

Winter 2000



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2001 OUTLOOK

KELLEY

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Contents

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From the Editor:

The forecasts provided here were written in the last months of 2000 by a cadre of university economists throughout Indiana. Their conclusions are based on long-term trends in the national, international, state and local economies. Keep this fact in mind as you read these outlooks on 2001, even while you hear the media humming in your ear about the slowing economy. It's the long term that counts.

As you read these 19 articles, you may want to explore some of the economic data as it unravels through the year. The Internet provides us with an opportunity to share data in an immediate fashion. Key sources for Indiana indicators will be STATS Indiana (www.stats.indiana.edu), the Center for Econometric Model Research (www.bus.indiana.edu/cemr), and the State's Workforce site (www.state.in.us/dwd/inews). For national indicators the Dismal Scientist is one of our favorite sites (www.dismal.com).

And finally, a note on the metro areas covered in this issue. We solicit articles from economists at universities in all of the major metro areas of the state, but do not receive articles from all of them. We will continue to ask for such submissions, but the vagaries of time and other competing interests may sometimes impede progress toward this ideal.

Another Try at Comfortable Deceleration

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You move into the passing lane, push the accelerator a little harder, make your pass, and then return to a comfortable, sustainable speed. The pass may have been necessary or exciting but it is good to be traveling at the right speed again. With the United States economy growing at more than 4 percent per year for four years, the forecasting community is once again predicting a deceleration of economic growth under the belief that conditions dictate a more sustainable rate of change for Gross Domestic Product (GDP) in the year 2001.

Strong growth above 4 percent has been very important to the U.S. The unemployment rate dipped below 4 percent in more than one month in 2000. With the increased employment have come higher incomes and reductions in crime and poverty. The 10-year national economic expansion has benefited consumers, armed firms with newer and better technology, and facilitated an expansion in spending on Medicare and other social programs. Clearly, gains have been widespread and significant for most groups.

But traveling so fast sets off alarms. This year saw wages and prices start to accelerate. The Federal Reserve (the Fed) raised interest rates to try to cool the economy. Spending on housing and durable goods slowed. The U.S. trade deficit soared to over \$400 billion as the dollar strengthened against the new euro. Consumers reached deep into pockets to sustain spending on both imported and domestically produced goods. Equities markets drifted lower and have not recovered as of the end of the year.

As we move into the New Year the expected slowdown scenario is complicated by an energy imbalance. World economic recovery increased the demand for petroleum products. Supply was not forthcoming and prices spiked. The gray hairs remember the 1970s but they are not sure how what we learned will come into play in 2001. Perhaps energy prices are relative prices and should not be the concern of the Fed. If the economy slows, the Fed might allow interest rates to fall to prevent a deceleration from turning into a decline. But if inflation spikes, the Fed might, instead, worry about inflationary expectations. In that case, they might try to raise interest rates to prevent a temporary surge of prices from turning into a sustained cycle of rising wages and prices.

In the new year, we have concerns about a bear market, the impacts of the oil crisis, the large trade deficit's impact on the value of the dollar, and the

onset of other seemingly negative events. But these ruminations should not overshadow what looks like another year of excellent sustained economic growth. Some of the highlights of our 2001 forecast include:

- GDP growth of 3.5 percent in the 11th year of the economy expansion
- CPI inflation of 3.3 percent
- Unemployment rate of 4.3 percent
- Stable short- and long-term interest rates
- Housing starts of 1.5 million units
- A trade deficit of approximately 4 percent of GDP
- A declining value of the dollar
- 20,000 new jobs for Hoosiers
- Return to double-digit growth of Indiana exports to the world

The U.S. Economy

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There is some controversy whether 2000 is the last year of the 20th century or the first year of the 21st. In economic terms, if it is the former, the century ended with a bang. If it is the latter, it set a standard that will be very hard to match. Figures 1 and 2 illustrate why. **Figure 1** shows the broad economic situation as indicated by output growth and

inflation for the past eight years.¹ Bear in mind that at the beginning of the period shown there was a solid consensus among economists that the U.S. economy could sustain growth of about 2.5 percent per year—anything higher, it was thought, would eventually lead to accelerating inflation. But over these eight years growth has exceeded the 2.5 percent speed limit in every year except 1995, and has been well above 4 percent for the past five. Inflation, however, has been notable mainly by its absence. Recently, of course, energy prices have shot upward, but there is scant evidence to date that inflation is spreading more broadly.

Figure 1
United States Output Growth Vs. Inflation, 1993-2000

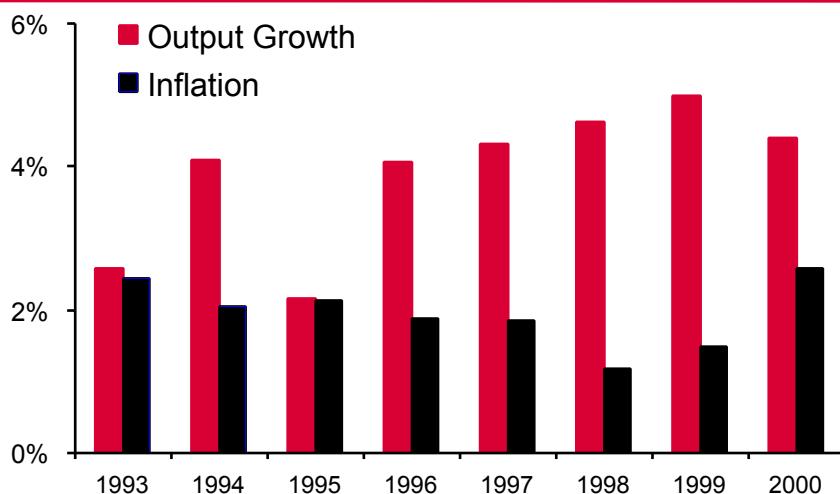


Figure 2
United States Job Creation Vs. Unemployment Rate, 1993-2000

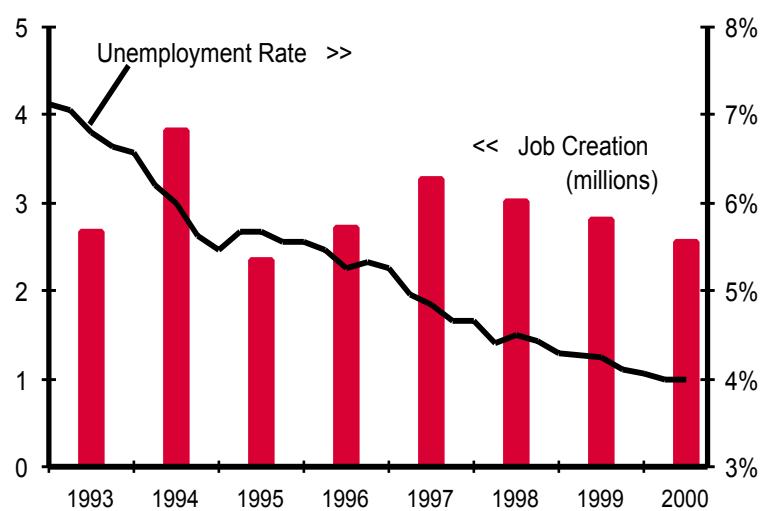


Figure 2 depicts the labor market situation. The U.S. economy's ability to create jobs has been and continues to be remarkable. Over the past eight years payroll unemployment has risen by nearly 23 million, an average of above 2.8 million per year.² This substantially exceeds the underlying growth in the population, causing a nearly steady fall in unemployment. During the past six months the rate has been bouncing around 4 percent, a level not seen in 30 years. Like rapid growth, low unemployment has long been perceived as a precursor of inflationary pressure via rising wage rates. But as with inflation itself, there has been little pressure on labor costs.

The list of credits for this remarkable performance is a long one, but several get special billing. In the starring role is an historic surge of new technology. In addition to providing an avalanche of new products, new business application of the advances is pushing productivity at an accelerating pace. Higher productivity both raises output and—via lower costs—holds down inflation.

The second lead goes to international influences in a multi-faceted role. Expansion of free markets and the trade they engender is another force behind productive efficiency. The end of the cold war has allowed a major shift of resources away from defense toward civilian uses, including in particular investment in high tech. Access to foreign capital has allowed the U.S. economy to invest at levels far beyond what could be financed solely from domestic saving. The strength of the dollar has been an important factor in holding inflation in check.

A major supporting role has been played by the government sector. There has been an unprecedented shift in the fiscal situation. A decade ago the federal government was running large deficits that most forecasters expected to continue indefinitely. Instead, during the 1990s the budget has swung 180 degrees with forecasts now for increasingly large surpluses as far as the eye can see. The budget is now a source of funds for private investment, rather than a competitor for financing. Finally, the Federal Reserve under Alan Greenspan has done a masterful job of keeping the economy from veering off course.

The bottom line of all of this is that the past couple of years have been probably about as good as it can get. The best we can hope for is more of the same. But a more realistic expectation is that the economy will decelerate to some degree. The question is how much? Will the economy slow down or turn down? We think the former. We expect that

output growth over the next year will be between 3 percent and 4 percent. This is significantly below the past year, and a little below the previous three. It would mean that unemployment would not decline further and might edge up a little. On the other hand, it would mean that the slight rise in inflation over the past year remain contained below 3 percent.

For the next year any impact from the outcome of the presidential election will be mainly psychological. Whatever the outcome, any policy changes will not be enacted until well into 2001 with their effect on economic conditions stretching out from then. If our expectations of continuing—albeit less rapid—expansion does not materialize the causes will lie elsewhere.

A central area of concern is the saving balance in the economy. A high level of saving is essential to finance the high technology investment boom. There are three potential sources—from households, from government surpluses, and from abroad. During the past two years the first of these has essentially disappeared. American households are spending all of their after-tax income on consumption. Part of the slack is being made up with the large government surpluses mentioned previously. The rest comes from foreign investment in the U.S. The mirror image of the latter is our huge trade deficit.

Looking ahead, for the near term the government budget surplus seems secure (although the talk of multi-trillion dollar surpluses over ten years should be taken with a grain of salt). However, at some point it is reasonable to expect that household saving will recover and that the trade deficit will shrink. In terms of total saving these two will offset one another, and if the adjustment is gradual, the economy as a whole could come through fine. But if the adjustment is unbalanced or abrupt there could be problems. A sudden increase in household saving would imply a decline in consumer spending. Since consumption is two-thirds of total spending, the prospects for the economy as a whole could darken. Any quick reversal in the trade situation would likely be associated with a decline in the value of the dollar in the foreign exchange markets. While this might stimulate output in the short run, it would also greatly raise the risks of inflation.

Another area of potential concern is the world energy market. This sector saw considerable turmoil in 2000 and what happens there will have a big influence on the outlook for 2001. Certainly the most noticeable recent development has been the more

than 50 percent increase in world petroleum prices in the last year.

During most of the last decade, world oil production exceeded demand putting downward pressure on prices. In 1998, total world demand for petroleum was constrained by the recession in parts of Asia and by very favorable weather conditions in North America. At the same time, there was a significant increase in OPEC production. As a result, supply exceeded demand by an average of over a million barrels per day throughout the year. During 1999, by contrast, demand rose as Asia recovered and OPEC production returned to its 1997 level. This combination caused demand to exceed supply by almost a million barrels a day resulting in declining inventories and increasing prices.

During 2000, demand continued to grow, and while both OPEC and non-OPEC production increased, the added output to date has not been sufficient to close the gap between demand and supply. The result has been even higher prices.

What is likely for 2001? If our economic forecast is correct and growth continues both in the U.S. and internationally, then world demand for petroleum will continue to increase. This will be particularly true if weather returns to normal in North America. Under these conditions, petroleum prices are likely to remain quite high unless producers significantly increase supplies. Some increase in output may happen since the high prices are a stimulus to production, development and exploration. There will also be a small draw from the Strategic Petroleum Reserve. However, new supplies will not come on line quickly so prices are likely to remain high for some time. Unless there is a mild winter, heating oil costs in the Northeast will be high this winter.

Other much less attractive scenarios are possible. The political turmoil in the Middle East could reduce OPEC production. Any such supply cuts coming now, when demand is high, would put tremendous upward pressure on prices. A colder than average winter in North America would have a similar, though smaller, effect.

The situation is similar with respect to other energy sources. Electricity demand has grown by about 2.5 percent this year as a result of continued economic growth. The growth of the internet has produced a significant new source of demand for electricity. The industry has responded with expanded capacity but almost all the new facilities are fueled by natural gas, which has put strong upward pressure on

gas prices. Wellhead prices have increased over 60 percent this year. As a result, home heating costs in the Midwest, where gas is the fuel of choice, will be much higher this winter.

The economy appears to be at a crossroads. It is currently performing at a record pace. The outlook for the immediate future is reasonably good, but significant problems are building. Any significant changes in consumer saving behavior, in the value of the dollar, or in international energy markets could significantly alter the outlook in a negative way.

advanced and developing economies are contributing to this performance, with the former marching at 4.7 percent and the latter at 5.6 percent. Clearly, booms are becoming increasingly synchronized; and with this synchronization comes the fear that rising inflation may prompt monetary authorities to reduce money growth and raise short-term interest rates. To complicate matters, the world is suffering from an oil price shock similar in size to the one that took place at the end of the seventies. The convergence of business cycles and the oil price shock represent the most significant risk to this year's forecast.

Endnotes

¹Output is measured by real gross domestic product. The inflation measure used is the GDP deflator. The data shown are averages of annualized quarterly rates of change for the four quarters of the year. The data for 2000 are for the first three quarters only.

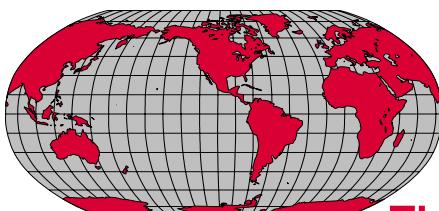
²Job creation is the increase in total nonfarm payroll employment measured from fourth quarter to fourth quarter. The value for 2000 is third quarter to third quarter.

Consensus Forecast

The International Monetary Fund projects that the world in 2001 will be growing at 4.2 percent, down a half percentage point from 2000 growth. The advanced economies are forecasted to grow at 3.2 percent—down one percentage point from 2000—and the developing countries at 5.7 percent—virtually unchanged from last year. *The Economist's* poll of forecasts (see Table 1) suggests that the world has now many growth locomotives, in contrast to last year when the United States and the 11 countries that have formed the European Monetary Union (France, Germany, Italy, Spain, Portugal, Belgium, Luxembourg, Netherlands, Austria, Finland, and Ireland) were pulling the world train of economic growth.

The United States is still going strong. For 2001 the percentage increase in real GDP is projected to fall towards trend values. Stock market and consumption developments are signaling a landing of sorts. The Euro-11 continues its expansion phase, with virtually all of the eleven economies registering declines in unemployment. Good news at the moment is overshadowed by a weak euro, a subject of significant controversy. The depreciation of the euro relative to the dollar is boosting the competitiveness of euro-based export companies. On the other hand, a weak euro is threatening inflation via the import channel. In particular, a depreciating euro is magnifying the local effects of the higher dollar price of oil. Furthermore, the depreciating euro and the inflation threat has led the European Central Bank to keep its guard up and raise short-term interest rates, thus keeping the expansion in check.

Japan is doing better, but growth there is still anemic. Japanese policy makers have applied and continue to apply archetypal Keynesian pump-priming stimulus. Government debt as a proportion of GDP



The International Economy

Michele Fratianni

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Economic growth around the world in 1999 rose above trend, as the effects of the 1997 Asian crisis were unwinding. The year 2000 looks even better. The International Monetary Fund forecasts world economic growth at 4.7 percent, one and half percentage point above 1999 growth. Both the

has now surpassed that of Italy, with the important difference that Italian debt is declining whereas Japanese debt is rising. With a current government budget deficit of 7 percent of GDP and a glut of government-financed investment projects, fiscal policy stimulus appears to have reached its limit. Monetary policy as well seems to have reached its limit in light of the fact that short-term interest rates are close to zero. There is no strong evidence that private consumption is ready to step in and replace government spending as the engine of growth.

The outlook for Asia is positive on the whole. China is doing very well. Accession to the World Trade Organization will force drastic restructuring at home. One big question is whether the political leaders are up to the challenge. India's performance is quite satisfactory. The South East economies, which were swept by the currency and banking crisis of 1997, have bounced back. Structural problems persist, however. Indonesia is the most vulnerable of the group. At the moment, high oil prices are hiding the weak spots in the economy. South Korea as well has failed to implement serious reforms and is at risk by high oil prices.

Performance in Latin America is more uneven than in Europe. Brazil, Chile and Mexico have the best prospects of the group. Argentina is struggling and the currency board prevents any depreciation of the domestic currency in the exchange markets. High oil prices are covering Venezuela's deep problems, most of all centered around a populist and popular president. Columbia is torn by civil war; the extremely risky environment is causing capital to leave the country. Peru is in the midst of a political transition that has raised the risk of doing business.

The Russian economy is finally growing: 3.2 percent in 1999, 6.2 percent in 2000 and 4.7 percent forecasted for 2001. High oil prices are certainly helping, but credit should be given to Putin's economic policies that are delivering declining inflation. The West and the Russians have yet to figure out whether Putin is a throw back to the past or a reformer.

The Risks

One risk in the forecast stems from a slowdown in the U.S. economy. The slowdown can either be "hard" or "soft." The hard version could be triggered by a spike in inflation sparked, among other things, by a further and sustained increase in oil prices. The Fed would be compelled to tighten the money stock and bring about a substantial rise in short-term interest rates. Stock prices would decline substantially, say 20 or more percent from present levels and net capital flows would change direction. The dollar would depreciate against both the euro and the yen. Exporters in Euro-11 and Japan would lose competitiveness, but imported inflation in those two areas would lessen. The European Central Bank could offset the impact of the decline in the foreign impulse by loosening monetary policy. The Bank of Japan could in principle do the same, but it would have much less room because short-term interest rates in Japan are already

Table 1
The Economist's Poll of International Economic Forecasts

| | GDP | | Consumer Prices | | Current Account Balance | |
|-------------|------|------|-----------------|------|-------------------------|------|
| | 2001 | 2000 | 2001 | 2000 | 2001 | 2000 |
| | | | Percent of GDP | | Percent of GDP | |
| U.S. | +5.2 | +3.5 | +3.3 | +2.9 | -4.3 | -4.2 |
| Japan | +1.9 | +2.1 | -0.6 | 0.0 | 2.6 | 2.4 |
| Euro 11 | +3.5 | +3.1 | +2.2 | +1.9 | 0.2 | 0.4 |
| Canada | +4.8 | +3.4 | +2.6 | +2.4 | 0.9 | 1.1 |
| U.K. | +3.0 | +2.7 | +2.4 | +2.5 | -1.6 | -1.8 |
| China | 8.0 | 7.6 | n.a. | n.a. | 1.6 | 1.1 |
| India | 6.4 | 6.4 | n.a. | n.a. | -1.3 | -1.3 |
| Indonesia | 4.1 | 4.2 | n.a. | n.a. | 5.8 | 4.5 |
| Malaysia | 8.4 | 5.6 | n.a. | n.a. | 11.6 | 7.7 |
| South Korea | 8.7 | 5.9 | n.a. | n.a. | 1.6 | 0.8 |
| Argentina | 1.5 | 2.9 | n.a. | n.a. | -4.0 | -4.2 |
| Brazil | 3.8 | 4.1 | n.a. | n.a. | -3.9 | -3.6 |
| Mexico | 6.6 | 4.4 | n.a. | n.a. | -3.4 | -3.9 |
| Russia | 6.2 | 4.7 | n.a. | n.a. | 17.8 | 11.1 |

Source: *the Economist*, 14 October 2000

close to zero. Latin American economies would feel the brunt of the U.S. slowdown and dollar depreciation through a flattening of their exports. Monetary and fiscal policies could come into play but initial conditions are not favorable for a big expansion. In sum, a hard landing of the United States would impact most negatively Japan and Latin America and less Euro-11. World growth would clearly take a dive. One small consolation would be the much-awaited appreciation of the euro against the dollar.

The chance of a soft landing depends on the Fed and the oil price shock. If the Fed were to believe that higher oil prices would not last beyond six months and actually oil prices were to follow the Fed's prediction, monetary policy would change course and expand. Short-term interest rates would fall to compensate the adverse effects on the economy of a declining stock market and higher oil prices. Net capital inflows would slow down and the dollar would depreciate, but much less so than in the hard landing scenario. Globally, a soft landing of the U.S. economy would be relatively benign.

As to oil prices, these are bound to remain high throughout the winter. The short-term supply of oil is very inelastic to prices; the demand is also very inelastic to prices. Consequently, if the demand for heating oil were to rise in response to a harsh winter, oil prices would be bound to rise before falling. Over the medium run, the supply of oil is responsive to oil prices. Oil producers will find it profitable to extract more oil from existing wells and bring to production new wells. Experts indicate that it takes approximately six months for the supply of oil to adjust to the higher oil prices. Until then oil supply will remain relatively rigid.

Another risk of the forecast arises from the possibility that the United States may not be able to borrow approximately \$400 billion a year to finance its current-account deficit. While this state of affairs cannot go on forever, it can last for quite a few years. There is no way to tell when foreign capital will turn sour on the United States. The day it will happen a hard budget constraint will be enforced on the U.S. current account, meaning that either exports will rise or imports will decline or there will be a combination of more exports and fewer imports. For exports to rise substantially, the dollar would have to depreciate significantly in the exchange markets with the obvious consequences on domestic price inflation. For imports to fall sharply, the U.S. would have to suffer a cut in income. This is what usually happens in countries that

have to correct a current account deficit: unpleasant but necessary consequences. The United States is fortunate to have the largest economy and the most widely used currency in the world.

In sum, the soft landing scenario may appear a good bet should oil prices stay high or rise for a limited number of months.

Financial Market Forecast for 2001

Michael Simkowitz

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It is time for us to take out the crystal ball once again. 2000 being a presidential election year we must repeat one salient truth: the 2001 forecast is not dependent upon who is in the White House.

There are three major factors in forecasting the financial markets: interest rates, earnings and the risk premiums. First, interest rates are lying on a yield curve that declines by 60 basis points in the first 15 months and is then essentially flat. This appears to indicate that the markets are looking for a slight decline in interest rates. But beneath this there is a major struggle between the forces of light and darkness.

The forces of light believe that the Fed is done tightening and the next move in interest rates, if any in the next few months, will be downward. While the forces of darkness see rising interest rates necessary to combat inflationary pressures due to the rise in the price of oil. By the way, there are two schools of thought regarding oil prices and interest rates. One is that the rising costs of crude diverts dollars out of the domestic economy and, although some may come back via the financial system, that this may actually reduce inflationary pressures in the general economy. The counter argument is the classic cost-push argument that high crude prices raise costs and

business will pass these costs through the system causing inflation. Being essentially a monetarist, I lean toward the former in that higher crude prices reduces the domestic real supply of money if we assume a constant Fed policy.

Second, earnings have been very robust for the past few years and although next year's growth may not match the recent record, corporate earning may still grow by nearly 10 percent. Corporate earnings growth will be hampered by the strong dollar and a consumer sector that is already spending at the "max". On the upside is a rate of productivity growth that does not show any signs of slowing. But the net is that earnings will grow but at a slower rate than in the recent past.

Third, will this slower growth upset investors? This is where risk premiums enter our discussion. Until this past spring we had seen risk premiums decline to the lowest level in memory. It is always difficult to separate the effects of declining risk premiums from rising expectations but it appears that over the past few years that expectations were rising and risk premiums were falling.

Since last spring the NASDAQ index has fallen sharply relative to both the Standard and Poor's 500 and the Dow Jones Industrial Average. This indicates that there has been an increase in the risk premium. It should be noted that this increase appears to have just restored the risk premium that evaporated during the speculative surge in the five months, November 1999 through March 2000. Therefore, there may be further relative erosion of the prices of the riskier part of the stock market.

There are imponderables that will worry the financial markets. The two big ones are full-fledged warfare in the Middle East with its impact on oil supply and prices and the future of the Euro. Barring any major calamities we look for a 50 to 70 basis point decline in short rates and steady long rates. The stock market will be the driven more by the nexus of risk premiums and expectations than by actual interest rates and earnings realizations. There is a real probability that the riskier part of the stock market will under perform the more defensive part of the market. Remember that valuations are still relatively high. So short term investors: "you be careful out there". But long term investors (7 years and longer): "hang on Sloopy hang on".

Soft Landing for Housing

Jeffrey D. Fisher

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Housing starts have been slowing throughout the year 2000. During the first quarter of the year housing starts were at a 1.7 million unit pace but by the third quarter the pace had slowed to about 1.5 million units. The average for 2000 will likely come in at around 1.6 million housing starts but for 2001 the rate is likely to be about 1.5 million starts. This is not a drastic decline but suggests a "soft landing" for housing as the impact of higher interest rates and perhaps lower equity prices has had an effect on housing markets. New and existing home sales are also likely to come in at a lower level for the year 2000 than the previous year and continue to decline in 2001.

At the same time, the "good news" is that the percent of Americans who own their homes hit a record high 67.7 percent in the third quarter of 2000 according to the U.S. Department of Housing and Urban Development. The relatively low mortgage rate environment and steady home prices has no doubt contributed to the ability of more people to purchase a home. In fact, the national median home price for both new and existing homes actually declined in 1999 to \$133,000 from \$147,000 the previous year. The deductibility of mortgage interest for the purposes of calculating federal income taxes no doubt also continues to encourage home ownership. The IRS recently reported that nearly 31.5 million federal income-tax returns for 1998 included a deduction for home-mortgage interest payments. This represents about one fourth of all tax returns and a lot of voters who are unlikely to support elimination of the home mortgage interest deduction (even though Morton Marcus has stated during past Outlook Panels that this just subsidizes rich people)!

Lower home prices in 1999 resulted in an increase in the housing affordability index to 137.8. An index of 100 indicates that the median income family can just afford to purchase the median price home

at current mortgage interest rates. A rate over 100 indicates greater affordability. Housing affordability is likely to remain relatively high through 2001 because neither home prices nor interest rates are expected to increase much during the next year. The median home price likely ended the year 2000 up slightly from last year but remained below the record level reached in 1998.

Mortgage interest rates are likely to stay at about the current level, depending of course on the effect Fed policy has on interest rates in general. Mortgage rates are likely to stay below 8 percent over the next

year keeping them at a relatively attractive historical level. The gap between fixed and adjustable rates has been narrowing as short-term interest rates have increased relative to longer term interest rates.

The exhibit below from the National Association of Home Builders website summarizes recent trends in housing and interest rates as well as their forecast for the year 2000 and 2001.

Housing and Interest Rate Forecast**

| | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|-------|-------|-------|-------|-------|
| Total Starts (000) | 1,622 | 1,675 | 1,602 | 1,508 | 1,522 |
| Single Family (000) | 1,278 | 1,340 | 1,262 | 1,198 | 1,230 |
| Multifamily (000) | 344 | 335 | 340 | 310 | 322 |
| New Home Sales | 890 | 909 | 860 | 808 | 808 |
| Existing Home Sales (000) | 4,962 | 5,197 | 4,593 | 4,309 | 4,309 |
| Interest Rates (Freddie Mac Commitment) | | | | | |
| Fixed Rate | 7.0% | 7.4% | 8.1% | 8.0% | 7.8% |
| ARMs | 5.6% | 6.0% | 7.1% | 7.2% | 7.1% |
| Prime Rate | 8.4% | 8.0% | 9.2% | 9.5% | 9.3% |

**Annual data are averages of seasonally adjusted quarterly data and may not match annual data published elsewhere.

Source: NAHB Economics Department



Indiana

The last recession ended, and the current expansion began, in the second quarter of 1991.

Since then the U.S. and Indiana economies have been expanding. In constant (1996) dollars, Indiana's economy has grown by \$39 billion, an average rate of 3.3 percent per year (see Figure 1).

As this remarkably long expansion has continued, two distinct periods can be identified. In the first period (1992 2nd quarter to 1994 1st quarter), Indiana advanced more rapidly than the nation. In the second period (1994 1st quarter to 2000 2nd quarter), the

Hoosier state trailed the nation in growth of personal income. Figure 2 shows the difference between Indiana's growth rates and those of the nation. In 18 of 37 quarters Indiana grew more rapidly than did the nation. But notice that nine of those positive quarters came in the first 12 quarters under consideration. In the last 25 quarters, Indiana also had nine quarters with faster growth than the nation. Hence the frequency of positive differentials has been cut in half. Also notice that the highs were higher in the early years and the lows lower in the later years.

Morton J. Marcus

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Figure 1

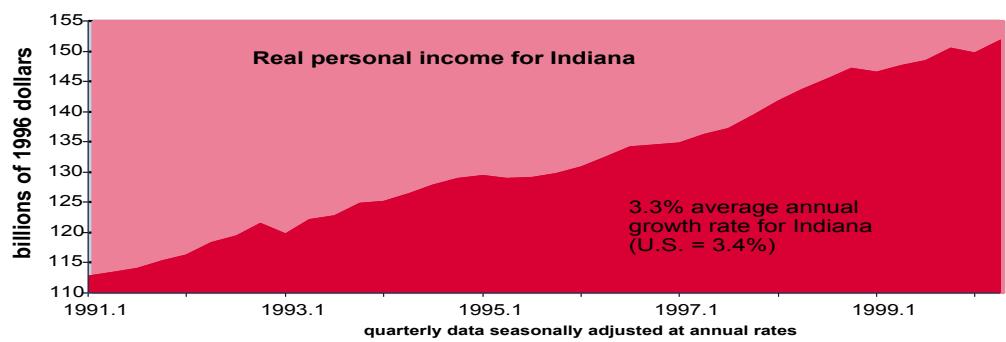
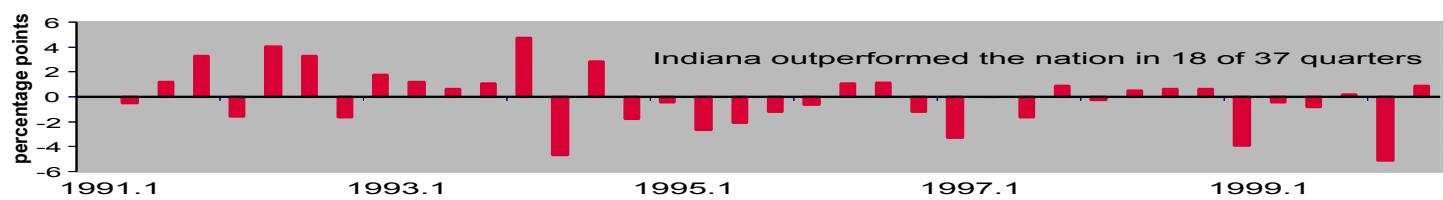


Figure 2
Personal Income Growth Rates, Indiana Vs. Nation, 1991-1999



The result of these differential growth rates was a dramatic rise in Indiana's share of U.S. personal income in the early period, with an equally dramatic fall in that share since 1994 1st quarter (see **Figure 3**). In historical perspective, the rising period was an anomaly, interrupting a fairly steady decline that began in the late 1970s.

Figure 4 summarizes the two periods very clearly. As the U.S. picked up steam in the last six years

from a slow start in the first four years of the decade, Indiana slowed down. Where the nation's growth rate accelerated from an average of 2.1 percent to a robust 4 percent, Indiana slipped from a respectable 3.6 percent to a still honorable 3.2 percent average annual growth rate for personal income.

Figure 3
Indiana's Share of U.S. Personal Income

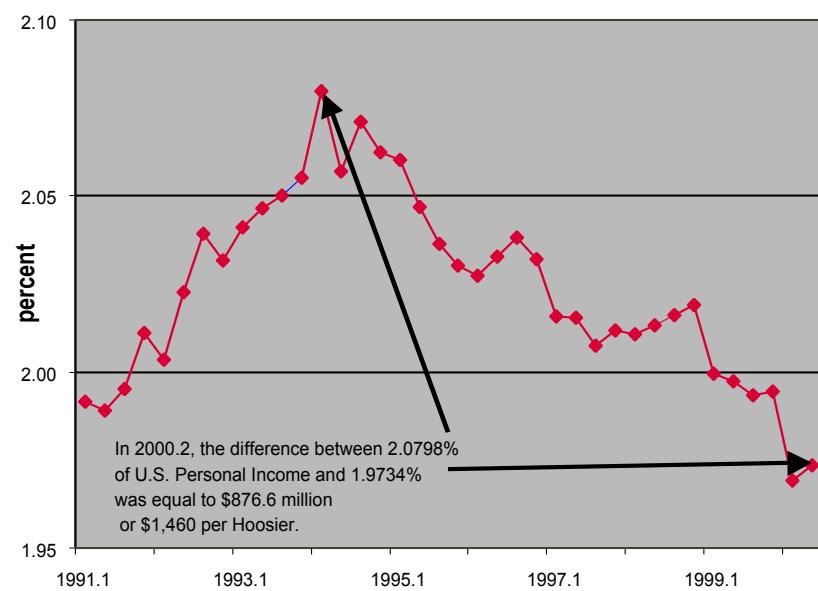
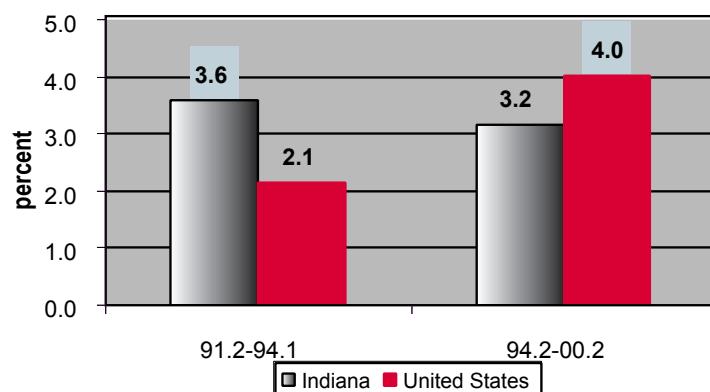


Figure 4
Average Quarterly Growth Rates of Total Personal Income



A Regional View

Indiana was not alone in this swing of fortune. As Figure 5 shows, Indiana was one of 14 states that had a deceleration in growth between the two periods. California, with approximately 13 percent of U.S. personal income, had the greatest acceleration at 4.69 percent (from 0.05 percent to 4.74 percent). The Golden State moved from slowest growing state in the nation to the 11th fastest growing state in this transition. At the same time, New York, New Jersey,

and Massachusetts also had major accelerations in growth rates, pushing the nation forward.

Among the Great Lake States, Indiana and Michigan decelerated, while the region as a whole accelerated. But, the acceleration of our region was the smallest improvement of any of the nation's eight regions (see Figure 6). At the same time it can be seen that the Mideast was the only region that failed to achieve the national growth rate in both periods while the Southwest and Rocky Mountain regions exceeded the nation in both periods.

Figure 5
Growth Rate, National Comparison

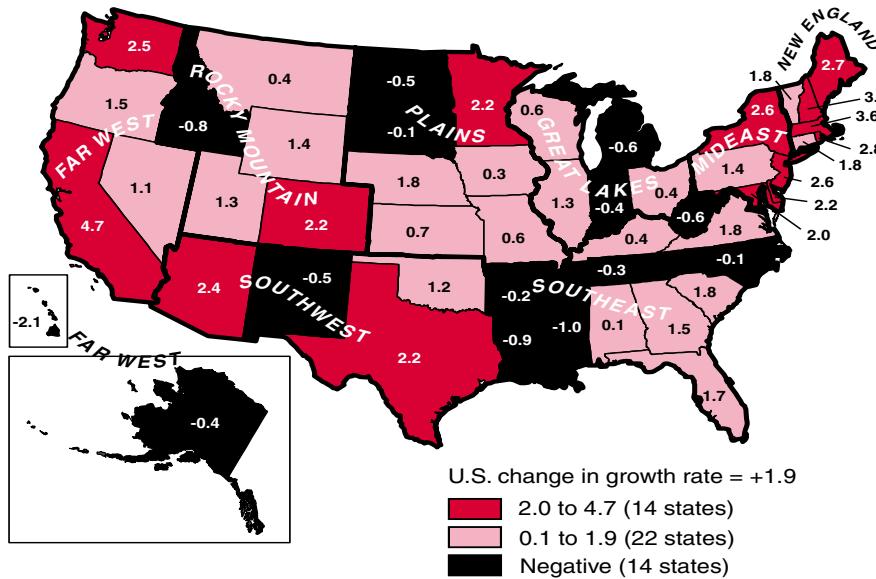
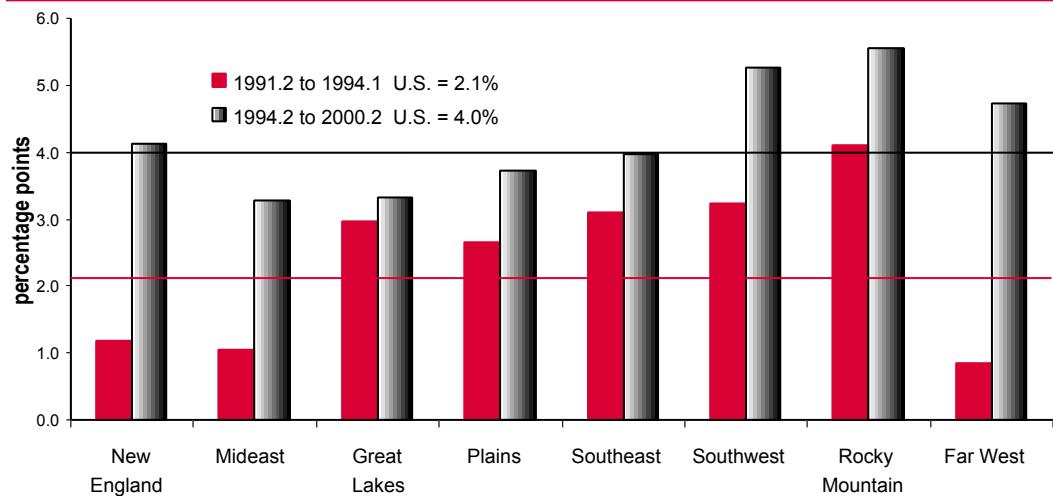


Figure 6
Average Percent Change in Personal Income



The result of these different patterns of growth shows up in the changes each region had in its share of the nation's personal income. In **Figure 7** those changes are shown with the Mideast losing 1.6 percent of the nation's personal income to the Southwest and the Rocky Mountain regions. Of particular interest to Hoosiers is the dramatic change in the Great Lake States where a 0.4 percent share gain was turned into a 0.7 percent loss of share. This -1.1 percent shift was exceeded only by the +1.4 percent turnaround in the Far West. All other regions had more moderate share changes.

Figure 7
Changes in Personal Income Shares

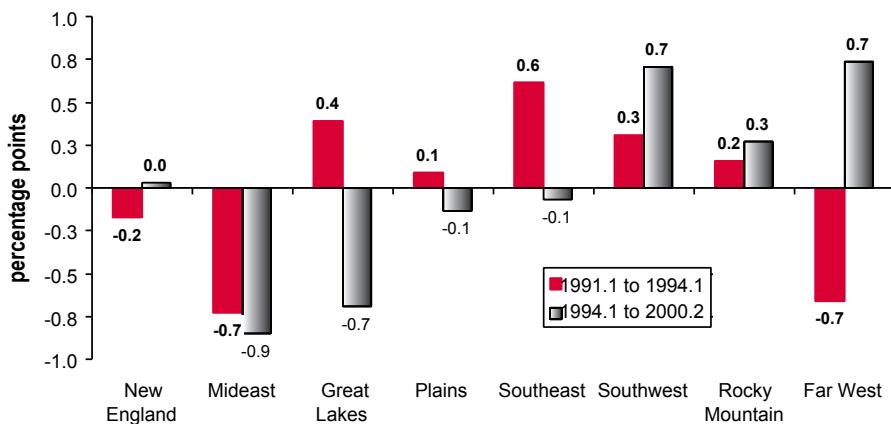
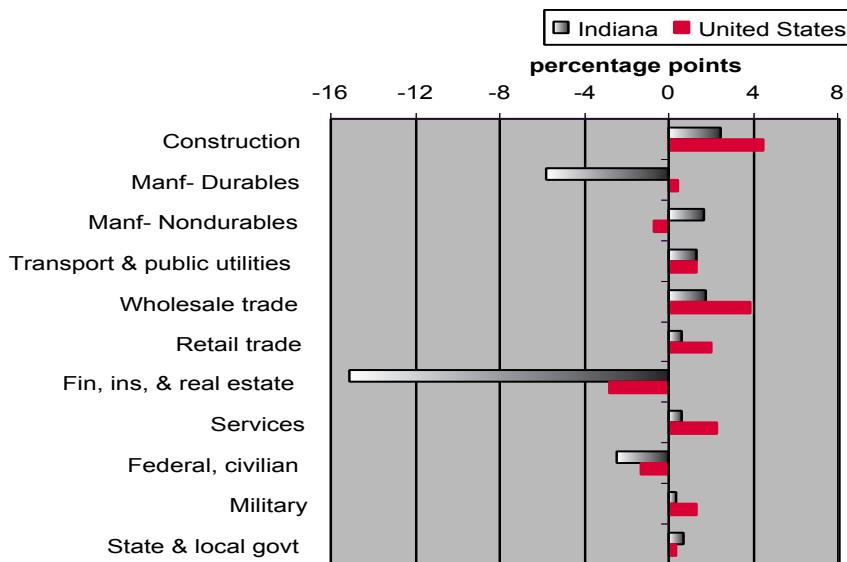


Figure 8
Changes in Sector Growth Rates, 91.2-94.1 and 94.2-00.2



Origins and implications

What happened between the first and second periods in the 1990s? How was growth in the first period (1991.2 to 1994.1) different from the growth of the second period (1994.2 to 2000.2)? The differences for Indiana and the nation are reported in **Figure 8**. Two major events stand out. First, Indiana had a significant slowing of growth in earnings derived from durables goods manufacturing. Where we had been growing at an average rate of 7 percent, we slowed to a 1.1 percent rate. That shows in Figure 8 as a decline of nearly 6 percent in durable manufacturing. At the same time, the nation had a very moderate increase from 2 percent to 2.4 percent and is depicted at a 0.4 percent increase.

The importance of durable goods in Indiana's economy makes this a very strong effect. But another factor was at work as well. Indiana had a remarkable 19.3 percent annual growth rate in the financial sector during the first period but slowed to 4.2 percent in the second period or a -15.1 percent swing. The nation, by contrast, slowed only -2.8 percent from 10.6 percent to 7.8 percent.

In addition, Indiana showed less acceleration in construction, wholesale trade, and services than did the nation. The net effect was a relative slowdown for Indiana that cut our share of personal income to historically low levels.

Now that the national forecast calls for a decline in housing construction and in automobile sales (not just a slowdown in those sectors but actual declines in these sectors), we can expect that Indiana will again grow less vigorously than the U.S. But that relationship is not guaranteed. Over the years, declines or flatness in durable goods generally indicates problems for total personal income. Yet the exceptions are numerous and important.

2001 will probably see a slowing of job growth in Indiana. After several years of 35,000 to 50,000 jobs being added to the Hoosier economy, next year may have as few as 20,000 new jobs. Nominal personal income growth of 4 percent may be anticipated, which would put the real rate below 2 percent if the inflation rate exceeds 2 percent.

However, the state is only an aggregation of its components. That is why it is important to consider the following reports from around the state.

Anderson

Barry Ritchey

Professor of Economics,
Anderson University

Even though we have seen the end of the 1990s, we have not seen the end of the structural change for the Anderson community. Anderson is moving away from its traditional role as a blue collar manufacturing center to a new identity as local service/retail center.

In the decade of the 1990s the county lost over 5,000 manufacturing jobs. We started with over 16,000 jobs in 1990, but finished the decade with just over 11,000 jobs. That is a 31 percent decline. We started the decade with one in three jobs in manufacturing and finished with only one in four.

The evolution of the employment base is also reflected in the community's ability to retain consumer expenditures. From 1990 to 1998, personal income increased by 48 percent in the county. During that same time period, retail sales increased by a similar amount, 50 percent. The growth in income was adequately reflected in the growth in retail sales. This is an indication that the community is becoming a mature local retail center. We are also seeing the development of a more complete service sector. In the past decade, service sector jobs increased by about 16 percent.

performance of the local economy. However, the results are also largely driven by the strong national and state economies. The changing mix of local employment away from cyclically sensitive manufacturing jobs certainly helps to reduce the swings of our unemployment rate over the business cycle. However, the manufacturing sector still commands 25 percent of the county's wage employment. The strong national and state growth in the latter half of the 1990s has helped to keep our unemployment rate low in relative and absolute terms. The local economy is still sensitive to national business cycles, but not to the extent that we saw in the past. Any slowdown in durable spending (particularly auto sales) would result in some decrease in local income as overtime hours would be decreased in local manufacturing facilities. Mild decreases in durable goods spending would not have much impact upon the local unemployment rate.

Income growth has been positive for each year of the 1990s. However, income growth for our county lagged behind income growth for the State of Indiana. Per capita income growth for Madison county is only about 92 percent of the average income growth for the state.

The moderate income performance is largely a reflection of the changing employment mix and demographic configuration for the county. The jobs that have been created are concentrated in the service sector, which is typically low value added (with an average wage of about \$14,000). The shrinking manufacturing base reflects a higher value added (the average manufacturing wage is \$52,000). So, we are gaining jobs that are low paying, and we are losing jobs that are higher paying. Demographics also tend to slow down income growth. The population base shows a large retiree segment. Many of our citizens draw their incomes from pensions and other transfer payments (approximately 17 percent). This large dependence upon fixed income sources tends to reduce the potential for income growth.

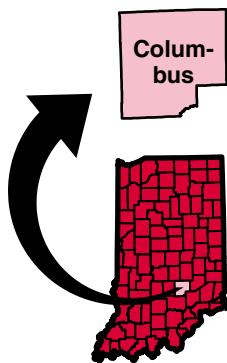
The short-term performance for income growth, while positive, does not reveal the long term implications of further structural and demographic trends. Long-term income growth may become problematic in the future unless the county can attract more high value-added employment opportunities. The possibility of attracting these types of jobs could be enhanced by the development of appropriate public infrastructure. This would begin with improvements in primary and secondary education systems.

Table 1
Unemployment Rate Comparison

| | U.S. Rate | Madison County Rate | Indiana Rate |
|-----------|------------------|----------------------------|---------------------|
| 1990-1994 | 6.54% | 6.78% | 5.64% |
| 1995-1999 | 4.92% | 4.0% | 3.68% |

Residential construction is still strong for the community. For the first five years of the decade (1990-1994) there was a yearly average of \$28.5 million in residential construction. For the next four years (1995-98) there was a yearly average of \$47.5 million in residential construction in the county. Employment in the construction industry grew by about 25 percent during the decade.

The unemployment picture for our community is stable. **Table 1** compares the unemployment picture in Madison County to the national average and the state average for Indiana. Our yearly average unemployment rate for the first half of the decade was 6.7 percent. For the last half of the decade, the yearly average dropped to 4 percent. We finished 1999 with our lowest rate of the decade, 3.2 percent. The early figures for 2000 are also encouraging. Through the first eight months, the average unemployment rate for Madison County is only 3.5 percent. These results are in part determined by the strong economic



Columbus

Ammar Askari

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The State of the Local Economy

The Bartholomew County monthly unemployment rate in 2000 averaged 2.4 percent from January through the month of September. Comparatively, the unemployment rates for the state and the nation over the same period were 3.3 percent and 4.0 percent, respectively (see Figure 1). Despite being higher than the average for all of 1999, which stood at 2.0 percent, this rate is still historically low. In fact, the September unemployment rate bottomed at an all time low of 1.2 percent (1.8 percent in 1999), compared with the state's 2.1 percent (2.5 percent in 1999) and the nation's 3.9 percent (4.4 percent in 1999) (see Figure 1). Regionally, only the counties of Hamilton (0.9%) and Brown (1%) posted a lower unemployment rate in the month of September. It is noteworthy also that Indiana's unemployment rate of 2.1 percent in September is currently lower than that of the four surrounding states.

Table 1 shows the year to August unemployment rates, the number employed, the number unemployed, and the annualized employment growth rates through the 1980s and 1990s for Bartholomew County. Note that from 1990 to the most recent period available, the number employed has grown by 23 percent (from 31,922 to 39,142), and the unemployment rate fell from 4.9 percent to the current rate of 2.6 percent. August's unemployment claims in Columbus stood

at 3,114, a whopping 51 percent increase from a year ago. Combined with a higher number of average monthly-unemployed workers, 1,003 (versus 784 in 1999), these figures signal a relative loosening of the local labor market. This is due to recent layoffs in the manufacturing sector, which may become a mixed blessing as the local businesses are in need of skilled labor.

After an all-time record earning before interest and taxes of \$107 million on sales of \$1.77 billion in the second quarter, Cummins Inc. reported earnings of \$25 million on sales of \$1.57 billion in the third quarter. For the first nine months of 2000, Cummins reported net earnings of \$128 million or \$3.36 per share, compared to net earnings of \$135 million, or \$3.48 per share, for the same period in 1999. Revenues increased from \$4.8 billion to \$5 billion. The relatively weak third quarter performance and the even worse performance expected in the fourth quarter are due to a glut in the North American heavy-duty truck market. To address this downturn, Cummins recently announced the layoff of 150 hourly and the termination of an additional 350 salaried employees from the engine business, 85 percent of which is located in Bartholomew and Jackson Counties. Since the beginning of the year, Cummins reduced its engine business workforce by 900 employees.

Arvin Industries, Inc. merged with Meritor Automotive effective July 2000. The new company, ArvinMeritor, reported 2000 sales of \$7.7 billion, a 3 percent increase over fiscal year 1999. Despite a decline of 11 percent in sales in the fourth quarter, net income for the year rose by 3 percent to \$254 million, or \$3.56 per share. The fourth quarter earnings, at \$29 million, were 66 percent lower than those in 1999. These disappointing results signal a continuing softening of the North American commercial vehicle markets. To realign itself with these changing market conditions, ArvinMeritor announced plans to lay off 1,500 employees, 4 percent of their worldwide workforce. This comes on the heels of the very recent layoff of 250 workers. It is not clear how many of these cutbacks will affect the Columbus based workforce, but it is safe to expect that some portion of these layoffs will hit the local ArvinMeritor workers. In general, because of the merger and the consequent relocation of the Arvin management cadre, elimination of duplicate processes, and the newly unified balance sheet, it is difficult to assess the new firm's performance and its effect on the local economy relative to that of 1999.

Figure 1

Unemployment Rates Comparison

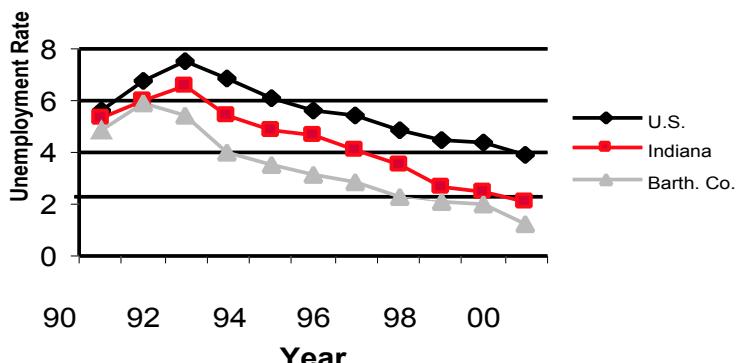


Table 1
Employment Rates for Bartholomew County, 1980-August 2000

| Year | Unemployment Rate (%) | # Employed (Monthly Average) | # Unemployed (Monthly Average) | Annual Employment Growth Rate (%)* |
|-------------------|-----------------------|------------------------------|--------------------------------|------------------------------------|
| 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 |
| 1998 | 2.1 | 39,000 | 837 | 1.6 |
| 1999 | 2.0 | 39,143 | 784 | 0.0 |
| 2000 (as of Aug.) | 2.6 | 39,142 | 1,003 | 0.3 |

*The average annual employment growth rate is the percentage change in the monthly average for a period compared to the monthly average over the same period in the previous year.

According to the Columbus Economic Development Board, three companies—Tata Consultancy Services, Indiana Die Technologies, and ArvinMeritor—joined the Bartholomew County area since December of 1999. The first added 100 jobs with an average hourly wage of \$21.63, the second added two jobs with an average hourly wage of \$21.63, and the third added 94 jobs with an average hourly wage of \$27.10. Also, since October of 1999, eight existing companies—Arvin Industries, Top Seal, Quality Machine & Tool, Rightway Fasteners, Maumee Industries, Hewitt Soap, TIEM, and Analytical Engineering—spent a total of \$21.43 million in their expansion efforts and hired an additional 84 workers with a weighted average wage of \$14.12.

The local housing market is still experiencing a relative glut. As of the end of October, the number of houses sold was slightly up from 783, in the same period last year, to 804 this year. The average property-selling price stood at \$132,461 versus \$131,222 last year and the average number of days on the market stood at 126. As of October 19th, there were 642 actively listed houses with an average price of \$136,902 and average number of days on the market of 178. The sold-to-list price ratio decreased to 95.5 percent as compared to 96 percent in 1999. By comparing the first three quarters of each year, the number of new listings has declined steadily since 1998. Conversely, over the same period, the ratio of houses sold to houses listed has increased from 52 percent and 56 percent in 1998 and 1999, respectively, to 60 percent in 2000. The declining trend in new listings is a welcome development and may be a sign that the local housing market is working itself out of the surplus of the past few years. Unfortunately, news of local industry layoffs and terminations may reverse this positive development.

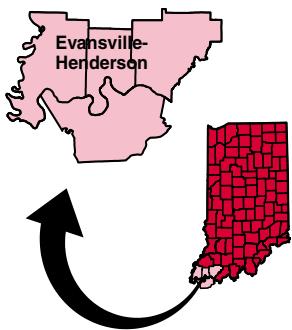
Forecast

The fortunes of the local economy will follow those of the national economy. I project the current U.S. economic expansion to continue, but at a more moderate pace. The only worry is a reversal upward in inflationary trends. Continually rising oil prices (exacerbated by cold-weather-driven higher energy demand), taut labor markets, rejuvenated financial markets, and improving economic conditions abroad may cause domestic inflationary pressures to rise again.

Barring this possibility, the outlook is once again bright. I expect the extraordinary levels of business investment and technological discovery and the consequent gains in productivity to continue. It is unlikely that financial markets will regain the sky-scraping levels reached in the past few years. Also, hawkish monetary policymakers are likely to keep a close watch on the price level and react at the first sign of trouble. Both of these factors will ameliorate consumer demand for goods and services. Combine this with a higher cost of borrowing and more restrictive credit conditions, and the domestic spending is likely to subside.

All of this means that we will see high real GDP growth rates upwards of 4.5 percent for the whole of 2000, and somewhat lower rates (still historically high), around 4 percent for 2001. Inflation will be higher than the levels witnessed in the past few years. The GDP chain price index will end 2000 up 2.8 percent and slightly lower at 2.6 percent for 2001. Expect CPI inflation to be around 3.7 percent for 2000 and upwards of 3.5 percent for 2001. Unemployment rates are likely to remain low. For all of 2000, expect the rate to remain around 4 percent and 4.3 percent for 2001.

Locally, the fortunes of the labor force depend largely on the fortunes of the local manufacturers. The glut in the heavy-engine North American Market and the weakness in the commercial vehicle markets should subside within a year or two. Expect buoyant economic conditions abroad to pick up some of the slack for the domestic market. Even at current levels, the unemployment picture remains relatively healthy. Those employees that were terminated should have a relatively easy time finding employment locally, although perhaps not at their previous wages. Regardless, expect the local unemployment rate to remain around 2 percent.



Evansville

Gale M. Blalock

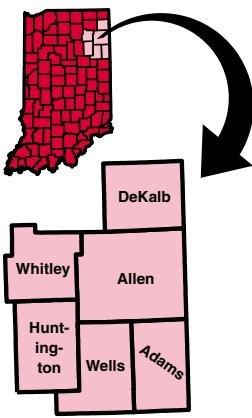
Chair, Department of
Accounting and Business
Administration, University of
Evansville

The Evansville economy continued its substantial growth into 1999 as measured by the index calculated at the University of Evansville. The index grew at 3 percent from 1995 to 1996, 1 percent from 1996 to 1997, 3 percent from 1997 to 1998, and 5 percent from 1998 to 1999. All sectors measured in the index, save for industrial production, were at five-year highs. Growth was strongest in construction trade and finance, weakest in transportation and negative in industrial production. Anecdotal evidence suggests declines in construction and transportation in Evansville proper in the near term, but if the Toyota expansion begins to have its positive impact

on the local economy, I anticipate that good times will continue for our area. Please note that the index below is slightly different from the one printed in last year's Indiana Business Review Outlook Issue. They differ in that the one just reported relies upon employment as the relevant data for industrial production instead of electricity sold to industrial users that was not readily available at the time of calculation. This is somewhat telling about the sorts of changes that are going on in the economy that are not easily captured by an index such as the one reported here. Our local public utility for years, SIGECO, has apparently become much more dynamic as it has moved into the communications/internet delivery business and has also been through a substantial merger. As other firms in Southwest Indiana also transform themselves, offering new products and services and employing new production technologies, our economy may be able to sustain this sort of growth even with the tightness in the local labor market.

Evansville Economic Index

| Year | Industrial | | | | Index | Growth |
|------|------------|--------------|-------|----------------|-------|--------|
| | Production | Construction | Trade | Transportation | | |
| 1995 | 0.316 | 0.040 | 0.272 | 0.047 | 0.227 | 0.903 |
| 1996 | 0.330 | 0.060 | 0.267 | 0.051 | 0.237 | 0.944 |
| 1997 | 0.329 | 0.048 | 0.267 | 0.055 | 0.234 | 0.942 |
| 1998 | 0.359 | 0.069 | 0.277 | 0.060 | 0.234 | 1.000 |
| 1999 | 0.385 | 0.090 | 0.288 | 0.062 | 0.256 | 1.081 |



Fort Wayne

Thomas L. Guthrie

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

This is a good time for those of us residing in the nine counties comprising northeast Indiana to remind ourselves that the northeast Indiana economy is not representative of the Indiana economy. Since 1979—the start of the infamous rustbelt debacle—the Indiana economy has shed almost 10 percent of its manufacturing jobs. During that same period, the number of manufacturing jobs in northeast Indiana increased over 20 percent.

Consequently, approximately one of every three jobs in northeast Indiana currently is in manufacturing; while only approximately 23 percent of the jobs in Indiana currently are in manufacturing.¹ Even more instructive is the fact that manufacturing jobs account for less than 15 percent of U.S. employment and have been decreasing for decades.

This "many eggs in one basket" occurrence has proved highly successful in propelling the northeast

Indiana economy (and many of the economies comprising the Great Lakes' region) out of the rustbelt debacle that ended in 1982. But the one-faceted strategy now is turning into a liability.

In fact, it already has been a liability, but the labor market has been so tight that few have noticed. As shown in **Figure 1**, manufacturing employment in the Fort Wayne metro area has been declining over two years—more precisely, eight of the last nine quarters (ending in the third quarter 2000). The total loss in manufacturing jobs between the second quarter 1998 and the third quarter 2000 has been 2,900—3.8 percent. That is why total employment growth in the metro area (also shown in Figure 1) has been so tepid compared to U.S. employment growth.

The outlook for 2001 is for more of the same. As noted in the accompanying forecast for the U.S. economy, most of the forecasted slowdown will occur in spending on durable goods. Stated differently, northeast Indiana will bear the brunt of the forecasted

Consider, for example, the manufacturing of trucks and autos—arguably the dominant products of the northeast Indiana economy. A recently released study is certainly supportive of their importance.² Of the initial announcements of larger (only those planning to employ 100 or more) manufacturing firms locating/relocating in northeast Indiana between 1983 and 1992, auto related manufacturing accounted for 66 percent of the activity and 85 percent of the capital investment (see **Table 1**)

Figure 1
Yearly Change in Average Quarterly Payroll and Manufacturing Employment,
Fort Wayne MSA

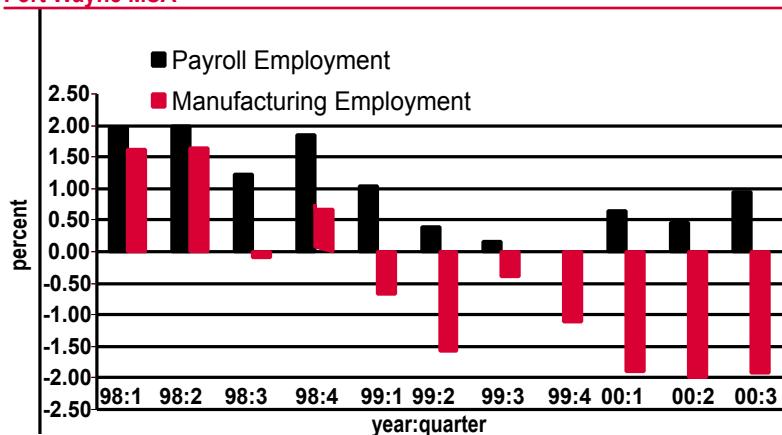


Table 1
Importance of Truck and Auto Manufacturing to Northeast Indiana

| | Count | Capital Investment | Jobs |
|-------------------------|--------------|---------------------------|-------------|
| "New" Arrivals | 53 | \$1 billion | 15,000 |
| Auto Related | 35 | \$850 billion | 10,000 |
| Percentage Auto Related | 66% | 85% | 66.7% |

Source: Lincoln Schrock, Director, Indiana Northeast Development

U.S. light vehicle sales have increased essentially unabated from 12.3 million in 1991 to an estimated 17.5 million in 2000. However, record sales during the last half of 2000 have been spurred by generous rebates that come at a substantial cost—in terms of both profits and future sales.

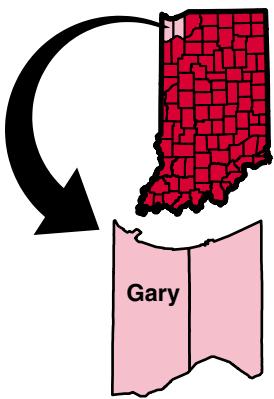
Given the recent increase in energy prices, the multiple increases in short-term interest rates by the Federal Reserve, and a downward-biased stock market, the phenomenal run in truck and auto sales finally will end in 2001. This is bad news for the northeast Indiana economy.

In summary, the area economy will continue to experience minimal employment growth in 2001—between a quarter and a half percent increase. But this will probably be enough to absorb the new entrants into the labor force, so the general perception will continue that the economy is in excellent health.

Endnotes

¹ Approximately 26 percent of the jobs in the Fort Wayne metro area are in manufacturing. (Adams, Allen, DeKalb, Huntington, and Whitley counties constitute the metro area.) When Lagrange, Noble and Steuben counties are added, the portion of manufacturing jobs rises to a third.

² Guthrie, Thomas L. and Valerie A. Richardson, The Performance of the Northeast Indiana Economy Over the Past 30 Years, The Major Forces Shaping that Performance, and Some Thoughts on Appropriate Economic Policy to Enhance Future Performance, (Indianapolis: IUPUI Fort Wayne, 2000).



Gary

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In the past year, employment growth in Northwest Indiana (Lake and Porter Counties) has slowed significantly. As a result, the unemployment rate in the region has increased from a low of about 3.2 percent in mid-1999 to about 4.5 percent at the end of 2000. A continuation of current growth patterns both in Northwest Indiana and in the nation should lead to employment growth in Northwest Indiana of 1 percent to 1.5 percent over the next year, with declines in local manufacturing (including steel), and increases in services and trade. This relatively slow growth in employment is also likely to result in slightly higher unemployment rates by the end of 2001.

The declines in manufacturing are offset by significant gains in service employment. This marks a continuation of a past trend. Steel, in particular, has experienced a reduction in employment levels and in the average work week. Many steelworkers have some degree of job security as per their union contract. However, there can still be a reduction in average hourly wages steel through a reduction in average weekly hours. This reduction brings about a proportionately greater reduction in earnings, since the hours lost are overtime hours. The protection that the steel industry sought from foreign imports has not been fully achieved. As a result, both domestic and

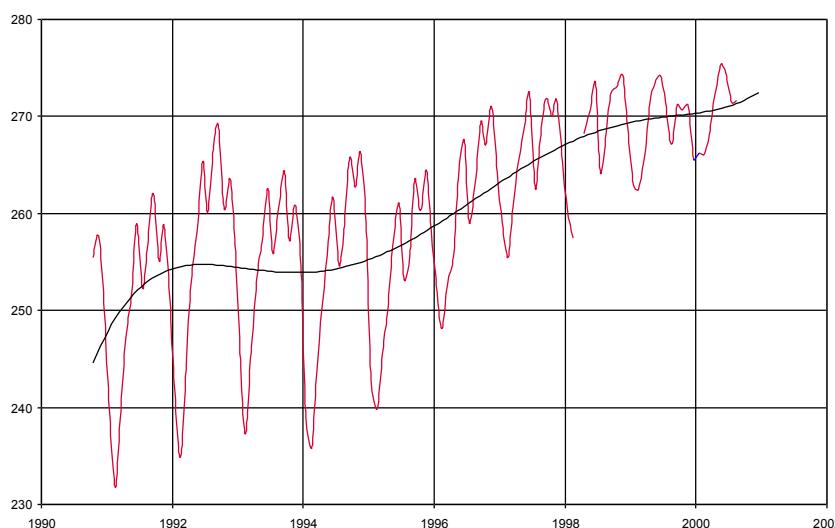
foreign steel producers are competing for a shrinking market.

The possibility of a downturn in the Northwest Indiana economy remains substantial. If slower car sales persist, or should the national economy slow, manufacturing (and particularly steel) in Northwest Indiana could decline even more than our baseline forecasts suggest. There exists a substantial possibility of employment declines in 2001, rather than continued growth.

Employment and Unemployment

After four years of 2 percent to 3 percent employment growth, the local economy added jobs at about a 1.5 percent rate over the past year, with (trend) employment growing by about 2500 (see **Figure 1**). Indeed, for the first time since 1996, the year-to-year growth in employment was negative in late 1999. Manufacturing employment fell by about 2000 jobs between late 1999 and late 2000, and only continued relatively strong growth in the service sector (a gain of about 5000 jobs; nearly 40 percent of the job gain in the service sector was in retail trade) allowed any growth in total local employment. The shift in employment from manufacturing to services also leads to lower earnings, since the average level of compensation for services employment is significantly lower than it is for manufacturing in general.

Figure 1
Northwest Indiana Total Establishment Employment, Trends and Predictions



The relatively slow growth in the Northwest Indiana economy will probably continue throughout 2001, as growth in the U.S. economy slows in response to higher interest rates and higher energy prices. (Indeed, motor vehicle output has declined, at least temporarily, within the last month.) Continued moderate national growth will support only incremental employment increases in Northwest Indiana. We anticipate that manufacturing employment will continue to fall in 2001, losing perhaps as many jobs as in the past year, and slower growth in services and retail will prevail, with total employment growth accounting for a net of 2500 new jobs overall.

The unemployment rate in Northwest Indiana has already increased from its late 1999 low of about 3.2 percent (see **Figure 2**); indeed, unemployment was generally less than 4 percent throughout 1999 and has been generally above 4 percent in 2000. With employment growth slowing, we anticipate that the local unemployment rate will continue to rise in 2001, perhaps reaching 5 percent.

Even this relatively slow local economic growth will require that the national economy continue to grow at a moderate (2 percent to 2.5 percent) rate. Should national economic growth slow in response to higher interest rates, higher energy prices, increased import penetration of domestic markets (or other causes), the Northwest Indiana economy may experience a decline. The continued concentration of the local employment in manufacturing (17 percent of total local employment, and only 14 percent of national employment) makes the Northwest Indiana economy somewhat more sensitive to cyclical downturns.

If the forecasts of continued strong national growth prove to be correct, then the local economy may grow at a faster rate than we have indicated. On the other hand, if employment growth nationally falls to zero, we anticipate that local employment may fall as much as 2 percent, with manufacturing bearing the brunt of the decline. The additional unemployment that could result might lead to unemployment rates as high as 7.5 percent to 8 percent.

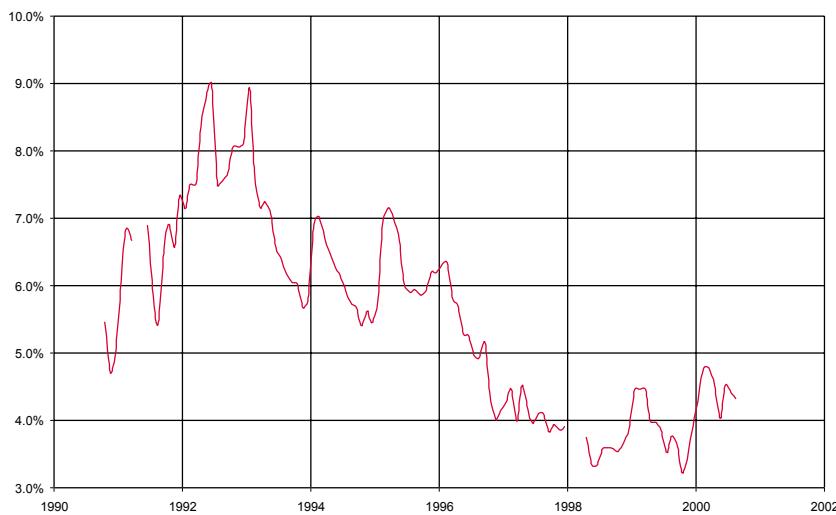
Weekly Hours and Wages

Average weekly hours in manufacturing have also trended down in the past year. After averaging 43 hours per week in 1999, weekly hours seem likely to average about 40 in 2000. This means that the true decline in manufacturing employment has been greater than the decline in employment (down about 3.5 percent over the past year) alone suggests—combining the drops in employment and in hours suggests an overall reduction in the use of labor in manufacturing of slightly more than 10 percent.

Average hourly wages in manufacturing (adjusted for inflation to 2000 prices) began to reverse their downward course in early 1998 and have been moving upward ever since. After bottoming out at about \$18.95 in May 1998, real wages have increased to about \$20.55 in August 2000—an increase of 8 percent. (The trend growth during this period—May 1998 was something of an anomaly—is about 3.3 percent.) In general, real wages have increased as hours have increased and decreased when hours have decreased (because the average earnings data incorporate overtime premiums). The last year is, therefore, an unusual period. It seems unlikely that real wages in manufacturing will continue their strong growth if manufacturing employment continues to decline.

We expect weekly hours to stabilize in 2001 at around 40 hours per week and real wages to fall to around \$20 per hour.

Figure 2
Northwest Indiana Unemployment Rate, Trends and Predictions



Steel

The steel industry deserved separate treatment because of its continued importance to the Northwest Indiana economy. Employment in steel has declined over the past year, falling to about 26,000; this represents a decline of nearly 24 percent since 1991 and almost 5 percent in the past year. Weekly hours in steel have shown no trend over the past decade (indeed, steelworkers work slightly longer hours now than they did in 1991); they have declined from over 44 hours per week in 1999 to around 42 hours per week now. Real wages in steel have increased by about 15 percent during the 1990s and about 4 percent recently.

Employment, hours, and wages in steel will all depend on national steel output over the next year. Nationally, steel output will be larger if the national economy grows more rapidly or if steel imports fall (or fail to rise significantly). The Chicago/Indiana region consistently produces between 25 percent and 30 percent of steel output in the U.S. and current (weekly) output levels have recently decreased from about 540,000 tons to about 500,000 tons (see Figure 3). (Nationally, output has decreased since the first of the year from about 2.2 million tons to about 1.9 million tons per week.)

Weekly steel output in Northwest Indiana has, since the beginning of 1997, shown a modest upward time trend (growing, on average, by 170 tons per week). It has also increased and decreased along with, but by a smaller percentage than, national output (an increase in national output of 1000 tons per week seems to correspond to an increase in regional steel output of about 150 tons per week). Nationally, steel output has been decreasing since about the beginning of 2000. Slower growth in the overall U.S. economy and continued stiff import competition is likely to cause continued slow declines in total U.S. steel output, down to perhaps as little as 1.7 million tons per week by the end of 2001.

Should that occur, local steel output could fall from its current 500,000 tons per week to around 475,000 tons per week. Such a decline in output, coupled with ongoing productivity increases in steel, could cause steel employment to fall by about 7 percent to 8 percent (around 1800 – 2000 fewer jobs) by the end of 2001. (Note that the Chicago/Indiana region's share of total steel output would rise, which is only a modest consolation.) Such a development would probably be associated with declining total employment in Northwest Indiana.

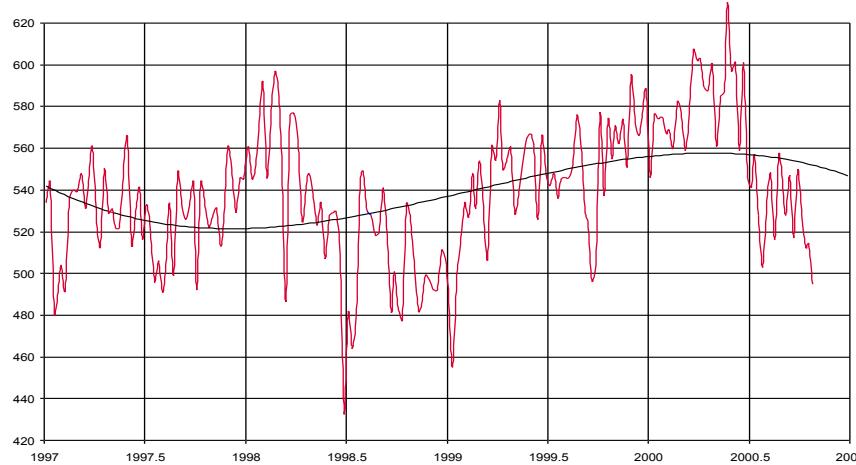
Labor Force Growth

Since 1993, the resident Labor Force (the employed plus the unemployed) in Northwest Indiana has grown very little, rising from about 290,000 to about 300,000, or 3 percent in seven years, with almost no overall growth since early 1994. The slow labor force growth appears to parallel the slow growth in population in the region since 1990 (up from about 602,400 in 1990 to about 628,400 in 1999, an increase of 3.9 percent over a decade). While the local economy is extremely "open" to commuters (e.g., from LaPorte or Newton Counties, or from the south Chicago suburbs), such slow labor force growth can become a barrier to continued economic growth in the region.

In addition, slow population and labor force growth is also a response to slow economic growth, as in-migration is likely to slow and out-migration is likely to increase.

There is no indication in recent trends in the labor force or in the population that labor force growth is about to accelerate. At best we look for 1 percent to 1.5 percent growth in the labor force in the coming year; at the high end of that range, unemployment will almost certainly rise.

Figure 3
Steel Output in the Chicago/Indiana Region



Conclusions

With continued moderate growth in the U.S. economy, growth in Northwest Indiana will almost certainly slow from its already slow pace of the past two years, with employment growth of 1 percent to 1.5 percent. Manufacturing employment will probably continue to decline, led by potentially large declines in employment in steel. Moderate growth in services (including retail) will lead to slow overall growth. The local unemployment rate is likely to rise to around 5 percent.

However, the local economy remains vulnerable to a national slowdown. An end to the U.S. expansion would likely lead to declining employment and 7 percent to 8 percent unemployment in Northwest Indiana. In the event of a national recession, the decline in the local economy would be even more severe.

While we do not expect that U.S. economic growth will end (still less do we expect a national recession), the chances of such a result are greater now than a year ago. We remain optimistic about the short-term future of the local economy, but our optimism is tempered.

not been accompanied yet by rising mortgage, credit card, or installment loan delinquencies, it does raise a question about the strength of consumption in 2001.

Capital spending, which has contributed to 35 percent of the growth of real GDP in 2000, but represents only 10 percent of nominal GDP, is expected to slow after the capital goods backlog is reduced. Large increases in federal and state spending to improve highways and mass transit, authorized by the Transportation Emergency Act21 (TEA-21) in 1998, will continue in 2001 in the Indianapolis area. Also, increased defense spending may have some modest local impacts later in the year.

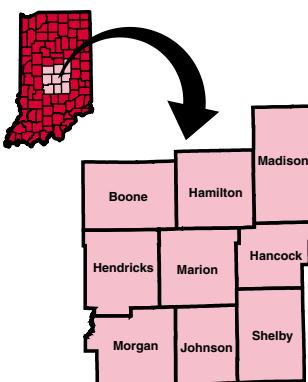
Recent Performance

How has the Indianapolis metropolitan area done over the past year (3rd quarter, 1999 to 3rd quarter, 2000)? Based on nonfarm payment employment, Indianapolis is compared to other areas in our region and others outside our region of similar size in **Table 1**. Indianapolis was third in our region. How will a slowing rate of consumer spending affect the Indianapolis metropolitan area economy? Let's look at the sources of growth in employment in the past year in **Table 2**.

Chemicals, a nondurable manufacturing component, reflects, in part, the publicly-announced Eli Lilly expansion plans that will continue. The large federal government increase was the extra hiring for the 2000 U.S. Census enumeration, and will not be reoccurring in 2001.

Construction has been a primary contributor to employment growth for the past several years. Single-family building permits were down about 6 percent for 2000 through September compared to the same period in 1999. In 2001, if the local employment growth is a little slower, then housing permits, and expenditures for household furnishings, will follow the same pattern but will be cushioned by eventually falling mortgage rates. Office vacancy rates have moved up. The supply of hotel rooms will increase by 616 rooms with the opening of the Indianapolis Marriott Downtown. It will be a challenge to duplicate the impressive employment increase in construction in 2001.

Consumer spending consists of durables, nondurables, and services. Expenditures on durable goods tend to be more volatile than services. Indianapolis has a lot of auto-related durable goods-based employment. Consumers will have increasing choices, especially in the SUV market. Many SUVs



Indianapolis

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The outlook is for a moderating rate of employment growth for the metropolitan (nine county) Indianapolis area. This outlook is based on the national consumption growth rate slowing to a rate closer to the national disposable personal income growth rate. From 1995 to 2000, consumers had the best of times—low unemployment and inflation, and growth in household wealth. However, an uncertain stock market, due to rising costs and slowing profit growth, will result in more moderate growth in consumer spending.

Also, at the national level the ratio of household debt service to disposable income has risen to a high level of 13.6 percent. Although this high level has

are coming off lease. This reduces the residual value that, in turn, could lead to more expensive leases on new vehicles. Because the auto industry has been meeting increases in demand since the mid-1990s by using more overtime, a sales slowdown would show up first in a reduction of overtime, to be followed by a reduction of employment.

How have consumers changed the allocation of their budgets? The Consumer Expenditure Survey does not provide data for the Indianapolis metropolitan area. There are data for consumer units in the Midwest, however. **Table 3** provides selected components of expenditures for two surveys, 1988-89 and 1997-98 (the most recent).

Housing, the largest component, includes mortgage interest and property taxes. The Indiana Tax Court ordered a new property tax reassessment rule to be adopted by June 1st, 2001 to be effective by March 1st, 2002, with taxpayers first paying property taxes under the rule in 2003. In addition to the increase in assessed values, there will be a decrease in tax rates (but not necessarily levies), and burden shifts between and within property classes.

Natural gas for home heating is classified as a utilities expenditure. Natural gas prices are expected to be higher until increased supplies reach the market. If households have to allocate more for natural gas and maybe gasoline because there are few substitutes (demand is price inelastic—insensitive to price change), then other budget categories will be reduced given a fixed budget level. Medical insurance premiums have been going up compared to the mid 1990s, and are expected to continue their rate increase. So, the result of the above could be a reduction of discretionary income and expenditures.

Table 1
Employees on Nonfarm Payrolls for Selected Metropolitan Areas, 1999 (3rd quarter) to 2000 (3rd quarter)

| Metropolitan Area | Total Employment 2000 (3rd Quarter) | Change in Total Employment 1999 (3rd Quarter)—2000 (3rd Quarter) | Percent Change* |
|--------------------|-------------------------------------|--|-----------------|
| Indianapolis | 887,200 | 15,500 | 1.8 |
| Cincinnati | 894,900 | 15,100 | 1.7 |
| Columbus, OH | 870,700 | 10,500 | 1.2 |
| Louisville | 595,100 | 12,700 | 2.2 |
| St. Louis, MO | 1,339,300 | 13,200 | 1.0 |
| Detroit, MI | 2,179,400 | 40,400 | 1.0 |
| Chicago, IL | 4,248,200 | 40,500 | 1.0 |
| Austin, TX | 666,200 | 31,500 | 5.0 |
| Raleigh/Durham, NC | 679,000 | 10,500 | 1.6 |
| San Jose, CA | 993,500 | 17,100 | 1.8 |

Source: U.S. Bureau of Labor Statistics, <http://stats.bls.gov>

*These data are subject to revision

Table 2
Indianapolis Metropolitan Area Employment Change by Major Sector, 1993 (3rd quarter) to 2000 (3rd quarter)

| Sector | Percent Change |
|---|----------------|
| Construction | 5.3 |
| Manufacturing | 1.9 |
| Transportation Equipment | 2.9 |
| Chemicals | 4.1 |
| Transportation, Communication, Public Utilities | -0.9 |
| Wholesale and Retail Trade | 2.4 |
| Finance | 1.5 |
| Services | 1.3 |
| Federal Government | 8.0 |
| State Government | -0.4 |
| Local Government | 0.6 |

Source: Indiana Department of Workforce Development

Metropolitan Area Livability

How livable is Indianapolis? One indicator is how are people “voting with their feet”? Are they moving to Indianapolis? The net migration rate is one measure of “voting.” Howard Wall, Federal Reserve Bank of St. Louis, uses the net domestic in-migration to rank 59 large metropolitan areas. His “livability index” is the rate of net domestic in-migration, the net domestic in-migration 1990-1997 divided by the 1990 population. **Table 4** lists Indianapolis and selected metropolitan areas.

Indianapolis is third among mid America areas. Austin and Raleigh/Durham are two high-tech areas with which Indianapolis would like to have increased (air service) interaction. Interestingly, San Jose (Silicon Valley) is third from the bottom.

Table 3
**Consumer Expenditures by Selected Categories for the Midwest,
1988-1989 and 1997-1998, percent composition**

| | 1988-1989 | 1997-1998 |
|-----------------------------|------------------|------------------|
| Average Annual Expenditures | \$25,418 | \$34,109 |
| Selected Categories: | | |
| food | 14.9% | 13.8% |
| food at home | 8.5% | 8.0% |
| food away from home | 6.4% | 5.8% |
| housing | 30.0% | 31.6% |
| apparel and services | 5.8% | 4.9% |
| transportation | 19.5% | 18.6% |
| vehicle purchases | 3.7% | 3.1%* |
| gasoline and motor oil | | |
| health care | 5.1% | 5.7% |
| entertainment | 4.9% | 5.4%** |

*real price of oil was historically low in 1997-1998

**includes fees and admissions, televisions, radios, sound equipment, pets, toys, and playground equipment

Infrastructure

Population and employment growth can put pressure on the infrastructure of a metropolitan area. Efficient connectivity and mobility are two major requirements for economic development in the 21st century. How well does Indianapolis meet these requirements? Connectivity will be discussed in terms of information technology, air passenger transportation, and combined sewer overflows; mobility by vehicular congestion.

Information Technology and Indianapolis' Role in Internet2

In February 2001, construction will begin on a Communications Technology Building on the IUPUI campus. This building will be the center of IU's telecommunications infrastructure for IUPUI, its state network and its connections to other national and international networks. It will house the Network Operations Center for the Internet 2 Abilene network, the TransPAC network to Asia, and a number of other high-performance research networks. Abilene, KS, was the gateway to the future on the old American frontier. Information technology plays that role today, and Indianapolis plays a key role. The Abilene Network was created by the University Corporation for Advanced Internet Development (UCAID) in partnership with Qwest Communications, Cisco Systems, Nortel Networks, and Indiana University. Abilene is a backbone network used by the Internet2 community. Abilene network supports the Internet2 by providing an effective interconnect among the regional networking aggregation points, pioneered by Internet2 universities.

Air Passenger Service Connectivity

Air passenger service connectivity is critical for development of information economy firms. Indianapolis would like to establish air passenger linkages with certain metropolitan areas, such as Austin, TX, Raleigh/Durham, NC, and San Jose, CA. How do these areas compare with Indianapolis? The method of comparison is to use a measure of employment concentration—the measure is greater than 1.0 if the metropolitan area has a greater concentration than in that same industry at the national level. Measures of concentration for components of the information sector are given in Table 5.

Table 4
Livability Index, 1997-1999

| Metropolitan Area | Net Domestic In-Migration Rate | | |
|-------------------|---|-------------------------|--|
| | Top Ten | Mid America | |
| Las Vegas | 38.0 | Nashville 9.1 | |
| Atlanta | 17.0 | Cincinnati 5.6 | |
| Phoenix | 16.6 | Indianapolis 2.7 | |
| Austin | 15.2 | Kansas City 2.2 | |
| Raleigh/Durham | 14.6 | Columbus, OH 2.0 | |
| West Palm Beach | 12.7 | Minneapolis/St.Paul 1.9 | |
| Orlando | 11.3 | Bottom Three | |
| Fort Lauderdale | 10.5 | San Jose -8.6 | |
| Portland, OR | 10.4 | New York -13.3 | |
| Charlotte | 9.9 | Los Angeles -15.1 | |

Source: Howard J. Wall, "Voting With Your Feet," The Regional Economist (April 1999), pp. 10-11.

Table 5
**Employment Concentration for the Information Sector, 1998
Selected Metropolitan Areas**

| Metropolitan Area | Software (5112)* | Cable (5132) | Telecommunication (5133) | Information Services (514) |
|--------------------|---------------------|-----------------|-----------------------------|----------------------------|
| Austin, TX | 5.32 | .98 | 1.79 | 1.27 |
| Raleigh/Durham, NC | 1.52 | .68 | 1.39 | .78 |
| San Jose, CA | 10.36 | 1.20 | .97 | 1.45 |
| Indianapolis | .69 | .57 | 1.01 | .82 |

*the new North American Industrial Classification System (NAICS)

Source: U.S. Bureau of the Census, County Business Patterns, 1998 and author's calculations

Table 6
Mobility Trends, 1992-1997 (for Selected Metropolitan Areas)

| Metropolitan Area | Travel Rate Index | | Rank | | Percent Severe Congestion | | | |
|-------------------|-------------------|------|------|------|---------------------------|------|------------------|------|
| | | | | | Freeways | | Arterial Streets | |
| | 1992 | 1997 | 1992 | 1997 | 1992 | 1997 | 1992 | 1997 |
| Indianapolis | 1.09 | 1.22 | 46 | 28* | 5 | 31 | 13 | 20 |
| Columbus, OH | 1.13 | 1.21 | 33 | 33 | 23 | 24 | 17 | 11 |
| St. Louis | 1.13 | 1.24 | 33 | 21 | 11 | 33 | 17 | 16 |
| Kansas City | 1.04 | 1.09 | 55 | 52 | 15 | 14 | 18 | 18 |
| St. Jose | 1.30 | 1.29 | 7 | 15 | 41 | 50 | 14 | 9 |

*the lower the rank, the greater the congestion

Source: Texas Transportation Institute. 1999 Annual Mobility Report, <http://tti.tamu.edu>

For many observers the convenient shorthand explanation is that there is a regional culture that fosters an entrepreneurial spirit. The cultural explanations are peculiar because they are all-encompassing but convey little information. The driving force in Silicon Valley is fundamentally economic, and the institutions that have arisen to facilitate new firm formation are based on the capital gains derived from firms that have grown incredibly quickly. The culture is not a prerequisite to an economy based on large capital gains; it is an outcome of such an economy.¹

Austin is a state capitol, and the home of the University of Texas at Austin as well as Dell Computer Corporation. A statistical analysis of outbound air passenger traffic from Austin to 57 cities showed that after controlling for hub status and distance from Austin of the paired city, the outbound traffic from Austin was positively associated with a concentration of software employment in the paired city. Indianapolis-based software firms, such as Powerway and Interactive Intelligence, have announced major employment expansion plans over the next several years. The Indiana Technology Partnership is working in Indianapolis and statewide to promote new information sector firms and, therefore, to make air connections more economically attractive.

What are determinants of software employment? In an analysis by this author, workforce quality, as measured by a weighted measure of the educational attainment, and the presence of venture capital were found to be important. More generally, in a discussion of what generated high-technology firms, such as Apple Computer, Cisco, Genentech, Intel, Oracle, Sun Microsystems, and 3Com in Silicon Valley, Martin Kenney, University of California, Davis and a Senior Project Director at the Berkeley Roundtable on the International Economy writes:

Combined Sewer Outflows

The Indianapolis Chamber of Commerce Infrastructure Commission issued a report, *Getting Indianapolis Fit for Tomorrow* (GIFT), ten years ago. The report called for 1.1 billion in infrastructure spending over the next ten years. Mayor Bart Peterson has indicated that tomorrow is here, and that he intends to address the combined sewer overflow problem, one component of the report. The cost depends on the level of abatement. The method of finance has not yet been determined but the solution to the problem will require some increase in fees.

Auto and Truck Mobility, and Congestion

The Northeast Corridor transportation study (from Noblesville to downtown Indianapolis) focuses on the projected increased levels of congestion by 2025, and the alternative strategies to deal with it. Analysts at the Texas Transportation Institute, located at Texas A & M University, have been studying mobility issues of metropolitan areas.

They have developed a Travel Rate Index that shows the difference between a trip taken during peak travel times and the same trip made in uncongested conditions. Those metropolitan areas with the highest index in 1997 were Los Angeles, Seattle-Everett, San Francisco-Oakland, Washington, D.C.-MD-VA, and Chicago-Northwestern, IN. **Table 6** shows Indianapolis and some similarly-sized metropolitan areas.

The table shows that for the 68 urban areas studied, Indianapolis became: 1) more congested—our Index increased, 2) more congested at a faster rate than other urban areas—our rank decreased, and 3) severe congestion increased on our freeways and arterial streets. The Mobility Report estimated the annual congestion cost per eligible driver to be \$865

for Indianapolis (rank 13) and \$1,370 for Los Angeles (rank 1). What are the options? The Texas analysts observe:

If building additional roadway capacity were the only option, the cities in the study would have to add an average of 37 more lane miles than they currently do to keep pace with only one year of increased traffic demand.

If carpooling were the only answer, the average city would have to increase its annual number of carpool trips by at least 100,000 every year. They note that "...There is not a need for a specific option so much as there is a need for consensus that transportation is an important element of our cities, and something will be done to address the mobility issues."² In the short run, we can use our existing highway capacity more efficiently with intelligent transportation system activities and commuter van services (under federal law, the first \$65 provided to an employee monthly for vanpooling is tax-free income). Long run options include capacity enhancements—freeway expansion and commuter/light rail transit. Congestion reduction options come with a variety of price tags. What price are we willing, and able, to pay?

So, in 2001 the residents and the leadership of the business, government, and nonprofit sectors of Indianapolis face major infrastructure issues in "getting fit" for the coming decade. How creatively and constructively we respond will influence our economic future.

Endnotes

¹Martin Kenney, "A Note on the Comparison between Cambridge, England and Silicon Valley, Berkeley Roundtable on the International Economy," Research Note #6, July 2000.

²David Schrank and Tim Lomax, "Study Shows Traffic Worsening in a Variety of Ways and Places," 1999 Annual Mobility Report, Texas Transportation Institute, <http://mobility.tamu.edu>.



Kokomo

Dilip Pendse

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Kokomo is experiencing its longest period of economic expansion since 1992. Recently, *Industry Week* magazine stated that Kokomo is among the top 15 manufacturing centers in the U.S. According to the U.S. Department of Labor's Bureau of Economic Analysis, Kokomo's average salary ranks among the top 15 MSAs in the nation. The same source reports that Kokomo MSA has held #1 ranking in Indiana in terms of average salary for the past 16 years! Kokomo has a prosperous business partnership with DaimlerChrysler, the world's 3rd largest auto manufacturer. In addition, Kokomo's housing is affordable, its population is growing, its property values keep rising, and its credit rating is high. Optimism abounds in Kokomo!

Although the Kokomo economy is barreling along, it is not as super-charged as it was during the previous several years. Apparently, it is showing some signs of economic growth fatigue. There are, however, no signs of a significant slowdown. Manufacturing still remains strong. There is no significant reduction in factory overtime. The jobless rate remains low. The labor market is super tight. Payrolls are high. The retail sector is vibrant. Nonresidential construction is up (see Table 1).

Table 1
The Kokomo Economy That Keeps Surprising

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000* | 2001** | |
|-------------------------------|------|------|------|------|------|------|------|------|-------|--------|---|
| Average Jobless Rate (%) | 7.2 | 6.0 | 5.7 | 4.4 | 3.7 | 3.4 | 3.3 | 2.7 | 2.9 | 3.1 | DaimlerChrysler's new investment plans have elevated Kokomo's image in the state and in the U.S. It is a win-win situation for Kokomo. This new investment in Kokomo (close to \$1 billion) will: (1) retain existing jobs; (2) create additional jobs in the near future; (3) provide additional sources of property revenue to the local government in the long run; (4) generate business opportunities for local suppliers; and (5) create construction-related jobs during the expansion and renovation phase. |
| Avg Mfg Wk Week (hrs) | 40.5 | 43.3 | 47.5 | 47.3 | 52.4 | 48.9 | 51.2 | 48.5 | 47.5 | 45.5 | |
| Av Weekly Wages (\$) | 839 | 878 | 1064 | 1079 | 1081 | 1103 | 106 | 1103 | 1065 | 1050 | |
| Single-family housing permits | 196 | 208 | 302 | 265 | 312 | 272 | 218 | 332 | 290 | 270 | |
| Total building permits | 766 | 783 | 990 | 937 | 984 | 1033 | 960 | 1066 | 1075 | 1060 | Kokomo is Indiana's #1 Manufacturing Center |
| Retail sales (\$mil) | 844 | 919 | 950 | 1035 | 1084 | 1093 | 1132 | 1424 | 1700 | 2000 | What do San Jose, CA, and Kokomo, IN, have in common? According to <i>Industry Week</i> magazine, they are two of the nation's top 15 manufacturing centers in the nation. While San Jose was ranked #1 in the U.S., Kokomo was ranked #14. In the <i>Industry Week</i> ranking, Kokomo not only outpaced the state's Elkhart-Goshen (23 rd) and Indianapolis (25 th), but also surpassed St. Louis, MO, Cleveland, OH, New York, NY, Detroit, MI, and Lexington, KY. |

*Projection based upon available data

**Forecast based upon trends observed

Christmas in September

Juergen Schrempp, CEO of DaimlerChrysler's worldwide operations, recently sent Kokomo an early Christmas gift. Despite disappointing earnings, a declining stock price, and sluggish sales, DaimlerChrysler announced in September 2000 that it plans to invest \$853 million in Kokomo's three operations. The economic windfall came unexpectedly, because DaimlerChrysler invested \$1 billion in creating its new Indiana Transmission Plant (ITP) just five years ago. The latest spending decision was a calculated, strategic move. Since installing its first manufacturing facility in Kokomo in 1937, Chrysler has gradually and systematically boosted its manufacturing base here. As a result, outside of Detroit, Kokomo now has DaimlerChrysler's second largest number of plants. Although about 12,000 Hoosiers work for DaimlerChrysler, nearly 75 percent of them work in Kokomo. DaimlerChrysler is Kokomo's largest single employer.

This latest massive investment will result in a 600,000 square feet expansion at ITP, installation of \$400 million worth of machinery, and renovations at the Kokomo Transmission Plant and Kokomo Casting Plant. Along with producing Chrysler-engineered transmissions, the expanded Kokomo operation will produce German-engineered Mercedes-Benz transmissions, which were previously produced in Hedelfingen, Germany.

Kokomo Remains #1 in Indiana

In terms of average salary, Kokomo ranks #1 in the state and very high at the national level. The average salary in the Kokomo MSA soared from \$35,880 in 1997 to \$37,517 in 1998, a gain of 4.6 percent, according to U.S. Department of Labor's Bureau of Economic Analysis. The percent gain in 1998 was the highest in last three years. The 1998 average salary ranked #1 in the state and #13 in the nation. In fact, since 1981, Kokomo's state rank has not changed. At the national level, the ranking of Kokomo's average salary has remained under 15 for the past five consecutive years. The July 2000 issue of the trade publication *Sales & Marketing Management* reported that Kokomo MSA's median household after-tax income in 1999 was \$38,579, the 5th best in the state's 11 metropolitan areas and 104th nationally.

The weekly manufacturing earnings during the first nine months of 2000 averaged \$1,086, the best in Hoosierland. If this trend continued for the rest of 2000, an average factory worker easily pocketed \$56,500 before year's end. The average manufacturing work-week dipped slightly to 47.7 hours, but this still resulted in almost eight hours of overtime per week. Kokomo's average factory work-week ranks #1 among in Indiana's factory towns.

Retail Sector Approaching \$2 Billion Mark

Kokomo has become a shopping mecca for nearly 300,000 people living in the greater Kokomo area. Kokomo's retail sector will grow further because of the expansion of Wal-Mart into a Super store and Marsh's construction of its Super store, as well as the arrival of Old Navy, Pier 1, and Menard's. The 2000 grocery wars will intensify in 2001 with the opening of Marsh's super store. Hardware store wars are on the horizon! In the last six years, more than a dozen restaurants have made U.S.31 their home. The good news for consumers is that competition will stiffen as a result of the arrival of Donatos, Don Pancho, and Golden Corral. Competition has already caused the closing of Boston Market, Colorado Steak House, Lincoln Square Restaurant, Blimpie, and Shenanigans.

Kokomo MSA's service-producing sector employed 31,400 people during the first nine months of the year 2000, compared with 30,200 in 1999. The retail and service producing sectors accounted for nearly two-thirds of these jobs. After breaking the \$1 billion barrier in 1995, Kokomo MSA's retail sales are fast approaching the \$2 billion mark. According to *Sales & Marketing Management*, Kokomo MSA retail sales totaled \$1.4 billion in 1999, up a whopping 26 percent from a year earlier! While the 2000 sales figures will not be known until next July, I project that retail sales in Kokomo will be \$1.7 billion. Retail sales in Kokomo MSA averaged \$35,350 per household in 1999 and ranked 7th among the state's 11 MSAs. **Table 2** below shows retail sales per household in selected categories:

Table 2
Kokomo MSA Retail Sales per Household in Selected Categories, 1999

| Category | Sale per Household | Rank Among 11 MSAs |
|-----------------------------|--------------------|--------------------|
| Eating and drinking places | \$ 3,989 | 1 |
| Motor vehicle parts dealers | \$12,733 | 3 |
| Food and beverage stores | \$ 3,789 | 4 |
| General merchandise | \$ 5,855 | 5 |

Payrolls on the Rise

The latest issue of the *Indiana Employment Review* reported that in September 2000, non-farm employment in the Kokomo MSA stood at 54,500; this is a gain of 1,500 jobs since the beginning of the year. The current total non-farm employment is the largest in recent years! The ability of Kokomo's economy to create 167 jobs per month is remarkable given that the economic fatigue factor has showed up in other sectors of the local economy. While manufacturing registered small losses, other sectors posted 2.8 to 37.5 percent gains, as shown in **Table 3**.

Because of the growth in non-farm payrolls, Howard County's unemployment fell to 2.3 percent in May 2000, the lowest in recent history. However, for the first nine months of the year, the jobless rate in Howard County stayed at 2.9 percent, compared with 2.8 percent during the same period in 1999. The two major reasons behind 2000's slightly higher unemployment rate are: closing of the Cannon Valley Woodworking operation, and layoffs at DaimlerChrysler. The layoffs at DaimlerChrysler's Indiana Transmission and Kokmo Transmission plants began in the early months of the year. Currently, 300-400 employees are still not reporting to work. The permanent shut-down of the Cannon Valley Woodworking operation, resulted in a loss of 189 jobs. In the absence of these developments, the jobless rate could have easily dipped below the 2 percent mark.

Construction Sector Cooling Down

During the first nine months of the year 2000, the economy's interest-sensitive construction sector showed signs of cooling off. Rising interest rates, or the eight-year growth fatigue, may have put the damper on construction activity. During the first three-quarters of 2000, non-residential construction activity was more vibrant than residential construction. The number of construction-related jobs increased gradually from 1,600 at the start of the year to 2,200 at the end of September. Nonetheless, total construction-related jobs for the year 2000 remained at a lower level than a year ago. The housing and construction sector is important to the local retail sector. According to *Sales & Marketing Management*, retail sales of furniture and home furnishings, appliances, building materials and hardware totaled 123.2 million in 1999, up 16.9 percent from 1998.

During January to September of 2000, the number of building permits issued totaled 816, down

4.4 percent from the same period in 1999. The dollar value registered on these permits totaled \$75.25 million, 5 percent above 1999's level, thanks to a surge in non-residential building activity.

With a total of 218 building permits issued during January-September 2000, the non-residential building sector posted a 2.3 percent increase over the same period in 1999. The major non-residential building construction projects include IUK's science building, a surgical center at Howard Community hospital, a public library, a motel, two restaurants, three commercial warehouses, and 14 commercial buildings.

In May 2000, Kokomoans learned of the shutdown of Cannon Valley Woodworking operation, which was owned by a Minnesota-based cabinet manufacturer. The closing of Cannon Valley's operation resulted in 189 people losing their jobs. It was a blow to Kokomo's efforts to diversify its economic base.

Table 3
Employment by Selected Sectors

| Kokomo MSA Payroll | January '00 | September '00 | Gains/Losses | % Change |
|---------------------|-------------|---------------|--------------|----------|
| Total non-farm jobs | 53,000 | 54,500 | 1,500 | Up 2.8 |
| Manufacturing | 22,900 | 22,800 | (100) | Dn 0.4 |
| Retail Trade | 9,900 | 10,600 | 700 | Up 7.1 |
| Business Services | 9,300 | 10,000 | 700 | Up 7.5 |
| Construction | 1,600 | 2,200 | 500 | Up 37.5 |

Residential building permits issued during the first nine months of 2000 totaled 598, down 6.4 percent from the same period the previous year. Permits issued for single-family houses declined 9 percent to 243. The year-end number of permits for single-family houses will probably be about 290, compared with 332 in 1999. Nonetheless, this will be the 5th best performance in the past 22 years. The average dollar value registered on these single-family housing permits increased marginally to \$136,049 from 1999. After growing vigorously for the past three years, multi-unit housing construction activity slowed dramatically in 2000. Only 26 permits valued at \$7.12 million were issued, compared with 45 permits, valued at \$10.1 million, in 1999. The number of permits issued for residential storage buildings declined to 28, from 50 the previous year. Interestingly, permits for swimming pools jumped by 18 to 53.

Economic Prospects for 2001

Kokomo's economic fortunes depend heavily upon the strength of the national economy and that of the auto industry. The national economy is expected to slow down a bit, and the aggregate motor-vehicle production is likely to be in the 17 millions range, somewhat lower than in each of the past two years. For the year 2001, I foresee the following for Kokomo: (1) DaimlerChrysler's cost-cutting efforts will adversely affect Kokomo. There will likely be a hiring freeze. DaimlerChrysler workers will have to brace for short-term layoffs. Their overtime will be shortened. Profit-sharing bonus checks to be received in the early months of 2001 will be 25-40 percent below the amounts for 2000. (2) The labor market will remain tight. It will hamper small businesses' ability to grow. Howard County's jobless rate will range between 2.2 and 3.6 percent, compared to an average yearly rate of 3 percent. (3) Construction-related jobs will increase due to expansion and renovation at DaimlerChrysler's three operations. (4) The housing sector will cruise along without any dramatic changes. (5) The retail sector will remain vibrant.

In summary, the economic nirvana of 2000 will continue in 2001. Kokomo will remain at the top of the economic mountain.



Lafayette

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The Lafayette metropolitan area has been the third fastest growing metro area in the state for many years. The area's stable, well-diversified economic structure should help keep that momentum going into 2001.

The final counts for metropolitan areas from the 2000 census will not be released until later in the year. The most recent estimate from the U.S. Census Bureau puts the Lafayette metro area population – encompassing Tippecanoe and Clinton counties – at 175,500 people as of July 1999. Through the decade of the 1990s, the Lafayette area population grew about 1% per year. Only Elkhart-Goshen and the greater Indianapolis metro area grew faster (about 1.2% per year each).

This steady population growth is both a cause and an effect of expanding economic activity. When an area offers attractive living conditions and good economic opportunities, it tends to attract new

residents. And these new residents spend money and create demand for still more goods and services. This population trend is a good sign for Lafayette's economic future.

While the Lafayette area has been adding population at a rate close to 2,000 people per year, it has been adding new jobs even faster (see **Figure 1**). Total employment is measured in different ways, but statistics from the U.S. Bureau of Labor Statistics show the Lafayette area has added about 3,000 new jobs each year since 1993. This high rate of job growth is a good indication of economic strength. It's also a sign that Lafayette is increasingly a regional economic center, drawing people from surrounding counties into its economic activity.

When job growth exceeds population growth, that drives down the unemployment rate. The unemployment rate for the Lafayette area according to recent estimates from the Indiana Department of Workforce Development is about 1.5%. This remarkably low rate is well below the state rate of about 2.5%. The nation's rate of economic growth is expected to moderate in 2001, but in Lafayette we probably will not see unemployment creep up much beyond 2%.

A major factor in Lafayette's strong economic outlook is its comparatively balanced economic mix. Durable goods manufacturing accounts for about 18% of employment in the Lafayette metro area, and retail sales generates another 18%. The corresponding rates statewide in Indiana are 17% in durable goods and 19% in retail. Other areas with higher concentrations of employment in durable goods are more vulnerable to an economic slowdown. As businesses and consumers trim spending, it's often high-priced durable goods like automobiles and machine tools that get postponed first. Places like Kokomo, with 36% of its employment in durable goods manufacturing, and Elkhart-Goshen, with 42%, are likely to have a harder time in 2001 than will Lafayette.

Overall, the Lafayette metro area probably will experience economic conditions in 2001 very much like it saw in 2000. Housing construction will slow markedly in response to recent interest rate increases. But labor availability will remain tight and unemployment low. Though car sales may drift down somewhat from their extraordinary peaks in 2000, retail sales in general and manufacturing businesses should continue their slow and steady growth.

Figure 1
Lafayette Metro Area Population and Employment Growth





Muncie

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For at least 30 years, Muncie has been slowly shrinking in terms of its role in the Indiana state economy.

In 1970, people working in the Muncie metropolitan area enjoyed an earnings level that was 2.4% of all Indiana earnings (see **Figure 1**). By 1998, the most recent year for which the U.S. Bureau of Economic Analysis has published local data, the Muncie area's share of state earnings had sunk below 1.8%. Of the 11 metropolitan areas in Indiana, only Gary-Hammond lost more of its share of state earnings over this period than did Muncie.

This slide is reflected in the population of the Muncie metro area, which includes all of Delaware County. During the decade of the 1990s, according to U.S. Census Bureau estimates, Muncie was the only metro area in the state which actually lost population. In the 1990 census, Muncie's population was 119,659. By 1999 the population had drifted down to an estimated 115,472. Bloomington passed Muncie in size in 1998, making Muncie the second smallest metro area in the state, just ahead of Kokomo.

Barring a major unforeseen event, this pattern of unchanged or slightly declining economic activity will be Muncie's fate in 2001 as well. As the rate of economic growth eases across the nation, the heavy manufacturing that is a major part of Indiana's economy is likely to slow more than other sectors

as consumers postpone big-ticket purchases. As its share of the state clicks down another notch, the Muncie area is likely to taper off more than the state average in several areas.

The effects of lower sales of durable goods will be seen clearly in the Muncie area. Without a growing residential population to offset the general economic slowing, Muncie's housing construction industry will retrench significantly. The U.S. automobile business already has slipped from its record levels in early 2000, and car sales in Muncie for 2001 will drop even further below last year's figures.

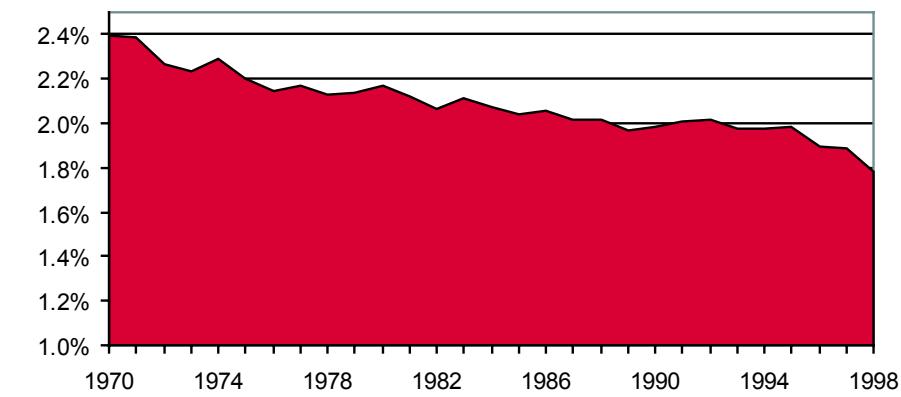
Economic activity in the state of Indiana has typically generated about 50,000 new jobs a year for the past several years. During this same period, the net gain in jobs each year in the Muncie metro area has been essentially zero. The U.S. Bureau of Labor Statistics reports that just over 61,000 people were employed in the Muncie area in October 1997; in October 2000 there were 60,800. For 2001, the Center for Econometric Model Research in the Kelley School of Business at Indiana University predicts there will be a net increase of about 30,000 jobs in the Indiana economy. When job growth slows across the state, we can expect to see a small net decline in the number of jobs in Muncie, coupled with elimination of factory overtime and perhaps temporary plant shutdowns for inventory adjustment.

Muncie's unemployment rate typically mirrors the state rate. Unemployment in Indiana is expected to inch up slightly in 2001 from the extremely low levels of late 2000. In the Muncie metro area, that will translate to an increase of perhaps a full percentage point in the unemployment rate.

In 2001, as durable goods manufacturing slows and earnings from those jobs are curtailed, other sectors of the Muncie area economy are not in a position to take up the slack. Retail trade supplies 20% of all full-time and part-time employment in the Muncie area, a relatively high proportion (BLS does not publish figures for the share of Muncie employment in health services, another major source of jobs in the area). In Indiana, only Terre Haute at 24% has a larger retail percentage. But retail jobs, which are often part-time, tend to produce lower annual earnings than jobs in manufacturing or in certain kinds of services.

Wholesale trade and manufacturing of nondurable goods are relatively minor parts of the Muncie economy, employing less than 2,000 people each. These sectors are not expected to contribute any growth in the area in 2001.

Figure 1
Muncie Metro Area Share of Statewide Earnings from Work



New Albany

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In the year 2000 Southern Indiana and the Louisville metropolitan area have continued to experience the strong economic trends that have been occurring regionally and nationally over the past several years. The seven counties in the Louisville Metropolitan Statistical Area (MSA) are Clark, Floyd, Harrison and Scott in Southern Indiana and Bullitt, Jefferson and Oldham in Northern Kentucky. The following analysis examines various measures of economic growth in the Louisville MSA and its component counties.

Labor Markets

As evidenced by the prevalence of 'Help Wanted' advertising, labor markets are tight in Southern Indiana. Throughout 2000 the unemployment rate in the Southern Indiana counties continued to be below or even with that of Indiana as a whole and below that of Kentucky and the United States as shown in **Table 1**. The average annual unemployment rates for January through September 2000 indicate that the unemployment rate is hovering around 3 percent on average in each of the Southern Indiana Counties. The unemployment rate reached a new low in September 2000 as shown in Table 1. The September 2000 unemployment rates in the Kentucky counties were well below the Kentucky state average at 2.4%, 3.2%, and 2.1% in Bullitt, Jefferson, and Oldham counties, respectively.

Figure 1
Unemployment Rates Comparison

| | 1999 Annual Average | Annual Average (Jan.-Sept. 2000) | September 2000 |
|----------|---------------------|-------------------------------------|----------------|
| Clark | 2.8 | 3.1 | 2.6 |
| Floyd | 2.3 | 2.9 | 2.1 |
| Harrison | 2.6 | 2.9 | 1.7 |
| Scott | 3.1 | 3.2 | 2.2 |
| Indiana | 3.0 | 3.3 | 2.1 |
| Kentucky | 4.5 | 4.0 | 3.6 |
| U.S. | 4.2 | 4.1 | 3.8 |

Source: Indiana Department of Workforce Development and Kentucky Cabinet Workforce Development

Recent data for the Louisville MSA (see **Table 2**) indicates that the average level of nonagricultural employment increased by 11,000 from 1999 through August 2000. Manufacturing employment remained steady for Southern Indiana at 20,200 and decreased by about 1,400 jobs in the MSA. Nonmanufacturing employment decreased by about 400 jobs in the Southern Indiana and grew by 12,500 in the MSA. The MSA job growth in the nonmanufacturing sector was led by increases in the service sector, transportation, the communications and public utilities sector and the retail sector. These employment statistics represent

a leveling off of employment growth for the Southern Indiana counties, resulting in part from tight labor markets.

Recent data from the Indiana Department of Revenue indicate that 33,000 workers (32 percent of the Southern Indiana labor force) commuted daily between Southern Indiana and Kentucky in 1998.

Several major retail chains are expanding operations in Southern Indiana, and the retail sector will experience substantial growth over the next few years. New retail developments including Walmart, Home Depot, Meijer, Kohls, are either moving into the New Albany area or looking for a suitable location. Other developments include the Army Munitions Plant near Charlestown, a 500-room hotel at Caesars Casino in Harrison County, and several properties in Jeffersonville. These developments will further increase the demand for retail and service workers in Southern Indiana.

Wages and Hours in Manufacturing

Even though the unemployment in Southern Indiana is low, average weekly earnings in manufacturing industries continues to be below that of Indiana as a whole as shown in **Table 2**. Earnings have decreased slightly over that of 1999 suggesting that inflationary pressures are not evident. Generally, this sort of situation with stable earnings during a period of low unemployment is attributed to a less-skilled work force, increases in labor productivity, or both. College attainment rates in Southern Indiana are well below the Indiana, Kentucky and national averages, thus providing some support for the former claim. While there is no standard measure of labor productivity for metropolitan areas, national averages suggest that labor productivity in manufacturing has increased substantially over the past decade thus holding output prices and wages down.

Average weekly hours worked in the manufacturing sector have actually declined slightly over the past year. This indicates that on average the level of overtime has not increased.

Table 2
Nonagricultural Employment

| Nonagricultural Employment | 1999 Annual Average | 2000 Annual Average (through August) | Percent Change |
|--|---------------------|---|----------------|
| Southern Indiana Counties* (000) | 94.7 | 94.3 | -.04% |
| Louisville MSA** (000) | 579.0 | 590.1 | 1.9% |
| Manufacturing Employment | | | |
| Southern Indiana Counties (000) | 20.2 | 20.2 | 0.2% |
| Louisville MSA (000) | 89.0 | 87.6 | -1.6% |
| Nonmanufacturing Employment | | | |
| Southern Indiana Counties (000) | 74.5 | 74.1 | -0.6% |
| Louisville MSA (000) | 490 | 502.5 | 2.6% |
| Average Weekly Earnings Manufacturing | | | |
| Southern Indiana Counties | 568.96 | 567.1 | -0.3% |
| Indiana | 679.04 | 664.2 | -2.2% |
| Average Weekly Hours Manufacturing | | | |
| Southern Indiana Counties | 43.3 | 42.8 | -1.2% |
| Indiana | 43.5*** | 42.2 | -2.9% |

* Clark, Floyd, Harrison and Scott Counties. The Indiana Department of Workforce Development refers to this as the New Albany Area.

**The Louisville MSA is Clark, Floyd, Harrison and Scott Counties in Indiana and Bullitt, Jefferson and Oldham Counties in Kentucky.

***Data from December 1999.

Source: Indiana Department of Workforce Development

Long-term Employment Trends, 1990-97

The 1990-97 percent change in employment for major industry groups is shown in **Table 3**. Between 1990 and 1997¹ total employment in Southern Indiana grew by just over 20,000 jobs (a 36 percent increase). During this same time period, total job growth in the three Kentucky counties of the Louisville MSA increased by just under 68,000 jobs (a 20 percent increase) led by job growth in Jefferson County, KY.

The employment increases in Southern Indiana were led by the Services (adding just over 7,200 jobs, a 60 percent increase), Retail Trade (adding 4,660 jobs, a 32 percent increase) and Manufacturing (adding 5,080 jobs, a 34 percent increase) sectors. In the three Kentucky counties of the Louisville MSA, employment increases were led by Services (adding 28,700 jobs, a 26 percent increase), Retail Trade (adding 14,300 jobs, a 20 percent increase) and Transportation (adding 13,700 jobs, a 76 percent increase). These sectors were followed by Finance, Insurance and Real Estate (adding 7,100 jobs, a 27 percent increase), Construction (adding 4,380 jobs, a 23 percent increase), and Wholesale Trade (adding 4,250 jobs, a 17 percent increase). The Manufacturing sector in the three Kentucky counties declined during this time period decreasing employment by 4,400 jobs, a 6 percent decrease.

Growing Population

The recently released 1999 population estimates show that the population of the four Southern Indiana counties is growing (see **Table 4**). Population increased by over 11 percent or over 23,000 persons between 1990 and 1999. Harrison County led the growth with an 18.4 percent (5,500 people) increase in population. The Louisville MSA, as a whole, increased population by 6 percent or just short of 57,000 persons between 1990 and 1999. The largest portion of this growth occurred in the working age population (age 18 to 64) with an 11.7 percent increase, closely followed by seniors (age 65+) with an 11.3 percent increase. About 20.5 percent of the MSA population live in Southern Indiana.

Consumer Activity

Sales and Marketing Management magazine's Survey of Buying power reported a 28.7 percent increase in total retail sales in the Louisville MSA from just over \$10 billion in 1999 to just over \$13 billion in 2000. Bullitt, Jefferson, Clark, and Harrison counties led this growth with 45 percent, 30.5 percent, 29.1 percent and 26.8 percent increases in retail sales respectively for these counties.

Housing sales in the Southern Indiana area² have slowed. Home sales through October totaled 1,840 compared with 1,950 homes sold January through September 1999 and 1,845 January through September 1998. The average sales price was \$130,652 for January-October 2000 sales, and 70.5 percent of homes sold in 90 days or less.

Consistent with housing sales, residential construction as measured by residential building permits for new single family units decreased from the 1999 level and the 1998 high in most counties. As shown in **Table 5**, the largest decrease occurred in the number of single family permits, 307 (13.6%), occurred in Jefferson County. Harrison is the only county in the MSA that increased the number of single family building permits issued. The number of multifamily permits increased in Jefferson, Harrison, and Scott Counties.

The sale of new cars and trucks is an indicator of consumer confidence. In 2000 the sales of new cars in Jefferson County, KY and Clark and Floyd Counties in Indiana increased 2.3 percent (25,527 cars sold through September of 2000 and 24,944 cars sold through September of 1999) over the same time period in 1999. In contrast, the sale of new trucks decreased by 2.4 percent (11,507 in 2000

Table 3
Percent Change in Employment for Major Industry Groups, 1990-1997

| Industry | Southern Indiana Percent Change 1990-1997 | Kentucky Counties Percent Change 1990-1997 | Louisville MSA Percent Change 1990-1997 |
|---|---|--|---|
| Total | 36.0% | 19.6% | 21.9% |
| Agricultural Services, Forestry & Fishing | 23.4% | 23.9% | 23.9% |
| Mining | 10.0% | -14.5% | -8.3% |
| Construction | 28.6% | 23.1% | 24.1% |
| Manufacturing | 33.8% | -6.2% | 0.8% |
| Transportation | 33.5% | 76.0% | 67.9% |
| Wholesale | 14.8% | 17.0% | 16.8% |
| Retail Trade | 31.8% | 20.2% | 22.1% |
| Finance, Insurance, Real Estate | 9.8% | 26.6% | 25.4% |
| Services | 59.6% | 25.6% | 29.0% |

Source: U.S. Bureau of the Census, County Business Patterns, 1990 and 1997 Editions

versus 11,784 in 1999). In total, new vehicle sales has increased by less than one percent.

Gaming at Caesar's Casino continues to grow. The average monthly turnstile count through September of 2000 was 168,780 patrons, a 10.3 percent increase over 1999.

Louisville-Jefferson County Merger

The merger of the City of Louisville and Jefferson County governments will not only have significant political effects but also far-reaching economic effects for the Louisville MSA. Southern Indiana will benefit from its proximity to a city that will be among the 25 largest in the country without the political growing pains that will accompany the merger.

Clearly, the strong economic growth exhibited locally and nationally has continued in the Louisville and Southern Indiana area during 2000. However, there is evidence that the region is settling into a period of slower growth. Housing sales, single family residential building permits, and automobile sales have leveled off. Employment growth in Southern Indiana appears to have leveled off over the past year with a slight increase in manufacturing employment and a slight decrease in nonmanufacturing employment. Relatively strong employment growth in the Kentucky counties over the past year has occurred in the nonmanufacturing sector. In the Kentucky counties, manufacturing employment has declined over the past year. The tight labor market in the Louisville MSA will affect business expansion, particularly with all the new retail and hotel developments that are planned for Southern Indiana. These will be areas to watch in 2001.

Table 4
Population Trends

| Geographic Area | Population 1990 | 1990 Percent of MSA Population | Population 1999 | 1999 Percent of MSA Population | Percent Change 1990-1999 |
|--------------------|-----------------|--------------------------------|-----------------|--------------------------------|--------------------------|
| Clark | 87,774 | 9.2% | 95,121 | 9.5% | 8.4% |
| Floyd | 64,404 | 6.8% | 72,243 | 7.2% | 12.2% |
| Harrison | 29,890 | 3.1% | 35,376 | 3.5% | 18.4% |
| Scott | 20,991 | 2.2% | 23,433 | 2.3% | 11.6% |
| Other KY counties* | 745,953 | 78.6% | 779,676 | 77.5% | 4.5% |
| Louisville MSA | 949,012 | 100.00% | 1,005,849 | 100.00% | 6.0% |

* Bullitt, Jefferson, and Oldham Counties, Kentucky

Source: U.S. Bureau of the Census

Table 5
Residential Building Permits, 1999-2000

| County | Single Family Jan.-Sept. 1999 | Single Family Jan.-Sept. 2000 | Multi-Family Jan.-Sept. 1999 | Multi-Family Jan.-Sept. 2000 |
|---------------|-------------------------------|-------------------------------|------------------------------|------------------------------|
| Jefferson, KY | 2259 | 1952 | 110 | 126 |
| Clark, IN* | 519 | 476 | 59 | 10 |
| Floyd, IN | 360 | 284 | 21 | 3 |
| Harrison, IN | 97 | 134 | 4 | 9 |
| Scott, IN | 59 | 44 | 0 | 2 |

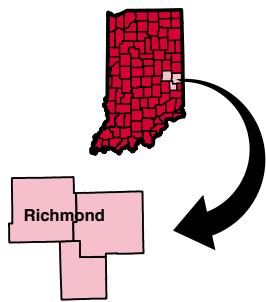
*Charleston not reporting

Source: Kentuckiana Regional Planning and Development Authority and various city and county government offices

Endnotes

¹Employment and business establishment is taken from County Business Patterns. Data from 1997 are the most recent available.

²Data on home sales from the Southern Indiana Association Multiple Listing Service covers the counties of Clark, Crawford, Floyd, Harrison, Jefferson, Scott and Washington.



Richmond-Connersville-New Castle

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National economic conditions have far-reaching repercussions on the Richmond-Connersville-New Castle (RCNC) area economy because of its interdependence with the U.S. economy. The anticipated 2001 national growth rates for real GDP (3.5 percent), inflation (2.7 percent), unemployment (4.2 percent), and disposable income (3.3 percent) will generate positive effects on the local economy.

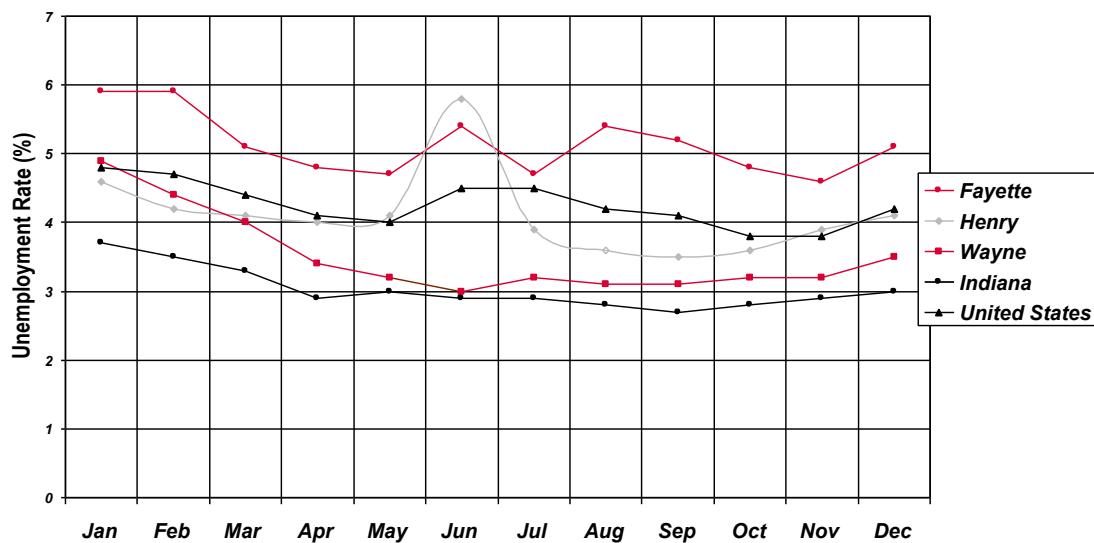
The manufacturing sector, having recovered from the Asian and Latin American crises, is holding steady. There is softness, however, in durable goods manufacturing, particularly in machine tools and heavy trucks, because of the slowdown in economic activity. The dollar's depreciation will provide a stimulus by making American goods less expensive to foreigners and will boost local exports. Rapid growth is expected in a major part of the global economy especially among our trading partners. Manufacturing activity accounts for at least 25 percent of RCNC's employment and is expected to accelerate in 2001 as firms expand and new firms enter into the region. Manufacturing remains the key player in RCNC's economic base.

Employment growth in Wayne, Fayette, and Henry counties was moderate in 1999. The numbers of employed workers in 1999 were 36,580, 10,440, and 23,180 respectively for the three counties, and the unemployment rates were 3.5 percent, 5.1 percent

and 4.1 percent respectively. Those unemployment rates were higher than the statewide rate of 3 percent, but were lower, except in Fayette county, than the national rate of 4.2 percent (see Figure 1). Fayette county led the pack given its high manufacturing intensity and the downsizing at Roots/Dresser Industries. The employment front in RCNC would improve in the coming year, especially with the DaimlerChrysler modernization plant investment of \$77 million and the opening of super stores, Wal-Mart and Lowe's, New Castle Correctional Facility, and Flying J truck stop. There are also internal business expansions at Chatsworth Products, Custom Extrusions, Draper Shade, Inland Buildings, and Stant. The bus company, Carpenter, is closing in Richmond, which clouds the employment picture with a loss of over 300 good-paying jobs. RCNC's absorptive capacity may be inadequate to replace such jobs in the near term.

The slow job growth in manufacturing, along with the loss of temporary decennial census workers, was offset by gains in services. The service sector, in contrast, is experiencing rising employment because of the strong demand for business and personal services, transportation and public utilities, and finance, insurance, and real estate. There are improved choices for local shopping, food, entertainment, health

Figure 1
Unemployment Comparisons for 1999



care, and financial management, all of which are consistent with the evolution toward a service/information economy. Also, energy consumption is a gauge of economic activity and quality-of-life standards. Its use affects all Hoosiers. The service sector accounts for at least 35 percent of RCNC's employment and is expected to create more jobs in 2001.

The retail sector is also performing well. Meijer's entry into the retail market in Richmond has generated needed improvement in the supermarket business by competitors, such as Kroger and Cub Foods (County Market). These supermarkets, strategically located in Richmond, provide consumers with a wider choice of groceries at competitive prices. Consequently, consumers' buying power increases, especially under a low inflationary environment. The retail sector accounts for about 24 percent of RCNC's employment and is expected to maintain its current pace in 2001.

The housing sector, like a dynamic duo with retail, is keeping a strong pace. In Richmond, the number of building permits issued through the first nine months of 2000 totaled 1479, of which 26 and 16 were residential and commercial respectively (see **Table 2**). Their total investment value is an estimated \$23.9 million, reflecting a decrease of 17.8 percent over 1999.

Local financial institutions had 15-year and 30-year and one-year adjustable rate mortgages averaging 7.76 percent, 7.94 percent, and 7.20 percent respectively, at the end of October (see **Table 3**). With such favorable rates, most housing activity is in the \$75,000 to \$150,000 price range, indicating upscale movement by local residents and city newcomers. The average home price is \$91,600 which suggests that the combination of rapid price appreciation and increased mortgage rates has not undermined local housing demand. Although consumer confidence is still relatively strong, further Fed tightening could affect it.

In a recent survey by the Center for Economic Education, 80 percent of the firms have hired new employees in 2000, 92 percent are affected in varying degrees by current economic conditions, 62 percent engage in e-commerce, and 50 percent plan to expand in 2001. All responding firms rate RCNC favorably, but are concerned with workforce development, global competition, and government regulation.

The fundamentals are in place at both the national and local levels for continuing growth and prosperity, although spending may be slowing due to past Fed tightening, higher energy prices, and stock market volatility. The United States is enjoying its longest economic expansion and is the only country to simultaneously experience the combination of rapid GDP growth, low inflation, low unemployment, and high productivity growth. It is, indeed, a Goldilocks economy "not too hot, not too cold, just right."

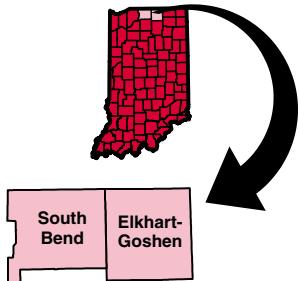
Table 2
Building Permits Issued 1-1-9/30/2000 City of Richmond

| | New Residential | New Commercial | Value | Service Projects | Service Proj. Value | Total Permits | Total Value |
|-----------------|-----------------|----------------|-------------|------------------|---------------------|---------------|--------------|
| January | 2 | | \$115,000 | 116 | \$650,588 | 118 | \$765,588 |
| February | 2 | 1 | \$262,000 | 108 | \$595,698 | 111 | \$857,698 |
| March | 6 | 2 | \$1,057,600 | 246 | \$5,690,673 | 254 | \$6,748,273 |
| April | 2 | 1 | \$348,000 | 162 | \$193,217 | 165 | \$541,217 |
| May | 2 | | \$124,000 | 203 | \$1,860,351 | 205 | \$1,984,351 |
| June | 2 | 2 | \$341,000 | 188 | \$4,827,497 | 192 | \$5,168,497 |
| July | 2 | | \$280,000 | 115 | \$949,129 | 117 | \$1,229,129 |
| August | 5 | 4 | \$2,739,500 | 162 | \$1,362,238 | 171 | \$4,101,738 |
| September | 3 | 6 | \$1,004,000 | 137 | \$1,533,637 | 146 | \$2,537,637 |
| Total Permts 26 | 16 | | \$6,271,100 | 1437 | \$17,663,028 | | \$23,934,128 |

Table 3
Mortgage Rates

| Name of Institution | 15-year fixed | 30-year fixed | 1-year ARM |
|----------------------|---------------|--------------------------|------------|
| Bank One | 7.75 | 7.875 | 7.375 |
| Firstar | 7.625 | 7.875 | 7.75 |
| First Bank Richmond | 8.125 | 8.375 (21-year fixed) | 7.125 |
| West End | 7.625 | 8.125 | 6.625 |
| Wayne Bank And Trust | 7.875 | 7.875 | 6.825 |
| Harrington Bank | 7.75 | 7.875 | 6.625 |
| Old National | 7.625 | 8.125 | 7.625 |
| Union County | 7.75 | 7.875 | 7.625 |

South Bend



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Bend

South Bend/Mishawaka Elkhart/Goshen

In the early 1950s, both the South Bend/Mishawaka and Elkhart/Goshen local economies featured very strong manufacturing sectors. More than half of all employment in both economies was in manufacturing. In the 1960s and 1970s, employment in the South Bend/Mishawaka local economy, like most local economies in the United States, shifted from manufacturing to non-manufacturing. By December 1986, manufacturing employment made up only 22 percent of total employment. Manufacturing employment in the Elkhart/Goshen economy, led by the recreational vehicle and manufactured housing industries, continued to grow as fast as non-manufacturing employment. In 1999, manufacturing employment made up 51 percent of total employment, the highest percentage of any Metropolitan Area (MSA) in the United States. **Table 1** shows average unemployment rates and uses seasonally adjusted index numbers to show average levels of employment for each year since our last recession. Data in Table 1 indicate the trends mentioned above are continuing with manufacturing employment in South Bend growing 6 percent since 1993, and manufacturing employment in Elkhart growing 19 percent during the same period.

The South Bend/Mishawaka economy has performed well since 1993. Total employment grew rapidly in 1994 and 1995, leveled off in 1996, and grew again, at a slower rate, in 1997, 1998, and 1999. From 1993 through 1999, employment grew 13.4 percent. Non-manufacturing employment increased consistently during this period, but manufacturing was up and down depending upon the situations facing local firms. Unemployment rates dropped significantly from an average of 6.1 percent in 1993 to 4.4 in 1994, and have remained at very low levels since then. The local labor market has been very tight since 1994.

The Elkhart/Goshen economy has also performed well since 1993. Total employment grew rapidly in every year since 1993 except for a slight decline in 1996 and slow growth in 1997. From 1993 through 1999 employment grew 16.4 percent. Non-manufacturing employment increased in every year, except for a slight decline in 1996. Manufacturing employment increased in every year except for 1996 and 1997. Unemployment rates dropped significantly from 5.9 percent in 1993 to 3.8 percent in 1994, and have remained at very low levels since then. The unemployment rates for the Elkhart/Goshen economy indicate its labor market has been even tighter than the South Bend/Mishawaka labor market.

Data from Table 1 for the first six months of 2000 together with recently released data for August 2000 suggest both local economies are slowing down. In South Bend, average employment is down slightly for the first six months of 2000 versus 1999, and August 2000 employment is down slightly compared to August 1999. The average unemployment rate is up from 2.9 percent in 1999 to 3.6 percent for the first six months of 2000, and the August 2000 unemployment rate is up .4 percent from August 1999. Employment levels in the South Bend economy are declining slightly, and unemployment rates are rising, but are still very low by historical standards.

In Elkhart, average employment was up for the first six months of 2000 versus all of 1999, but the average unemployment rate is also up from 2.1 percent to 2.5 percent. Unemployment rate data for July and August 2000 show significant increases to 3.7 percent and 3.6 percent, and August 2000 employment data show a decline from August 1999. Data on recreational vehicle production nationally show increased production for the first three months of 2000 compared to the first three months of 1999, but a drop in production for the rest of the year through September 2000.

Table 1
Employment and Unemployment Rates for Selected Years

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000* |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| South Bend/Mishawaka | | | | | | | | |
| Total Non-agricultural | 114.2 | 119.5 | 124.1 | 124.1 | 126.0 | 128.6 | 129.5 | 129.4 |
| Manufacturing | 89.8 | 93.4 | 97.5 | 92.9 | 93.1 | 94.5 | 92.9 | 95.2 |
| Non-manufacturing | 121.3 | 127.1 | 132.1 | 133.3 | 135.7 | 138.5 | 140.3 | 139.4 |
| Unemployment Rate | 6.1% | 4.4% | 4.3% | 4.0% | 3.3% | 2.7% | 2.9% | 3.6% |
| Elkhart/Goshen | | | | | | | | |
| Total Non-agricultural | 117.4 | 125.1 | 129.2 | 127.4 | 128.0 | 132.7 | 136.6 | 140.1 |
| Manufacturing | 112.3 | 120.2 | 122.0 | 119.3 | 119.1 | 124.1 | 129.6 | 133.7 |
| Non-manufacturing | 123.4 | 130.7 | 136.9 | 136.7 | 138.5 | 142.7 | 145.0 | 147.0 |
| Unemployment Rate | 5.9% | 3.8% | 4.5% | 3.8% | 3.3% | 2.6% | 2.1% | 2.5% |

*2000 figures cover the first six months of the year.

All employment figures are seasonally adjusted numbers with 1986=100.

Total production was down 2.5 percent for the year through September. The Elkhart economy appears to be slowing significantly.

Outlook

Accurately forecasting economic conditions for local economies is very difficult for two reasons. First, we have much less economic information available for local economies than for larger economies, and the data we do have tends to be less accurate. Secondly, special situations affecting individual firms, which would have little impact on a regional or national forecast, can have a major impact on a local economy. The uncertainty surrounding these special situations creates uncertainty about the forecast. At the present time, we have four special situations that have the potential to impact our local economies over the next couple of years. General Motors is building a production facility in St. Joseph County to produce Hummers. Approximately 1500 workers will be hired at wages well above the local average for production workers. Since almost all of the sales will be outside our area, and since it is likely additional new jobs will be created to supply this plant the multiplier effect will be substantial. This development will have a very substantial impact on local employment and local income.

Crowe Chizek and Company, one of our largest local employers, has announced an expansion in South Bend. The company plans to hire one hundred to two hundred new employees in this area over the next three to five years. Since this is the company's national headquarters, much of the income supporting these new positions will come from outside our area. Many of these jobs will be high paying with excellent fringe benefits. While the multiplier effect will be smaller than General Motors', it will still be substantial. Local employment and income will increase from Crowe Chizek's expansion, although most of the impact will occur beyond our forecast period.

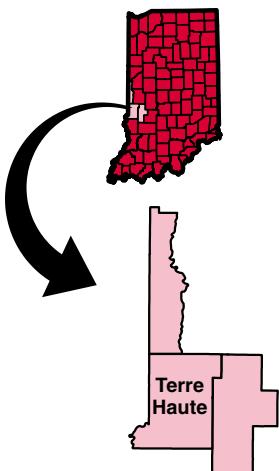
On September 6, 2000, Citigroup, Inc. and Associates First Capital Corporation announced that Citigroup is acquiring Associates. Associates Corporation is another large local employer with several hundred employees in our area, mostly involved in computer support services. Once again, the income supporting these jobs comes from outside our area, and these are excellent high paying jobs, so the multiplier effect will be substantial. Since Citigroup, Inc. has similar computer operations, there is serious concern that the Associates jobs will be lost. If this

happens, then there will be a loss of employment and income in our area.

Honeywell, Inc., another of the area's largest employers, has recently accepted a \$45 billion stock takeover bid from General Electric Co. The two companies have a number of similar operations, and there is concern that some or all of the local jobs will be at risk. These jobs, like the ones mentioned above, are export oriented and high paying, so the multiplier effect will be very large if these jobs are lost. At this time, there has been some speculation, but no real information concerning the likelihood of losing these jobs.

The combined effect of these four situations is likely to be positive, because the General Motors and Crowe Chizek impacts are reasonably certain and larger than the Associates negative impact. The major uncertainty concerns the Honeywell impact. At its worst, it could make a real dent in the positive effects of the first two developments, but if the Honeywell impact is small, then both local economies will benefit significantly from these special situations. It will take time for these developments to affect our local economies, so most of the effects will be felt in 2002 and later years, although we may see some impact at the end of 2001.

Like most local economies, the South Bend/Mishawaka and Elkhart/Goshen economies are greatly influenced by the national economy. The durable goods component of the national economy, and especially the automobile, manufactured housing, recreational vehicle, and steel industries have a big impact on our local economies. Since the Elkhart economy has very substantial manufacturing employment it tends to be affected quickly and significantly by movements in the national economy. Recent national data show declines in durable goods spending in general and in the sales of autos, recreational vehicles and manufactured housing. If these economic trends continue into 2001, we should see little or no employment growth in the South Bend economy and possibly some decline in employment in Elkhart. Unemployment rates in both local economies will be well above the averages for the last couple of years, averaging in the 3.3 to 4.8 percent range. While this slowdown will likely lead to some layoffs in selected manufacturing industries, both local labor markets will remain tight by historical standards.



Terre Haute

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In the midst of the longest economic expansion in the nation's history, one Indiana metropolitan area is struggling to keep up with the prosperity gains. And its traditional weakness is expected to carry over into 2001.

Of the 11 metropolitan areas in Indiana, all have seen their total earnings from employment increase in recent years. Consider the five-year period ending in 1998, the latest year for which the U.S. Bureau of Economic Analysis has published local data. Indiana's statewide earnings grew 29% in current dollars. The Lafayette metro area and the greater Indianapolis area both beat that average, coming in at nearly 34%, and the Elkhart-Goshen area enjoyed a 32% rise.

In the Terre Haute metropolitan area, however, which includes Vigo, Clay and Vermillion counties, current dollar earnings increased only 14%, the lowest metro area figure in the state. Second lowest was Muncie at 16.5%.

For a perspective on Terre Haute's restrained capacity to generate income, we can examine the earnings per job figure calculated by BEA. This is simply total earnings from work divided by the number of people employed in the area. In the Terre Haute metropolitan area, earnings per job in 1998 were \$26,000, including both full-time and part-time employment. That's tied with Bloomington for lowest in the state.

Lafayette and Muncie, however, also had low earnings per job, so perhaps a large student population has an effect. If we look simply at earnings per person, dividing earnings by area population, the picture changes. The Terre Haute metro area is clearly the lowest in the state at just over \$14,000 per resident. Muncie and Lafayette earnings per population were \$16,000 and \$18,000 respectively. Assuming the earning power of students is similar at each of the four large universities, there apparently is something else that prevents Terre Haute from matching the rest of the state's earning power.

We will leave examination of the details of Terre Haute's earning power to another time. For purposes of a forecast for 2001, however, we can rely on this historical weakness to arrive at a likely economic scenario in the Terre Haute metro area for this coming year.

The Terre Haute area is likely to experience more problems as a result of the expected slowing of economic growth in the United States.

First, the unemployment rate in the Terre Haute metro area will rise to higher levels than in most other

parts of Indiana. Available statistics do not track full-time and part-time jobs separately. But presumably many of the jobs in the Terre Haute area are part-time jobs, contributing to the low level of earnings per job. As the economy slows, part-timers and lower paid (less senior) full-time employees often are laid off first. The unemployment rate in the Terre Haute metro area historically stays higher than the state average, so expect noticeable increases in unemployment there this year.

Second, the Terre Haute area's population has not been growing recently. In fact, throughout the decade of the 1990s the metro area population was essentially unchanged at about 148,000 people. So in an economic slowdown the Terre Haute area does not have natural population growth to take up the slack. New housing construction in particular will decline significantly in the Terre Haute area this year from its record high levels in 1999 and 2000. Retail sales, too, including car and truck sales, will soften more in Terre Haute than in other Indiana cities.

World energy prices are forecast to remain high in 2001. Energy prices may actually give a boost to the Terre Haute area. To the extent that higher oil and gas prices prop up the prices of other fuels, the coal mining industry around Terre Haute will enjoy a modest improvement over the depressed prices of the late 1990s.

Finally, Terre Haute's economic mix works against it. Compared to other Indiana metro areas, the Terre Haute area has a smaller proportion of the high paying jobs found in durables manufacturing and certain services industries.

The rest of Indiana may notice the slowdown in the rate of growth in economic activity that is forecast for 2001. The Terre Haute area, however, has a weaker earnings capacity than other Indiana metro areas. Any slowdown at all is likely to cause the Terre Haute area to struggle even harder just to stay even.

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