

U.S. Economy Won't Avoid Global Slowdown

The economic recovery that began in 1991 will continue into 1999, though at a slower pace. The U.S. economy behaved oddly in the last five years, befuddling economists enough to be called the "new economy" because of its ability to grow rapidly sans rising interest rates and inflation (see **Figure 1**). Strong foreign and domestic demand propelled growth, while a strong dollar, fierce global competition, and rising manufacturing productivity kept inflation at bay.

A world financial and economic crisis ended all that in mid-1998, and will continue to affect the U.S. economy in 1999. U.S. exports have contracted while imports continued to grow, leaving the country with what will be its largest trade deficit ever. Consumers dug deep into savings this year and can dig no deeper. Heightened risk in equity markets reduced consumer confidence and spending. The upshot is that spending in 1999 will grow more slowly, despite falling interest rates and a depreciating dollar. Expect GDP to grow by 2% and the unemployment rate to rise to 5%.

Other highlights of the 1999 outlook include:

- payroll employment increases by 1 million;
- short-term interest rates average less than 4.5%, while long-term rates average 25 basis points lower than the average for 1998;
- lower corporate profits and declining interest rates have offsetting influences on equity markets;
- housing starts average 1.5 million units, while existing home sales reach 4.4 million;
- consumer and business spending will grow, but at less than half the growth rates of 1998;
- exports will increase by 2%, but imports will grow by at least twice that rate;
- employment growth in Indiana compared to 1998's increase of approximately 35,000 will be re-

duced noticeably, although the picture will become brighter as the year progresses;

- Hoosier exports will grow by about 3%, largely because of trade to Canada, Mexico, and Europe.

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The National Real Outlook

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During the past year, the U.S. economy has continued its remarkable performance, extending the current expansion into an eighth year. The outlook for the coming year, however, includes some significant potential risks, and we think that a year of sluggish output and employment growth is a prospect.

Figure 1 presents the core of the current situation. The heavy line shows the year-over-year growth rate of real GDP on a quarterly basis; the light 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 well in excess of 2.5% for the past six years. Since the end of the last recession in 1991 (now over 90 months ago), output growth has averaged 3% per year. For the three-year period ending with third quarter 1998, growth has

Figure 1
U.S. Economy: Year-Over-Year Growth Rate of Real GDP and Change in GDP Deflator

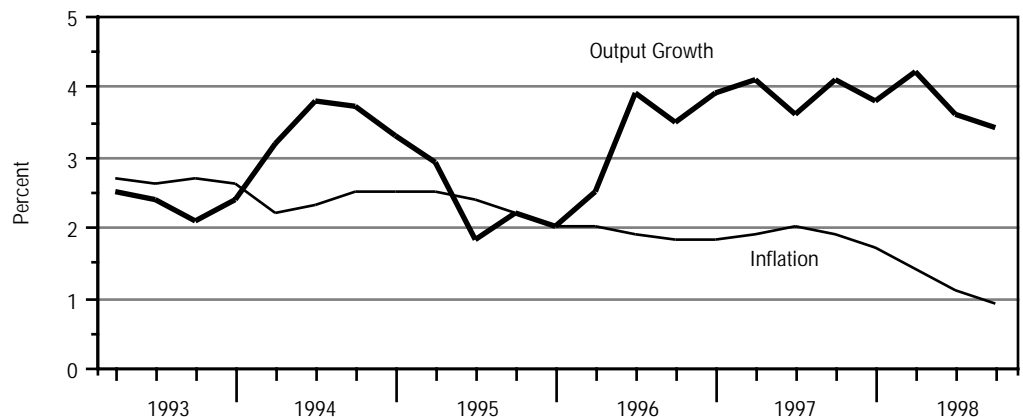
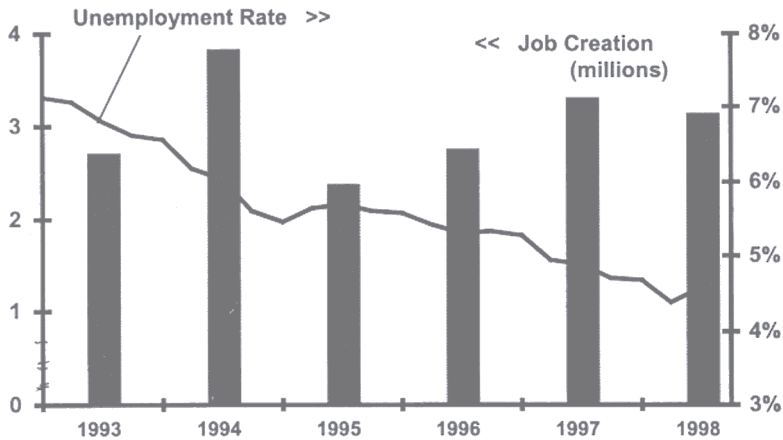


Figure 2
U.S. Labor Market Data



NOTE: Bars are 4th quarter to 4th quarter, except 1998, which is 3rd quarter to 3rd quarter.

averaged 3.7%. At the same time, inflation has steadily declined. During the first three years of the expansion, the GDP deflator rose at a 2.7% annual rate; over the past three years, the average rate has been 1.6%; and over the past four quarters, only 1.0%. This combination of strong growth and low inflation was recently described by Alan Greenspan (chair of the Federal Reserve Board) to be as impressive as any he had witnessed in nearly a half-century of closely observing the American economy.¹

The labor market situation has been similarly repetitious, as shown in **Figure 2**. The bars depict the increase in payroll employment. Since its low point in 1991, the economy has added an average of more than 2.3 million jobs per year, even with a slow start in 1992 and a lull in 1995. Over the past four quarters, 3.1 million jobs have been created—a remarkable performance for a recovery more than seven years old. This rising employment has been about 1.1 million per year above the growth of the working age population. About half of this difference has come from reductions in measured unemployment (people who are actively seeking work), producing the steady drop in the unemployment rate shown by the solid line in **Figure 2**. From its cycle high of 7.8% (reached in June 1992), the jobless rate has declined over 3 points, reaching a low of 4.3% in April and May before experiencing a slight recent uptick. The remainder of the gap has been closed by a rise in labor force participation, including a significant number of people who have entered the labor market as a result of the recent welfare reforms.

This combination of rising output, low inflation, and low unemployment represents the best economic

performance in the past three decades. On the surface, it is a replay of the situation in 1996 and 1997, only more so: output growth has been a little stronger, inflation has fallen a little lower, unemployment is a little lower. But under the surface, the situation has become less sound over the past year in several regards. The three most important are pressures on prices, the international situation, and the enhanced role of consumer spending in the expansion.

By any standard measure, the economy is now at or very close to “full” employment. Over the past three decades, its growth has averaged about 2.3%. We have been well above that long-run benchmark for much of the past six years, including the last three. Unemployment below the mid-5% range tends to put pressure on wages, ultimately pushing prices up. So far, though, this has not happened; labor costs have been creeping up over the past couple of years, but most of this has been offset by higher productivity. Moreover, strength in the value of the dollar in the foreign exchange market has lowered import prices (including raw material prices) and restrained the ability of domestic producers to raise prices.

Looking ahead, a key issue is productivity. While we think a reasonably good performance is likely, we do not expect it to entirely offset the pressure on wages from a tight labor market. In addition, the dollar has reversed course since late August, falling by nearly 10% against an average of 10 other industrial countries (through mid-October). We do not expect this depreciation to continue, but even relative stability in the value of the dollar could lessen the restraint on domestic prices. If the depreciation does continue, inflation could become a more serious concern.

Internationally, the past year has seen a dramatic turn for the worse. A year ago, and for several years before, exports were growing at a double-digit rate, providing one of three primary supports of the overall expansion (together with consumer spending and business investment). Problems had surfaced in the Far East, but they seemed to be related mainly to financial and currency markets. During the past year, these problems have become far worse, producing continuing turmoil in financial markets, but also severe downturns in the real economies of the affected countries. Further, there has been concern recently that difficulties may spread to Latin America. Combined with dollar appreciation, the effect on U.S. exports has been dramatic, with a 2.8% rate of decline in the first quarter of 1998, followed by decreases at a 7.7% rate in the second quarter and 2.9% in the third. At the same time, imports have grown rapidly, causing the trade deficit to nearly double over the past year, reaching \$263 billion in the third quarter.

The collapse of exports has left the economy leaning increasingly on household spending for con-

tinued expansion. Over the past year, consumption has risen 4.7%, with the rate of increase rising above 6% in the first two quarters of this year. This spending spree has outstripped the growth in household income (as measured by the Commerce Department), causing the personal saving rate to fall to only 0.1% of disposable income in the third quarter.² Clearly this surge has been driven partly by the enormous increase in wealth resulting from the remarkable stock market advance of the past three years. The question for the immediate future is how consumers would react to market performance more in line with historical norms, or even to a period of market weakness. At the least, a continuation of the recent rapid growth in consumption seems unlikely.

In the face of these problems, we expect economic growth to slow in 1999. We also expect inflation to worsen a little from its current very low level. To be more specific, we expect real GDP to rise about 2% during 1999, with inflation rising back over 2%. If this is the case, employment will increase about 1 million, considerably below the rate of recent years and slow enough to boost the unemployment rate back to about 5%.

In part, this scenario is premised on our expectation that the Fed will continue its easing of monetary policy begun in late September. The Fed will probably feel constrained from a drastic reduction in short-term rates by the potential inflationary pressures mentioned above. If, however, the economic picture becomes darker than we foresee, more significant easing by the Fed would certainly occur.

Our outlook presumes that the international environment, though remaining weak, does not experience significant further deterioration, allowing U.S. exports to stabilize and then begin growing again later in the year. Households should be more restrained next year, leading to a retrenchment in purchases of durable goods and in residential investment. If households pull back more drastically than we anticipate, or if the international situation continues to worsen, the outlook for the U.S. economy will be darker and an end to the expansion cannot be ruled out.

In summary, 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 fallen to very low levels. We think the next year will be one of continued growth, though not at recent rates. Growth will decelerate, while unemployment and inflation will edge up a little.

We do not, however, view this as a pessimistic outlook. At some point, a continuation of growth like that of the past three years would lead to excess, requiring a potentially painful correction. Given the problems in other parts of the world economy, and

the imbalances in the domestic situation, a slowdown seems better than the possible alternatives.

Notes

1. Alan Greenspan, statement before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, July 21, 1998. Reprinted in *Federal Reserve Bulletin*, Sept. 1998, pp. 735-742. The testimony and accompanying report can be accessed at: <http://www.bog.frb.fed.us/boarddocs/hh/>.

2. Income, as defined in the National Income and Product Accounts, does not include capital gains on security holdings. Recently, the definition was revised to also exclude capital gains dividends paid by mutual funds.

The Financial Markets

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The past few years have been kind to the investor. It hardly mattered if your choice was bonds or common stocks; both provided favorable performance. Now, unfortunately, some fundamental questions are hanging over the financial markets like a black cloud:

- Are the problems in Asia, Russia, and Latin America behind us? Or will these economies, particularly those in Russia and Southeast Asia, continue to be a drag on the world financial markets?

- Will interest rates continue to slide downward, generating solid returns on long-term bonds and common stocks? Or, in the process of interest rate declines, will we catch the "Japanese disease" of low interest rates and no economic growth characteristic of an economy in deflation?

- Will the establishment of trading in the euro, the common European currency, be a positive or negative influence on U.S. financial markets?

- In light of all the turmoil around the world, will the profits of U.S. corporations hold up? What will this mean for the stock market?

- How will the risk in the markets be perceived by investors? Will there be a flight to quality?

Economic Problems Around the World

The Asian, Russian, and Latin American economies continue to suffer. Southeast Asia grew fast, expanded capacity, and watched currencies collapse last year. Just recently, however, hopeful signs of recovery have

been observed. The currencies have stabilized and common stock values have risen modestly. In South-east Asia, the good news is that most of the riots have been quelled. Moreover, the economies fell so hard last year that they have no place to go but back up! The bad news is that the fundamentals of these economies remain weak: high unemployment rates and a corporate governance system that favors political connections over merit. In our opinion, a long period of restructuring is required to rehabilitate the countries to become truly capitalistic. The old political operatives may be in the background now, but they are still there waiting to ascend to power once again. The work ahead for the IMF and other organizations is to stabilize the economies first and then restructure them to be healthy growth engines in the future. This will take time to accomplish.

Likewise, the already shaky Russian economy worsened when it decided to place a moratorium on the debt payments to its creditors. This evidently came as a surprise to many speculators, who were fat and happy earning large returns by investing in Russian bonds. To complicate matters, the health of President Yeltsin is in question and the recent shakeup of the government calls into question who is really in control in Russia. Similar concerns exist in the other former Soviet republics. At the same time, Brazil recently witnessed large capital outflows from the country, and other Latin American economies are not experiencing the fast growth rates enjoyed in the past.

The financial markets responded negatively to these economic developments. But now that help is on the way from international agencies, and some signs of recovery are visible, the outlook has improved somewhat. Thus, we see stabilization in these countries and signs of slow but positive economic growth that will modestly reduce the drag on our economy.

Interest Rates

We forecast a continuing decline in interest rates, but at a much slower pace than in the past few years. Rates have declined dramatically in recent years, providing fuel for the powerful rallies in the stock and bond markets. Homeowners have refinanced mortgages at a rapid pace, some of them two or three times in the past couple of years. The refinanced mortgages at lower rates put more monthly income in the pockets of homeowners, enabling them to keep spending. In a similar vein, lower refinancing rates have enabled the U.S. government to borrow at lower rates, furthering progress on reducing the federal budget deficit. All of us have benefitted from the lower interest rate environment.

Looking ahead, the interest rate outlook should remain favorable. The Fed has just completed two rate cuts to stimulate the economy and stem the weaken-

ing financial mood in the country. As of late October, the medicine has worked. We see another round of modest rate cuts by the Fed. We forecast low levels of inflation, so there will not be large inflationary pressures on interest rates. We do not see the deflation some pundits are predicting. The only upward influence on interest rates we can see is if the Japanese sell massive holdings of U.S. government bonds. A sell-off earlier in the fall spooked the markets and sent interest rates higher. Fortunately, the move was temporary and not indicative of a fundamental portfolio adjustment on the part of the Japanese. The episode did, however, remind the government bond markets of the influence of the Japanese debt holdings.

The Impact of the Euro

On January 4, 1999, a new era begins in Europe: The euro will become the official currency of 11 key European economies, with the exception of the United Kingdom. Whether this move will be good or bad for the U.S. is a concern. Clearly, the euro should be strong initially to gain the support of trade partners and financial markets, but not so strong as to hurt exports and economic activity. This is a big issue in Europe in light of the relatively high unemployment rates there. Given the recent interest rate cuts in the U.S., there will likely be a round of European interest rate cuts to keep the European export position from deteriorating. In our opinion, this would be good news for the world economy and the United States.

In the long run, the establishment of the euro should be a positive development for all European trading partners, including the United States. No longer will a tangle of foreign currency exchange rates need to be negotiated as goods and services are supplied to all of continental Europe. Trade will be simplified, which is good. Unfortunately, there will probably not be as strong a tendency to adhere to fiscal and monetary discipline in a group setting as with an individual nation. A key here is the position of Germany, which has been firmly resolved against any measures hinting of inflation. Will the same resolve be evident in the combined governing body supervising the euro? Will the leftward tilt in recent European elections affect this resolve negatively? We hope the collectivist nature of the body will not lean toward rapid inflation, which would be highly detrimental.

Corporate Profits

Our forecast is for corporate profits to decline for three reasons. First, there will be some increase in unit labor costs due to moderate wage rate inflation. Second, the wage inflation will not be offset by productivity increases. Third, price inflation will not be high enough to offset the other two effects. Thus, we predict a squeeze on corporate profit margins next

year, resulting in lower profits. Easy corporate cost-cutting measures taken in the past to raise profits are virtually exhausted, and the economic environment we project for 1999 does not lead to higher profits.

Of course, lower corporate profits generally lead to declines in stock prices. Damage to the overall stock market already occurred in late summer and is continuing for some individual firms that do not match up to earnings expectations. This is a particular problem now for the banking sector. The lower interest rates we forecast will help offset the decline in profits for all firms, including banks, indicating that the stock market will drift sideways next year. Also helping the market overcome the profit decline is the lower probability of a recession occurring this year. This probability was much higher earlier in the summer.

Market Risk and the Flight to Quality

A big determinant of stock market direction in 1999 will be investor perception of risk. Because the market has been a powerful wealth creator for investors over the past few years, most investors are sticking with it after the late summer sell-off. If many decide to leave the market because it is viewed as too risky, buying support could weaken and stock prices will fall.

A number of factors influence the risk of the market. Interest rate uncertainty, global crises, banking failures, negative profit surprises, and political upheaval could all lead to a judgment of more risk in the market. Higher risk perceptions would lead to stock price declines greater than we currently expect.

In our opinion, the market is fragile right now concerning risk. We have weathered the collapse and rescue of the Long Term Capital Management hedge fund, impeachment proceedings against the president, numerous international problems, and some poor earnings reports from important companies. Unfortunately, more could happen. In particular, a severe crisis could occur in the Japanese banking sector because the banks in Japan continue to sit on bad loans that need to be written off. Given the importance of those banks in funding Japanese business, a banking crisis there could be very harmful to its economy and the others in Asia. Further, such a crisis would hasten the Japanese to sell U.S. government bonds to raise liquidity. Such a move would put upward pressure on interest rates in the United States. Although there is always a chance of such a crisis, we do not see it developing.

Summary

To sum it all up, we expect financial markets in 1999 to drift sideways, with a modest reduction in interest rates. Inflation will be under control and, with a bit of luck, we will avoid the international crises that could negate this forecast and put all of us in a bad mood.

International Trade and Foreign Investment

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The Asian crisis that began in the latter part of 1997 ushered in a global financial crisis in 1998. It affected not only stock markets and exchange rates in Asian countries, Russia, and Brazil, but also a broad spectrum of the world's economic conditions. Tremendous fluctuation in economy and business—a repeated theme everywhere these days—will likely continue in 1999. The Dow Jones Industrial Average has gone through several near-record ups and (mostly) downs thus far this year. The Japanese yen appreciated from ¥145/\$ to ¥110/\$ in a couple of months and had a record daily gain recently. Our trade deficit reached an all-time high, and foreigners have amassed their investments in the U.S. at a record pace. The prediction of international trade and foreign investment for 1999 has naturally become more difficult in this tumultuous period. A good prediction is all the more important, because global trade and foreign investment now play a greater role in our economy than ever before.

At the end of second quarter 1998, the accumulated four-quarter U.S. merchandise trade deficit was a record \$220 billion, compared to \$197 billion a year ago. After continuous increases in our merchandise exports, we had two consecutive quarters of decline in the first half of 1998. The second-quarter merchandise exports were \$165 billion, \$9 billion less than the figure for fourth quarter 1997. On the other hand, our imports steadily increased from \$224 billion to \$230 billion over the same period. Exports in services were flat in the same period at around \$65 billion, whereas service imports increased slightly with the second-quarter figure of \$45 billion.

A broader measure of trade, the current account balance (which includes merchandise, services, investment income, and unilateral transfers), had a deficit of \$186 billion—an all-time record—over the same four-quarter period. We will likely have a larger deficit in 1998, followed by another record in 1999, although the change from 1998 to 1999 is not expected to be as large as that from 1997 to 1998. This record-setting pace of foreign trade is nonetheless dwarfed by the enormous changes in foreign direct and portfolio investments.

A year ago, Larry Davidson wrote in his outlook for 1998: "Should currency crises occur in 1998, one result would be massive capital inflows to the U.S. and a higher value of the dollar." Massive inflows, indeed! At the end of 1997, U.S. assets abroad were \$5 trillion (all assets are in market values), among which our direct investments abroad were \$1.8 trillion. On the other hand, foreigners' assets in the U.S. were \$6.3 trillion, including \$1.6 trillion in direct investments. At the end of 1997, the latest actual figures available, the net investment position of the U.S. was -\$1.3 trillion, compared to -\$744 billion at the end of 1996. Our net investment position decreased by \$679 billion in 1997. The figures for 1998 are expected to be even larger. The U.S. economy has been very good: healthy growth, relatively high returns from investments, and low inflation. Foreign capital, especially due to the Asian turmoil, found its way into the U.S. for high, safer returns. Recent stock market movements, cuts in the short-term interest rates, and slower economic growth will likely contribute to reducing the rate of capital inflows.

Capital inflows, as measured by the capital account balance, were \$255 billion in 1997. (The difference between this and the current account balance of \$155 billion, -\$100 billion, is due to the so-called statistical discrepancy.) The value for 1998 will be in the neighborhood of \$300 billion. We predict capital inflows to be only a little bit larger in 1999 from the 1998 level, because our economy will grow weaker and the problems in Japan and other Asian countries in 1999 will not be as severe as in 1998.

Without the fast-track authority, the administration will be ineffective for any new serious negotiations with other countries for international trade and investments. As imports rise, some industries will likely seek trade protection by following the lead taken by recent antidumping petitions from steel producers. Because many developing countries try to grow their economies by exporting more to developed countries in general and to the U.S. in particular, there is a potential danger of competitive exchange rate and commercial policies around the world. Business managers should pay closer attention to the nature and the outcome of new rounds of negotiations, such as the recent talks between the European Union and Japan and between the EU and several Latin American countries. We do not, however, expect any major trade negotiations that would greatly affect our economy.

The trade-weighted value of the dollar has also been fluctuating wildly. Up until the middle of August, mainly because of the healthy U.S. economy, the demand of the dollar had been steadily increasing, although the rate of increase was not large. Since September, however, the value of the dollar has taken a nosedive. In fact, the Japanese yen appreciated

against the dollar by 8% in a single day. From a high of ¥145/\$ in August, the exchange value is now as low as ¥110/\$. Less dramatically, though, the German mark has been appreciating against the dollar as well. With the introduction of the euro on January 1, most European countries will make sure their new currency is not overvalued against the dollar. The effective exchange rate in 1999 is therefore expected to be only slightly lower than what it is now.

So far, Indiana has been doing better than the nation in exporting manufactured goods. The state's manufactured exports in the second quarter reached a new record of \$3.59 billion. Indiana managed two consecutive increases in quarterly exports in 1998, in stark contrast to consecutive declines for the nation. In the first two quarters, it exported \$7.1 billion, compared to \$6.7 billion for the same period in 1997. That increase places it among a small group of high-performing states this year. The *Indiana Quarterly Export Report* (second quarter 1998) wrote that, out of the 25 largest exporting states, 11 states exported less during the first half of 1998 than they sold in the first half of 1997. Only six states performed better than Indiana. It should be noted, however, that the rate of increase in Indiana's exports in those periods was much smaller than growth in the last few years. Thus, Indiana is suffering from the high dollar exchange rate in 1997 and early 1998 as well as the global financial crisis, though less severely.

What is in store for 1999? International trade and foreign investments depend on the economic conditions of the rest of the world as well as the United States. Recently, the World Bank cut the predicted value of the growth rate of world output in 1999 almost in half, from 3.5% to 2%. Only six months ago, the rate had been predicted to be close to 4%. Fortunately, the U.S. economic growth rate we forecast is only slightly below that of the rest of the world. The top two destinations of Indiana's manufactured exports, Canada (by far) and the U.K., are relatively less affected by the Asian crisis so far than other countries. Yet Japan (the third destination) is still in a recession that will continue in 1999. The severity of the recession in most Asian countries will be much reduced in 1999. In fact, some of those countries will begin to record positive growth rates, especially in the second half of the year, although 1999 is probably too early for their full recovery. We predict our current account deficit will be substantially larger in 1999 and still larger in 2000.

Until the global financial crisis is resolved, capital will continue to flow into the United States. With a slower growth rate and lower interest rates than before, however, the rate of capital inflows will be slower. Many U.S. firms are reportedly finding new ventures in countries that are severely affected by the Asian

crisis. Many old joint ventures have been changed into wholly owned subsidiaries. Real estate prices have been dropping and affected countries are now welcoming more foreign direct investment (FDI) than ever before. We believe there will be a large change in U.S. exports and FDI in those destinations. Because our lower savings rate appears to have bottomed out, and because we are going to have a budget surplus again in 1999, our current account deficits and capital inflows will become smaller, but only after the first half of 2000. In the meantime, there will be a large increase in risks as well as opportunities in 1999, in both international trade and foreign investments.

Housing Markets

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It has been a good year for housing. The home building industry is enjoying one of its best periods, driven by a strong economy, low mortgage rates, and robust employment growth. Housing starts and home sales reached record levels this year. Privately owned housing starts in August were at a seasonally adjusted

annual rate of 1,613,000, which is 17% above the August 1997 rate of 1,383,000 (see **Figure 1**). During the first eight months of this year, 1,074,800 housing units were started, compared to 977,300 for the same period in 1997—about a 10% increase.

Building permits issued during the first half of 1998 were up 11% from the first half of 1997 and surpassed the first-half record set 21 years ago. The increase in permits in Indianapolis was exactly the same as the national average of 11%. Mortgage Bankers' chief economist David Lereah predicted record highs this year for existing home sales, new home sales, the U.S. home ownership rate, and mortgage originations.

Sales of new one-family houses in August 1998 were at a seasonally adjusted annual rate of 838,000, according to estimates released recently by the U.S. Department of Commerce's Bureau of the Census and the U.S. Department of Housing and Urban Development (see **Figure 2**). This is 5% above the August 1997 rate of 799,000. Through August of this year, 618,000 houses were sold, compared to 564,000 during the same period last year—an increase of about 10%.

Mortgage Interest Rates at Record Lows

Interest rates for 30-year fixed-rate mortgages dipped to about 6.5% in October, the lowest level in about 30 years. They rose toward the middle of October, but that was before the most recent reduction in interest rates by the Fed (see **Figure 3**). The rate for one-year adjustable-rate mortgages also dropped in October (see **Figure 4**). The spread between the rate on adjustable-rate mortgages and fixed-rate mortgages has

Figure 1
Housing Starts

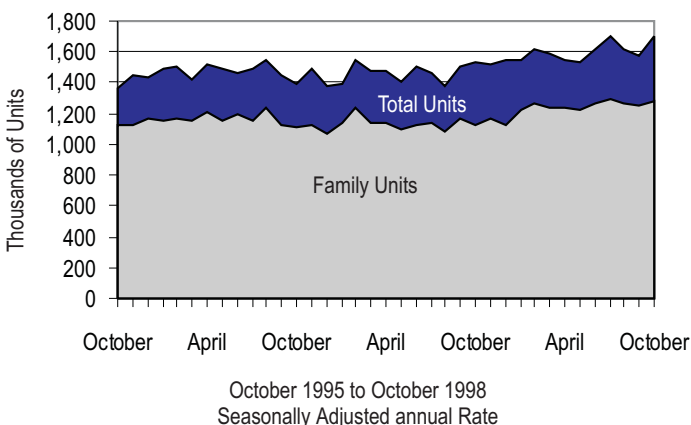


Figure 2
Single-Family Home Sales

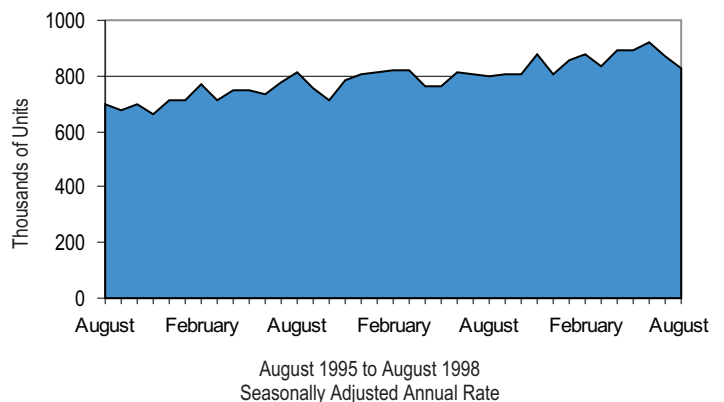


Figure 3
Interest Rate for 30-Year Fixed-Rate Mortgages

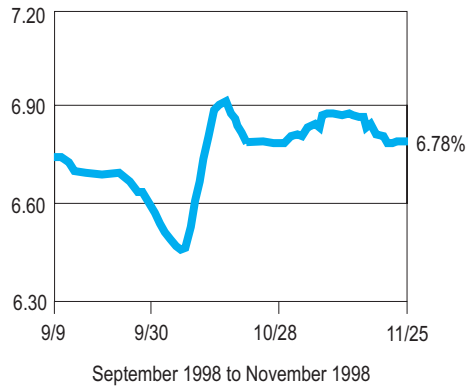
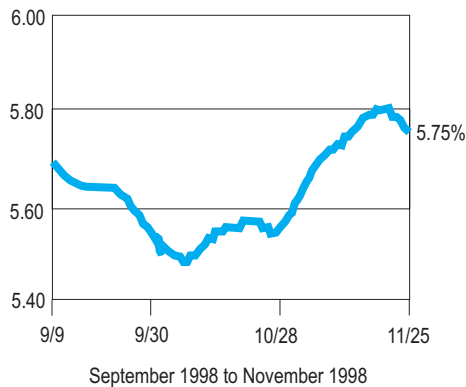


Figure 4
Interest Rate for 1-Year Adjustable-Rate Mortgages



narrowed in recent years as interest rates in general have decreased.

Will the Good Times End?

The two interest rate cuts of late may have helped reduce the likelihood that a slowing economy could cause the housing market to cool, although a dampening of the housing market may already be occurring. Figures recently released by the U.S. Commerce Department show that construction of new homes and apartments fell 2.5% last month after a 5.2% decline in August.

Home sales and mortgage originations are likely to ease off from record levels as the economy cools next year. Yet economists at the Mortgage Bankers Association believe that the actions of the Fed to keep the economy out of serious trouble will again push long-term home loan rates down below 6.5 percent—where they dipped briefly at one point this year—and keep the housing market close to current levels.

Until now, the world economic crisis has been “a blessing in disguise for housing,” having pushed U.S. interest rates so low. Because mortgage rates depend on the overall structure of interest rates, that means the general structure of interest rates will decline. Over the next year or so, mortgage rates could come down by another quarter or half point.

But next year a tug of war will emerge between the stimulating effect of lower interest rates and the drag from a weakening economy, which reduces consumers’ willingness to commit to purchasing a new home. This is likely to lower housing starts in 1999 to about 1,500,000 units, which is around 6.25% below the 1,600,000 level we are likely to average for 1998. Existing home sales will likely decline to about 4,400,000 units for 1999, about 6% below the average level for 1998. By historical standards, this would still be a very respectable level of housing starts and existing home sales.

Indiana on the Brink?



As the nation skirts the rim of a recession in 1999, Indiana will be even closer to that edge. The question marks for the nation have exclamation points after them in the Hoosier state.

As one of the three states most heavily dependent on the manufacture of durable goods, Indiana could experience a decline in earnings and employment during the first half of 1999. Should the national forecast of a decline in consumer spending for durable goods be on target, Indiana could face a year with little or no employment growth. This would be the first flat or declining year since the end of the recession in 1991. In 1998, we estimate, the state gained more than 36,000 jobs, the seventh consecutive year of such increases. No such expectations, however, are being entertained for 1999.

Growth and Decline

The year just past has been another year of employment growth in Indiana. As seen in **Figure 1**, total establishment employment has been rising since 1991's slump.¹ This has been a source of both pride and consternation for Indiana. Politicians have felt pride (and parents relief) in the growth of employment opportunities, whereas employers have been

concerned and frustrated in their attempts to hire qualified employees.

Indiana has added 350,000 jobs since 1991. But our share of employment nationally (now 2.26%) has dropped from the high point reached in 1994 (2.36%). If Indiana had retained its 1991 recession-level share of 2.31% (not being greedy and trying to retain the higher 1994 position), there would be 63,000 more jobs in the state today. Lost employment share is the consequence of growing less rapidly than the nation.

From 1990 to 1994, jobs grew in Indiana by 6.4%, compared to just 3.7% nationally. However, between 1994 and 1998, Indiana advanced only 5.5% while the U.S. grew by 10.1%. Thus, even though Indiana lauds and laments its good economic performance, our record was below the national level.

We can expect a similar deficit in 1999. The question is, how widespread will the problems be? Manufacturing is an obvious area of concern. Hoosier employment in manufacturing peaked, for this business cycle, in 1995 (see **Figure 2**). Construction employment and jobs in wholesale and retail trade have flattened after enjoying a cyclical rise (see **Figures 3** and **4**). But three sectors show continuing rising trends: business and personal services (**Figure 5**),

Morton J. Marcus

Director, Indiana Business Research Center, Kelley School of Business, Indiana University

Figure 1
Total Indiana Establishment Employment, July 1990 to 1998

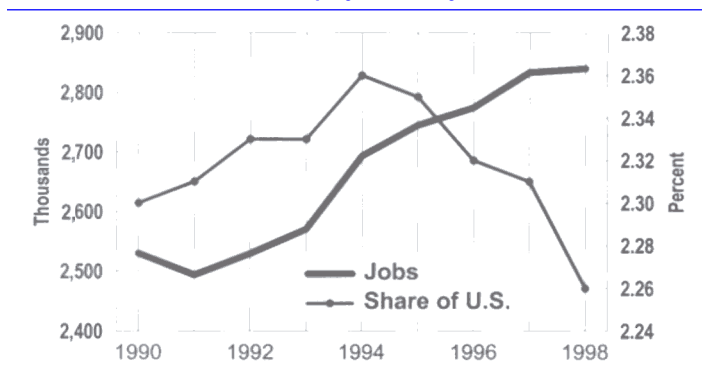


Figure 2
Indiana Manufacturing Employment, July 1990 to 1998

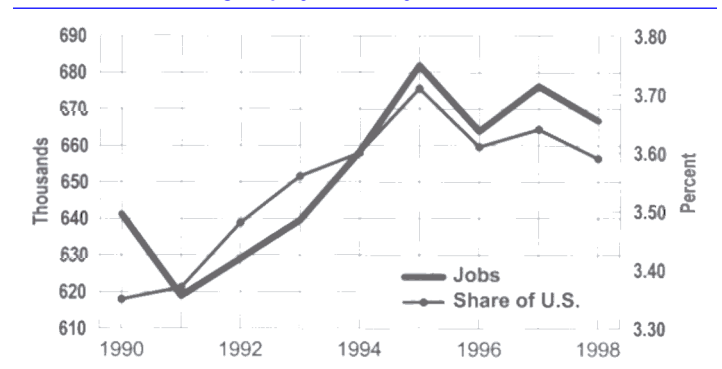


Figure 3
Indiana Construction Employment, July 1990 to 1998

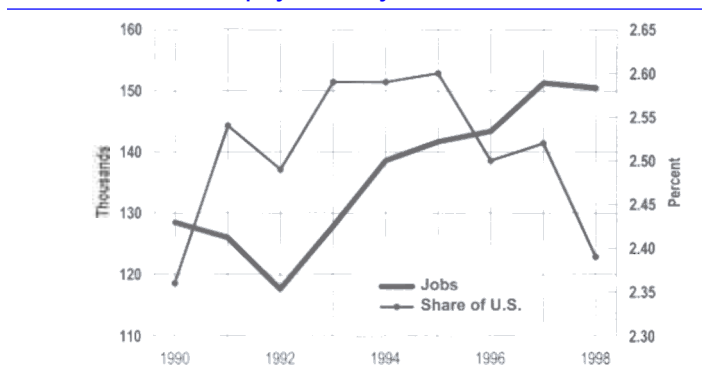
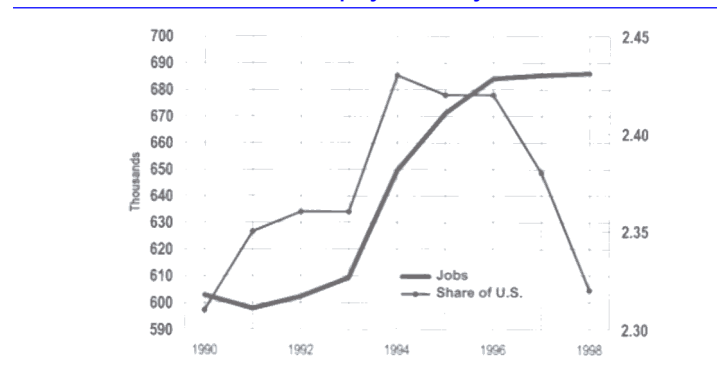


Figure 4
Indiana Wholesale and Retail Employment, July 1990 to 1998



transportation and public utilities (Figure 6), and finance, insurance, and real estate (Figure 7). In each of these cases, however, whether employment is rising or falling, Indiana's share of the nation's jobs is in decline.

In 1999, along with declines in manufacturing, we might reasonably expect transportation and construction employment to be adversely affected by reduced demand. Wholesale and retail trade, which has shown flatness in recent years, will not be growing aggressively. Together, this presents a picture of an economy-in-waiting—waiting to see the full effects of the Asian flu, the high dollar, and an expansion that seems to have run its course. Although we may not experience a recession in Indiana in 1999, we can not expect to enjoy the growth that has characterized recent years. And somewhere along the line, we will have to consider the implications of a declining share of the nation's employment opportunities.

Where Will We Be Hurting?

Any flatness or decline that may be realized next year will not be spread evenly over the state. If history is a

guide, then the following analysis may be helpful in identifying where problems are most likely to occur. Three elements should be considered:

1. *Wage and salary (W&S) disbursements* represent the money paid to employees. They do not include health or retirement benefits such workers may receive, or income earned by proprietors of businesses. They are what people make because they work for someone else.

2. *W&S employment* is the number of people who work in the state for someone else.

3. *Wages per job* is disbursements (1) divided by employment (2). (We refer to "wages" per job, although both wages and salaries are included.)

As businesses adjust to new conditions, we might find employment shrinking with no change in wages per job, if those losing their jobs are representative of the entire work force. But if those who are displaced are in low-wage jobs, wages per job could rise.

If businesses tend to release more highly paid workers (perhaps because they are older and have the accumulation of seniority), but replace them with less

Figure 5
Indiana Business and Personal Services Employment, July 1990 to 1998

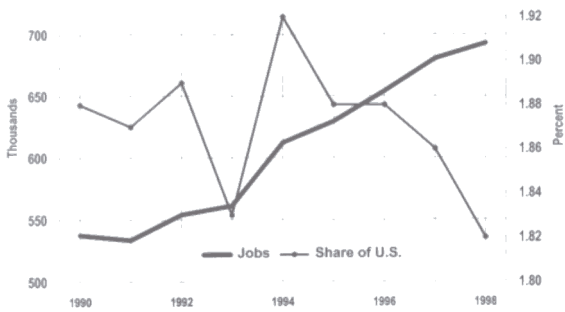


Figure 6
Indiana Transportation and Public Utility Employment, July 1990 to 1998

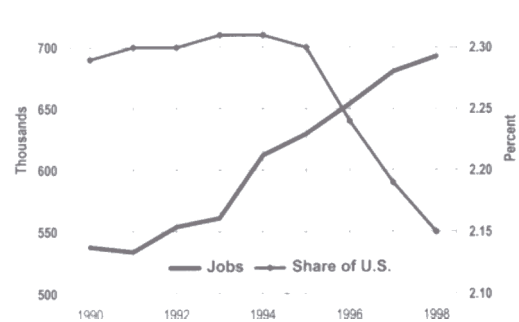


Figure 7
Finance, Insurance & Real Estate Employment, July 1990 to 1998

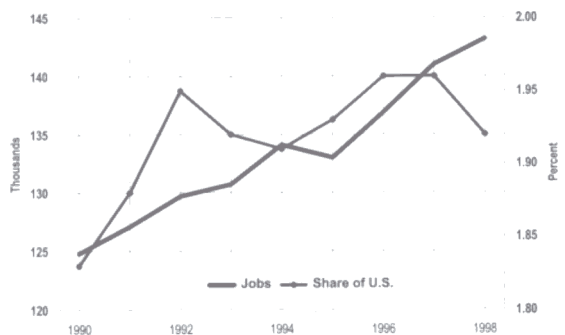


Figure 8
Indiana Real Wage and Salary Disbursements, 1972 to 1996

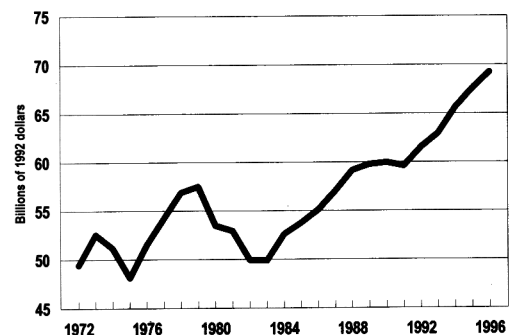


Figure 9
Indiana Wage and Salary Employment, 1972 to 1996

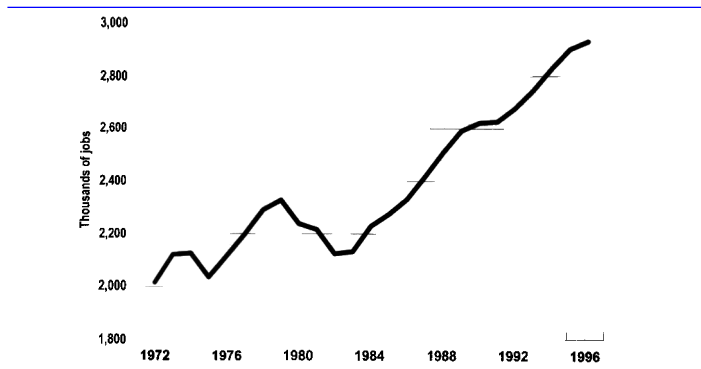


Figure 10
Real Wages Per Job in Indiana, 1972 to 1996

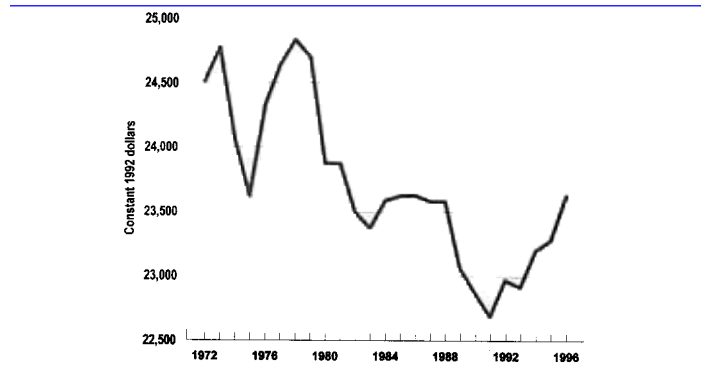
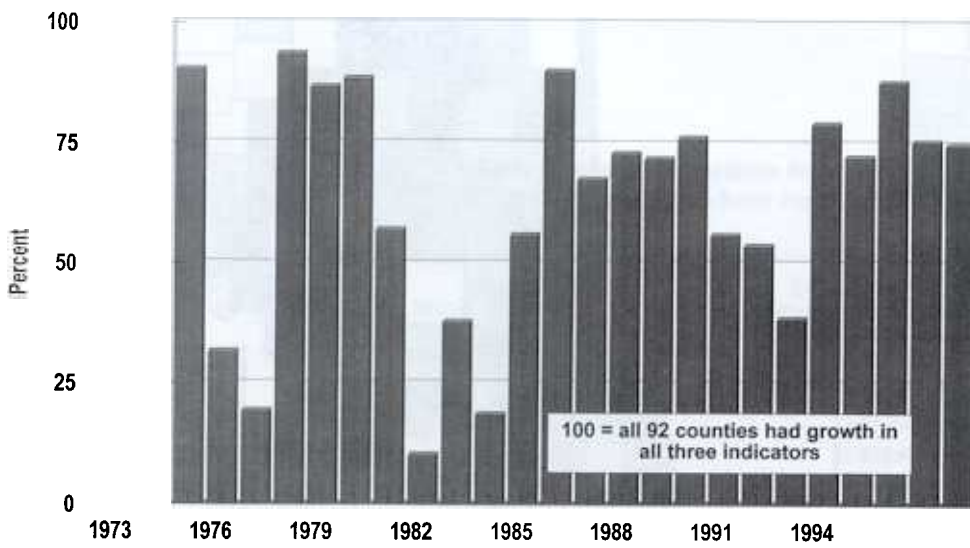


Figure 11
Indiana Index of County Economic Performance, 1973 to 1996



well-paid workers, then wages per job can fall even though employment may remain constant.

Finally, disbursements may remain uniform as firms hold the payroll constant and drop workers to reduce benefit payouts. (For example, health benefits generally do not vary with pay level, so it is cheaper to pay 100 workers 10% more than to hire 10 more people at the same wage.)

What has happened in past recessions in Indiana? **Figure 8** shows that real wage and salary disbursements² fell in seven of the 24 years shown. That decline averaged 3.3%. But in any given year, not all counties declined together. In 1991, the last recession in Indiana, 61 of the state's 92 counties declined in W&S disbursements, whereas 31 had increases. In 1980, the worst of the 24 years, W&S disbursements fell in 88 counties.

Figure 9 presents the record for W&S employment. Here there were just four declining years, with (coincidentally) an average decrease of 3.3%. Yet only 38 counties lost jobs in 1991; the worst year was 1982, when 81 counties had employment decreases. Hence, the pattern for employment losses is not the same as the pattern of real disbursement declines.

Therefore, we would not expect the pattern of changes in real wages per job to be the same as the two preceding factors. **Figure 10** shows decreases in wages per job in 13 years between 1973 and 1996; the average decrease was 1.1%. But in 1989, though only eight counties lost employment and 30 counties saw decreases in real disbursements, 84 Indiana counties saw real wages per job fall.

When we combine these three factors (in **Figure 11**), we see the pattern of the Indiana economy as measured by changes in the 92 counties.³ Whereas 1980 was the low point, with an index value of just 10.1%, 1973 was the best year, with an index of 93.5%. From 1983 forward, there has been just one year in which the index dipped below 50%. We have been over 67%⁴ in 11 of those 14 years.

That's fine for describing the state, but which counties have had the best and the worst records since 1973? There are two ways to look at that question. **Figure 12** shows that five counties had index values below 50% (Miami, Pike, Grant, Madison, and Randolph). During the same period, 11 counties enjoyed index values at or above 75%, led by Hamilton (83.3%), Johnson, Morgan, and Porter (all at 79.2%).

The picture changes somewhat, though, as we look at the degree of decline rather than the frequency of decline. **Figure 13** shows the counties that have been hit hardest by the sum of their average declines in each of the three factors discussed above. Henry, Randolph, Perry, Madison, Fayette, and Fulton counties lead this list. Twenty counties had aggregate average percent declines of 10% or more.

But eight counties had positive aggregate values. These were led by Pike County, which enjoyed major gains during the recessions of the 1970s, when energy prices soared. Pike, where coal mining is of great consequence, benefitted while other counties, which are energy-using areas, suffered. Also in the positive range were Jasper, Jefferson, and Spencer counties.

There is no guarantee that those that led either list or those at the bottom will enjoy (suffer) similar experiences in 1999. But these representations certainly show the areas we should be watching most closely in the year ahead.

Our regional writers have more detailed views. Their wrap-ups and outlooks follow.

Notes

1. The data used in this section are based on jobs reported by employers to the Indiana Department of Workforce Development. Although its coverage is less than the

household survey, which yields the number of people employed and the unemployment rate, the establishment data may be a better indicator of economic activity in the state. A more comprehensive statement will appear in the next *Indiana Business Review Update*. The figures show data for the months of July, which in 1998 were affected by a strike in the automotive industry. The trends, however, are not seriously compromised by this fact.

2. That is, W&S disbursements adjusted for changes in the prices paid by consumers for goods and services.

3. To obtain the index value (which ranges from 0 to 100%), we take the number of counties with negative values in each year, sum them, and subtract that from the total of all such values in that year (92 x 3 = 276) divided by that total. For example, in 1996, real W&S disbursements fell in 21 counties, W&S employment fell in 32 counties, and real wages per job fell in 17 counties. These sum to 70, or 74.6% of the 276 possible values for that year. Hence the bar for 1996 sits just below the 75% line in Figure 11.

4. The state index value was 66.7% for the period 1973 to 1996.

Figure 12
Index of Indiana County Economic Performance, 1973 to 1996, by Frequency of Increase

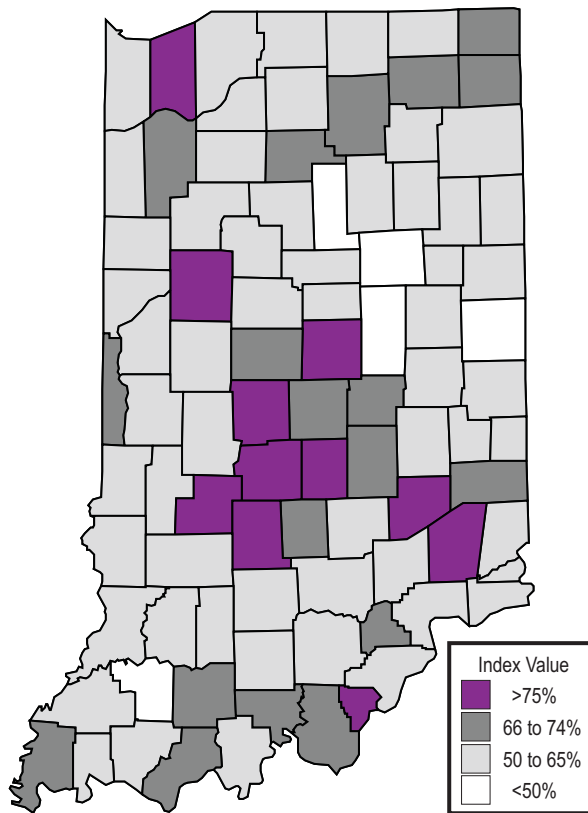
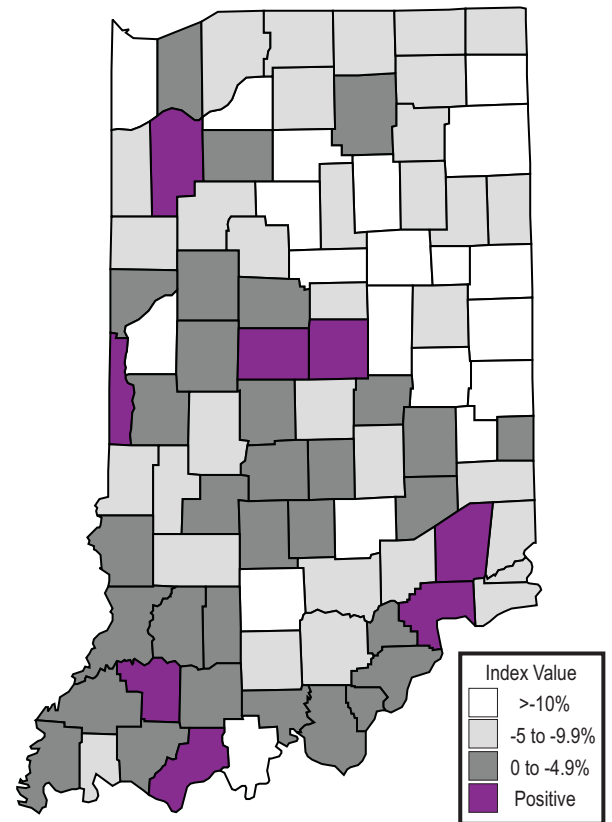


Figure 13
Hardest Hit Counties, 1973 to 1996, by Degree of Decrease



Indianapolis

Robert Kirk

Professor of Economics, Indiana University-Purdue University at Indianapolis

Employment growth in the Indianapolis metropolitan area (Marion County and the surrounding eight counties) is expected to grow at a moderate rate (1–1.5%) in 1999. This slower rate is based on a 2% rate of GDP growth, reflecting the impact of the turmoil in the foreign trade sector on some manufacturing industries, a related profit squeeze, and a resulting reduced rate of growth in capital spending.

Foreign Exposure

How does Indianapolis rank in terms of export sales? **Table 1** ranks it by 1996 dollar values (the most recent year for data availability) and export sales per manufacturing employee.

The city's primary industries for export sales are electrical and electronic equipment, chemical products, and transportation equipment. The primary destinations are Canada and Mexico (representing 53% of the total) and Europe. Care must be taken in interpretation because many of these exports are intermediate goods—parts are exported to another country, such as Canada or Mexico, and then the assembled product is returned to the United States. Moreover, the export sales data involve the marketing location, not the production location, of exports. If there is a downturn in foreign sales, the negative production employment impact may be felt somewhere other than Indianapolis, the marketing/reporting location.

Table 1
Export Sales of Selected Metropolitan Areas, Ranked by 1996 Dollar Values, and Export Sales Per Manufacturing Employee in 1996

<i>Metropolitan Area</i>	<i>Rank</i>	<i>Export Sales per Manufacturing Employee</i>
Detroit	3	\$50,627
Chicago	5	30,290
Cincinnati	26	29,477
St. Louis	28	22,958
Indianapolis	31	31,898
Louisville	48	26,324
Columbus, OH	69	16,344

Source: Office of Trade and Economic Analysis, International Trade Administration, U.S. Department of Commerce

Consumption

The national economy has been driven by growth in personal consumption expenditures. So an outlook for 1999 depends critically on what we as consumers do. With the personal savings rate having fallen, one may ask, "Where did the money go?" It went to support consumption of services. The primary one was medical services, which consists of not only consumers' out-of-pocket costs but also third-party payments made by insurers such as private health insurance plans, Medicare, and medical public assistance (Medicaid) on behalf of consumers.

Other types of services households spent money on were personal business, education, religious activities, and recreation. Personal business consists of brokerage fees, investment counseling, bank service charges, life insurance, and legal expenses. Education includes expenditures for private educational institutions—preschool through university—and tuition paid to publicly assisted universities. Some of the personal business expenditures (brokerage fees and investment counseling) could be viewed as the costs of saving; educational expenditures could be viewed as investment in human capital. Therefore, it is only the recreation expenditures that fit the customary image of consumption.

Many of the expenditures above tend to be located in urban areas. So it is not surprising that in 1998 the industries that primarily contributed to Indianapolis's employment growth were health and financial services. Although the demographics are favorable to the expansion of health services, certain issues should be considered: How should the rate of growth in health expenditures be controlled, and who should determine the quality of service provided—insurance companies, physicians, or certifying professional organizations?

Health insurance premiums are expected to rise in 1999. The "low-hanging fruit" (for cost savings in health care) has been picked. Drug costs are rising. Direct consumer advertising is inducing patients to ask physicians for the advertised drugs. New drugs have replaced old standbys in the oft-prescribed list of drugs, but there are no generics yet for the new ones. The Balanced Budget Act of 1997 included a slowing of Medicare growth and changes in Medicaid, which will reduce outlays to hospitals, managed care plans, and other providers by \$12.3 billion nationally in 1999 (and \$26.9 billion in 2000). Moreover, those eligible for Medicare will pay higher monthly premiums for Part B, which pays physicians' bills. Additional spending for children's health insurance initiatives will make pediatric care relatively more attractive for health care providers. Local providers will be affected by these financing changes, which may slow the growth of the industry in the short run.

Table 2
Population Growth 1990–1997 for Selected Metropolitan Areas

<i>Metropolitan Area</i>	<i>Percent Change, 1990–1997</i>	<i>Rank Among 273 Metropolitan Areas</i>
Minneapolis-St. Paul	10.0	91
Indianapolis	8.9	115
Columbus, OH	8.5	122
Kansas City	8.0	125
Memphis	7.5	141
Cincinnati	6.4	163
Chicago	4.9	175
Detroit	4.9	176
Louisville	4.7	177
St. Louis	2.6	205
Milwaukee	1.8	216

Source: U.S. Census Bureau, State and Metropolitan Area Data Book

Table 3
Percent Change in the Indianapolis Metropolitan Area's Population by Age Group, 1992–1997, and by County

<i>County</i>	<i>AGE GROUPS</i>							<i>All Ages</i>
	<i>0–4</i>	<i>5–17</i>	<i>18–24</i>	<i>25–44</i>	<i>45–64</i>	<i>65–84</i>	<i>85+</i>	
Boone	5.4	7.4	-2.7	7.1	19.0	7.1	13.5	8.9
Hamilton	23.9	27.2	13.8	26.0	40.6	24.4	30.8	28.0
Hancock	8.0	10.8	-0.4	10.2	22.5	8.8	17.4	11.9
Hendricks	12.5	15.4	3.4	14.1	27.4	13.1	21.7	16.1
Johnson	11.7	13.9	0.4	13.2	26.2	11.1	13.2	14.2
Madison	-3.6	-0.4	-8.1	-0.9	8.5	-1.7	9.4	0.3
Marion	-3.5	1.5	-8.9	-1.0	9.4	-1.1	8.6	0.4
Morgan	7.1	10.0	-1.2	-9.0	21.2	8.6	18.0	10.8
Shelby	1.7	4.5	-6.6	2.8	14.3	3.4	15.3	4.8
TOTAL	1.8	6.5	-5.4	4.3	15.7	2.9	12.0	5.7

Source: Estimates by U.S. Census Bureau

Table 4
Absolute Change in the Indianapolis Metropolitan Area's Population by Age Group, 1992–1997, and by County

<i>County</i>	<i>AGE GROUPS</i>							<i>All Ages</i>
	<i>0–4</i>	<i>5–17</i>	<i>18–24</i>	<i>25–44</i>	<i>45–64</i>	<i>65–84</i>	<i>85+</i>	
Boone	158	564	-78	908	1,544	305	105	3,506
Hamilton	2,337	6,637	1,233	11,393	9,742	2,188	321	33,851
Hancock	247	1,044	-16	1,566	2,327	394	89	5,651
Hendricks	686	2,471	236	3,790	4,524	921	160	12,788
Johnson	758	2,534	38	4,078	4,786	949	192	13,335
Madison	-303	-99	-1,087	-348	2,379	-293	166	415
Marion	-2,253	2,093	-7,612	-2,770	13,697	-897	844	3,102
Morgan	291	1,179	-68	1,676	2,640	469	108	6,295
Shelby	52	363	-242	369	1,190	152	84	1,968
TOTAL	1,973	16,786	-7,596	20,662	42,829	4,188	2,069	80,911

Source: Estimates by U.S. Census Bureau

In financial services, the banking component did not show employment growth. Insurance and real estate were the primary contributors. Housing circumstances were especially favorable in 1998, but are not expected to be quite as favorable in 1999. Bank mergers were driven by technological advances in communications and data processing. Economics of scale are possible in the management of very large databases. To take advantage of these economies, the large scale of the bank becomes important.

Does large scale mean diminished service, high fees, and questions of credit availability? Not necessarily. Banks are being forced to differentiate their products by service level, thereby giving consumers more options. So there will be expanding services as consolidation occurs. Cross-subsidies and minimal fees will be replaced by fees and interest rates that reflect customer balances and activity—matching more closely the costs of services provided. Large banks will specialize in standardized small-business lending and community banks in more tailored lending. The concern with bank mergers is the problem of dealing with the failure of a large merged banking organization—the “too big to fail” problem.

Population Growth and Labor Markets

One of the problems facing businesses has been the availability of labor. **Table 2** compares Indianapolis's population growth rate during the 1990s with other Midwestern metropolitan areas. Indianapolis has done very well in the region. However, the estimate for growth (1996–1997) was slower than the previous years; the rate of employment growth slowed as well. Indianapolis had one of the lowest unemployment rates among the 50 largest metropolitan areas in 1998. This was good for finding work, but a challenge to the employer who was hiring.

A look at Indianapolis's population change by age cohort is helpful in understanding this labor market situation. **Table 3** provides percent change in the metropolitan area's population by age group, 1992–1997, and by county.

We observe suburbanization (Marion compared to the other counties), although it has not been uniform among the fringe counties. There was a lot of variation across the nine counties in the all-ages cohort—from 0.3% in Marion to 28.0% in Hamilton. People in strategic planning and marketing and would-be entrepreneurs who measure the size of the market would want to know the absolute change as well as the percent change, so **Table 4** is provided.

As Tables 3 and 4 indicate, the percent increase for the entire metropolitan area for all age groups is 5.7% (80,911 people). It is this percent with which the age- and county-specific cohorts should be compared. The 0–4 years (preschool) cohort increased

1.8%, showing a wide range across the counties, and the county-specific cohort change was positively correlated with the county-specific total change. The 5–17 years (kindergarten–12th grade) cohort grew 6.5% and was positively correlated with the total change. It is not surprising to hear that financing was an issue in local school board elections (such as in Johnson County, which had a 13.9% population increase).

For the 18–24 years cohort, we see why there have been a lot of “help wanted” signs. People in this age group typically enter the labor market for the first time, and their percent change was a *decrease*. What can be done to increase the quantity of labor supplied? We need to promote industry-based networks as a means of addressing the collective problem of individual employers. For example, firms are hesitant to invest heavily in employee training because of the risk of losing the employee to a competitor shortly after completion of the training. By coming together *at the industry level*, firms in the same industry may reap a higher return on their training investment dollar because training is industry-networked.

Some American firms have adopted the “just-in-time” approach to inventory management, requiring a close coordination between Tier 1, Tier 2, and Tier 3 suppliers. Similarly, we need a just-in-time approach to employee development, which requires coordination between employers, educational institutions, trade schools, trainers, and community groups. There are school-to-work and welfare-to-work initiatives—though as Wisconsin has shown in its welfare reform, welfare-to-work does not come cheaply.

For the 25–44 years cohort, we have to think about how child care, housing, and transportation all fit into the problem of employee recruitment and development. Being recognized as “family-friendly” helps a firm bond workers to it and increase their productivity. The 25–44 age cohort is the one that includes the first-time home buyer, typically 25 to 34 years old. Its percent increase was a little less than the overall percent increase. Although low mortgage rates drive the housing market, other factors, such as the demographic one, play a role too.

The 45–64 years cohort is where the leading edge of the Baby Boomers is found. Both in percent change (15.7%) and absolute change (42,829, or 53% of the total population change), this is where the bulk of the consumption expenditures is. How this cohort spends affects, and will continue to affect, the economy. In a life-cycle-of-saving framework, this is the age group that has historically shifted from a high consumption mode to a saving mode. This group, therefore, patronizes the personal business services mentioned above.

Finally, the 65–84 and 85+ years cohorts are large consumers of health services. Although the

percent increase is large, the absolute number is smaller (the 85+ cohort is roughly 10% of the 45–64 years absolute change). How much of our resources, nationally and locally, will we be willing to allocate to health care? This question raises intergenerational issues (How much should the young be asked to pay for the health care of seniors?) and intersectoral issues (What proportion of our resource endowment should be allocated to health care?).

Suburbanization

Economic growth has a spatial and environmental dimension that is receiving increased attention. Trade-offs exist between the benefits of agglomeration and the costs of congestion. A major transportation study of the northeast corridor (downtown Indianapolis northeast to just north of Noblesville) is examining mobility options based on projected twenty-first century transportation patterns. Meeting this challenge creatively will be a major factor in determining the quality of life of citizens and the productivity of the Indianapolis metropolitan area's economy.

Fort Wayne

Thomas L. Guthrie

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

The first task in forecasting is always to determine the current status of the economy. However, that task is even more difficult than usual this time because of the impact of the GM strike on the data. By late June, 93% of all GM domestic operations had ceased, and employment data are collected the second week of the month. Comparing non-seasonally adjusted data for June (before the strike) and September (after the strike), it is hoped, eliminates most summer seasonal jobs from the calculation. That comparison reveals a loss of 5,500 jobs in the Fort Wayne metropolitan area (Adams, Allen, DeKalb, Huntington, Wells, and Whitley counties), of which 2,500 are manufacturing jobs. Those losses are likely the result of some undetermined combination of “Asian flu” and lingering GM strike effects. The area economy will need to recoup at least half of those jobs by the end of the year to match year-end 1997 employment—that is, to register no loss in employment for 1998.

Although that assessment of employment change is not particularly inspiring, one should not overlook the extraordinarily high level of area economic activity currently taking place:

1. The 273,000 jobs (seasonally adjusted) in June were a record (see **Figure 1**).
2. The area unemployment rate in September was still only 3.2 percent (not seasonally adjusted).
3. Industrial use of electricity set a new record in September (again, see **Figure 1**).
4. New single-family housing permits in Allen County have a good chance of beating the current record of 1,951 permits set 20 years ago, in 1978.

For the 16 years since the end of the rustbelt debacle (1982), the area economy has continued to perform well vis-à-vis the national economy. However, the growth strategy has been unconventional. Fort Wayne has continued to attract manufacturing jobs, while manufacturing jobs nationally continued to shrink. Between 1982 and 1997, manufacturing employment in the Fort Wayne area grew from 55,400 to 74,900; nationally, it declined from 18.8 million to 18.5 million during the comparable period.

Consequently, northeast Indiana (which includes Noble, Steuben, and Lagrange counties) and the Fort Wayne metro area currently have 33 percent and 27 percent, respectively, of their employment in manufacturing, versus approximately 15 percent nationally. So whatever does happen to manufacturing activity nationally in 1999 gets a twofold magnification in northeast Indiana.

To date, the one obvious problem with the strategy has been a significant decline in job quality. Between 1979 and 1996, the average annual pay level fell from 103 percent to 87 percent of the average for all metropolitan areas. However, a “most of our eggs in one basket” strategy, like a one-stock strategy in investment, is inherently riskier. Unfortunately, 1999 is likely to be the year we get reminded about the greater risk of an economy top-heavy in manufacturing employment.

It is difficult to identify a likely source of significant growth for the area economy in 1999, given the national outlook put forth earlier in this issue. The twin problems from the Asian flu—lackluster demand for our exports and increased competition from imports—will be quite troublesome to the manufacturing sector, especially industrial equipment manufacturing. Domestically, the latter is likely to be adversely affected by the twin problems of sufficient capacity (maybe overcapacity) and shrinking profit margins. In other words, companies will have neither the desire nor the wherewithal (internal financing) to buy industrial equipment.

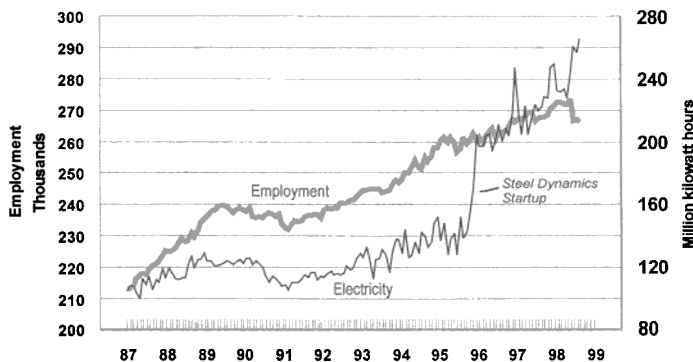
For the national forecast to be realized, the consumer must continue to buy aggressively—and that obviously includes autos and trucks. Why won't that translate into increased area employment in 1999? The answer is that the competitive pressures on price resulting from the Asian flu problem, general overcapacity, and GM fighting to regain lost market share are simply ferocious. The net result is more likely to be job losses than job gains as manufacturers struggle to cut costs and increase productivity.

The empirical evidence of this pricing pressure is prevalent. The sticker prices on new cars and trucks have been declining. The average manufacturing wage in the Fort Wayne area fell 20 cents in the year ending in September, which is one reason job quality in the Fort Wayne area continues to deteriorate. Wages in the manufacturing sector continue to decline, while wages in the service sector (in which the Fort Wayne area is underrepresented) are rising 3-4 percent annually.

We will be fortunate if, at the end of 1999, we can again note 273,000 jobs and 3.2 percent unemployment in the Fort Wayne metro area. That outcome would still allow job opportunities for households, a smattering of relief for employers trying to hire, and time to reconsider economic development strategies.

Finally, it is worth noting that next September the UAW contract with the Big Three auto manufacturers expires, and there may be stockpiling of inventories prior to the year's end in anticipation of Y2K problems. Consequently, there could be substantial intra-year volatility in auto and truck production and employment.

Figure 1
Total Employment and Industrial Use of Electricity in the Fort Wayne Metropolitan Area



Anderson

Barry Ritchey

Professor of Economics, Anderson University

To understand the state of the local economy, it helps to see issues in relevant terms. There are three interesting comparisons for the Anderson community that shed light on our position in the 1990s: (1) we can look at ourselves in the 1990s compared to the '80s; (2) we can look at ourselves compared to the national economy; and (3) we can look at ourselves compared to the rest of Indiana. This report takes all three approaches in an attempt to best show our progress, our current condition, and possible future directions.

The labor market continues to show signs of structural change. On the unemployment side, moderation has been the trend since the early part of the 1990s. The Madison County yearly unemployment rate for this decade has been 5.8%, compared to 9% in the 1980s. Of course, part of this improvement is due to improved national performance: about 7.3% in the 1980s, and down to 6% in the '90s. Still, this does not explain all of our improved performance. The local unemployment rate has been below the national level for five years in a row (1993–1997) and is running below the national level for the first eight months of 1998. We have experienced less than a 4% unemployment rate so far this year—despite the spike in unemployment that occurred in July due to the GM strike. The rate doubled in that month, and will likely add about a quarter of a percentage point for the year.

In relative terms, it would seem that our ability to create jobs has improved significantly. However, another comparison is also important. The local unemployment rate is not as low as that of the average community in Indiana for this decade or this year. Although we are doing better compared to our own experience in the 1980s and the national performance in the '90s, we still lag behind the average of other Indiana communities.

Our more stable employment picture reflects some important structural changes locally. Manufacturing employment tends to be sensitive to cyclical movements in the economy. Yearly manufacturing employment in the 1980s averaged more than 18,000; that number has fallen to about 13,500 in this decade. Total employment in Madison County averaged 45,470 in the 1980s, but has risen to an average of 47,700 in the 1990s. So the percent of total jobs in manufacturing—as high as 44% in the early 1980s—fell drastically to less than 28% by the end of 1996.

There has also been a change in the way local manufacturing has approached national economic

downturns. The local labor contract provides more insulation from layoffs due to national declines, and provisions like the job bank solve mild downturns internally. Naturally, there is more risk from the more extreme disruptions, such as the regional auto strikes. Because the auto companies have decided not to increase their hiring in the Anderson market, when increased production is needed, overtime has been the preferred solution. Mild downturns are met with a decrease in overtime rather than an increase in unemployment.

Another significant structural change is the redefinition of Anderson as more of a regional service center. The jobs created in the past decade have been primarily in the retail and service sectors. We see improved choices for local shopping, food services, and entertainment alternatives. When you remove manufacturing from the employment mix, about 6,000 new jobs have been created in other sectors in Madison County from the 1980s to the 1990s.

Construction has also improved over the two decades. Residential construction for the county averaged slightly more than \$7 million per year in the 1980s, but has risen dramatically in the 1990s to an average level of \$32 million per year. In 1996, this value reached a high of over \$52 million. For 1997, we saw a decrease to a not-so-modest \$44 million in residential construction. Through the first half of 1998, we were ahead of the building pace of the year before. Nonresidential construction has also improved in the 1990s. For the last decade, Madison County averaged less than \$7 million per year. In the first half of the '90s, the county averaged over \$17 million per year. Much of the higher average is driven by the large expansion in 1994. Still, the performance was clearly better in the first half of the decade. The increased construction and economic activity is a reflection of the desirable location Madison County enjoys, with its proximity to Indianapolis.

Income in the 1990s is much less impressive. Income measures show that local income growth is positive, but lags behind the average community in Indiana. Our share of the Indiana income pie has been flat or decreasing for most of the past 20 years. While average wages are relatively high in Madison County, the number of high-value-added jobs is clearly declining. The larger number of jobs in retail and service sectors tend to be low-value-added and thus pay lower average wages. The labor market transition partly explains the slower income growth. A higher dependence on transfer payments for income is another part of the explanation.

The local short-term forecast, which includes the balance of 1998 and into 1999, is not bad. Most national forecasts are calling for a moderation of GDP growth for 1999, somewhere in the 1 to 2 percent

range. A modest cooling of the national economy should not be enough to push local auto unemployment upward significantly. It will likely mean less overtime and therefore less local manufacturing income and lower average manufacturing wages. We shouldn't expect large changes in the local employment mix or unemployment for the coming year. Of course, some wild cards could surprise us. The changing ownership of local auto factories gives us some uncertainty in the near future. Existing contracts will be honored, but we cannot begin to predict what will happen at the end of those contracts.

On balance, the current assessment of our local economy should include a significant recovery from the poor performance of the 1980s. We have seen some improvement over the past decade. But the comparison between us and the rest of Indiana indicates that we have some distance to go in maintaining a standard of living commensurate with other, more prosperous Hoosier communities. The quality of employment growth will be a key for us in 1999 and on into the next century. Because our future as a manufacturing center is at best uncertain, a focus on providing the infrastructure needed to attract high-value-added jobs is essential for long-term growth.

Columbus

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Despite marked improvement in employment performance on the state and national fronts, once again the Columbus area economy outpaced them both. The year-to-August average monthly unemployment rate for Bartholomew County stood at 2.2% (2.3% for the same period in 1997), compared to 3.1% for the state (3.6% for the same period in 1997) and 4.5% for the U.S. (5% in 1997). The county's unemployment rate for the months of July and August was only 1.6%. And its initial unemployment insurance claims posted lower numbers in 1998 than in 1997—down by 22% and 18% for the first and second quarters, respectively. August 1998 initial claims were 14% lower than those for August 1997. Moreover, total unemployment claims filed decreased by 30% from 3,527 in July to 2,471 in August.

Table 1 shows the unemployment rates, the number employed, the number unemployed, and the annualized employment growth rates through the 1980s and '90s for Bartholomew County. Note that from 1990 to the most recent period available (third quarter 1998), the number employed has grown by 23% (from 31,922 to 39,395) and the unemployment rate fell from 4.9% to the current rate of 1.6%.

For the first nine months of 1998, Cummins Engine reported a 25% decrease in net earnings to \$111 million (from \$148 million in 1997), or \$2.86 per share (from \$3.82 in 1997), on sales of \$4.7 billion (from \$4.1 billion in 1997). These earnings exclude a pretax charge of \$114 million for restructuring costs and \$35 million associated with a methodology change in calculating product coverage costs for extended warranty programs. The restructuring plan, along with expected savings from economies of scale (a decrease in the firm's long-run average cost) in the new product lines, should reflect positively on the firm's financial position in the future. On the other hand, Cummins agreed to a consent decree with the government that requires it to pay a fine of \$25 million and comply with new environmental standards (along with six other engine manufacturers, whose collective fine amounted to \$1 billion). This is expected to put upward pressure on the cost of production in the next millennium.

Table 1
Columbus Area Employment Data

Period	Unemployment Rate (%)	Number Employed (Monthly Avg.)	Number Unemployed (Monthly Avg.)	Annual Employment Growth Rate (%) ¹
1980-1989	8.2	27,700	2,450	1.2
1990-1995	4.9	31,890	1,580	4.4
1996	2.8	38,029	1,120	2.1
1997	2.2	38,395	888	1.0
3Q98 ²	1.6	39,395	645	1.3

¹The annual employment growth rate is the percentage change for each quarter in a year compared to the same quarter in the previous year.

²For some of the figures reported, September's numbers were not available at the time of writing. Consequently, we extrapolated third-quarter averages by assuming that September's figures are equal to the average of the data from August and July.

For the first nine months of 1998, Arvin reported that its net earnings increased by 22% to \$58 million (from \$47.7 million in 1997), or \$2.40 per share (from \$2.06 in 1997) on sales of \$1.8 billion (from \$1.75 billion in 1997). This was the 11th consecutive quarter in which Arvin's earnings grew faster than sales. The company's plan to double its size by the end of 2002 remains on track.

Based on a survey conducted in July of every year by the Columbus Economic Development Board, employment in the old top five manufacturing companies (Arvin, Cosco, Cummins, Golden, and Rockwell) has continued its declining trend. Total employment in these companies went down from 11,082 in 1997 to 10,925 in 1998—a 1.5% decrease. On the other hand, employment by the top five new manufacturing companies (Enkei, Impact, NTN, Onkyo, and TIEM) has increased from 2,477 in 1997 to 2,617 in 1998—a 5.7% increase. In addition, four new companies (Crescent Manufacturing, MACtac, Inc., Maumee Industries, Inc., and Hamilton Foundry & Machine Co.) moved into the area, adding a total of \$24.6 million in investment and creating 98 new jobs with a weighted average hourly wage of \$13.40. Finally, expansions by other existing companies led to total new investments of \$418 million and the hiring of 124 new employees with a weighted average hourly wage of \$12.90.

For Bartholomew County, the number of building permits issued for residential buildings was 240 units for the eight-month period ending in August, compared to 257 for the same period last year. Although the number of units is down, their total cost for the same period increased by 2.7%, from \$32.4 million to \$33.3 million. As for the local housing market, for the first three quarters of 1998 the number of houses sold was almost identical to the year before: 770, compared to 767 in 1997. For the period ending on October 22, the average selling price in 1998 was \$129,584, compared to \$124,543 for third quarter 1997 (a 4% increase). This is despite the fact that the average number of days on the market increased from 121 to 131. Further, the sold-to-list-price ratio has inched upward to 96.2% from last year's 95.5%. Overall, the housing sector continues to experience a relative excess supply, although some housing appreciated at a rate exceeding the inflation rate.

Forecast

How the local economy evolves depends greatly on what scenario takes place. Assuming that the national economy will grow moderately (the most likely scenario), this should leave the Columbus area economy at more or less its current state. If the nation grows at above the expected level, then we should experience further shortages in local labor markets and higher

employment costs. If, on the other hand, global recession contaminates the domestic economy, then we believe the Columbus area will be adversely affected, with sales, profitability, incomes, and employment all declining.

Richmond–Connersville– New Castle

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The Richmond-Connersville-New Castle (RCNC) area economy can expect a slowdown in economic activity in 1999. This forecast hinges on the U.S. economy, given the area's interconnectedness and interdependence with the latter, especially in durable goods manufacturing. The expected 2.1% growth in real gross domestic product (the market value of final goods and services), a 1.7% inflation rate, an unemployment rate of 5%, and a 2.2% increase in real disposable income (personal income minus personal taxes) suggest that the robust economic performance of previous years will not be repeated in 1999. The national economy is slowing down, and so is the regional economy.

The manufacturing sector is reeling from the Asian crisis. Devaluation and recession are adversely affecting local firms that sell their products to Asian economies, which have been experiencing large external deficits and excessive exposure to foreign exchange risk. Local products become more expensive to foreigners as the purchasing power of their currencies declines relative to the dollar. The softness in demand, particularly in durables, translates into layoffs and job losses. Consequently, RCNC's unemployment will increase during the first two quarters of 1999 because of the Asian contagion (see **Table 1** on the following page). However, stability in Asia and other markets would eventually halt a significant increase in the local unemployment rates. Protracted double-digit unemployment rates are unlikely.

The service industry, unlike manufacturing, will experience more employment in 1999 because of sustained demand for various services, ranging from business, personal, and health to professional and social. The current sectoral expansion reflects this phenomenon, coupled with the demographic profile

Table 1
RCNC Labor Force Estimates

	Labor Force		Employment		Unemployment		Unemployment Rate	
	Aug-98	Aug-97	Aug-98	Aug-97	Aug-98	Aug-96	Aug-98	Aug-97
Fayette	11,370	11,570	10,800	10,950	570	620	5.0	5.3
Henry	25,540	25,150	24,700	23,980	840	1,170	3.3	4.7
Wayne	38,640	3,870	37,170	37,340	1,470	1,530	3.8	3.9

Source: Indiana Workforce Development

Table 2
Building Permits Issued 1Q-3Q98, City of Richmond

Month	New		Service Value	Svc. Proj. Value	TOTAL PERMITS	TOTAL VALUE	
	Residential	Commercial					
January	5	1	\$ 1,094,000	130	\$ 1,495,032	136	\$ 2,589,032
February	6	3	1,112,000	110	986,152	119	2,098,152
March	4	2	1,686,000	228	1,428,036	234	3,114,036
April	3	--	320,000	220	1,369,647	223	1,689,647
May	9	2	8,656,300	260	5,081,027	271	13,737,327
June	3	6	2,068,000	305	3,362,614	314	5,430,614
July	6	2	960,400	291	5,482,312	299	6,442,712
August	3	1	431,700	305	2,198,729	309	2,630,429
September	6	3	651,500	274	1,289,132	283	1,940,632
TOTAL	45	20	\$16,979,900	2,123	\$22,692,681	2,188	\$39,672,581

Source: Department of Planning, Permits and Inspections. City of Richmond

and consumption activity. The county's median age is 34.9 years, and about 16% of the population is 65 years and over. Per capita income is about \$17,500, which means a steady demand for services.

In a recent survey by the Center for Economic Education, 73% of the firms have hired new employees in 1998, 84% are affected in varying degrees by current economic conditions, and 40% plan to expand in 1999. Most of the firms (80% of them) rate RCNC favorably for doing business, but are concerned with work force development and global competition.

Coupled with employment is gross fixed capital formation, which is investment in plant, equipment, and commercial and residential structures. Such capital formation will have a positive effect on RCNC, tempered by setbacks in business operations. In Richmond, the number of building permits issued through the first nine months of 1998 totaled 2,188, of which 45 and 20 were residential and commercial, respectively (see **Table 2**). Their total investment value is an estimated \$39.6 million, reflecting a slight increase of 2.2% over 1997.

The housing market is faring well because of low unemployment and favorable interest rates. The unemployment rate in Wayne County has remained below 5.5% during 1998. Most financial institutions had 15-year and 30-year mortgages and one-year

adjustable rate mortgages at 6.5%, 7%, and 6.2%, respectively, at the end of October. Upscale houses priced above \$150,000 are doing much better than last year, though most of the housing activity is in the \$75,000-\$150,000 price range. It is both a buyer's and a seller's market, which may help cushion other sectoral side effects during 1999.

The retail sector, like housing, can expect a good fourth quarter as consumers get a head start on holiday shopping. Consumer confidence in the economy is still strong, which bodes well for local merchants. Early sales, discounts, and other promotions have sustained consumer sentiment and shopping. The Monica Lewinsky factor has not generated consumer retrenchment in the marketplace. Local merchants can expect at least a 3% increase in retail sales in the fourth quarter, with the customary lull in succeeding quarters.

Given the forecast of a slowdown in the national economy, combined with a less than robust manufacturing sector, I expect RCNC to prevail against any recessionary cloud. Economic activity should proceed at a subdued pace provided there are no further external shocks.

Kokomo

Dilip Pendse

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Looking back at the economy's performance during the first nine months of 1998, the good news is that the Kokomo area remained vibrant in the midst of El Niño's unusual weather effects: Wildcat Creek running over its banks, a tornado that destroyed homes and school buildings and knocked down electric lines in eastern Howard County. Two hundred new jobs were created each month. This is remarkable, considering we are at the tail end of an eight-year-old economic expansion. In addition, payrolls have swollen, unemployment reached a rock-bottom level, the job market is ultra tight, factory overtime and incomes have remained high, and the influx of people has continued. Kokomo also made *Industry Week's* top ranking in manufacturing, housing is most affordable, and the multi-unit housing construction is booming.

Kokomoans deserve this high ride to the top of the economic mountain after struggling through the

chills of recession and the pains of downsizing in the early '80s. It is time to celebrate economic ebullience.

Kokomo Glowing in the National Spotlight

The year began with bursts of good news. Kokomo being ranked among the world's gold medalists in manufacturing came first. In its March 1998 issue, *Industry Week* magazine ranked Kokomo at the top of its list of 25 U.S. manufacturing MSAs and 8th best worldwide. The magazine placed Kokomo ahead of Detroit and Indiana's Elkhart-Goshen, Lafayette, and Fort Wayne MSAs, as well as among the ranks of such long-established manufacturing meccas as São Paulo (Brazil), Toronto (Canada), Shanghai (China), and Tokyo and Osaka (Japan).

A high ranking in the housing market followed Kokomo's top ranking in manufacturing. In its quarterly survey of nation's housing markets, the National Home Builders Association ranked Kokomo's housing market most affordable for the sixth quarter in a row.

Brawny Labor Market

The November *IBR Update* noted that Kokomo's MSA posted the highest job growth rate (5%) among the state's 11 MSAs for the 12 months ending June 1998. Kokomo's economy created 2,500 jobs during August 1997-98, a remarkable feat indeed.

The local job market, however, remained tight. Employers anxiously await job seekers to walk through their doors, and "Now Hiring" signs are all over town. Since May 1991, Howard County's jobless rate has gradually declined, dropping to a 26-year low of 2.2% in August. Throughout the first eight months of the year, the unemployment rate stayed below the state and national levels, except in July. The eight-week strike by auto workers in Flint, Michigan caused massive layoffs at Delphi Delco Electronics, resulting in the tripling of Howard County's unemployment rate to 6.6%. The average monthly rate in Howard County (except for July) stood at 2.9%, compared with 3.4% during the same period the year before. This has been the lowest average unemployment rate since 1972.

With a low unemployment rate, work rosters swelled throughout the year. In the 12 months ending in September, the Kokomo metropolitan area created 200 jobs a month. Unlike the year before, the goods-producing sector remained strong. Although it posted robust gains of 1,300 jobs, the service-producing sector actually lost 100 jobs. Manufacturing posted solid gains of 800 jobs, followed by hefty gains of 500 jobs in the construction sector. The service sector's job losses occurred primarily in trade, followed by government and transportation & public utilities.

For the fifth year in a row, Kokomo's 21,500 workers engaged in the production of durable and nondurable goods earned handsome overtime pay.

The weekly working hours in manufacturing averaged 51 hours during the first eight months of the year, three hours more than a year before. Not only that, the average manufacturing work week remained higher than any other MSA in Indiana. Average weekly earnings in manufacturing were \$1,054 during the first eight months—\$150 more than the same period a year earlier. At these wages, an average blue-collar worker could pocket about \$55,000 for 1998.

According to *Sales and Marketing Management*, the median spendable income in the Kokomo metropolitan area rose 5% in 1997 to \$37,258. The magazine also ranked Kokomo's median income third in the state and 84th nationally. Another source placed Kokomo's average annual pay at the top in Indiana for the 16th consecutive year. According to the U.S. Bureau of Labor Statistics, Kokomo's average annual pay of \$34,779 in 1996 was 13th highest among the nation's 313 metropolitan areas, and second highest among 55 metropolitan areas in the Great Lakes Region. In 1996, Kokomo's average annual income increased 2.4%, compared with 2.2% the year before.

Finally, in terms of income, the average wage and salary paid to Kokomoans in 1996 remained among the top three in the state and about \$5,000 above the state average of \$25,920. During 1991-96, the percent change in per capita income in Howard County far exceeded the state's overall gain of 28%.

Mediocre Growth in the Housing Sector

Construction cranes dotted the Kokomo landscape. Thanks to several school building projects and a multi-unit housing boom, Kokomo's construction sector soared. Construction employment zoomed to a new peak of 2,700 in September, up 500 from 12 months before, and 125% higher than in 1994. The bright spot in the residential construction sector was the rapid growth in multi-unit construction. Valued at \$13.4 million, the number of permits issued for multi-unit housing totaled 48, compared with 42 permits issued a year ago and valued at \$8.1 million.

Overall, however, residential construction declined. Building permits issued totaled only 519, which was 14% of the number during the same period in 1997. Permits issued for single-family homes numbered only 181—13% below the level reached a year earlier. But average construction value registered on the permits skyrocketed to \$196,000, a whopping 68% jump from the year before.

For the second consecutive year, nonresidential building permits issued outnumbered the permits issued for residential purposes, soaring 41% from 181 a year ago to 261. Among the permits of note are a hospital expansion (valued at \$8.5 million), additions to school buildings (\$22.8 million), and 35 business buildings and additions (\$8.8 million).

Overall, despite low interest rates, low joblessness, an influx of people, and higher incomes, the housing sector remained listless. During the first nine months of 1998, the number of building permits issued totaled 780, which was 1% below the same period a year ago. The dollar value reported on all permits issued totaled \$99.5 million, \$5.5 million below last year's level.

Growth in the Retail Sector

Since 1994, Kokomo has added 1,300 new retailing jobs. Now employing 10,100 people, the retail sector continues its upward growth. Total sales in the metropolitan area rose \$9 million to \$1.093 billion in 1997. At an average of \$27,472 in retail sales per household, Kokomo ranked fourth in the state. While automotive sales per household topped the state's metro markets in 1997, the general merchandise and food store sales ranked third and fourth, respectively.

This year is going to be a banner year for the retail sector. Kokomo's economy is strong, incomes are high, and the number of job holders is larger than ever before. The sector got a shot in the arm early in 1998 when Chrysler and Delphi Delco employees received their bonus checks or flexible pay raises totaling \$50 million. In September, another boost came from the Farm Progress Show held in Tipton County, which attracted more than 300 exhibitors and up to 500,000 visitors nationwide and pumped between \$6–8 million into the local economy.

Local Business Activity

A new "merger mania" era has dawned in Kokomo. At the beginning of the year, the Delco Electronics (DE) sign, a landmark on U.S. 31, was replaced with a sign reading "Delphi Automotive Systems," making Delco one of the seven DAS units worldwide. DE is likely to remain DAS's strongest and most profitable unit. Chrysler Corporation, Kokomo's second largest employer, officially merged with Germany's Daimler-Benz AG. The Daimler-Chrysler (DC) merger, together with the DE-DAS merger, give Kokomo a more prominent spot on the world map. In addition, the Sullivan-based First Bank and Trust merged with Kokomo's First National Bank. The new bank, with about \$1 billion in assets, will be called First National Bank and Trust, and its headquarters will remain in Kokomo.

Chrysler energized Kokomo's manufacturing sector. Its casting and transmission plants remained active in hiring new employees. The two plants will add a total of 600 new jobs before the year's end, according to its three-year hiring plan.

Delphi Delco made news on several fronts. The eight-week long strike at Flint, Michigan caused ripple effects in Kokomo. At the strike's peak, 62% of the 5,000 production workers here were temporarily laid

off. Worker call-back began in early September. Moreover, the company announced the formation of a 160-person Energenix Engineering Center in Kokomo by transferring 120 staff members from its facility in Castleton, Indiana. The new center will develop futuristic electronic auto components. Delphi Delco's total work force continued to increase through new hires, job transfers from Castleton, and a plant closing in Muncie, although it permanently shut down Plant One as part of its strategy to consolidate manufacturing operations in Kokomo.

IDRA Press Spa, an Italian manufacturer of huge pressure die casting machines, launched its one and only North American operation in Kokomo. It is hoped that IDRA will be successful in attracting business and creating jobs in Kokomo.

After nearly 10 years of struggle, the EPA agreed to clean up the defunct Continental Steel plant site at a cost of \$8 million. Further cleanup of the contaminated site will cost at least \$80 million.

With the arrival of a 19-bed unit at St. Joseph Hospital, the Kokomo area can now boast three hospitals. The Dallas-based Spectrum Comprehensive Care Inc. will run the new hospital-within-a-hospital. Further, St. Joseph and Howard Community Hospital announced building expansions totaling \$13.7 million. Unfortunately, in a cost-cutting effort, Howard let go 63 of its 800 employees in July.

Kokomo is now home to three colleges/universities: Indiana University Kokomo, Ivy Tech State College, and the new downtown campus of Indiana Wesleyan University.

Several other business changes have occurred or are in the offing. WIS Sheet Metal, a supplier of medical devices, announced a \$3.4 million expansion plan. Syndicate Sales, a manufacturer of floral products and Kokomo's fourth largest employer, acquired Nestlé Food Co.'s 132,000-square-foot facility—an acquisition that could create new job opportunities. With the grand opening of the Auto Heritage Museum, Kokomo now has two museums. The number of Kokomo businesses increased with the arrival of Save-a-Lot, Goody's Family Clothing, Advance Auto Parts, Pep Boys, Blimpie's, and Grindstone Charley's. And while several new stores arrived, Shoney's and Lowry Lanes East closed.

Some of the major developments in the surrounding area include the signing of the joint-use agreement at the Grissom Aeroplex, paving the way for the civilian use of Grissom's 12,500-foot landing strip for air cargo operators, maintenance providers, auto parts manufacturers and distributors, and other businesses. The Miami County Correctional Facility administrators hired about 500 people for the newly built facility and is slated to begin its operations in July 1999. D.C. Coates Inc. acquired the Muncie-

based Engineered Technology Corporation. And with the ratification of a five-year labor pact by Logansport's IBP, workers will receive higher pay and other benefits.

Economic Outlook for 1999

No dark clouds lurk on Kokomo's economic horizon. Despite rumblings of a recession at the national level, Kokomo's economy should remain strong for three reasons: jobs, jobs, and jobs. In addition to this year's hiring of about 600 workers, Chrysler will add 400 more to its work force in 1999. Although GM will spin off Delphi Automotive Systems in 1999, the local unit will add about 300–400 production and salaried personnel to its work force next year. The Miami Correctional Facility will create another 150–300 jobs in the service sector.

The unemployment rate will hover around the 2.5–3.5% range. More new businesses will open on the north side of Kokomo. The average work week will fall a bit to 49 hours. Overall, retail sales and incomes will register strong gains. While multi-unit housing construction will slow next year, single-family home building activity will pick up. The specific economic forecasts for 1999 are listed in **Table 1**.

In summary, no major threat to Kokomo's prosperity exists in 1999. The economy will cruise along at a comfortable pace, attracting new businesses, extending job opportunities to hundreds, and raising incomes and retail sales to new levels. The days of glory will continue for at least one more year.

unchanged at its current level of around 268,000 jobs in Lake and Porter counties. However, some substantial downside risks suggest this may be the best that can be expected over the coming year. These risks arise from an unsettled international picture, raising the possibility of both increased import competition (especially in the steel industry) and reduced export opportunities for a broad range of industries in Northwest Indiana.

In the past year, a number of countries, especially in Asia, have experienced sharp declines in output and employment—hence, the so-called “Asian Flu.” Producers in these countries, seeking sales outlets in other countries, have increased their sales to the U.S.; in a number of cases, these increased sales have come at the expense of domestic U.S. producers.

In part, these increased imports have been driven by increases in the international value of the U.S. dollar. A strengthening dollar makes imports less expensive for U.S. buyers (and U.S. exports more expensive for foreign customers). For example, the Japanese yen fell from ¥120.65 to the dollar at the end of August 1997, to ¥140.90 to the dollar at the end of August 1998. That is a 17% appreciation against the yen in one year. Other things being equal, this would reduce the price of Japanese imports by 17%—and the yen was one of the stronger Asian currencies during this period.

In addition, a potential weakening of the U.S. economy raises the possibility that demand for steel and petrochemical products may slow or decline. This has obvious implications for the Northwest Indiana economy.

Goods-Producing Industries

Employment in goods production (construction and manufacturing) has declined over the past two years by nearly 3%—from 68,700 to 66,700. Manufacturing claimed 1,700 of those lost jobs, a decline of 3.3%. On balance, all of the loss can be attributed to declines in primary metals employment, down from 30,800 to 29,100 over the two years (a 5.5% drop).

Of equal significance for incomes generated in manufacturing, average weekly hours have declined from 42.4 in October 1996 to 41.4 in October 1998. In addition to declining overtime, shifts in the structure of employment have driven hourly earnings down from \$18.56 to \$18.43; the consequence is a 3% decline in average weekly earnings. Indeed, the 1997–98 drop is even more severe: hours dropped from 43.3 in 1997 to 41.4 in 1998, while hourly earnings fell from \$18.72 and weekly earnings fell by nearly 6%. Combined with lower employment numbers, this suggests a decline in local income generated in manufacturing of nearly 10% over two years.

Table 1
Kokomo Area Economic Forecast

Average unemployment rate	2.7%
Manufacturing employment	22,000
Average factory work week	49 hrs.
Single-family bldg. permits	250
Average annual pay	\$36,438
Total retail sales (\$ billion)	1.135

Northwest Indiana

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Following four years of robust growth, the economy of Northwest Indiana appears likely to grow much more slowly in 1999. Between the beginning of 1994 and October 1998, total employment in the region grew by 12% (an annual rate of nearly 2.4%). However, growth has slowed recently, to 0.4% between October 1997 and October 1998. For the coming year, we expect total employment to remain essentially

Employment, hours, and earnings in manufacturing will likely continue to fall in 1999. A decline in manufacturing employment of around 600–1,000 jobs is a big possibility; it also seems likely that weekly hours will at best remain constant. This implies a decline in local income generated in manufacturing of around 2% in 1999.

Primary metals. In the case of the steel industry, imports have surged. For the first eight months of 1998, imports totaled 26.7 million net tons of steel, up 24% from the first eight months of 1997. Imports from Asia in particular rose dramatically; Japan, Korea, and Indonesia accounted for nearly 25%, up from 13% in 1997. We have already observed the consequences for employment in steel. Hours and hourly earnings also both fell, with weekly earnings dropping by 5.5% since October 1997.

Continued declines in employment seem likely in primary metals in 1999. It would not be surprising if employment were to drop by around 600 jobs, even in the absence of continued turmoil in world markets for steel. Weekly hours will likely fall modestly as well, leading to income losses in metals of 3% or more.

Chemicals and petroleum products. Total employment in chemicals and petroleum products has held steady at 4,400 since October 1996. However, weekly hours have declined, particularly in chemicals. As a consequence, weekly earnings have fallen by about 3%. Assuming exports of chemicals and petroleum products are not adversely affected by world economic conditions, employment will probably hold its own. However, declines in weekly hours may continue leading to modest drops in income generated in these industries in 1999.

Service-Producing Industries

The service sector has fueled Northwest Indiana's employment growth over the past four years, but that stimulus appears to have run its course. Following extremely strong growth between October 1997 and October 1998 (a gain of 4,200 jobs, with 3,500 of those in business and personal services), service employment rose by only 1,300 over the past year, and by only 400 in business and personal services.

Clearly, the rapid increases in service employment—nearly 20% over 4.5 years—are a result of the opening of the lake-based casino operations. This development will not be repeated in the near future, so the service sector probably will not provide the kind of stimulus in the future that it has over the past several years. Employment growth such as that seen over the past year seems most likely, with perhaps 1,000 new jobs to be generated. These jobs should be relatively widely distributed across the service sector (trade, finance, business, and personal services), rather than concentrated in one area.

Conclusions

The year 1999 is shaping up, at best, as one of slow growth for Northwest Indiana. If the international situation remains unsettled, or if further declines occur in Asia (either in levels of output or in the value of currencies), the region may experience decline rather than stability or modest growth. Given its continued specialization in manufacturing, its economy remains more cyclically sensitive than the state or the nation. With the prospect of continued weakness in the world economy and a potentially slower-growing national economy, a recession is more of a possibility for Northwest Indiana, even if it is not yet highly likely.

South Bend/Mishawaka–Elkhart/Goshen

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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 June 1998. Note that the table includes comparable figures for May 1998 and June 1997, along with percentage changes to indicate possible trends.

South Bend/Mishawaka

The labor market in St. Joseph County has grown and tightened in 1998. Average monthly employment has increased almost 1.5% over 1997, with nonmanufacturing jobs growing slightly faster than manufacturing jobs. Whereas monthly unemployment rates have dipped to an average of 3%, help wanted advertising continues to rise. So far in 1998, South Bend and Mishawaka enjoy full employment, and more employers are seeking additional workers.

Among our other seasonally adjusted indicators, the largest changes thus far in 1998 have been the 25% declines in monthly commercial and industrial gas sales. Monthly registrations of new cars and trucks showed only minor changes from 1997 levels, although the data do not yet reflect the GM strike. The worrisome rise of nonbusiness bankruptcies continues, with the average monthly level now exceeding 340% of the base year level. Such weakness in consumer finances may figure prominently in the next recession. Housing construction slowed in 1998, with the monthly number of permits falling even as the average value per permit rose. All unadjusted indicators of the residential real estate market have higher monthly averages so far, with the number of listings and the average market price up about 5% over 1997.

Elkhart/Goshen

Elkhart County's labor market shows strong growth so far in 1998, with average monthly employment ahead of 1997 by more than 3%. Monthly unemployment rates have averaged just 2.7%. Monthly levels of help wanted advertising have climbed 5% above 1997 levels. As in St. Joseph County, the labor market has grown stronger and tighter.

In the first half of 1998, monthly registrations of new vehicles showed very little change compared to 1997. Unadjusted residential real estate data thus far in 1998 posted higher average levels than the year before. As in neighboring St. Joseph County, average market prices were up about 5%. The number of listings climbed almost 15% and the average days listed rose more than 20% higher than 1997 levels.

Table 1
South Bend Area Economic Indicators

	SOUTH BEND/MISHAWAKA					ELKHART/GOSHEN				
	June 98	May 98	June 97	% Change from June 97 May 98		June 98	May 98	June 97	% Change from June 97 May 98	
EMPLOYMENT INDICATORS										
Nonagricultural Employment ¹	128.5	127.9	127.0	0.5%	1.2%	124.3	128.9	128.1	-2.9%	-3.5%
Manufacturing Employment	95.4	95.0	92.9	0.4%	2.7%	120.1	119.8	119.5	0.5%	0.3%
Nonmanufacturing Employment	138.0	138.0	136.8	0.0%	0.8%	136.9	136.1	138.0	-0.8%	0.6%
Unemployment Rate	2.9%	2.8%	3.1%	—	—	2.2%	2.7%	2.9%	—	—
Help Wanted Advertising Index ²	105.7	106.7	95.4	-1.0%	10.7%	111.6	93.7	101.2	10.3%	19.1%
UTILITIES³										
Industrial Electricity Sales	108.2	107.4	104.4	0.7%	3.6%	113.3	113.9	113.3	0.0%	-0.5%
Commercial Gas Sales	148.3	109.3	145.7	35.7%	1.8%	n/a	n/a	n/a	n/a	n/a
Industrial Gas Sales	86.1	68.8	57.6	25.1%	49.5%	n/a	n/a	n/a	n/a	n/a
CAR & TRUCK REGISTRATION¹										
New Passenger Cars	51.2	56.8	53.3	-9.8%	-3.9%	49.4	53.3	53.3	-7.2%	-7.2%
New Trucks	127.3	108.6	103.3	17.2%	23.2%	122.4	135.9	116.4	5.2%	-9.9%
BANKRUPTCIES—SOUTH BEND DIVISION⁴										
Business	30.3	15.6	15.1	94.0%	100.4%	<i>(Included in South Bend Division)</i>				
Nonbusiness	337.6	332.4	297.4	1.6%	13.5%					
HOUSING CONSTRUCTION DATA⁵										
Estimated Value of Permits	168.8	165.1	169.6	2.2%	-0.5%					
Number of Permits Issued	114.2	102.5	112.6	11.4%	1.4%	<i>(Not available)</i>				
Average Value per Permit	155.9	162.3	158.9	-3.9%	-1.9%					
RESIDENTIAL REAL ESTATE DATA										
Number of Active Listings	1,498	1,336	1,328	12.1%	12.8%	1,461	1,480	1,238	18.0%	-1.3%
Average Days Listed	104	108	68	-3.7%	52.9%	102	96	83	22.9%	6.3%
Average Market Price	\$101,405	\$95,630	\$87,942	6.0%	15.3%	\$99,654	\$98,891	\$91,577	8.8%	0.8%
% of Sale to List Price	96.0	95.0	95.0	—	—	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, Walkerton, and New Carlisle. Elkhart County, excluding cities of Elkhart, Goshen, Nappanee, and Millersburg.

Outlook

The Michiana economy has benefitted from the long expansion in the national economy. Durable goods—auto parts, recreational vehicles, manufactured housing, boats, and so on—are an important part of regional output. High levels of consumer confidence, low national unemployment rates, and low interest rates during the past year have spurred the sales of durable goods, keeping local labor markets tight and leading to reasonable economic growth. International developments threaten to slow the growth in national GDP by reducing U.S. exports and increasing U.S. imports, as well as by reducing the sales and profits of U.S. corporations. This slowdown in the national economy, together with the recent drop in consumer confidence, will likely affect the demand for durable goods and the Michiana economy, especially in the next two quarters. The Elkhart-Goshen area, which has the highest percentage of manufacturing employment of any MSA in the U.S., will probably feel the effects of the drop in durable goods sales quicker and stronger than the South Bend-Mishawaka area. We expect to see rising unemployment rates, although still low by historical standards, and much slower growth in employment.

Louisville–Jeffersonville–New Albany

Fay Ross Greckel

Professor of Economics at Indiana University Southeast

This has been a year of considerable growth for the Louisville metropolitan area economy. Our seven counties (Clark, Floyd, Harrison, and Scott counties in Indiana, and Jefferson, Oldham, and Bullitt counties in Kentucky) generally out-performed the state of Indiana, though not all sectors of our economy were equally robust.

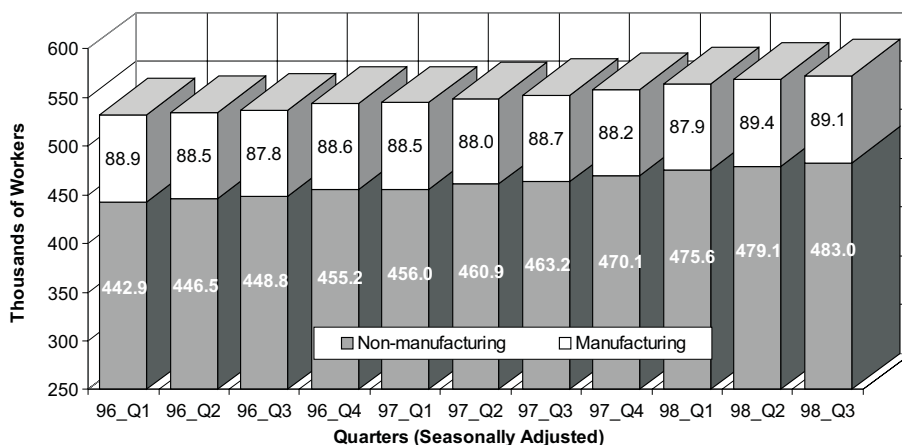
Total nonfarm employment grew at a surprisingly strong rate, adding about 17,000 filled jobs between third quarter 1997 and third quarter 1998 (see **Figure 1**). Revised employment data for the previous two years revealed that nearly the same number of jobs were added in the 12 months ending with September 1997, so we have had two years of very substantial job growth—well above the growth rate of the middle of the decade.

The magnitude of the employment growth attests to the vigor of the regional economy. It is surprising only because of the tightness of the local labor market. Local unemployment rates, which were already historically very low, declined about a percentage point from year-ago levels. The preliminary September unemployment rate reported for residents of the four metropolitan area Indiana counties was 2.3%. For residents of the three Kentucky counties, the rate was 3.0%. These rates are not seasonally adjusted, and they compare with 2.8% for Indiana and 4.4% for the nation as a whole.

Although some of the employment growth can obviously be explained by the lower unemployment rate, that does not account for the entire increase. The labor force itself has grown, partly from new residents and perhaps partly from new participants among the existing population. In addition, there has probably been some increase in commuting from outlying counties, as well as more residents holding multiple jobs. The upcoming decennial census should help reveal the relative importance of these various factors.

Virtually all the net job growth was concentrated in the nonmanufacturing sectors, which now provide about 84% of the nonagricultural jobs located in the area. The sector with the largest increase by far was services, which added about 7,000 jobs. As has been the case in recent years, business and health services led this jump. Trade employment rose by about 4,000 jobs, nearly all in the retail sector. Construction added

Figure 1
Employment in the Louisville Metropolitan Area

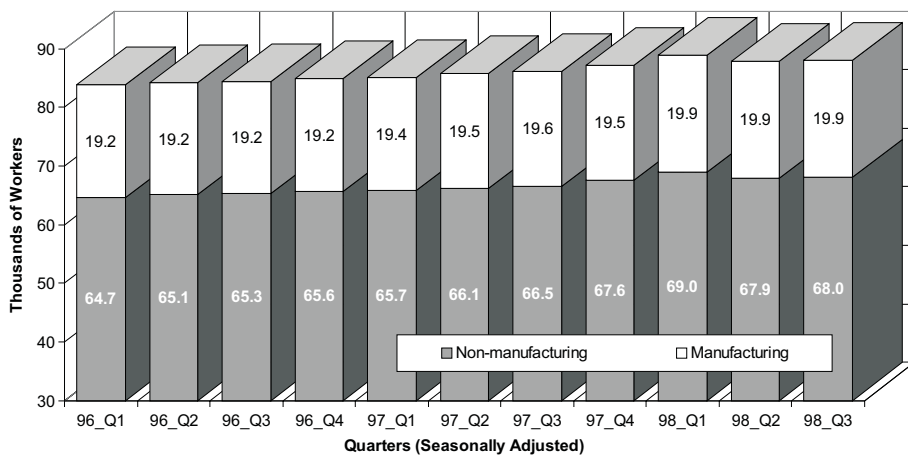


The Louisville area comprises Clark, Floyd, Harrison, and Scott counties in Indiana, and Jefferson, Bullitt, and Oldham counties in Kentucky. Data source: Kentucky Cabinet for Human Resources.

about 1,500 jobs, particularly in the special trades area. Local government expanded by about 1,000 jobs, mostly in education.

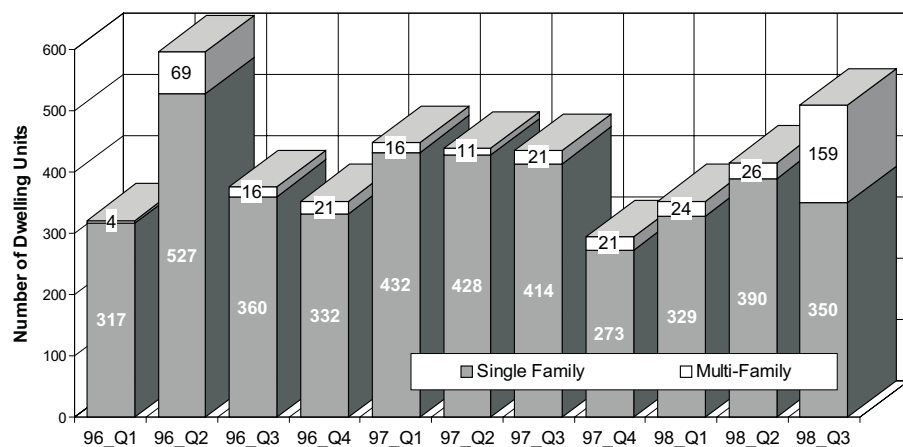
Employment data for just the four Indiana counties in the metro area show a decline for second and third quarters 1998 (see **Figure 2**). However, it is premature to be too concerned about that picture. The preliminary estimates on which these statistics are

Figure 2
Employment in Southern Indiana (Clark, Floyd, Harrison, and Scott Counties)



Source: Indiana Department of Workforce Development

Figure 3
Residential Building Permits, Clark, Floyd, Scott, and Harrison Counties



Source: Kentuckiana Regional Planning and Development Agency

based will be revised next year. Over the past three years we saw the same initial downtrend pattern, but later revisions turned that into a gently rising trend. I expect next year's revisions to show a positive picture once again. Also, with Caesar's riverboat casino opening in November and employing 2,000 people, the employment year should end on an upswing.

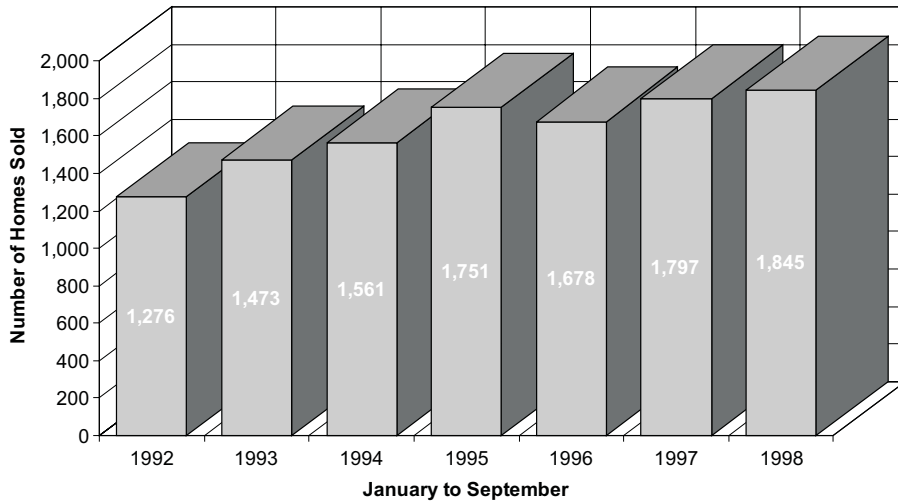
Even with the current statistics, the southern Indiana counties had 2,000 more jobs filled in third quarter 1998 than in third quarter 1997, and average employment for the first nine months of this year was running a robust 2,800 jobs ahead of the same period last year. The manufacturing sector added about 400 jobs. The nonmanufacturing sector accounting for the remaining gains was services, state and local government (including education), and construction.

It has been widely noted that southern Indiana is becoming more of a bedroom community for Louisville than it used to be. However, we should be careful not to overstate that trend. The southern Indiana counties account for more than one out of seven (15%) metropolitan area jobs, and for nearly one out of four (22.5%) of the manufacturing jobs. One of the more visible signs of economic activity is residential construction, which continues at a strong pace. In Jefferson County, Kentucky, the first three quarters of 1998 saw a record number of building permits issued for new single-family dwellings—well over 2,100 homes. That was a 19% increase over the record 1997 total for the first nine months of the year. Most of the building is occurring in the unincorporated sections of the county. Permits for multi-family units also rose strongly this year: nearly 40% higher than last year. But the totals are not high by historical standards, and the construction focus is still mainly on single-family homes.

Apartment-building also increased on the Indiana side of the river, but here too, most of the activity is in single-family construction. In the first nine months of this year, the four metro counties in Indiana reported issuing permits for nearly 1,100 single-family houses (see **Figure 3**). This was a high level of building activity by historical standards, but about 200 homes fewer than in the same period last year. Reporting of building permits has been rather slow from some jurisdictions, and the above total may understate the amount of home building going on. Construction employment is up, and people in the field do not see any building slowdown—if anything, they see the opposite.

Both the building activity and housing sales underscore the heightened interest in developing the more rural areas of the Indiana counties. There is also a growing realization that these locations are often more accessible to job sites than are most parts of Jefferson, Oldham, and Bullitt counties.

Figure 4
Real Estate Sales (Homes) in Clark, Floyd, Crawford, and Harrison Counties



*NOTE: Sales activity reflects only Multiple Listing service sales.
 Source: Southern Indiana Realtors Association*

The robust southern Indiana housing market is also evident in record sales of existing homes (see **Figure 4**). Through September of this year, nearly 1,850 homes were sold through multiple listing services in Clark, Floyd, Harrison, and Crawford counties—a 3% increase over last year's record sales for the same period. On the Kentucky side of the Ohio River, sales of existing homes jumped 8% over last year's sales, with more than 7,000 houses sold through September.

One indicator of consumer spending is purchases of new cars and light trucks. Data for the three largest metro area counties over the first nine months of the year show a different trend than most of the areas discussed above. For the second year in a row, sales of both new cars and light trucks fell in Jefferson County. Car sales were down nearly 6%, or about 1,000 vehicles. Sales of light trucks (pickups, minivans, and sport utilities) fell only 1%, or about 100 vehicles, but this is contrary to the national trend and to what has gone on locally for most of this decade.

For the first time since 1993, new car sales declined in Floyd and Clark Counties—also down nearly 1,000 vehicles, or about 19%. Light truck sales increased very slightly (less than 1%). Overall, new car and truck sales in the three large counties were about 6% lower than in the first nine months of 1997. It is possible that a shift to other consumer expenditures has occurred, rather than a drop in total purchasing.

Overall, the local economy still appears quite sound. The labor market remains very tight. Demand for workers is high, and it is hard to see where we will

get the work force to sustain another year of job growth as vigorous as this one has been. But then I did not expect this year's rate of expansion to be possible either.

A lot of industrial, commercial, and civic capital expansion is under way, injecting money into the economy now and providing additional jobs in the near future. Examples include Caesar's riverboat casino, which just opened with some 2,000 employees. More will be added when the \$275 million complex is completed, probably in late 1999, and the eventual payroll is anticipated to be around \$50 million. Also in Harrison County, Tower Automotive recently announced a \$71 million expansion that will bring 40 new jobs to Corydon.

The Clark Maritime Center has several new tenants; capital investments totaling well over \$100 million and at least 600 new jobs are anticipated. Among the new developments, Vogt Valve and GEA Parts opened new facilities this year, and GalvStar, RPS, ScanSteel, & Gateway Galvanizing are building at the Center. Floyd County activity includes the Community Bank headquarters building in downtown New Albany and investments by Accent Marketing Services and Tilton Equipment Company. These are only a few of the new and expanding commercial and industrial projects going on in the area. In addition, many public projects are under construction.

All of this points to continued economic vigor in the months ahead. Though we will be affected by any national slowdown, I expect this area to fare better than the average of the nation or the state in 1999.

Muncie

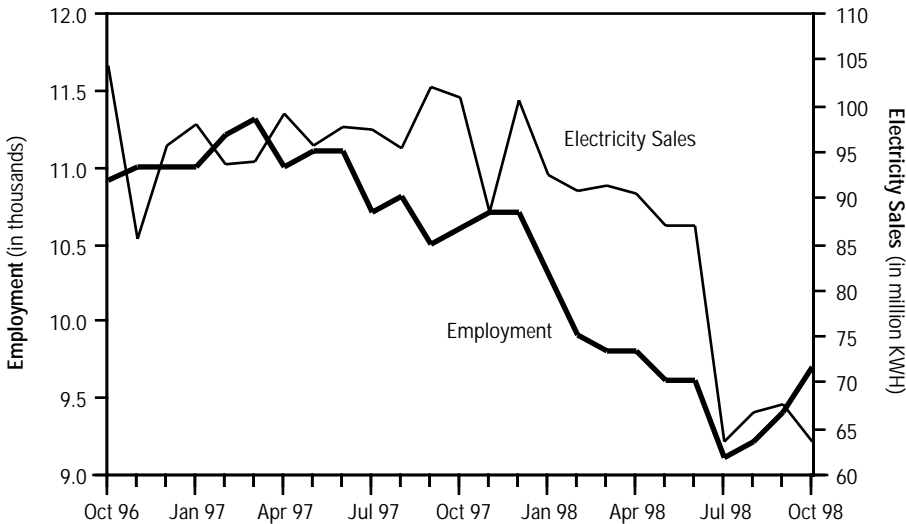
Patrick M. Barkey

Director, Bureau of Business Research, Ball State University

The Muncie economy got more than its proverbial 15 minutes of fame during the last year, but it was the kind of attention its civic leaders could have done without. The announced closure or downsizing of five major manufacturing employers took a sizable chunk out of the economy's manufacturing base and gave economic development efforts a new sense of urgency.

Nevertheless, the most recently released payroll data for October 1998 find employment totals actually up 100 jobs from their levels of the previous year. Moreover, the Muncie unemployment rate remains

Figure 1
Muncie MSA Manufacturing Employment and Electricity Sales



very close to its low level of 1997. This raises the question: When will the economy see the effects of the disruptions?

The answer, of course, is that the disruptions have already been felt, and will continue to exert a strong influence on the economy in the coming years. Two of the basic indicators of manufacturing economic activity, employment and electricity sales, have taken a nosedive in the last 12 months, the latter by more than 30% (see **Figure 1**). But a variety of special circumstances have prevented those effects from being felt in the most commonly used measures of overall economic activity. The most important of these are the relatively high age of some of the affected workers, the ability of some others to transfer to other facilities, and the strength of the economy itself.

The plant closings have not only thrown the basic economic identity of the Muncie MSA into doubt, they add a generous dose of uncertainty to the economic forecast as well. Unlike previous downturns in durable manufacturing, this one occurs at a time when the national economy is performing exceptionally well. Taken together with the fact that in some instances the recently vacated facilities are potentially very attractive to new employers, any forecast that projects the continued inactivity of these plants risks being overly pessimistic.

My forecast for Muncie's prospects in 1999 does exactly that, however. As a purely practical matter, it is doubtful that any new prospect that might be brought into those facilities could have any meaningful impact

on the economy in the space of 12 months. More important, the trends in manufacturing employment, both locally and nationally, make it difficult for Muncie, or any other community, to attract a new manufacturer of the size and scale to match those that recently withdrew.

Trends in Muncie MSA Employment

Any reasonable forecast must take account of historical trends, but in the case of the Muncie MSA, the trends performed an about-face around 1996. In the seven years prior to that year, the economy saw robust growth, as can be seen from **Table 1**. Indeed, the 2.6% annual growth in total payroll employment between 1988 and 1995 exceeded the U.S. average over the same period. At the close of this period, Muncie actually garnered a "Blue Chip" award as one of the best-performing mid-sized economies in the nation.

Since 1995, however, it has been a completely different story. Total employment has fallen by an average of 1.6% per year. It is important to note, moreover, that the beginning of this downturn predates the closing of manufacturing facilities that received so much attention over the last year. And the slowdown in employment growth around this time point is not unique to Muncie; almost every major city in the state, with the important exception of Indianapolis, has also shown a dramatic drop-off in its economic performance at or around this year.

The pattern of growth within industries before and after this break point is also illuminating. As might be expected, the pattern is amplified for construction industry employment, where the pre-1996 employment growth of 3.2% tumbled into a 2.0% decline in the last three years. Manufacturing and retail trade employment also seesawed around 1996, although the latter managed at least to average zero growth since 1995.

Bucking the pattern is the performance of service industry employment, the largest sector in the county. Thanks in part to the stepped-up pace of

Table 1
Muncie MSA Employment, 1988-1998, Average Annual Growth (Percent)

Industry	1988-95	Since 1995
TOTAL	2.6	-1.6
Construction	3.2	-2.0
Manufacturing	0.5	-0.9
Retail	1.7	0.0
Services	4.2	6.1
All but TCPU	1.9	0.5

expansion at Muncie's largest employer, Cardinal Health Care Systems, services not only led the way in growth in both periods, it actually managed to accelerate—from 4.2% to 6.1% average annual growth—on either side of the 1996 break point. It was precisely this upturn in service growth that enabled the overall employment total to hold its head above water in 1998.

In truth, the abrupt change in total employment growth noted on the first line of Table 1 probably overstates the magnitude of the real changes that took place in the Muncie economy around 1996. That is because of the very large swings in employment in a single industry, Transportation, Communications and Public Utilities (TCPU), due to the rapid growth, and subsequent decline, in a single company in the trucking industry. While the swings in employment in this category were real, their effects on Delaware County were dubious, since many of the affected employees were truck drivers whose residence may

have been several states away, but whose employment was counted geographically by the location of company headquarters.

For this reason, the pattern of growth in total employment minus TCPU industries, shown on the last line of Table 1, is perhaps a more representative indicator of the underlying growth in the economy of the MSA. This shows somewhat slower growth prior to 1996 of 1.9%, down to a lower—but still positive—average annual growth of 0.5% in the three years since that point.

My baseline forecast, therefore, calls for a continuation of this post-1995 trend growth of roughly half a percentage point per year. At current employment levels, this translates into a net addition of only 200–300 jobs in 1999. In the wake of a national economy that is expanding at nearly four times that pace, solving the underlying problems that have led to this weaker growth in our county will be a major challenge for political and business leaders.

