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The National Outlook

The State Outlook

Midyear Review of the Outlook for 1989

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The first six months of 1989 have not shaken our confidence in the broad outlines of its outlook for the national economy in 1989. Last December, we predicted positive but sluggish growth in real GNP in 1989 with modestly rising inflation, continued improvement in our trade balance, reductions in the rates of growth of consumption and investment, and little progress in reducing the federal budget deficit. Real GNP grew at a faster seasonally adjusted annual rate during the first quarter of 1989 than it did during the fourth quarter of 1988, but that increase was somewhat artificial; if the lingering effects of the 1988 drought were removed, real growth in the first half of the year was significantly less than the growth in the last half of 1988. We continue to believe that a recession will be avoided during 1989 and that on a year-over-year basis real GNP will grow between 2.0% and 2.5%. While the overall structure of our forecast appears to be on the mark, there a number of details that have suprised us somewhat during the first half of 1989.

Probably the most unexpected development is the strength of the dollar during the first half of the year. From its peak in February 1985, the dollar declined in value sharply for the next two years. But since then the dollar's decline has, at best, been modest. In fact, it has increased in value during the last few months. The strength of the dollar reflects real interest rates in the United States, continued growth of the U.S. economy, a positive investment climate in the United States, and a concern about political instability in Japan and West Germany. Our trade balance in this environment has continued its slow improvement. On a twelve-month moving average basis our merchandise trade deficit peaked in early 1988 at nearly $13 billion per month. While still significant, this trade balance is now running in the $9-10 billion-per-month range. There has been little improvement in our merchandise trade balance with Japan and the so-called newly industrialized countries (Singapore, Hong Kong, South Korea, and Taiwan), but our trade balance has improved significantly relative to Canada and Western Europe. Nonetheless, the trade deficit and the current account deficit are likely to linger unless the dollar depreciates further in value, and that decline in value is unlikely to be as great in 1989 as we predicted last December.

The strength of the U.S. stock market during early 1989 was also a surprise. A slowdown in the economy, rising interest rates, and stagnant corporate earnings are usually associated with a down market. Investor confidence in the first part of this year has been propelled by increases in the value of the dollar, a belief that a soft landing will occur, and feelings that inflation will not be a major problem. We still cling to our prediction that the market is fully valued if not overvalued at its current (late May) levels.

A third area that is receiving considerable attention is the rise in inflation in the first half of 1989. Capacity constraints, especially in the export-related sectors of the economy, and the increased value of the dollar are two important factors for the increase in inflation. Much attention has been given to the rapid increase in energy prices during the first few months of 1989 due to actions by OPEC, the oil spill in Alaska, and the drilling platform explosion in the North Sea. However, we view these as temporary phenomena and with increased production levels within OPEC we expect energy prices to decline from their current levels.

We predicted last December that the federal deficit would remain at the $150 billion annual level. Although the fiscal year 1990 budget now being developed in Washington will formally come under the Gramm-Rudman-Hollings target of $100 billion, that goal is achieved only through creative accounting—moving expenditures and revenue between fiscal years and taking some significant expenditures, such as the savings and loan bailout, to off-budget categories. On a more positive note, we are pleased that Congress and the Executive Branch have agreed relatively early on a spending target for fiscal year 1990 of approximately $1.2 trillion. This will give decision makers some time to work on improving consistency and efficiency within government expenditure programs.

In summary, we continue to see 1989 as a slow growth year, but one that has relatively balanced growth among the major sectors and avoids the recession that many people predicted for the year.

Personal Consumption

J. Fred Bateman

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Last fall we forecast a growth in aggregate consumption of about 1.5%, down from previous years in the current economic expansion. We saw it remaining a positive factor in the economy, but not a robust or leading sector. We find no reason to alter that aggregate forecast. Although spending on some products, particularly durable goods, foreign-made products, and goods sensitive to interest rate levels, is less than expected, we believe that continued growth of disposable income will keep overall consumer spending expanding, albeit at a modest rate.

Our forecast for the major components of consumption also remains valid. Consumer spending on services, rising at about a 4% annual rate, is stronger that at any time during the recent past. Given their sensitivity to income growth and their general insensitivity to interest rates, services should continue to be the strongest component of personal consumption spending for the coming months. Expenditure growth for nondurables is behaving in the generally weak pattern we foresaw last fall. And durable goods consumption has softened relative to previous years.

Given their sensitivity to income growth and their general insensitivity to interest rates, services should continue to be the strongest component of personal consumption spending for the coming months.

Within the components, however, some adjustments in our forecast are needed. The most important of these are to our outlook for automobile sales and energy prices. Our forecast of stability or a modest gain in auto purchases has proven to be too optimistic. Despite strong marketing efforts that include various buyer incentive programs, auto sales have been weak, taking a sharp drop during the fourth quarter of 1988 and showing only a small rebound in early 1989. This weakness is generally attributed to higher interest rates and rising import prices.

In December, we foresaw at most only "slightly higher energy prices." Without quibbling on how much that could imply, it is reasonable to assume that has already occurred early this year. Thus our outlook for this area may also turn out to have been somewhat optimistic. As summer approaches fuel prices may follow their normal pattern of increases, adding to what already has happened. We still do not, however, see energy prices rising so sharply as to cause major disruption in the economy and its predicted 1989 growth rate.

To conclude, we find no reason to change our basic conclusion regarding personal consumption in the 1989 economy. Spending overall will remain positive but weak. What strength there is derives almost completely from the consumption of services, the effect of which has been to offset poor automobile sales and weak durable goods markets generally. A sustained interest rate decline might stimulate auto sales later in the year, but our overall forecast of a 1.5% growth in consumption spending appears reasonable. Whatever strength there is in economic growth this will will originate in areas other than personal consumption.

Nonresidential Investment

Lawrence S. Davidson

Associate Professor of Business Economics and Public Policy, Indiana University School of Business

Last December we forecast that business capital spending would slow from the blistering 1988 pace and settle in at a sustainable 7% annual growth rate for 1989. Events since November suggest a slightly slower pace, approximately 6%.

What has *not* changed is that American industry, primarily the manufacturing sector, is faced with an insufficient capital stock. Capital spending expanded vigorously in 1988, but a disproportionate share of the expansion was in business equipment, with less of the increase relegated to structures. There is, therefore, substantial pressure for more spending on structures. First, capacity utilization rates in export industries are very high, and these firms cannot produce much more without expanded plants. Second, multinational firms will continue to locate new plants here. While the falling dollar has inspired more firms to locate in the U.S., some firms worry they might be denied direct entry to "Fortress Europe." These firms, unable to move to Europe in the near future but desiring eventual access to this new large market, might see a location in the U.S. today as a potential back door to European markets after 1992. Third, firms who want to continue to compete in global markets know that they must modernize their productive capital, and while the first wave of change may have been concentrated in equipment purchases, additional spending on structures can't be too far behind.

So what has changed? For one thing, interest rates rose to the top of our 1989 forecast ranges early in 1989. We do not expect them to rise much more, and although these higher interest rates will largely affect residential investment, we can't ignore the effect this increase might have on the marginal construction project. The direct financial impact of higher interest rates is often swamped by other long-term considerations, but if higher rates turn into slower sales projections, then some investment projects may be postponed.

Another new piece of information comes from the Commerce Department's survey of intended business plant and equipment spending, which reports that managers plan to spend less than they revealed in earlier surveys. An unexpected increase in business inventories, a large swing upward in energy prices in early 1989, and steeply rising interest rates have tempered their plans for the future.

Managers can't put off capital expansion and modernization plans much longer. While short-term profitability and liquidity constraints may add or subtract a point or two from investment spending, without a full-fledged recession scenario shaping up, the urge to fend off international competition should keep business spending growing at least at a pace of 6% for the foreseeable future. Most executives recognize that global business and competition is a growing part of their futures, and they do not expect much effective protection from government policies. Capital expansion, not increased protectionism, is a more permanent way to oust their competitors.

Fiscal Policy

R. Jeffery Green

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In the *IBR* outlook published last December, we forecast a slight decline in constant dollar federal government purchases of goods and services. It now appears that these purchases will be at levels slightly above those of 1988, with most of the increase occurring in the first quarter of this year. The revised projections can be seen in the **Table.** State and local government purchases have also been revised upward, but by very small magnitudes.

Our December outlook projected a fiscal year 1989 budget deficit of about $150 billion. That forecast was slightly more than the government's October 1988 projection of $145 billion and more than $10 billion above the Gramm-Rudman-Hollings (GRH) target of $136 billion. It now appears the deficit will be even greater, probably near $160 billion. The irony is that even if this happens, it will have no impact on future government spending.

The reason is that the GRH legislation requires only that the forecast deficit just prior to the beginning of a fiscal year be within $10 billion of the GRH target. Once the fiscal year begins, no automatic cuts take place no matter how large the deficit becomes. This feature of the GRH law has provided incentives for Congress and the Administration to create clever ways to make the projected deficit meet the target even when actual spending is well beyond target.

Any deficit forecast must be based upon economic assumptions. By making those assumptions extremely optimistic, forecasters and significantly raise their revenue projections. The fastest-growing component of Federal spending has been interest on the debt. It has grown increasingly rapidly both because large deficits in recent years have been expanding the debt outstanding and because interest rates have been rising recently. By forecasting large decreases in interest rates, projections of interest expenses can be lowered. The GRH projection of last October assumed the Treasury bill rate for 1989 would average 5.6%. In fact, for the first four months of 1989, the Treasury bill rate has averaged over 8.5%. Transfer payments, such as unemployment compensation and food stamps, depend upon the level of output and employment in the economy. Very optimistic projections of real growth and employment can lower the projected growth in spending on transfers.

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There are additional varieties of "smoke and mirrors" that can be used to meet GRH target. Asset sales can reduce the deficit in a given year. The government must estimate the probable receipts from such sales and by inflating estimates can reduce the

Table
Government Purchases of Goods and Services (billions $1982)

	1988:4	*1989:1*	*1989:2*	*1989:3*	*1989:4*
Federal	335.5	333.2	330.6	331.6	330.6
State/Local	460.0	464.5	467.3	470.0	472.8

deficit projection. Since expenditures actually incurred during a fiscal year don't affect GRH targeting, expenditures can be moved forward so that we spend money this year rather than next. This will make it easier to meet next year's target. This is an example of how the GRH targeting can increase current spending. Finally, some large expenditures threaten to destroy GRH targeting in spite of all these tricks. An example is the $50 billion, perhaps more, that will be needed for the bailout of insolvent savings and loans. In this case, the expenditures were simply moved off-budget so they will not count in the GRH calculation.

Unfortunately, we have reached a point where the government is losing its grip on fiscal policy. The GRH legislation may no longer be effective; in fact, it may be inhibiting the search for fiscal restraint by deluding legislators and the public into the view that progress is being made.

The International Economy

Michele Fratianni

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

In the December 1988 issue of the *IBR* we said that "the existing pattern of current-account deficits and surpluses in the world cannot persist. The U.S. has become a debtor country. Although the actual size of this indebtedness is unknown with any degree of precision, it is clear that current and prospective current-account deficits will add significantly to net debt." Since then the dollar has appreciated in the exchange markets. How can we explain the strength of the dollar in light of the magnitude and persistence of the external deficit? What changes in our projections need we make as a result of new information? These are the issues of this brief midyear update.

The strength of the dollar can be justified by the fact that real interest rates on U.S. assets exceed those prevailing in other currencies. For example, on the basis of 3-month Eurocurrency interest rates and 3-month forecasts of the inflation rate measured by the CPI, as recently as the end of April 1989 real interest rates in U.S. dollars were approximately 1% higher than in DM and Yen. The higher real rate differential induces investors around the world to place funds in U.S. dollars in preference of DM and Yen. Hence the appreciation of the dollar in the spot market.

The actions of the monetary authorities here and abroad are critical for the future course of the dollar. At the time of writing (mid-May) it appears as if the Fed has stopped tightening and that Germany and Japan may accept higher levels of market interest rates. Should that happen, the dollar will level off. Official interventions in the exchange markets are another factor influencing the value of the exchange rate over a period of weeks. Such short-term considerations nonetheless should not obscure the fundamental forces at work, which were highlighted in the opening paragraph. Over the long term the dollar remains under pressure. The size of the current-account deficit calls for an additional real depreciation of our currency, regardless of whether or not the monetary authorities of the seven Summit countries intervene in the exchange markets. Although the timing of this depreciation cannot be predicted with any degree of precision, we "stick" with our December 1989 forecast of a dollar depreciation.

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The April 1989 issue of the *World Economic Outlook* of the International Monetary Fund assesses that the correction of the external imbalances of the U.S., Germany, and Japan will slow down in 1989, implying further pres-

Table
Midyear International Forecast

	1988	*1989*
Exports ($1982, NIA, % change)	20	10
Imports ($1982, NIA, % change)	6	5
Trade Balance ($ billion)	–128	–110
Current Account ($ billion)	–138	–133
Dollar/Yen Change (4th qt. to 4th qt.)	–7%	–7%
Dollar/DM Change (4th qt. to 4th qt.)	+4%	–4%
Effective Dollar Exchange Rate Change (FRB Index, 4th qt. to 4th qt.)	+1%	–5%

sure on exchange-rate movements and on policymakers—especially those living in Washington, D.C.—to take actions. According to the baseline projection of the Fund, "[M]arket participants eventually will regard the prospective accumulation of U.S. external debt as unsustainable and will reduce their demand for U.S. assets."

The midyear forecast dos not alter fundamentally that of December 1988. See the **Table** for the summary.

Interest Rates and Financial Markets

Robert C. Klemkosky

Fred T. Green Professor of Finance, Indiana University School of Business

The interest rate and stock market forecasts in the December 1988 issue of the *IBR* have been partially correct, which also means that they have been partially wrong. The December forecast was for stable to slightly higher interest rates, and that has occurred for long-term rates. However, short-term U.S. Treasury rates have risen by more than 100 basis points (1%) only to fall back in recent weeks to the upper end of the range forecast in December. Also, real economic growth appears to have decelerated this year to the forecasted 1.5-2.5% range from the 3.5% growth rate in 1988. One surprise in 1989 has been the value of the dollar relative to other major foreign currencies. A substantially weaker dollar would have hurt U.S. interest rates and stock prices. What has occurred in 1989 is a strengthening dollar, the result of progress on our trade deficit and political uncertainties in Japan and West Germany. The trade deficit for March was surprising $8.86 billion, and every month in 1989 has experienced a trade deficit in single digits compared to several months in 1988 when the monthly trade deficit was in double digits.

A hard landing (a recession) obviously would depress stock prices, as would an economy strong enough to increase inflationary expectations and higher interest rates.

The big surprise in 1989 has been the performances of the U.S. stock market. The Dow Jones Industrial Average and Standard & Poor's 500 Stock Index have risen about 15% as of May 1989, substantially above the December forecast for a flat-to-down stock market. Interest rates are slightly higher, the economy has slowed, and the growth rate of corporate earnings has declined as forecasted. What many investors are expecting in 1989-90 is a soft landing for the economy in which we would experience: (1) slower economic growth without recession; (2) moderating inflation in the second half of 1989; (3) lower interest rates; and (4) a stable dollar. Whether this occurs will be important to the stock market in the second half of 1989. A hard landing (a recession) obviously would depress stock prices, as would an economy strong enough to increase inflationary expectations and higher interest rates. Other reasons for the strong stock market performance in the first half include: (1) monetary policy that has not been unreasonably tight; (2) continuing strong corporate demand for common stock for mergers, LBOs, and repurchases; and (3) low equity ownership among institutional investors.

The forecast is for stable interest rates in the second half of 1989. The stock market is projected to be down-to-flat in the second half. Earnings growth has peaked and price-earnings ratios are slightly above historical averages. The U.S. budget deficit remains and the stronger dollar will hinder any improvements in our trade deficit. All in all, common stock values still appear unattractive relative to returns available on money market instruments and bonds.

Inflation, Unemployment, and Capacity Utilization

Lawrence S. Davidson and Bruce L. Jaffee

Associate Professor, and Chairperson and Professor, Business Economics and Public Policy, Indiana University School of Business

Last December we wrote that the rate of growth of demand in the economy would slow in 1989 but that the decline would be modest. We believed then that although the nation's factories were increasing their capacity utilizations, the increase would be gradual. Inflation would increase, but by only a small amount. Specifically, we predicted that consumer prices would rise by 4.5% to 5% in 1989. Given the slow pace of the economy, we also forecast that employment growth would also slow, yielding an average unemployment rate of about 5.4% in 1989.

Since December, a few unanticipated events have given us cause to recalibrate, but we feel that the basic direction of change has not been disturbed by what has recently transpired. For example, we based our moderate rise in the inflation rate upon two major sets of factors. The first set is largely unchanged. That is, the underlying or core inflation rate has changed very little lately. While it is true that the inflation rate accelerated its pace in early 1989, the change in the consumer price index excluding the volatile prices of food and energy rose by only 4.3% at an annual rate between November of 1988 and March of 1989. It rose by only 4.2% over the entire year from March 1988 to March 1989. Furthermore, although the percentage increase in unit labor costs (the extra labor costs embodied in each additional unit of output produced) more than doubled in 1988, about two-thirds of the increase resulted from the absence of an increase in labor productivity in the business sector in 1988. As the hiring rate slows in 1989 and the productivity increase bounces back to a more normal number (say, 1.5% per year) unit labor costs should rise by no more than about 3.5% in 1989. This prediction is based also on an slight acceleration of hourly compensation. Workers in the private business sector were able to increase their compensation by about 4,8% in 1988 after obtaining increases of about 4.5% per year since about 1984. Even by raising our prediction to 5% for 1989, unit labor costs should hover in the 3.5% range, a number clearly compatible with overall inflation of less than 5%.

What has changed lately is the second major factor affecting short-term inflation—special cost factors. Our December forecast was predicated upon a declining value of the dollar and the then $15 spot price for a barrel of oil continuing into the first few months of 1989. Since early this year, unexpected events—like oil spills and off-shore drilling explosions—pushed oil to over $20 a barrel. Meanwhile, the dollar has appreciated. These factors lead us to raise modestly our forecast of inflation.

Other recently announced data have forecasters taking equivocal stances. On the one hand, a recent survey of manufacturing purchasing agents suggests that the economy may grow more rapidly later this year. On the other hand, the unemployment rate, which hovered near 5% for several months, climbed to 5.4% in March. This latter event suggests that the economy may be slowing even faster than we thought it would. Recent polls of forecasters show that more of the professionals have been reducing their economic growth forecasts. If they are right and the economy slows significantly this year, then core inflation should be lower.

Nevertheless, short-term fluctuations in growth, much like abrupt changes in monetary policy, affect the inflation rate with long, and sometimes complex, lags. Meanwhile, higher than anticipated food and energy prices are working their way through the U.S. economy. Firms faced with the continued force of international competition will pass through some, but not all, of their higher costs into prices. The rest of their cost increases will be revealed through lower profits and more conservative hiring practices. Based on these developments in the first half of the year, we now raise our inflation forecast range to 5.0% to 5.4% for the year and our average annual unemployment rate to 5.6%.

Housing

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Housing starts for March were at a seasonally adjusted rate of 1.39 million units, almost exactly at the 1.4 million rate we projected for 1989. However, the rate dropped to 1.36 million in April, a six-year low. If interest rates continue to rise, housing starts will likely fall further. Interest rates rose from 10.77% to 11.19% over the first quarter.

Existing home sales also dropped 6.6% in April. High interest rates coupled with high home prices are hurting demand. However, sales were good in the more affordable areas such as Indianapolis, and Columbus, Ohio.

This (first quarter 1989) is the first time since 1984 that the increase in CPI was greater than the increase in home prices for a quarter.

Nationally, the price of existing homes rose 3.4% during the first quarter while the CPI increased 4.8%. This is the first time since 1984 that the increase in CPI was greater than the increase in home prices for a quarter. This raises the question of whether housing will continue to be an inflation hedge, as it has been since the 1970s. According to a study recently released by the Center for Real Estate Studies at Indiana University, the median home price in Indiana rose slightly to $54,000 from $53,500 during the first quarter of 1989. Home prices remain very affordable in Indiana relative to the rest of the nation. The housing affordability index for the state of Indiana was 166, which indicates that the median income family in Indiana has 66% more income than necessary to qualify for a loan on the median priced home in Indiana at current interest rates. During the same period, the index for the nation was 105.

The Midyear Indiana Forecast

Morton J. Marcus

Director, Indiana Business Research Center, Indiana University

The Indiana unemployment rate for the first quarter of 1989 was at a 16-year low. Total employment continues to rise, and manufacturing employment is once again on the increase. After nearly a decade of concern it would be delightful to have sustained strong expectations.

Unfortunately, slow national growth patterns typically are adverse for the economy of Indiana. When American consumers and investors defer spending on capital goods, whether they be office buildings or washing machines, Indiana's strong manufacturing and transportation sectors realize the consequences of those decisions. If interest rates are sustained or increased in the months ahead, Indiana will see a marked decline in growth. It is unlikely, however, that the state will experience a recession as measured by total personal income.

Real total personal income for Indiana reached a peak in the first quarter of 1979 at $61.7 billion (in 1982 constant dollars, see **Figure 1**). It was to be 28 quarters before that level was regained. After seven years of decline and recovery, the state's economy passed that previous record at $62.6 billion in the first quarter of 1986 and has been climbing since then. In the final quarter of 1988, total personal income for Indiana stood at $65.8 billion, 6.6% above the 1979 peak.

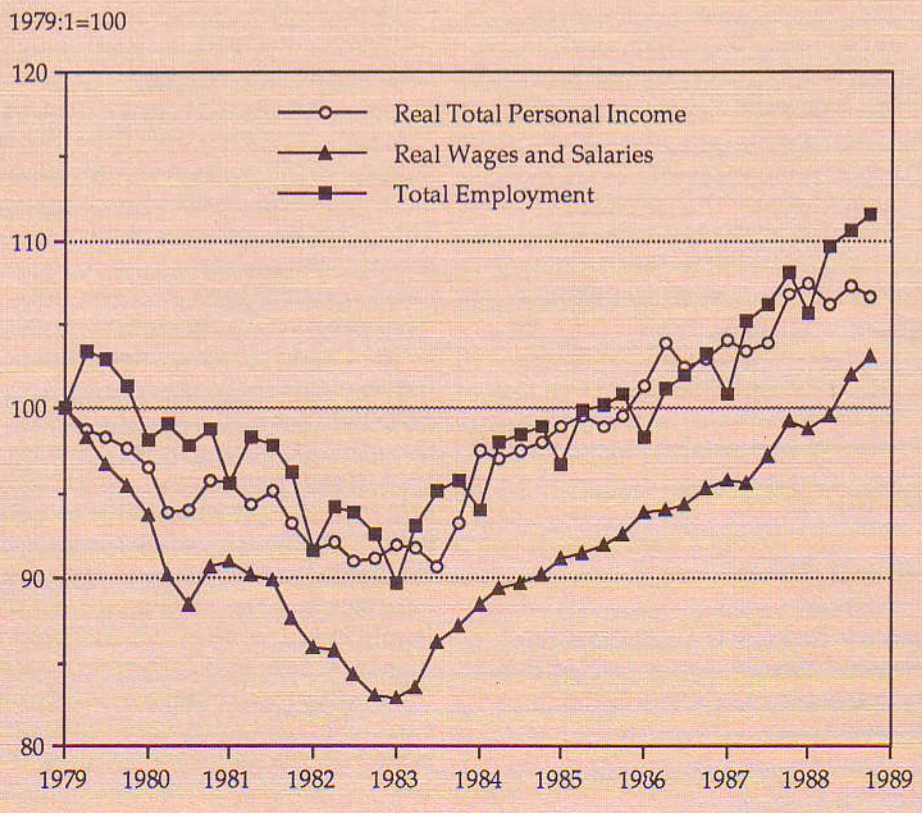
Total employment in Indiana at the start of 1979 stood at 2,424,000. In the fourth quarter of 1988, the state reported employment at 2,702,000, a prodigious gain of 11.5% and nearly twice the rate of gain recorded in *real* total personal income.

The situation is more somber when we look at the wages and salaries generated by that employment (Figure 1). Indiana's *real* wages and salaries (again in 1982 dollars) in the first quarter of 1979 were $39.7 billion, a historical high. That level was not reached again until 38 quarters had passed. Then, in the third quarter of last year, the workers of this state once again were on new ground at $40.5 billion. By the end of the year, workers were receiving 3.1% more in real wages and salaries from 11.5% more employment. That is not a record for a decade's economic progress, even though we are on new high ground.

During this time, Indiana's share of total U.S. personal income continued a decline. This trend has been ongoing since the mid-1960s (see **Figure 2**). At the end of 1965, Indiana had 2.5% of total U.S. personal income. With a declining share of population *and* a concurrent decline in per capita income relative to the nation, Indiana slipped below 2% of U.S. personal income for the first time in 1988. With an expectation that our state will not perform as well as the nation in 1989 and early 1990, we will not see Indiana regain the 2% level at any time in the foreseeable future.

Indiana's personal income is no longer as driven by fluctuations in wages and salaries as it had been. In the 1960s, the earnings of Hoosier

Figure 1
Indiana's Income and Employment Record 1979-1988



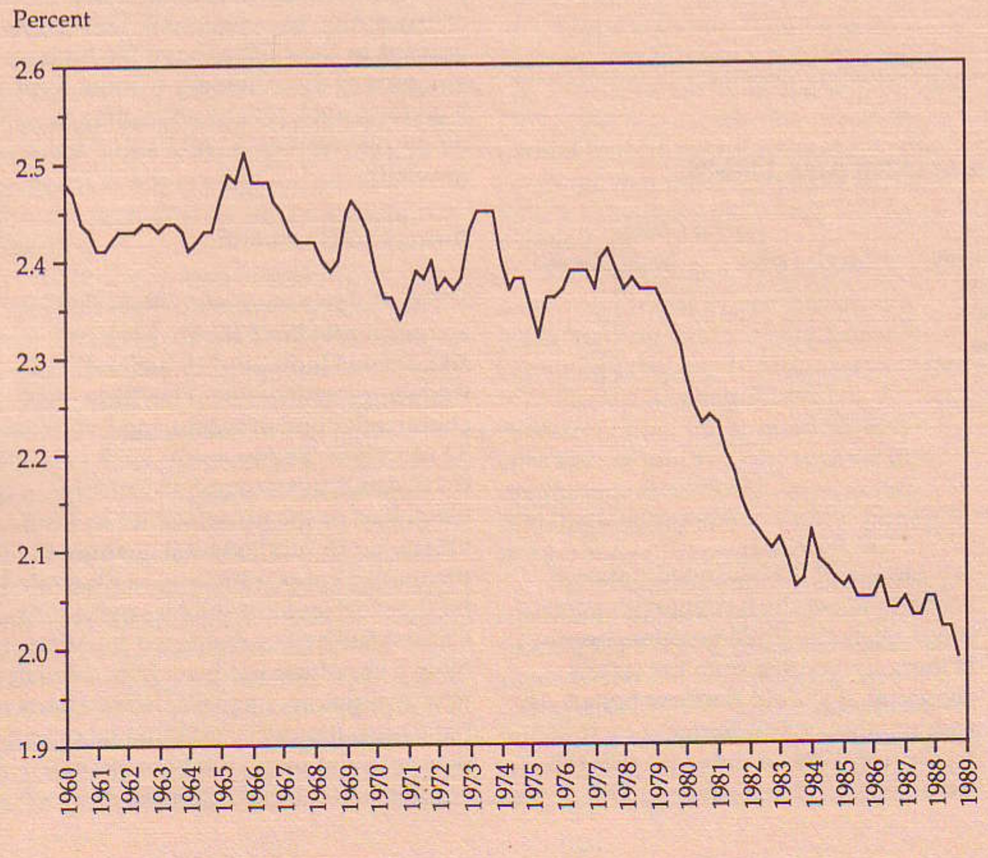
workers in the form of wage and salary disbursements equalled nearly 71% of total personal income. More recently, in the mid- to late 1980s, wages and salaries have averaged 60% of total personal income. Interest and dividend receipts have grown in importance with deregulation and diversification of financial institutions and opportunities. Transfers (social security and retirement payments particularly) are a more important part of income as well. In years of poor economic performance, unemployment compensation plays a greater role. Nonetheless, wages and salaries remain as the largest single element in personal income and have significant economic, psychological, and political importance.

The rest of this year and early 1990 will find real wages and salaries declining in Indiana as manufacturing employment growth slows and perhaps stops. Inflation, meanwhile, eats away at nominal gains of all workers. We do not expect the decline in real wages and salaries to be as severe as in the 1979-1982 recession, but it could be comparable to the 1970 slump that went virtually unnoticed outside the Midwest.

The economy of the next 12 months in Indiana will depend on the extent to which national auto sales, housing construction, and plant expansion are adversly affected by interest rate considerations. Even though manufacturing and the wage bill of that sector do not hold the same relative importance as in the past, we are not convinced that the state's economy is any less subject to fluctuations originating in that sector. Our base may have narrowed, but more of our services may rest on it.

The key question is, will fluctuations in output by manufacturers have the same income implications as in the past? If employment and hours worked are less tied to output levels with advances in production techniques, then the state's economy may be less sensitive to national business cycle fluctuations. It is possible we may have an answer to that question in the year ahead, whether we like it or not.

Figure 2
Indiana's Share of U.S. Personal Income
1960-1988



Indianapolis

Robert Kirk

Professor of Economics, Indiana University-Purdue University at Indianapolis, with data assistance from the Statistical Services Division of the Indiana Department of Employment and Training Services

This forecast is based on assumptions about the national economy and Federal Reserve monetary policy in particular. It is assumed that the Federal Reserve will be more concerned with inflation than recession. When there is excess demand, the direct effect is on product prices. However, there is an indirect effect through factor markets and the costs of production. To the extent possible, these increased costs of production are passed through, giving the illusion of cost-push inflation. However, due to competitive forces, nationally and

Table 1
Employment Change for Selected Metropolitan Areas 1983:4-1988:4 (%)

	Initial Recovery 1983:4-1985:4	*Dollar Depreciation 1985:4-1988:4*	*Total 1983-88*
Manufacturing			
Indianapolis	-1.7	-1.7	0.0
Chicago	-2.8	0.2	-2.6
Cincinnati	3.8	-1.8	2.0
Columbus, OH	5.5	-2.5	2.9
Detroit	12.6	-7.4	4.3
Louisville	1.5	2.2	0.7
St. Louis	1.4	0.4	1.8
Nonmanufacturing			
Indianapolis	10.3	16.0	28.0
Chicago	12.4	8.1	21.5
Cincinnati	10.5	15.9	28.0
Columbus	11.0	15.3	28.0
Detroit	11.5	9.4	22.0
Louisville	9.5	12.3	22.9
St. Louis	8.1	7.8	16.5

Source: Department of Employment by State.

Table 2
Housing Production for Indianapolis Metropolitan Area, 1984-88

	Absolute Change		*Percent Change*	
Year	*Single-Family*	*Multi-Famly*	*Single-Family*	*Multi-Family*
1984-5	7136	4469	2.5	3.4
1985-6	5209	6790	1.8	6.8
1986-7	3135	7234	1.0	6.8
1987-8	6928	4573	2.3	4.0

Source: Federal Home Loan Bank of Indianapolis.

internationally, firms may not be able to pass through the cost increases, and upward price pressures would thereby be dampened. The rate of growth in the national economy can be expected to slow. The slowdown will occur in durable goods (autos), capital equipment, and defense.

How will this assumed national scenario affect the Indianapolis economy? Since the Indianapolis economy is more diversified than the state's economy, it should perform better. An examination of employment by industry during 1986-88 indicates that the expansion has been concentrated in the nonmanufacturing sectors, with significant increases occurring in business services, legal services, banking and investments, air transportation, trucking, and consumer expenditures-related areas.

Nationally, the percent of GNP composed of personal consumption expenditures has increased over the past decade to 66%. This trend has been expressed at the local level by increases in employment in apparel, furniture, home building materials, and restaurants. This trend has been driven in part by favorable demographics arising from the high growth rate of persons aged 25-44 during the 1980s. As we move into the early 1990s, this source of economic stimulation will be reduced. It is not yet clear how expenditure patterns will be affected by the aging process. Some analysts predict a higher saving rate, which would allow for a shift of resources away from consumption to investment. However, persons in their fifties have the highest amounts of discretionary income. Will it go for travel, retirement saving, a down payment on a child's first home, or what?

Industrial Heartland

Some analysts have said "Rust Belt" is an inaccurate label for the Midwest, and argue "Industrial Heartland" is a more appropriate one. The "Rust Belt" characterization arose during the 1978-82 recession. Today, terms such as revival and turnaround are widely used. Part of the turnaround has been attributed to fundamental changes in the method of production, as illustrated by the steel and automobile industries. Capital has been substituted for labor. New technology has been imbedded in new equipment. Organizational charts have been flattened, bringing labor and management into a relationship that emphasizes mutual interests. Also, beginning in 1985, the exchange value of the dollar fell and U.S. exports became more competitive in international markets. This benefited the Midwest, in particular.

How have selected Midwestern metropolitan areas responded since the recovery began in 1983? **Table 1** shows the changes in employment by manufacturing and nonmanufacturing sectors, fourth quarter 1983-fourth quarter 1988. The period is divided into two parts, the initial recovery from recession, 1983-1985, and further recovery and depreciation of the dollar, 1985-1988.

Output would be a better measure of economic change than employment because employment is an input and does not reflect productivity growth—which has been significant in many manufacturing industries. Also, to assume that "manufacturing employment" encompasses all manufacturing-related employment is questionable because manufacturing firms, to reduce costs, have "contracted out" to firms classified in "nonmanufacturing." For example, part of the high growth in business services employment is directly or indirectly linked to manufacturing.

In terms of total employment change, 1983-88, Columbus has done best, followed closely by Indianapolis and Cincinnati. During the more recent period, 1985-88, Indianapolis has done best, followed by Columbus and Cincinnati. Table 1 indicates that the source of Indianapolis' strength has been in the nonmanufacturing sector during the recent period. In the manufacturing sector, Indianapolis experienced two major plant closings. These decisions were made in corporate boardrooms outside the state and show the vulnerability of a local economy's manufacturing sector. In manufacturing, Detroit had the greatest increase, reflecting primarily the recovery from the recession, as recent period employment has declined. Only Louisville has had some expansion in manufacturing during the recent recovery and period of dollar depreciation. The depreciation of the dollar helped promote employment in some industries, but not enough to offset losses in others. Compared to other regions, the Midwest remains the "Industrial Heartland." However, our major metropolitan areas appear to be deriving growth from a variety of sources.

Competitive Position

Usually at the later stage of the business cycle there is upward pressure on the costs of production. Compared to other parts of the country, Indianapolis is in a strong position. Land is cheaper than on the coasts. There is an adequate inventory of office space, resulting in a very competitive situation to attract office-type activities. The State of Indiana is building a new office building. When the building is occupied in 1991, state-leased space in privately-owned buildings will be vacated. We can hope that the city's promotional efforts to attract office users will be successful.

Housing inventories are adequate to support Indianapolis' image as a good housing value. **Table 2** provides recent housing production rates for the Indianapolis metropolitan area. A consequence of the continuing construction in multi-family units is that the metropolitan-wide vacancy rate remains slightly above 10%, resulting in aggressive promotional efforts.

An increasing concern is the quantity and quality of the labor supply. During the 1979-82 recession, Indiana experienced out-migration to Texas, Colorado, Oklahoma, and Louisiana. By 1987, there had been a turnaround. Also during the early 1980s, many Hoosiers migrated to Indianapolis in search of jobs. Indianapolis benefited from the supply of labor and the demand for housing.

Table 1 indicates that there has been no increase in manufacturing employment, 1985-1988. However, if we look at the rest of Indiana, we see that over this period there has been an increase of more than 35,000 manufacturing jobs (a 7.1% increase). Some persons who might have migrated to Indianapolis in the early 1980s have found jobs in their local areas. Therefore, as long as manufacturing demand holds up, communities in the rest of the state may continue to experience job growth and to hold their 25-34 year olds. But Indianapolis won't get the labor supply or housing demand it might have gotten earlier in the decade. In spite of attracting people from the rest of the state in the early 1980s, Indianapolis experienced a reduction during 1980-87 in the 20-24 age-group—the age group from which first-time labor force entrants is drawn. Thus, employers will have to invest more in in-house training and pay competitive wages.

Construction

Major commercial, industrial and governmental/educational construction projects, such as the Circle Centre, Eli Lilly, State of Indiana Office Complex, and Indiana University-Purdue University at Indianapolis (a library and a science/engineering and technology building), will support demand for construction workers, although residential construction may not be as strong as in the past. New initiatives, such as one initiated by the nonprofit National Training and Information Center and supported by Fannie Mae, GE Capital, and major local banks, are attempting to increase the supply of housing for the low to moderate income household.

As Table 1 indicates, Indianapolis has done well in the region. The challenge will be to maintain the momentum. Uncertainties that could affect the forecast are acid rain legislation, above-average inventories of office space, a possible auto-based sales slowdown, and a longer-term labor supply problem. By appropriate preparation and planning today, these uncertainties can be met constructively if and when they occur.

Gary-Hammond-East Chicago (Calumet Area)

Leslie P. Singer

Professor of Economics, Indiana University Northwest

Our midyear review offers no surprises. We had predicted steady growth in all sectors of the Northwest Indiana economy, and a continuation of that trend appears likely for the remainder of the current year. The usual seasonal factors will slightly slow down the third quarter. The fourth quarter will favor nonmanufacturing and a slight slowdown in steel.

We have just concluded an analysis of steel-related and other manufacturing firms that have recently relocated in Northern Indiana and found that the stabilization of the steel sector was the principal inducement for their selection of a Northwest Indiana location. This comes in spite of some earlier indications that this region's heavy dependence on steel might be waning. Steel is still very much the core industry of Northwest Indiana.

Much local attention is focused on an extension of the VRAs (Voluntary Restraint Agreements). VRAs expire in September. A five-year extension may appear to our international trading partners as protectionist. Economists have found it difficult to defend VRAs on theoretical grounds.

A recent study of the steel industry done with my colleague, Gary Lynch, has uncovered some surprising findings about cost functions in steel that might call some of the traditional free-trade theorems into question. There is no disagreement with the perception that the steel industry was oligopolistic and was protected in the past. However, international competition has made the industry more efficient and production has become technologically state of the art. Also, there has been a slight gain in consumer welfare owing to the fact that the rapid advance in steel prices has been halted, though at considerable cost in lost employment. In a separate study forthcoming in this journal, I show that foreign exporters have been systematically targeting American high-wage industries.

According to the Indiana Department of Employment, average weekly earnings in Northwest Indiana steel mills in February 1989 were $879.26, almost double the Indiana manufacturing weekly wage of $469.12. This, along with an overvalued dollar, made import penetration relatively easy. The current question is whether abolishing VRAs would continue to improve the productivity of U.S. steel plants and lead to lower prices as suggested by international trade theory.

Traditional theory suggests that as steel plants approach full capacity, as is the case at present, variable and marginal costs rise. If VRAs are extended, higher costs would be protected. Without VRAs, imports would alleviate the pressures on capacity and both costs and prices would fall.

We have culled the appended table from a larger study in order to show that traditional theory may not apply to steel. Similar results were obtained for five other steel companies. Clearly, variable costs per ton of raw steel produced declined as plants neared full capacity. During the phase from 1978 to 1982, the variable cost function shifted down as less-up-to-date plants were closed and the steel industry became more efficient. In the current

Table
Northwest Indiana Employment (in 000s); Quarterly Averages, Seasonally Adjusted

	Actual		*Estimate*			*Extrapolated*			
	1988:4	*1989:1*	*1989:2*	*1989:3*	*1989:4*	*1990:1*	*1990:2*	*1990:3*	*1990:4*
Total Employment	233.60	231.20	233.14	235.92	238.65	236.31	239.05	240.36	240.63
Manufacturing	57.10	57.00	57.24	57.50	57.75	58.01	58.26	58.01	57.62
Steel	35.20	35.20	35.31	35.21	35.10	35.02	35.10	34.90	34.70
Other Manufacturing	21.90	21.80	21.94	22.29	22.65	23.01	23.16	23.11	22.92
Nonmanufacturing	176.40	174.20	175.90	178.42	180.90	178.30	180.79	182.35	183.01
Trade	55.21	54.81	56.90	58.27	59.68	58.31	59.72	61.16	61.99
Services	50.60	51.42	51.60	52.73	53.89	52.13	53.87	54.57	55.91
Government	32.10	32.11	32.01	32.19	32.21	32.00	32.19	31.31	31.62

phase, with no more plants to close, high sunk costs and plant closing laws in effect, termination of VRAs would lower per plant capacity and would raise both average variable costs and per unit costs (average total cost). Moreover, if VRAs are not extended, several steel companies—including USX—may have to import slabs and other semi-finished products to remain competitive, resulting in job losses in Northwest Indiana.

If import penetration prevents upward adjustment in prices, as per unit costs rise, net revenue falls and continued plant modernization may be jeopardized. Our study revealed that net revenue per ton of raw steel produced in 1978, before depreciation, in 1987 dollars was $67.38 at 87.3% average capacity utilization. Net revenue declined to $11.92 at 49.4% average capacity utilization in 1983, then rebounded to $54.60 per ton in 1987 as capacity utilization rose to an average of 72%. Our studies suggest that the rise in per ton revenue was mostly due to lower average variable costs and not to higher prices for steel (except for inflation, which was factored out of the present relationship). It is not surprising, therefore, that VRAs are a very hot issue in Northwest Indiana.

The implication of constant average variable costs were analyzed as early as 1929 by Pierro Sraffa ("The Laws of Return under Competitive Conditions," *Economic Journal*).

Our forecasts are based on the assumptions that VRAs will be extended, that there will not be a long steel strike this year, and that wage settlements will be moderate. We show a slowing down of the local economy towards the third quarter of 1990 (see the **Table**). There may even be a brief downturn before 1990 ends. The figures are seasonally adjusted averages and do not reflect the significant fluctuations in the average work week in steel and other manufacturing. For example, steel employment was almost constant in 1988. In February 1988 steel employment was 35,100; in February 1989, steel employed 35,200 workers. However, the average work week was 43.3 hours in February 1988 but dropped to 41.7 hours in 1989. Thus in terms of full-time equivalents (FTE), steel employment declined from 37,990 to 36,690. At present Northwest Indiana steel mills operate at 92.8% capacity (very close to attainable full capacity of 93%). Employment is not expected to rise; instead the work week will increase as the busy second quarter rolls on.

Terre Haute

Marvin Fischbaum

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Six months ago the prospect of a number of favorable developments, including likely expansion at Evergreen Express and Hercules, and the possible selection of Terre Haute for a BASF paint plant, led to speculation that the Terre Haute economy might at least be coming out of its protracted stagnation. While the intervening period has been relatively quiet, most news has served to cloud the prognosis.

Terre Haute did land the expansion of polycarbonate film facilities at Hercules, but elsewhere prospects have soured. Evergreen Express expanded to daytime operations, but only for the Christmas season. Since then the Post Office demurred from renewing the Evergreen contract, and announced instead an open competition that has attracted at least six bidders. The economy stands to lose close to 200 mostly part-time jobs and one of the very few new businesses attracted to the area in recent years. Britt Airlines ended its existence as the largest independent commuter airline, and although few of its flights served Terre Haute, the system was administered and the fleet was maintained here. Its sale led to the loss of close to 100 quality jobs. At least a similar number of jobs went when the Brown Group sold its Meis division to Elder-Berman. The chain of Meis fashion department stores and The Bottom Half specialty shops had operated, almost autonomously, out of headquarters in Terre Haute. Now these managerial functions will be consolidated with those of Elder-Berman at Dayton, Ohio.

The above is not to imply that the local economy has fallen out of bed. Employment data exhibits continuing strength. The Indiana Department of Employment and Training Services no longer releases seasonally adjusted measures of unemployment. In recent years Terre Haute experienced sharp peaks in unemployment in January and February. The loss of manufacturing jobs, especially from J. I. Case and Alcan Aluminum, has undoubtedly attenuated that peak. Still, reported Vigo County unemployment rates of 6.0% for January and February, and 5.6% for March, would be consistent with an annual average unemployment rate of 5.4% or better.

There have been other signs of a strengthening job market. Establishment employment has improved modestly on a year-to-year basis, rising 700, or 1.3%, between March 1988 and March 1989. Help wanted advertisements in the local newspaper were somewhat more numerous, and, as the college year ended, help wanted signs cropped up at fast food places around town. The gain in establishment employment continued, however, to be concentrated in such low-wage sectors as retail trade and health services.

Manufacturing employment extended its decline, and in March constituted only 18% of the total.

Since January 1988 the state has provided metropolitan area data on average hours and average gross earnings per week in manufacturing. These numbers are apt to be more volatile than data on employment and unemployment, but they may also respond more quickly to changing economic conditions. As markets soften, employers may initially reduce hours of work. The quit rate then is likely to fall, pushing unemployment down, and putting further pressure on hours of work. Only after a lag will the layoff rate, and hence the overall unemployment rate, rise. In March of 1989 the manufacturing work week averaged 41.0 hours, down 3% from level of the previous March. The average manufacturing wage fell 4% to $393.60, as hourly wages also dropped 1%. That the local wage rate fell, rather than match the statewide increase of 3%, probably reflected in part a loss of overtime, and in part a loss of high-wage jobs in the primary metals industry.

Real estate activity continued to increase through the first quarter of 1989. The value of residential building permits in the twelve months ending March 1989 rose 25% over the preceding twelve-month period. For nonresidential construction the increase was 125%. In the first quarter of 1989, the number of residential properties sold through Terre Haute Multi-list rose 24% over the first quarter of 1988. The average selling price, though, fell by almost 5%. It seems unlikely that either building permits or resale activity will continue upward momentum through the second quarter.

The big issue remains the matter of BASF. It appears that of the three sites tested for the facility, only Terre Haute met the requirement of having an impermeable clay cap to preclude leakage of toxic wastes into the aquifer, and BASF clearly wants to obtain the site from the city. Opposition to BASF has grown, though, and it includes an alphabet soup of citizen groups. The matter as to whether due process was followed in creating the industrial park, and therefore whether the City of Terre Haute has the right to sell the site to BASF, is now in litigation. The new facility would, according to BASF, bring at least 500 relatively well-paying jobs to the Wabash Valley and provide much needed impetus to regional economic development. The new facility would, according to opponents, degrade air and water and thereby increase associated health risks. Both sides of course are right; most economic activity degrades the environment. An economist might wish to be able to rank facilities in terms of the trade-off; for example, local value added per man year of reduced life expectancy. Much of the industry presently in the Wabash Valley processes chemicals. BASF would differ from many of these primarily in that as a new plant it would be subject to more stringent EPA regulation.

Evansville

Maurice Tsai

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The Evansville economy concluded its 1988 year with a growth rate of 1.4%, higher than the originally predicted 0.9% (see the **Table**). The manufacturing sector grew at 2.6%, also better than the original forecast. Trade and services continued to be the strongest component of the regional economy, posting a 3.9% increase. The construction sector continued to decline from its 1986 peak, as the Lloyd Expressway and a new airport terminal were completed. Transportation activities rose by 0.6% compared to a decline of 1.4% in 1987. The financial sector was down 1.5%, still feeling the adverse impacts of the 1987 stock market crash. Area employment increased by 2.9%, the biggest increase in the last three years. Unemployment ended at 5.5% in December, 0.2% above the national rate but 0.4% below the state level. In short, 1988 was a year of slow growth.

In the second half of 1989, trade and services will lead the remaining sectors in the region; all sectors will grow with the exception of construction. A 2.0% growth is expected for the entire year.

The area economy in the first quarter of 1989 stayed at the same level as it ended the fourth quarter of 1988. Manufacturing, finance, and employment went below the levels of the previous quarter, while the trade and services sectors and construction improved, offsetting the losses in other sectors. The second quarter will be about the same as in the first quarter. In the second half of 1989, trade and services will lead the remaining sectors in the region; all sectors will grow with the exception of construction. A 2.0% growth is expected for the entire year. Thus 1989 will not be a fast growth year, due partially to the restrictive monetary policy by the Federal Reserve. The area employment will

Table
Evansville Area Business Index (1977=100)

	Industrial Production	*Trade & Services*	*Construction*	*Transportation*	*Finance*	*Employment*	*Composite Index*
Quarterly							
1988:1	122.93	117.84	116.96	99.88	108.38	110.73	117.20
1988:2	121.49	119.24	117.23	98.19	107.03	110.97	117.09
1988:3	125.61	119.61	114.68	98.90	107.70	113.41	118.71
1988:4	124.99	122.15	113.31	97.33	110.35	115.58	119.86
1989:1	123.48	123.23	121.06	99.32	107.07	113.65	119.87
1989:2	121.99	124.15	124.85	98.57	107.34	111.70	119.57
Annual							
1985	113.42	108.87	108.70	99.16	105.29	106.82	109.44
1986	116.92	110.70	174.44	99.48	109.91	107.36	117.24
1987	120.57	115.24	131.46	98.04	109.98	109.52	116.58
1988	123.76	119.71	115.54	98.58	108.38	112.67	118.22
1989	124.57	125.36	115.52	98.78	108.17	114.65	120.56
1990	130.73	130.52	100.24	100.54	108.48	116.73	123.56
Annual Growth Rates (%)							
85/84	-1.4	2.7	4.9	4.3	-0.8	2.9	1.4
86/85	2.3	1.7	60.5	0.3	4.4	0.5	7.1
87/86	3.9	4.1	-24.6	-1.4	0.1	2.0	-0.5
88/87	2.6	3.9	-12.1	0.6	-1.5	2.9	1.4
89/88	0.7	4.7	0.0	0.2	-0.1	1.8	2.0
90/89	4.9	4.1	-13.2	1.8	0.3	1.8	2.5

1989 figures estimated; 1990 figures projected.
Source: School of Business, University of Evansville.

improve by 1.8% and the area unemployment will remain around 5.5%. The Evansville economy has lost some jobs through closing or reduction of major firms in the last several years. However, the entries of new, medium-sized firms have offset these losses. The net increase in employment came mainly from expansions of existing firms in trade and services. This explains the slow employment growth in Evansville over the past few years.

The coming year, 1990, should be a better year than 1989. Unless the nation falls into a recession, the regional economy should grow at 2.5%, with the manufacturing and trade and services sectors spearheading the growth.

Jeffersonville-New Albany (Louisville Area)

Fay Ross Greckel

Professor of Economics, Indiana University Southeast

The Louisville area economy expanded at a moderate pace in 1988, although somewhat less vigorously than in 1987. In some sectors growth accelerated in the first quarter of 1989, but the prognosis for the year as a whole is for moderate growth once again, with another slowing of the pace of expansion.

Employment in the metropolitan area increased by some 13,000 jobs in 1988—about the average number of jobs added in recent years, but less than in 1987. (A much higher increase was reported in this column last December, but the Louisville Office of Employment Services recently published revised employment statistics for 1988, sharply reducing their previous figures.) As **Table 1** indicates, manufacturing employment crept upward for the second year in a row, and that trend continued in the first quarter of 1989. The increase in manufacturing jobs was divided fairly equally between durable and nondurable goods industries.

Table 1
Louisville Area Employment and Unemployment, 1985-891 (in 1000s)

	Total Nonfarm Employment	Manufacturing Employment	Nonmanufacturing Employment	Unemployment Rate (%)
Louisville Metropolitan Area				
Annual				
1985	410.8	87.0	323.7	7.9
1986	421.2	86.2	335.1	7.1
1987	437.4	87.1	350.3	6.9
1988	450.8	87.9	362.8	6.3
Quarterly				
1988:1	448.5	87.9	360.7	6.1
1988:2	449.6	88.0	361.5	6.5
1988:3	450.3	87.9	362.3	6.1
1988:4	453.8	87.7	366.0	6.5
1989:1	459.9	88.3	371.6	5.6
Clark, Floyd, and Harrison Counties				
Annual				
1985	53.4	13.1	40.3	8.1
1986	55.6	13.2	42.5	6.5
1987	59.3	13.4	45.9	5.9
1988	59.8	13.5	46.3	5.7
Quarterly				
1988:1	60.4	13.7	46.7	5.0
1988:2	60.0	13.5	46.5	4.8
1988:3	59.2	13.4	45.8	5.7
1988:4	59.2	13.4	45.8	6.5
1989:1	58.1	13.0	45.1	5.1

1. The employment date refer to establishments located within the area cited; the unemployment data refer to residents of the area. Data are seasonally adjusted.
2. Includes Clark, Floyd, and Harrison Counties in Indiana and Jefferson, Oldham, Bullitt, and Shelby Counties in Kentucky.

Sources: Indiana Department of Employment and Training Services; Kentudky Cabinet for Human Resources.

Most of the job growth occurred, as usual, in nonmanufacturing. From the first quarter of 1988 to the first quarter of 1989, service sector employers in the seven metropolitan counties added 10,000 workers to their payrolls, retail establishments and the transportation, communication, and utilities sector added 1,000 workers apiece, and total government employment rose by nearly 1,700 workers. Small employment declines in construction and in the finance, insurance, and real estate sector partially offset these gains. Job growth accelerated in the last quarter of 1988 and the first quarter of 1989.

The new jobs continue to be concentrated in the Kentucky portion of the metropolitan area. Employment in firms located in the Indiana portion (Clark, Floyd, and Harrison counties) declined by about 2,000 workers between the first quarter of 1988 and the first quarter of 1989, despite small employment gains in banking, insurance, and the service sector. Although small job losses occurred in most other sectors, sharper declines were reported in wholesale and retail firms, in motor freight transportation, and at the army ammunition plant in Clarksville. The employment picture should improve in the months ahead as new hiring occurs at Jeffboat and the Census Bureau.

Although fewer jobs were available in the Indiana counties, Clark, Floyd, and Harrison residents were apparently quite successful at finding jobs elsewhere in the area. Table 1 shows that their unemployment rate was consistently lower than that for the Louisville area as a whole. (Readers are cautioned that local unemployment rates are less reliable statistics than the national unemployment rate.) Here, as in other parts of the U.S., the unemployment rate continues to decline, although locally it remains somewhat above the national average.

Despite the reduction in unemployment, many area residents are still finding it difficult to feed themselves and their families. Dare-To-Care supplied 83,600 emergency food allotments in 1988, compared with 76,300 in 1987. The increase is probably due to a combination of factors, including greater awareness on the part of those in need; more repeat requests for assistance (qualified individuals may receive up to four allotments per year); and the fact that a higher percentage of

Table 2
Louisville Area Residential Building Permits, 1986-1989

(Number of Dwelling Units)[1]

	Jefferson Co. KY	Clark Co.	Floyd Co.	Harrison Co.[2]	4-Co. Total
Jan-Dec 1986	2634	252	427	122	3435
Jan-Dec 1987	3169	224	397	157	3947
Jan-Dec 1988	2697	341	376	148	3573
Jan-Apr 1986	734	53	103	56	946
Jan-Apr 1987	1816	72	127	50	2065
Jan-Apr 1988	601	64	141	46	852
Jan-Apr 1989	649	66	152	41	908

1. *Number of residential units for which building permits were issued, including single-family dwellings, apartment units, and condominium units.*
2. *Excluding Corydon.*

Source: Kentuckiana Regional Planning and Development Agency.

the current jobs are part-time or low-wage jobs, with few if any benefits, than earlier in the decade.

The overall health of the economy is still evident in the continued strength of single family home construction and of business investment in plant and equipment. Despite a sharp decline in apartment construction, caused by the new tax code and some concerns about possible overbuilding, during 1988 Clark, Floyd, and Harrison counties and Jefferson County in Kentucky issued building permits for only 370 fewer apartment/condominium units and single family homes than in the record-setting year of 1987. As **Table 2** shows, residential construction was higher in the first four months of this year than in 1988, but that may be simply a result of the milder winter.

The Louisville Chamber of Commerce tally of announced plans for major investments in plant and equipment totaled a record $1.2 billion in 1988—up from $600 million in 1986 and $1.1 billion in 1987. In 1987 Ford's announcement of a $500 million expansion of its light truck plant resulted in an emphasis on industrial expansion. Commercial investment led the way in 1988, with 570 commercial firms announcing a record $951 million in new capital projects that should eventually add 23,000 jobs to the area's economy. Another 3,000 jobs are anticipated through the capital projects announced by 157 industrial firms. Many additional projects have already been announced in the first few months of 1989.

These developments are occurring both in the central business district and in outlying areas. Downtown Louisville continues its interesting mix of renovation/preservation—such as the national headquarters of the Presbyterian Church, completed last year—and new construction. An architecturally innovative 23-story office building is nearing completion, construction is about to start on another office tower a few blocks away, and at least two others are in the planning stages.

Renewed emphasis is being placed on riverfront development, not only in Louisville, but also in Jeffersonville, Clarksville, and New Albany. In fact, Jeffersonville is in the process of choosing between two very ambitious proposals for development of the riverfront area between the Clark and Kennedy bridges.

Despite the higher interest rates, Louisville's multiple listing realty sales reached record levels in 1988, for the second year in a row. The number of properties sold increased 30% and the dollar volume of sales increased 35%. Sales volume in the first quarter of 1989 was about 20% greater than in the first quarter of 1988. While the Southern Indiana Board of Realtors reported a more modest 4% increase for 1988, its reported sales during the first two months of 1989 were 26% ahead of the same months of 1988.

Local residents seem to be putting their money into new houses rather than into new cars. Sales of new cars declined nearly 10% in 1988, although truck sales rose slightly. But car sales in the first quarter of 1989 were 18% below the number sold 12 months earlier, and truck sales were down 11%.

The declining car purchases may be, in part, a local reflection of the decreased consumer confidence reported nationally. That more cautious attitude will probably keep both new car sales and retail sales down in the months ahead. However, continued vigor in several other sectors, including housing and nonresidential construction, as well as the likelihood of at least several more months of expansion for the national economy, will keep the local economy on a path of slow to moderate growth. Although employment in the Indiana counties should stabilize in the second half of the year, employment growth in the metropolitan area as a whole is likely to be slower than in 1988.

Fort Wayne

Thomas L. Guthrie

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The data are sketchy and preliminary, but the Fort Wayne metro area economy appears to be on the defensive for the first time since 1982.[1] The original forecast (December 1988 *IBR*) of an employment increase of 2% to 3%—4,000 to 6,000 jobs—in 1989 still appears to be attainable.

Through March, seasonally adjusted employment already had increased 3,300; but it then fell a disturbing 2,200 in April. Assuming these relative changes are not eliminated by subsequent data revisions, they suggest that employment lacked the seasonal bounce experienced in previous Aprils. The interesting question that needs to be answered is, "Did the seasonally adjusted drop in employment result from a lack in demand for additional jobs or was it the result of labor shortages?" (Area media have already focused attention on the lack of teenagers to fill part-time and "summer" jobs.)

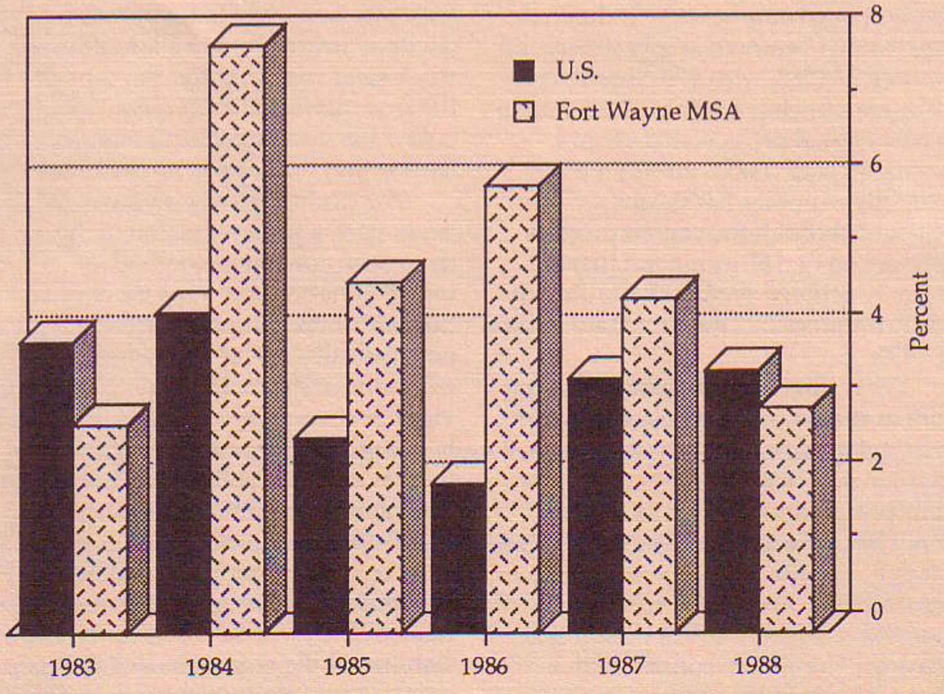
Other economic data, not subject to revision, suggest that lack of demand may be the primary culprit. Use of electricity by industry has been decreasing, and help wanted advertising has also eased the last two months.

Furthermore, it is difficult to identify sectors of the national economy that are likely to contribute to growth in the Fort Wayne area economy through the remainder of 1989. After the umpteenth round of rebates and below-market financing rates, it appears that the well has finally run dry for the auto industry. The Fort Wayne area economy is closely tied to the fortunes of the auto (and truck) industry. The defense industry, another important contributor to the area economy, remains on the defensive, a hostage of the federal budget deficit, Gramm-Rudman-Hollings, and the massive build-up in defense expenditures during the years of the Reagan administration. Residential construction in the Fort Wayne area has been trending downward for almost two years, and it now appears that commercial construction measured in dollar terms peaked near the end of 1988.

Hope, albeit modest, for economic growth through the remainder of 1989 centers around increased exports and continued growth in capital goods orders. The precise linkage of the Fort Wayne area economy to exports and capital goods is not known, but the remainder of 1989 is likely to provide substantial information.

Finally, it should be noted that the Fort Wayne area economy did not carry as much momentum in 1989 as noted in the initial forecast (December 1988 *IBR*). As a result of revisions, the employment gain in 1988 was essentially halved. Consequently, the string of four successive years of employment growth above that of the U.S. was broken (see the **Figure**).

Figure
Percentage Change in Payroll Employment U.S. and Fort Wayne MSA



Source: U.S. Department of Labor and Indiana Department of Employment and Training Services.

1. The Fort Wayne metro area consists of Allen, DeKalb, and Whitley counties.

Columbus

Patrick M. Rooney

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The local employment picture in Columbus is showing signs of weakening. The number of persons employed is up 3% from a year ago, but it is down 4% from the fourth quarter of 1988. More troubling is the fact that the number of persons unemployed, the unemployment rate, as well as continued and new employment insurance claims have increased between the fourth quarter of 1988 and the first quarter of 1989. Only our index of help wanted advertising has shown improvement between both the first quarter and the fourth quarter of 1988 and the first quarter of 1989.

This is consistent with the historical relationship between the local economy and the national economy. When the national economy is growing, Columbus grows faster; conversely, when the national economy slows, the Columbus economy decelerates even more quickly. This occurs because the durable goods industry as a whole is pro-cyclical. When the economy begins to grow, there is pent-up demand for durable goods, so durable goods manufacturing accelerates at a faster rate than the economy overall. When the economy slows down, some individuals and business delay purchases of durable goods because either their income has fallen or they fear that it may fall. Since much of the employment in Columbus is based upon durable goods manufacturing, our local economy tends to follow changes in the national economy rather than changes in the state economy. This is exemplified by the unemployment rate. In the first quarter of 1989 the national unemployment rate jumped from 5.0% to 5.3%. Concurrently, the unemployment rate in Columbus jumped from 4.3% to 5.4%.

Similar signs of a weakening economy are indicated by the housing market data. Overall, housing construction and single-family new starts declined both in terms of number of permits issued and estimated value of those permits. There were substantial declines both from fourth quarter 1988 and from a year ago (first quarter 1988). While average costs are up, they are up only 1-2%, a much smaller increase than we have seen in recent years. Similar price weakness is evident in residential real estate. The average market price of sold listings is up only 2% from a year ago.

Both new and used car markets grew more than 20% from the fourth quarter of 1988 to the first quarter of 1989, but they are up only slightly from a year ago. In addition, taxable sales in Bartholomew County grew only 2.0% from 1987 to 1988 versus a 7.1% increase statewide (the latest data available).

Table
Columbus Area Data

	1989:1	*1988:4*	*% Change*	*1988:1*	*% Change 1Q: 1988-89*
Employment Data					
Number of Persons Employed	29277	30530	-4	28467	3
Number of Persons Unemployed	1680	1350	24	1567	7
Unemployment Rate	5.4	4.3	26	5.3	2
Continued Employment Insurance Claims—Columbus	2486	1121	122	2643	-6
New Employment Insurance Claims—Columbus	396	266	49	398	-1
Help Wanted Advertising (1987=100)	134	131	2	121	11
Housing Construction Data					
Estimated Value of Permits Issued (000s)	3085.3	6825.5	-55	3692	-16
Number of Permits Issued	37	131	-72	45	-18
Average Value Per Permit	83.4	52.1	60	82	2
Single Family New Starts:					
Construction Costs (000s)	2935.3	5517.4	-47	3750	-22
Number of Permits	35	56	-38	45	-22
Average Costs (000s)	83.9	98.5	-15	83.3	1
Residential Real Estate Data					
Sold	164	n/a		175	-6
Average Days Listed	123	n/a		133	-8
Average Market Price	61894	n/a		60387	2
Sales Data					
New Car Sales	478	378	26	469	2
Used Car Sales	2501	2083	20	2510	0

Local Forecast

As a durable goods manufacturing-based economy, Columbus is greatly affected by interest rate fluctuations. If the Federal Reserve Board can continue to walk the knife's edge of growth between the undesirable alternatives of inflation and recession, then we can expect to see continued growth locally. While this growth will be slower than in the past five years, this is the preferable outcome. If the Fed is unable to traverse this path alone, and if the administration and Congress continue to refuse to actively resolve the budget deficit they created and the resulting problems, then we can expect rising interest rates, which will further decrease the local construction and housing market. In addition, as interest rates increase the demand for U.S. dollars will increase, thereby making our manufactured goods more expensive and reducing overall demand.

Finally, given the continued attempts of local employers to become more competitive internationally, we should anticipate some softening of purchasing power by labor. This has already been reflected, to some degree, in the slowdown in taxable sales, as well as in the deterioration of the local construction market. While this weakening of labor's income is not a preferred outcome, it is certainly better than having no jobs available. On the other hand, the lost income from such restructuring efforts is being offset, to some degree, by the promise of over 1,000 new jobs from firms expanding or starting up in Columbus in 1989. Furthermore, the significant increase in leasable retail space available (estimates range up to a doubling of currently available retail space) in the next 12 months should provide additional job opportunities. The additional space will not necessarily be filled immediately, but it does provide another indicator that outside investors still see Columbus and Bartholomew County as attractive sites for investment.

South Bend/Mishawaka-Elkhart/Goshen

John E. Peck

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This mid-year assessment of the economic condition of the South Bend/ Mishawaka and Elkhart/Goshen communities is based on an analysis of the latest available economic indicators for the area tracked by Indiana University at South Bend's Bureau of Business and Economic Research. A look at the indicators—particularly those relating to local employment—suggests that both communities have begun to experience some slowing in the pace of economic activity, as had been expected in the 1989 area forecast (*IBR*, December 1988).

The accompanying **Table** summarizes the various available indicators of local economic activity. These figures are seasonally adjusted and, with the exception of the unemployment rates and real estate data, are index numbers expressed as a percentage of base year values. It is noted that comparative indicators along with percentage changes are given for January and February, 1989. To highlight longer term trends, the same figures are also given for February 1988.

South Bend/Mishawaka

Nonagricultural employment in the South Bend/Mishawaka area increased 3.3% from February 1988 to February 1989. In absolute terms, 3,700 more persons were employed in February 1989 than in February 1988. While such growth is welcomed locally, it shows a softening of about one percentage point from the gain realized from 1987 to 1988. The 0.2% decline from January to February 1989 marks the first seasonally adjusted fall in the employment index in six months. The unemployment rate increase was more the result of an increase in the size of the work force than an increase in unemployment. The softest sector of the economy continues to be the transportation equipment sector of manufacturing—coming mostly from AM General layoffs and the continuing phaseout of Bendix jobs at its Energy Controls Division. On the positive side, the nonmanufacturing employment indicator, at 166.3, reached an all-time high.

Several other South Bend/Mishawaka indicators reflect similar softness in February to the short-term employment figures. Energy sales, new trucks, and housing permit values were all down marginally. On the other hand, the number of housing permits issued and the average days that resale homes were listed gave positive indications on both the month-to-month and year-to-year comparisons. Housing activity continues to be a strong economic force in the local community.

Elkhart/Goshen

February employment conditions in Elkhart/Goshen showed the same weakness as was found in South Bend/ Mishawaka, with all three indicators down by fractions of 1%. Similarly, year-to-year comparison portray a much stronger economic base. Yearly gains in both manufacturing and nonmanufacturing suggest a very positive situation through the first

Table
Area Economic Indicators

	South Bend/Mishawaka					Elkhart/Goshen				
	February 1989	*January 1989*	*Percent Change*	*February 1988*	*Percent Change*	*February 1989*	*January 1989*	*Percent Change*	*February 1988*	*Percent Change*
Employment Data										
Establishment Employment[1]										
Nonagricultural Employment	132.2	132.4	-0.20%	128.0	3.30%	201.5	202.6	-0.40%	192.6	4.60%
Manufacturing Employment	72.6	72.9	-0.40%	74.1	-2.00%	185.2	185.9	-0.40%	175.6	5.50%
Nonmanufacturing Employment	166.3	165.8	0.30%	158.7	4.80%	225.4	226.1	-0.30%	217.8	3.50%
Unemployment Rate	4.8	4.6	n/a	4.7	n/a	4.1	4.1	n/a	4.1	n/a
Help Wanted Advertising[2]	135.6	151.4	-10.40%	136.8	-9.00%	159.2	163.7	-2.70%	144.1	10.50%
Utilities[3]										
Industrial Electricity Sales	158.9	167.2	-5.00%	170.0	-6.50%	231.1	225.7	2.40%	216.2	6.90%
Commercial Gas Sales	93.0	102.3	-9.10%	100.6	-7.60%	92.3	98.9	-6.70%	105.7	-12.70%
Industrial Gas Sales	49.7	53.5	-7.10%	71.4	-30.40%	64.5	63.3	1.90%	70.3	-8.30%
Retail Car and Truck Sales[4]										
New Passanger Car Sales	85.0	82.0	3.70%	78.0	9.00%	96.7	80.5	20.10%	92.6	4.40%
New Truck Sales	257.6	263.4	-2.20%	275.5	-6.50%	147.9	142.4	3.90%	140.3	5.40%
Housing Construction[5, 6]										
Estimated Value of Permits	651.9	717.4	-9.10%	821.8	-20.70%	759.5	488.9	55.30%	517.3	46.80%
Number of Permits Issued	136.9	123.1	11.20%	164.1	-16.60%	173.7	126.5	37.3	121.2	43.3
Average Value Per Permit	499.4	538.5	-7.30%	521.7	-4.30%	389.8	453.2	-14.00%	381.4	2.20%
Residential Real Estate Data										
Number of Active Listings	995.0	981.0	1.40%	1028.0	-3.20%	1168.0	1151.0	1.50%	1155.0	1.10%
Closed Sales										
Average Days Listed	60.0	66.0	-9.10%	62.0	-3.20%	71.0	70.0	1.40%	80.0	-11.30%
Average Market Price	$64,672	$62,703	3.10%	$58,874	9.80%	$63,107	$62,955	0.20%	$60,421	4.40%
% of Sale to List Price	95.0	95.0	0.00%	94.7	0.30%	95.0	95.0	0.00%	94.0	1.10%

1. For South Bend, 1969 = 100; for Elkhart, 1967 = 100.
2. For South Bend, 1967 = 100; for Elkhart, 1984 = 100.
3. 1967 = 100.
4. For South Bend, 1967 = 100.
5. For South Bend, 1967 = 100, for Elkhart, 1970 = 100.
6. St. Joseph County excluding cities of South Bend, Mishawaka, Osceola, Walkerton and New Carlisle. Elkhart County excluding cities of Elkhart, Goshen, Nappanee and Millersburg.

quarter of 1988. In Elkhart County, 5,300 more persons were at work in February 1989 than in February 1988, with 2,700 of these finding jobs in manufacturing and 1,300 of the 2,700 added in transportation equipment. The Indiana Department of Employment and Training Services reported recently that in 1988, Elkhart employment grew by a larger percentage than 11 of the state's other 12 metropolitan areas. On the other hand, the 4.6% year-to-year gain was two percentage points lower than that experienced from February 1987 to February 1988.

Nearly all of Elkhart County's remaining indicators moved positively in February. Energy (with the exception of commercial gas sales), autos, trucks, and housing activity of all kinds advanced from January levels and from February 1988. The continuation of vigorous activity in terms of new housing permits issued—with the index up 43.3% from February 1988—is particularly impressive.

Outlook

With respect to an outlook for the Michiana area, we are particularly interested in the course of the national economy overall. As goes the U.S. as a whole, so goes St. Joseph and Elkhart counties. As has been noted throughout this issue of the *IBR*, forecasters continue to predict a softening of the national economy during the final three quarter of the year. If that view turns out to be accurate, we can expect to see a parallel slowing locally—especially in manufacturing—with employment growing in South Bend/Mishawaka by 1-2% and in Elkhart/Goshen by 3-4%.

Muncie

Robert Jost

Professor of Economics, Ball State University

The growth of real GNP for the U.S. economy has slowed significantly from the heady 5% rate of 1987 to a more modest 2.8% in 1988. The reported 5.5% real rate of growth for first quarter 1989 has now been revised downward to 4.3% and does not reflect a reversal of this slowing, for roughly half of the gain is derived from a one-time rebound in farm output following the drought. Given these facts, real growth during the second quarter is likely to be under 2%. While there is still some ambiguity in the nation's economic indicators, there are sound reasons for expecting slower growth into 1990. Foremost among these reasons are the erosion of consumer purchasing power as a consequence of the sharp rise in inflation, slower home sales reflecting high interest rates, and continued decline of net exports. Whether or not the economy slips into a recession in late 1989 or 1990 may well be determined by how well the Federal Reserve policy responds to conditions that unfold during the balance of 1989.

Although evidence of an economic slowdown for the nation continues to grow, there is little evidence of an economic slowdown in Indiana or Muncie at this point in time. If we look at manufacturing employment in Indiana *less Indianapolis* (where it continues to slowly decline), we can see that it has constituted a major source of Indiana growth since the end of 1986. However, this resurgence of manufacturing growth since 1986 has left Muncie untouched where manufacturing employment has remained flat. On the other hand, in Anderson, where there is much heavier reliance on motor vehicle parts production, manufacturing employment has declined 8%. Thus, Indiana appears to be experiencing substantial change in the composition and geographical distribution of its manufacturing industries. In nonmanufacturing employment, Muncie enjoyed a 12% increase since 1985 and Anderson experienced a 10% gain—both consistent with the state and national trend toward growth of the service sector. Muncie and Anderson had equal establishment employment totals of 47,000 at the beginning of 1985, but by April of 1989, Muncie's establishment employment exceeded Anderson's by 3,500 workers. Muncie's greater economic diversity and the presence of Ball State University probably account for much of this relative gain.

Unemployment figures for Muncie registered a new post '81-'82 recession low of 4.2% in April, but this figure reflects new methods of computation in Washington that warrant much more than the usual degree of skepticism with which one treats unemployment data. Certainly any euphoria generated by this low unemployment number should be tempered by realization that the Muncie MSA has lost more than 6% of its population since 1980, and at least one advance indicator of population change suggests that the population drain has not fully subsided.

Again, evidence of a slowing Indiana economy is hard to come by, but the fact that the average hours worked in manufacturing has declined more than one full hour from the previous year's levels could be a harbinger of slower growth ahead. Paradoxically, this indicator shot sharply upward in Muncie, but this reflects less an exuberant economy than specific skills shortages in booming basic material-producing industries.

Much of the building of multiple family units the past few years has been large apartment complexes marketed to Ball State University students.

There were 24% fewer new dwelling units completed in 1988 than in 1987. Deed recording for the first quarter of 1989 exceeded those for the comparable quarter in 1988, but currently there appears to be a softening in the housing market as higher interest rates make housing less affordable. Much of the building of multiple family units the past few years has been large apartment complexes marketed to Ball State University students. These large apartment complexes have skyrocketed population densities in older, established neighborhoods contiguous to the University, severely taxing the limited infrastructure of the area and exacerbating tensions between students and families domiciled in the area.

Richmond-Connersville-New Castle

Ashton I. Veramallay

Director, Center for Economic Education, Indiana University East

The Richmond-Connersville-New Castle (RCNC) area can expect continued economic growth at a slow pace for the rest of 1989. This means that as the national economy slows down, the effects will be felt at the local level. Some of the reporting firms in my survey are already experiencing, in varying degrees, the effects of current economic conditions.

Manufacturing employment will decline as the transition continues toward a service/information economy. Firms associated with the transportation industry will experience the side effects of a decline in automobile sales. It is important to note that RCNC is ultrasensitive to changes in the transportation sector, because most of its manufacturing activity is connected with this sector. Higher interest rates will dampen not only consumer demand but also affect business investment in plant and equipment.

A too-restrictive monetary policy by the Fed is likely to precipitate a recession. Prudent action is therefore necessary to sustain the current expansion without igniting inflation. Recent increases in energy and food prices will edge the consumer price index upwards. Producer prices for crude and intermediate goods, along with employment costs, have also been rising. The indications are for continued acceleration of inflation. Inevitably, consumers will see a slight price increase for a typical basket of goods and services, but the increase will be tolerable barring other shocks to the national economy.

On the bright side, the retail sector is expected to follow normal seasonal patterns. Employment creation will be positive, as the demand for goods and services of various kinds increases. Employment opportunities in fast food establishments, grocery stores, health care, education, insurance, and finance are growing as entrepreneurs start up small businesses. Both producer and consumer confidence is relatively stable, and this augurs well for the next two quarters in 1989.

With respect to tourism as an integral part of the service sector, the "Come On IN" slogan is unlikely to effectively promote Indiana. This slogan, like the other two, "Wander Indiana" and "Back Home Again," portrays a "prodigal son's image" of our state, which is in need of a positive sense of direction. The state is at the crossroads of self-realization, and so is RCNC. Massive infusion of external investment is not possible in the foreseeable future, given the fierce competition for such investment. Consequently, RCNC has to aggressively exploit the growth potential from its internal base.

In particular, the development of human capital creates growth and helps reduce the dependency ratio and transfer payments. It also promotes self-reliance and civic pride. Master plans that do not set realistic goals and prepare the citizenry for an increasingly technological and interdependent society eventually end up as futile exercises. Thus, RCNC has to adapt to the structural changes taking place. Otherwise, the consequences will be detrimental to its long-run economic health.

Overall, the prognosis is for slow but continuing economic growth in the short run. There is no recession in the offing, but an inflation watch is advisable.

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