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The National Outlook

The Indiana Outlook

in memoriam...

George W. Starr served as Director of the Bureau of Business Research in the Indiana University School of Business longer than anyone else. From 1927 to 1954 Starr, who came to I.U. from Ohio State University, molded the programs of the Bureau and helped establish the tradition that made it one of the most respected organized research units in the nation.

Active in the University and in the state, George Starr wrote a biweekly column for the *Indianapolis Star*, served on boards and committees where his advice was valued, consulted and aided Indiana governors of both parties, and taught in the School's growing transportation program. After he left the Bureau in 1954, he continued on the faculty until his retirement in 1962.

A few weeks ago, at the age of 95, George Starr died. His friends and those who have inherited his legacy extend their sympathies to his widow, Cecile, and family.

George W. Starr

The Outlook At Midyear

Bruce L. Jaffee

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

Last December we forecast that the national economy in 1988 would narrowly avoid a recession. Specifically, we predicted that real GNP for the year would increase by 1.9%. The economy turned in a surprisingly strong performance in early 1988, however, and we have revised our forecast of real GNP upward to 2.5%.

The economy seems to have shaken off the fears and uncertainty resulting from last October's stock-market crash. Although the crash's ramifications are still affecting financial markets, consumer spending and overall business investment continue to grow as if it had never occurred. At the end of 1987 our concerns were that consumer spending and business investment would turn cautious. But consumers continue to increase spending in real terms on durable goods, and business investment--especially for computerization, telecommunications equipment, and general modernization--is continuing apace. Automobile sales are especially strong. As the year began, inventory levels of automobiles were very high. However, increases in personal income, high levels of consumer confidence, and major and widespread rebate programs by domestic producers have led to sharp increases in automobile sales and resulting reductions in inventory levels.

Our trade situation continues to improve--as we forecast. The driving force behind this improvement is the export sector.

Our trade situation continues to improve--as we forecast. The driving force behind this improvement is the export sector: Americans continue to buy large amounts of foreign goods, in spite of continuing declines in the value of the dollar. Government monetary policy turned expansionist following the crash, but recently has become more conservative as the Federal Reserve Board has shown a concern about inflation. The unemployment rate is at its lowest level in this decade (5.4% in April). The labor force participation rate has been at or near record high levels since the fourth quarter of 1987. Even farm incomes have shown some improvement in the last six months, after being in the doldrums for the last few years. The drought is likely to reverse that trend, however.

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There are several points of concern, however, in this midyear look at the 1988 economy. Capacity utilization in the manufacturing sector is quite high and suggests that inflationary pressures may build. With relatively low spending on plant expansions, many domestic manufacturers have few resources to effect significant output increases in the next few years. As mentioned above, improvements in our trade balance have come primarily from increases in the demand for our exports. Protectionist efforts or weaknesses in demand for our products by our trading partners would be cause for great concern. Although we expect only modest increases in interest rates and inflation during the remainder of 1988, the trends are certainly opposite of what we have seen in the last few years, and may lead to deteriorations in consumer and business confidence. On balance, however, we believe that 1988 will proceed as we forecasted last December: a year of very modest but positive growth.

Consumption Spending

J. Fred Bateman

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

The other shoe has not yet dropped. If our original forecast holds true, it probably never will. Last fall's stock-market crash was widely anticipated to alter consumer expectations, rendering buyers more pessimistic and thereby reducing their spending. The domestic domino theory held that knocking the consumer prop out from under the lengthy economic expansion would eventually bring on a recession. After all, the gloomy forecasters proclaimed, the nation--in both the private and public sectors--had been on an extended spending spree that had propelled the U.S. economy during the Reagan years. Many, in fact, noted the irony of this president's almost Keynesian encouragement of deficits and spending. With the private consumer pulling out of the game in a post-crash daze, they argued, the game would be over.

Many, in fact, noted the irony of this president's almost Keynesian encouragement of deficits and spending.

In our evaluation last fall, we could not foresee this turn of events. We thought that consumer spending would fall substantially below its growth rate in the recent past, but we did not envision its turning negative. Consumer spending would slip from its role as the primary economic engine for growth in 1988, we believed, yet it would still provide a positive contribution to the economy's continued expansion. We concluded that consumer durables would be the most weakly performing consumption component--but not because of psychologically-induced events emanating from the stock market. Given the massive purchasing of durables during the past several years and the possibility of sharply rising prices for products manufactured overseas, we simply foresaw a reduced appetite for automobiles and other durables. On the other hand, we expected consumption of nondurables and services to remain relatively robust. Services, whose spending trend has been upward for years, was anticipated to be the strongest of the consumption components this year. In light of these offsetting forces, we believed that consumer spending would not become a negative economic force. We asserted that "consumption's role in propelling national growth will be diminished substantially during the coming year," but that it would not induce a recession. The other shoe would not drop in 1988.

Partly as a consequence of reduced savings, consumption spending remained strong early in 1988.

At midyear we see no reason to alter that conclusion. During the fourth quarter of 1987 total durable goods expenditures did drop, primarily because of a slowdown in spending related to motor vehicle purchases, but both nondurables and services spending actually increased. Partly as a consequence of reduced savings, consumption spending remained strong early in 1988. As a result, our confidence in the original consumption forecast for this year is still high. There is a growing belief among economists that things may not be so rosy during 1989, but that the worsening will not have been caused by the October crash.

The real historical lesson seems to be that our institutions differ substantially today from 1929, largely as a result of experience gained in the Great Depression.

Why did many expect a severe drop in consumption as a consequence of the stock market's behavior? Some apparently possessed a vague feeling that "something has to happen" after such a traumatic financial convulsion. The real economy, they hypothesized, simply had to be affected adversely. Others relied on a more factual foundation. Using historical analogy, they saw disturbing parallels between 1929 and 1987. The real historical lesson, however, seems to be that our institutions differ substantially today from then, largely as a result of experience gained in the Great Depression. The Crash of 1987 was the strongest test yet of these new institutions and of our new economic knowledge. Thus far, they and we have performed well. While we cannot foretell events over a longer term, we can at least proclaim that the financial tumult in 1987 has not destroyed the consumption underpinning of the current economic expansion.

Investment Spending

R. Jeffery Green

Professor of Economics, Indiana University

Our 1988 outlook for business spending on plant and equipment called for modest growth. The strongest components were expected to be business spending on computers and telecommunication equipment, whereas spending on both residential and nonresidential construction and inventory investment were forecast to lack luster. So far in 1988, with the exception of inventory investment, the directions of the trends have been as expected; the magnitudes of some of the changes have been remarkable.

It is likely that there are still opportunities for expanding the role of computers in many businesses.

In the last six months nonresidential investment spending in constant dollars has grown at an annual rate of 14.6%--far greater than the 3.3% growth experienced in 1987. Much of this growth has been concentrated in spending on computers and information processing equipment, which has risen at an annual rate of 20.4% (in constant dollars) over the last six months. That rate is clearly not sustainable, but it is likely that there are still opportunities for expanding the role of computers in many businesses. Spending on industrial machinery has been fairly flat for some time, but it may experience some pickup as export markets improve and capacity becomes increasingly tight.

Investment in nonresidential structures has been in a slump for several years as a result of overbuilding and the problems in the petroleum industry (where rigs are counted as structures). Tax reform also lessened the tax advantages of some construction projects. Nonresidential investment in structures, in constant dollars, fell at an annual rate of more than 5% in the first quarter of 1988. The level at the end of the quarter was more than 15% below the peak reached in the second quarter of 1985. We may be near a turnaround in investment in structures, with oil prices stabilizing, but our forecast is that such a turn will not occur until 1989. Some small additional declines are expected for the rest of 1988.

The outlook for residential investment is not particularly bright. We expect housing starts to decline in coming months as mortgage rates move higher.

The outlook for residential investment is not particularly bright. For several months, housing starts have hovered at an annual rate in the neighborhood of 1.5 million, below the level reached in 1987. Recently, interest rates have begun to move up. We expect housing starts to decline in coming months as mortgage rates move higher.

Inventory investment was very strong in 1987, and last year ended with considerable excess automobile inventories. As a result, we expected inventory investment to be much lower in 1988 than in 1987. The results for the first quarter of 1988 show a substantial reduction in nonfarm inventories, as expected, but in addition show a large, unexpected increase in farm inventories. This increase is the result of farmers' paying off government Commodity Credit Corporation loans and taking control of the inventories. When such loans are made they are counted as government purchases, and if they are paid off, they are counted as negative government purchases and increases in farm inventories. Commodity prices in the first quarter were high relative to support prices, so farmers paid off their loans with the anticipation of selling the crops. This is a temporary phenomenon, however, and inventory investment should be lower in coming quarters than it was in the first quarter.

The overall investment outlook is mixed. Spending on business equipment will remain strong but will be partly offset by declines in spending on residential and nonresidential structures and in inventory accumulation. We now expect total investment spending to rise almost 12% above the level of 1987, providing one of the major sources of economic growth for 1988.

Government Fiscal and Monetary Policy and Inflation

George W. Wilson

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

The surprising strength of the economy, shown by the first quarter's GNP growth, is welcome news indeed. The huge inventory buildup in the last quarter of 1987, and the wide belief in the negative and permanent impact of the October market crash upon consumer spending amid overall uncertainty and caution, led to expectations of a sluggish first half, and certainly a sluggish first quarter, of 1988. The reported 3.6% real GNP growth is just slow enough to allay fears of gathering inflation (it is below the 3.8%, 5.4%, and 4.4% growth rates for the first quarters of 1985, 1986, and 1987) and strong enough to reinforce the views that the economy is still on a bit of a roll. Certainly it portends no recession during 1988. Infact it strongly attests to the resiliency of the economy, which continues to grow despite the above-noted contractionary forces and even with very large actual reductions in residential construction and federal government spending during the quarter. The real market economy continues to outperform its vacillatory, wimpish financial counterpart.

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What this all means is that fiscal policy *can* stay on the track outlined here last December toward a fiscal year nominal deficit of less than $130 billion. This was based upon a growth in nominal GNP of at least 7% that should translate into a roughly equivalent increase in federal government revenues. If outlays can be held to about a 4% increase, then a budget deficit of $126 billion is achievable. It should be noted that this figure is well below the GRH target for 1988 ($144 billion) and even further below the OMB and CBO estimates of $147 billion and $157 billion. Yet the assumed growth rates of 7% and 4% seem more likely now, since federal spending fell sharply during the first quarter and nominal GNP has averaged more than a 7% increase over the last two quarters. In addition, defense spending will grow more slowly, in both nominal and real terms, from now through the early 1990s. With a little luck and some conscious efforts toward slowing entitlement outlays (especially unemployment compensation and farm price supports), it should be possible to contain outlay increases to the 3-5% range. If so, by fiscal 1993 the federal budget will be in balance. This is not necessarily good news, but it will make a lot of people happy. I give one cheer for fiscal "policy."

Monetary Policy and Inflation

With the threat of an imminent recession fading, with few signs yet of serious inflationary prospects, and evidence in real terms that the trade deficit is improving, the Fed need do little more than watch events carefully over the next several months. The Fed's goal (announced Feb. 23-24) of targeting M_2 and M_3 growth rates at between 4-8% to "support economic growth at a pace that is consistent with continued external adjustment and progress over time toward price stability" seems reasonable enough.

Thus, while all is not right in the economic world, 1988 is starting out better than most of us thought. For that I grudgingly concede two cheers.

The International Economy

Michele Fratianni

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

In the December 1987 issue of the *IBR*, we wrote that the sizeable increase in U.S. net exports was caused to a large extent by the depreciation of the dollar. We also questioned whether the exchange rate by itself could turn around the U.S. current account. To quote: "There are many economists who argue that, given the slow progress of international cooperation, the dollar ought to be allowed to seek its natural value--the value that would restore equilibrium in the current account. The difficulty with this . . . is that expected depreciations of the dollar would trigger sales of foreign-owned U.S. government securities, an action that would force interest rates to rise in the United States. Another difficulty with additional dollar devaluations is that the inflation rate would be adversely affected. The Federal Reserve Board would have to tighten monetary policy to offset the price-level consequences of the depreciation."

The strength of the U.S. economy, coupled with a large Federal budget deficit, makes additional dollar devaluations virtually inevitable.

Six months later, the analysis remains valid. The U.S. economy has remained surprisingly strong. The unemployment rate is approximately 5.5%, a full percentage point below the level of a year ago. Economic activity is putting upward pressure on interest rates. Despite a relatively stable pattern of prices, there is a growing consensus that the direction of the inflation rate is changing. According to a recent survey, purchasing managers are reporting higher prices, more shortages, and increasing backlogs.

The strength of the U.S. economy, coupled with a large Federal budget deficit, makes additional dollar devaluations virtually inevitable. The U.S. dollar has lost ground relative to major currencies, in particular the Deutsche mark and the Japanese yen, since the end of the year. Official interventions in the exchange market will slow the dollar decline but cannot stop it. An average dollar depreciation of 5-10% from present values is probable.

New trade legislation would raise the uncertainty of the forecast. It is not clear that any proposed bill, should the President sign it, would reduce the trade deficit. Foreign investors may actually place more funds in the United States to avoid the costs of the added protection. The higher inflow of capital would tend to appreciate the dollar and make the trade deficit larger.

It is not clear that any proposed bill, should the President sign it, would reduce the trade deficit.

Our expectations are that the President will veto any highly protectionist legislation, as he did earlier this year, and that Congress will not have enough votes to override the veto. On this assumption, we forecast net exports in constant dollars at $-130 billion for the year.

Interest Rates and Financial Markets

Donald L.Tuttle

Professor of Finance, Indiana University School of Business

There is a consensus developing that the U.S. stock-market plunge in October had only a moderating effect on the economy and economic growth. The wealth loss and uncertainty generation that the crash created only served to offset the economic positives that were beginning to become excessive last fall. The temporary respite afforded by the set of offsetting forces has run its course, however, and the economy is essentially back where it was in early October.

In mid-May we saw low unemployment, moderately high capacity utilization, a continuing trade deficit largely caused by import penetration of the newly industrialized countries, continuing budget deficits, increasing wage rates, increasing restraint by the monetary authorities, and rising inflation. The result will likely not be a recession during the last half of 1988, but an economy that may approach 0% real growth by year's end and an inflation rate in the 5.5-6% range.

The downward movement of rates anticipated for the first quarter of 1988 has been retraced. We expect rates to move further upward.

Not unlike late 1987, the yield curve for U.S. government securities in mid-Spring 1988 ranged from about 6.2% (for short-term) to about 8.4% (for intermediate-term) to about 9.2% (for long-term). The downward movement of rates anticipated for the first quarter of 1988 has been retraced. We expect rates to move further upward, to about 6.5-7.5% for short-term, 8.5-9% for intermediate-term, and 9.5-10% for long-term Treasuries by the end of the year.

The upward trend in rates is likely to be gradual and somewhat erratic; economic growth is not expected to be strong, private credit demand is easing, and the Federal Reserve will likely attempt to maintain an even keel because of the election and problems in the banking system. Moreover, a second stock-market tumble could temporarily (or longer, depending on its magnitude and causes) reverse the expected gradual rise in rates.

The forecast for the stock market is for lackluster returns for much of the balance of 1988, primarily because market participants do not know how to price the perceived higher risk growing out of last October's crash. Favorable effects from corporate acquisition activity, an absence of new equity supply, no immediate recession worries, better-than-expected corporate earnings, improving monetary indicators, and a stabilizing dollar should not be enough to overcome uncertainty worries. Should interest rates move to the high end of the projected ranges and there be strong expectations of a recession in 1989, stock prices could become extremely vulnerable as the end of 1988 approaches. For this forecast to be more optimistic, two things must happen: the economy would have to exhibit a stable low-growth (approximately 1.5%) scenario including slower consumer spending, lower energy prices, substantially easier monetary policy and lower interest rates abroad, and a higher dollar exchange rate; and the stock market would have to experience significantly larger corporate acquisition activity.

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The result is a forecast, in return/risk terms, that is relatively favorable for money market instruments and high-grade, short-maturity (2-4 year) bonds, and relatively unfavorable for long-maturity bonds and common stocks. The recommended asset allocation for the typical balanced account remains 30% in cash equivalents, 30% in short-term, highest-quality bonds, and only 40% in equities.

Indiana: Doing Better, and Hoping for Better Still

Morton J. Marcus

Director, Indiana Business Research Center, Indiana University

The past year has been good for the Indiana economy. The rate of increase in employment in the state outpaced that of the nation, as seen in **Figure 1**. While the nation has enjoyed employment gains of 3%, Indiana's rate of growth topped 4%. In each major category of employment except government service, the Hoosier state has increased employment at a better-than-average rate.

These employment gains have been translated into superior income growth. Indiana's increase in personal income in the fourth quarter of 1987 (the last quarter for which we have data from the U.S. Bureau of Economic Analysis) was better than the nation's and greater than that of any other state in the region (see **Figure 2**). In fact, for the year from fourth quarter 1986 to fourth quarter 1987 Indiana also outperformed both the nation and other states in the region.

In four of the last five quarters, Indiana's personal income has risen faster than the nation's, a major improvement from the preceding seven years.

In four of the last five quarters, Indiana's personal income has risen faster than the nation's, a major improvement from the preceding seven years. During those 28 quarters, Indiana's rate topped the national growth rate only five times (see **Figure 3**). This sad record forced Indiana to trail the nation's progress both in the long recession of 1979-1982 *and* in the recovery period from 1983 to the present. In **Figure 4** and the **Table**, we can see that nominal personal income in the nation grew by nearly 40% in each phase of the business

Figure 1
Percent Change in Employment
1986 to 1987

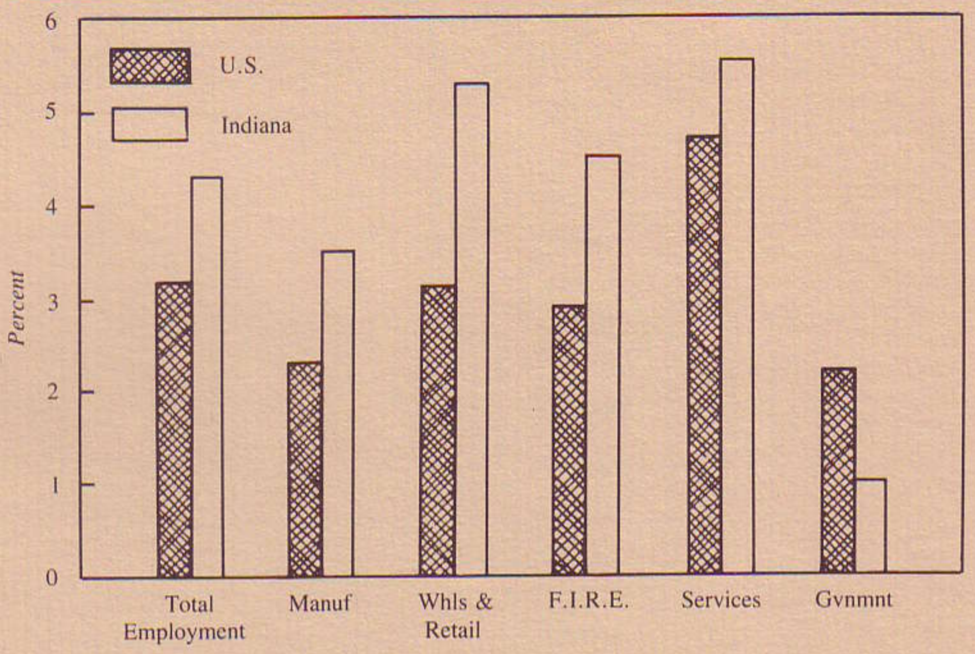


Figure 2
Growth Rates in Personal Income
One year and one quarter

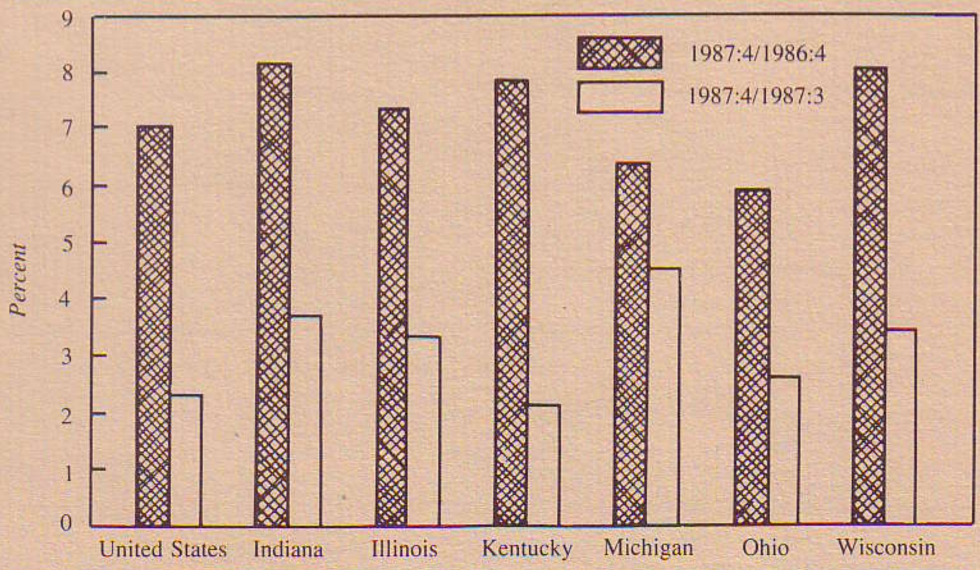


Figure 3
Indiana Personal Income Growth Compared with the U.S.
Differences in percent change

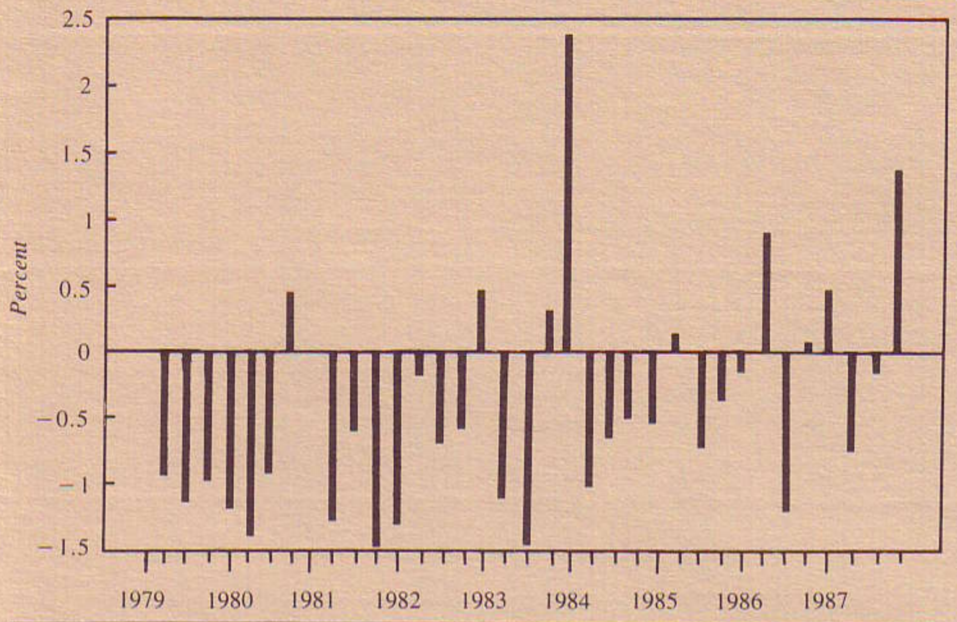
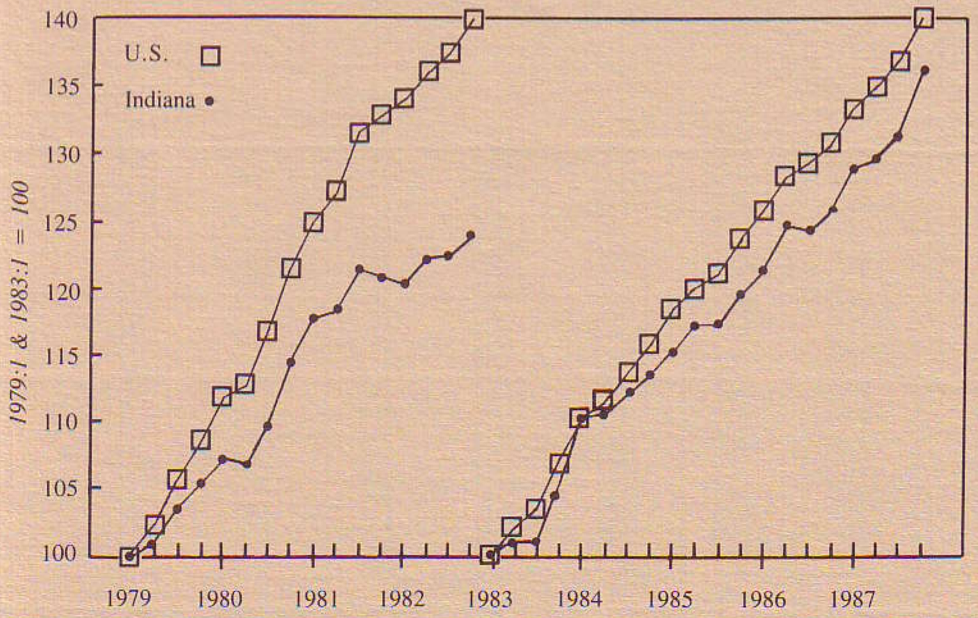


Figure 4
Growth Paths of Personal Income
Recession and Recovery



cycle. In the recession phase Indiana grew by less than 25%; in the recovery our advance has been more in line with the nation's--a 36% increase in nominal personal income.

The result of these differential growth rates was a decline of Indiana's share of the nation's personal income from 2.38% in 1979 to 2.11% in 1982. Since then, during the long expansion, our share has fallen to 2.04%--and it hit a new low of 2.03% during the third quarter of 1987.

Table
Nominal Growth Rates in Personal Income

	Recession 1979-1982	*Recovery 1983-1987*
United States	39.7	39.9
INDIANA	23.9	35.9
Illinois	29.7	34.3
Kentucky	33.2	32.4
Michigan	17.7	41.3
Ohio	27.1	34.0
Wisconsin	31.8	37.4

The Year Ahead

This year should see continued gains in the Indiana economy. Total employment should advance by nearly 80,000 jobs, with more than 80% of the gains made in nonmanufacturing businesses. Real personal income will also rise, led by gains in real wages and salaries.

These gains, however, will not be sufficient to stop the decline in the Hoosier state's share of U.S. personal income. Despite gains expected here, the nation's economy will expand even faster because many of the export sectors currently finding success in foreign markets, such as computer and communications equipment, are not heavily represented in Indiana.

The picture for the state is clouded by the uncertainties created by the drought conditions, which appear to have had a disproportionately adverse effect here. High farm commodity prices do not promise higher incomes, especially if the crop damage cuts severely into yields. Farm proprietors' income, nearly $1 billion a year, is no longer a major factor in the state's total personal income (approaching $80 billion), but total farm spending reaches into many sectors in many parts of Indiana. In addition, the high profile of farm distress tempers the outlook held in many businesses and county seats across the state.

Because the state is composed of different areas subject to widely diverse influences, we offer the following regional reports. It is our hope someday to have comprehensive coverage of the state. Each issue of this Outlook edition brings letters from readers who protest the exclusion of their counties as our writers focus on the major metropolitan areas. We are working toward the day when all areas will be included, and we beseech the patient indulgence of those currently neglected.

Indianapolis

Robert Kirk

Professor of Economics, Indiana University-Purdue University at Indianapolis. Data assistance provided by Ron Martin, Indiana Department of Employment and Training Services

Assuming that the Federal Reserve takes an accommodative position toward the national economy, the Indianapolis metropolitan economy should expand at a 3-4% employment growth rate. If the Federal Reserve shifts to a restrictive policy, then interest rate sectors, such as housing, would be negatively affected, and the rate of expansion could fall to the 2-3% range. The inventory of housing to be absorbed is at its highest level of the 1980s. For multifamily units the rate is above 10%. The single-family rate to be absorbed is increasing, but from a much lower level.

Looking further ahead, a reversal of some of the forces that prevailed during the early 1980s is possible. The dollar's appreciation led to a necessary corporate restructuring in manufacturing; consumers raised their standard of living by importing goods; employment growth, basically in the nonmanufacturing sector, also increased. These trends helped push Indianapolis (along with the Elkhart area) to the lead in population growth, in part by drawing Hoosiers from other areas of the state.

Since the dollar has now depreciated against many foreign currencies, inflationary forces may become stronger, manufacturing firms with export markets will experience gains in profits, and the rate of total employment growth may be slowed. It is easier to raise output via productivity growth in manufacturing than it is in the service industries. As demand for manufactured exports and capital goods increases, output can be increased via both productivity growth and employment increases. Steel and autos are good examples of industries that have raised labor productivity significantly during the 1980s.

Some of the gains in labor productivity in manufacturing arose from manufacturing firms contracting out services to specialized firms that had taken advantage of economies of scale and markets that had reached a threshold size. Thus, some of the decline in manufacturing employment was offset by increases in the service sector, particularly in business services. Business services tend to be located in urban areas; this sector has been a primary contributor to Indianapolis' employment growth.

While the manufacturing sector was under pressure to restructure under an appreciating dollar, firms in the service sector may come under increasing pressure to restructure under a depreciated dollar. It is possible that the service sector may not be as strong an engine of employment growth in the short term as it had been earlier in the 1980s. For Indianapolis this point is important, because the city's employment growth has come from nonmanufacturing--primarily business services, health services, construction, and retailing.

Construction

Major construction projects scheduled to begin during the second half of 1988 include the Circle Centre (downtown) Mall, the State Office Building complex, and the Eli Lilly & Co. Laboratory. Major ongoing projects will also contribute to construction employment.

A major question is whether the office buildings will be occupied. Expansion of local firms will not fill the existing space plus the new space being completed; efforts are being made to attract tenants from outside of Indianapolis. Analysis of Indianapolis employment change by occupation indicates that the growth of professional occupations, such as engineers, architects, physicians, dentists, lawyers, and public relations specialists, has been rapid. However, employment growth in the executive, managerial, and administrative occupations has been slower. These are the types of occupations associated with corporate headquarters. St. Louis, an area that has not done as well as Indianapolis in personal income, has experienced a much larger increase in employment in the executive, managerial, and administrative occupations. There are ten major national headquarters in St. Louis. Moreover, firms are increasingly evaluating the extent to which women have access to executive or professional jobs in metropolitan areas. St. Louis, Cincinnati, and Columbus have experienced larger employment increases in executive occupations for women than has Indianapolis.

As high-rise office buildings have been constructed (particularly downtown), a need for multi-story automobile parking structures has arisen. Responses to this need have been given. Developers have taken into account the vertical movement of people in office towers via elevators and the vertical movement of cars via garage ramps. However, at certain times of day people and cars exit these structures in large numbers. Since there is no price-rationing mechanism to allocate the scarce street space, the result can be (and usually is) traffic congestion. The cost to the automobile occupant is the opportunity cost of his or her time--which varies among persons. As commercial and residential areas have developed, farm-to-market roads have been converted to commuter highways. Neighborhood residents are becoming increasingly vocal about the evolving traffic patterns. One function of an urban area is to promote contact and communication. Citizens are beginning to express concern about the location and intensity of development, and pressure for infrastructure improvements continues to mount. A delicate balance must be struck between the benefits and costs of development.

Comparative Metropolitan Performance

Recent U.S. Department of Commerce estimates of personal income by metropolitan area are presented in the **Table**. It indicates that Indianapolis has done well within its region. In fact, even high-growth San Jose has not done much better in terms of rates of change. San Jose is a metropolitan area in which high land costs have forced land-using production facilities to relocate outside the area while leaving research and product development within the city. Indianapolis does not have that problem, but strong commercial and residential construction growth has reduced the supply of prime, highly accessible sites. The Table also illustrates the variation in the way urban areas are affected by national economic change, as well as the way they respond given different mixes of industries and competitive positions.

It must be remembered that the national economy remains the driving force behind the Indianapolis economy; we are not self-sufficient.

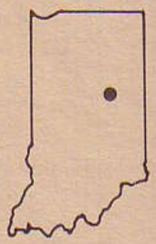
As Indianapolis evolves as a state, regional, and national center, it takes on new types of activities that provide new visibility and vitality. However, it must be remembered that the national economy remains the driving force behind the Indianapolis economy; we are not self-sufficient.

Table 1
Per Capita Personal Income Change, 1984-86, for Selected Metropolitan Areas by Rank

Metropolitan area	*Per Capita Personal Income (by rank)*		*Total Personal Income (percent change)*	*Population (percent change)*
	1984	1986	1984-86	
INDIANAPOLIS	94	83	14.4	1.5
Chicago	38	37	12.0	0.5
Cincinnati	103	86	13.6	0.7
Columbus, Ohio	122	101	14.6	1.9
Detroit	49	40	16.2	0.3
St. Louis	52	54	12.8	1.4
Boston	20	15	17.2	0.1
Dallas	19	28	15.5	7.8
San Jose	6	5	15.6	1.7

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Muncie



Robert Jost

Professor of Economics, Ball State University

Muncie recently celebrated the grand opening of the downtown Horizon Convention Center. Architecturally attractive in its own right, the present Horizon Center was transformed from a formerly vacated post office building located in the heart of the city. Across the street from the Horizon Center, the Radisson Hotel (formerly the old Roberts Hotel), after several false starts and a recent flirtation with bankruptcy, is finally completing its long-planned expansion that will enable it to adequately complement the Horizon Convention Center.

Two years ago, when these proposals were being made (see the *IBR*, July 1986), this observer indicated that the ventures were relatively risky, but that a successful entrepreneurial city must be willing to take the risks associated with innovation and share power with the private sector to facilitate economic development of the decaying downtown area. These developments do represent a monument to what business, government, and labor--in short, the community--can accomplish by working together. In the judgment of this writer, even assuming good management they still remain risky ventures, and only time will provide the final answer as to their viability. Without these attempts, however, Muncie would end up a suburban sprawl around a decaying city center.

The metamorphosis of the downtown silhouette is quite impressive. The Minnetrista Cultural Center, financed by the Ball Brothers Foundation, is located on a bluff overlooking the White River near the northern end of the downtown area.

This magnificent structure is now nearing completion. Also nearing completion is the attractive downtown office building that will house the business offices of the Ball Brothers Foundation and the George and Frank Ball Foundation.

The construction of a new jail and justice center now has a green light, and plans for a new city hall, a professional office building, and riverfront development are in the making.

Demographic Trends and Projections

Between 1980 and 1985, the Muncie MSA experienced a net out-migration that more than doubled its low natural rate of increase, resulting in a 4.4% decrease in population. A substantial portion of this decrease was in the relatively high-earning 35-44 and 45-54 age groups. Anderson suffered a comparable out-migration during the same period and a consequent 3.9% population decline; the state of Indiana managed to achieve a meager .25% increase during this period.

Based on some rather primitive advance indicators of population change, this analyst reported in 1985 that the gap between the net out-migration and the natural rate of increase appeared to be closing. However, these indicators turned negative again in 1987, and recent population data suggests that some exodus continues--although it is below the rate of decrease in the 1980-85 period. Recent data provided by the Indiana Business Research Center and the Indiana State Board of Health project a 1.6% loss of population for the Muncie MSA between 1985 and 1990. Figures for Anderson for the same period project a 1.3% decrease. As 1990 is relatively close at hand, one would expect these projections to be close to the actual mark. The Anderson population total in 1990 would thus exceed Muncie's by 11,000. On the other hand, the far more risky long-range projection to 2020 has the Muncie population surpassing that of Anderson. Muncie's population is projected to decline by 1.6% between 1980 and 2020, whereas Anderson is projected to experience a 10.7% population decline. While one must treat such projections with great caution, the direction of the changes--if not the actual magnitudes--dovetail with the concern expressed by this analyst that Anderson will be unable to find comparable replacement jobs for the high-paying manufacturing jobs being lost at its General Motors plants.

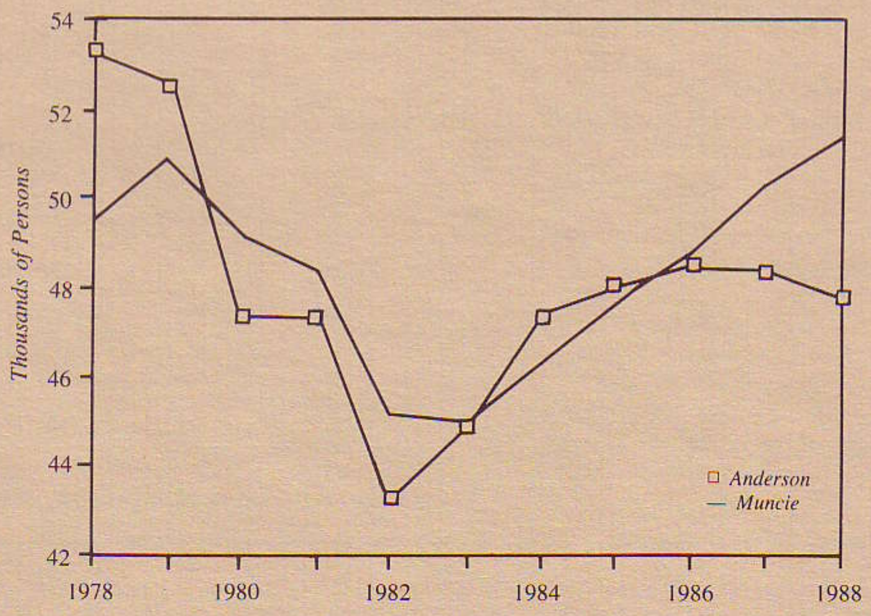
Employment and Income

Using the more reliable establishment employment data, **Figure 1** indicates that employment in Muncie peaked in 1979 and troughed in 1982. Projecting for 1988 from first quarter data, total employment will probably exceed the 1979 peak this year. Anderson employment remains substantially below its 1978 peak, and current data provides little evidence of improvement. On the other hand, **Figure 2** makes it obvious that for the state of Indiana as a whole, establishment employment already substantially exceeds its 1979 peak.

As the **Table** indicates, personal income gains for Muncie and Anderson MSAs were substantially below those of the state. There is much more variation between percentage changes in the payroll and personal income figures than one might be inclined to expect. In the December 1987 *IBR*, this analyst used the then-available payroll data as a proxy for the 1985 and 1986 personal income data. Using actual personal income data significantly alters the findings of the above cited article.

Deflating the above personal income figures into constant dollars and calculating the annualized real rates of growth for 1979-86 results in a limp .9% growth per year for both Muncie and Anderson. The state of Indiana, on the other hand,

Figure 1
Anderson and Muncie MSAs
Establishment Employment



Source: Indiana Department of Employment; 1988 figures are first quarter averages.

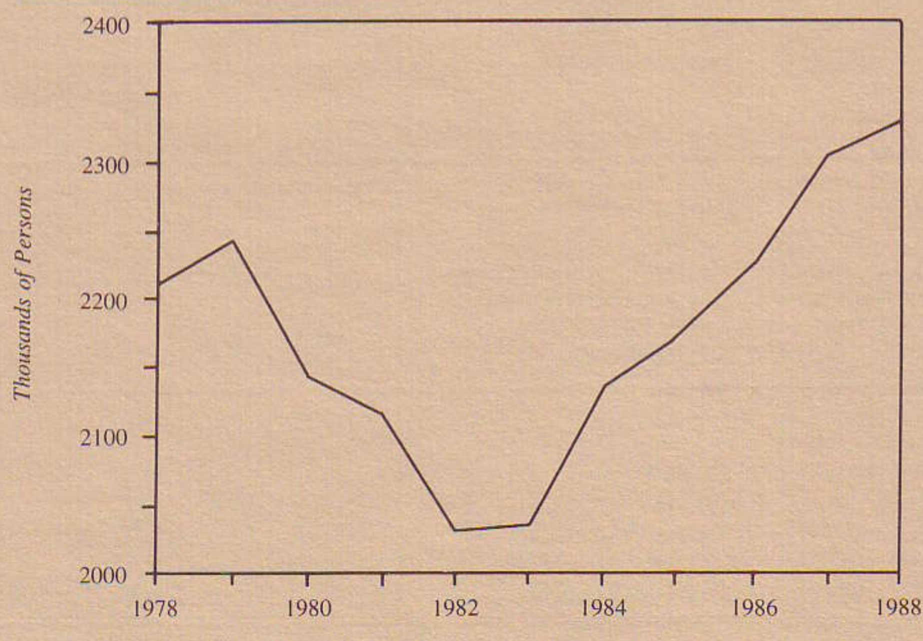
Table
Indiana, Delaware, and Madison County
Personal Income and Payroll (in $000,000s)

Year	*Indiana Payroll*	*Growth*	*Personal Income*	*Growth*	*Delaware Payroll*	*Growth*	*Personal Income*	*Growth*	*Madison Payroll*	*Growth*	*Personal Income*	*Growth*
1974	15910.6		27776.0		384.6		612.7		492.8		725.8	
1975	16211.6	1.9%	29815.7	7.3%	371.9	−3.3%	645.6	5.4%	486.9	−1.2%	772.0	6.4%
1976	18229.5	12.4%	33205.7	11.4%	410.3	10.3%	702.5	8.8%	568.1	16.7%	868.3	12.5%
1977	20562.9	12.8%	37074.9	11.7%	461.7	12.5%	798.8	13.7%	633.5	11.5%	963.2	10.9%
1978	25382.8	23.4%	41294.4	11.4%	541.6	17.3%	876.8	9.8%	730.2	15.3%	1034.9	7.4%
1979	28078.2	10.6%	45732.5	10.7%	601.0	11.0%	966.0	10.2%	766.5	5.0%	1121.0	8.3%
1980	28845.1	2.7%	49234.6	7.7%	622.3	3.5%	1058.5	9.6%	720.2	−6.0%	1188.9	6.1%
1981	31185.4	8.1%	54111.0	9.9%	658.7	5.8%	1142.0	7.9%	785.1	9.0%	1290.9	8.6%
1982	31072.6	−0.4%	56488.0	4.4%	633.6	−3.8%	1130.0	−1.1%	736.5	−6.2%	1261.0	−2.3%
1983	32445.5	4.4%	58925.0	4.3%	675.3	6.6%	1189.0	5.2%	814.5	10.6%	1344.0	6.6%
1984	35573.8	9.6%	65104.5	10.3%	735.3	8.9%	1360.9	14.5%	947.0	16.3%	1594.4	18.6%
1985	37699.7	6.0%	68391.2	5.2%	767.6	4.4%	1415.9	4.0%	1008.2	6.5%	1671.7	4.9%
1986	39789.5	5.5%	72282.7	5.7%	815.0	6.2%	1495.2	5.6%	1029.6	2.1%	1732.0	3.6%
1987	41696.4	4.8%	76275.0	5.5%	841.7	3.3%			1001.9	−2.7%		

grew at an annualized 1.26% real rate, roughly half the national growth rate.

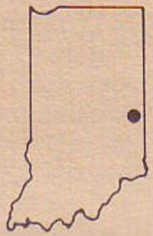
What does this demographic, employment, and personal income data tell us? First, it makes it clear that employment numbers do not constitute an adequate proxy for economic growth. Muncie lost roughly 5% of its population between 1979 and 1986, yet its employment figures are about to exceed their 1979 peak. But real personal income has experienced a minuscule rate of growth. Clearly the two-breadwinner families must have grown at a prodigious rate, and possibly the number of individuals holding two job as well. However, the new service jobs are not paying nearly as well as the old manufacturing ones. Between 1979 and 1986, Muncie and Anderson's manufacturing employment decreased 28% and 24% respectively--more than double the decline experienced by the state. There apparently has been a relative real decline in the well-being of a large segment of the Muncie and Anderson labor forces.

Figure 2
Indiana Establishment Employment



Source: Indiana Department of Employment; 1988 figure is average of first quarter.

Richmond-Connersville-New Castle



Ashton Veramallay

Director, Center for Economic Education, Indiana University East

The Richmond-Connersville-New Castle (RCNC) area economy will continue its slow-to-moderate growth rate in the remaining quarters of 1988. The expected shock waves of last October's stock-market crash have not materialized. As the national economic expansion rolls on, RCNC will follow in its path.

Nationally and locally, consumer confidence is on the rise. Consumers are not curtailing spending on big-ticket items such as automobiles, homes, appliances, entertainment sets, and furniture. Their reentry into the market augurs well for the retail sector, which employs a significant proportion of the local labor force. Further, real personal income gains and tax refunds, along with a "no-recession" syndrome, will enhance consumer spending. As Hoosiers pursue the "Wander Indiana" and "Back Home Again" slogans, their spending will help the retail sector, especially catering and recreational outlets.

Consumers' reentry into the market augurs well for the retail sector, which employs a significant proportion of the local labor force.

Producer confidence is also rising. Investment in plant and equipment may not be as strong as it was in the early phases of the current recovery, but it will still add to stability in the manufacturing sector--the economic backbone of RCNC. Most local activity in this sector generates basic components for the transportation industry. If this industry experiences a slowdown, adverse effects on regional employment, income, and output will inevitably follow.

Despite the relative back-to-normal patterns in the consuming and producing sectors, poverty has increased in RCNC. About 38% of the families earn less than $15,000 per year; only 2% make $50,000 or more. Most of the families earn between $15,000 and $35,000 a year. Given the high dependency ratio, these poverty statistics must be reversed if the area is to avoid the long-term consequences of transfer payments. Moreover, about 40% of the region's population 25 years and older do not have a high school education, which will undoubtedly frustrate economic development. In the short run, however, this phenomenon will not have any perceptible effect on the midyear economic outlook.

Columbus

Patrick M. Rooney

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Fourth quarter data (IV Q) revealed a slight deterioration in local economic conditions from the third quarter (III Q), but 1987 represented an improvement over 1986 in most areas (see the **Table**). The number of persons employed locally has remained fairly stable, growing only 1% from 1986 and 3% from III Q. While both the number of persons unemployed and the unemployment rate increased somewhat from III Q to IV Q, they both fell by one-fourth from year-end 1986. Additionally, the just-released unemployment rate for March was 4.8%, down

Table
Columbus-Area Data

	1987 IV Qtr.	*1987 III QTR.*	*% Change*	*1986 IV Qtr.*	*IV Qtr. 1987-1986*
Employment Data:					
No. of Persons Employed	30,167	29,233	3%	29,833	1%
No. of Persons Unemployed	1,567	1,433	9%	2,100	−25%
Unemployment Rate	4.9	4.7	4%	6.6	−26%
Continued Unemployment Ins. Claims	1,348	1,287	5%	2,521	−47%
New Unemployment Ins. Claims	366	246	49%	496	−26%
Utilities:					
Industrial Electricity Sales (million Kilowatt hours)	21,973	25,404	−14%	19,112	15%
Housing Construction Data:					
Estimated Value of Permits Issued (000's)	973	2,469	−61%	1,464	−34%
No. of Permits Issued	12	55	−78%	40	−70%
Avg. Value per Permit (000's)	81.1	44.9	81%	36.6	122%
Residential Real Estate Data:					
No. of Active Listings	444	520	−15%	699	−36%
Average Days Listed (solds)	130	136	−4%	127	2%
Average Market Price	63,762	62,921	0%	58,566	7%
Sales Data:					
Retail Cars—New	417	602	−31%		
Retail Cars—Used	2,042	2,817	−28%		

from 6.5% a year ago. Unemployment insurance claims--both new and continuing--exhibited similar trends. More worrisome is that both measures of unemployment insurance claims continued to increase in first quarter 1988 (I Q). However, these figures are still well below IV Q 1987.

The local economy largely depends on manufacturing jobs, which tend to be pro-cyclical. That is, when the national economy is doing well, Columbus does even better; as the national economy suffers a slowdown, Columbus is hurt even worse. As can be seen in the **Figure**, during the recession local unemployment rates far exceeded the national and state rates. As the national economy has recovered, however, the local economy has prospered, with unemployment rates falling below both the national and state rates during the past year.

Although housing construction was down in IV Q, 1987 represented the peak of housing construction since 1979. Along with the increased supply of new homes, however, Bartholomew County residents have been confronted with a 22% increase in the average price of new homes in the past year and a 61% increase since 1980. This increase can be linked to interest rates and consumers' willingness to buy bigger, more expensive homes. Although the overall supply of residential real estate was down 36% from IV Q 1986 to IV Q 1987, the 7% increase in average market price of listings sold indicates that local housing demand remains strong.

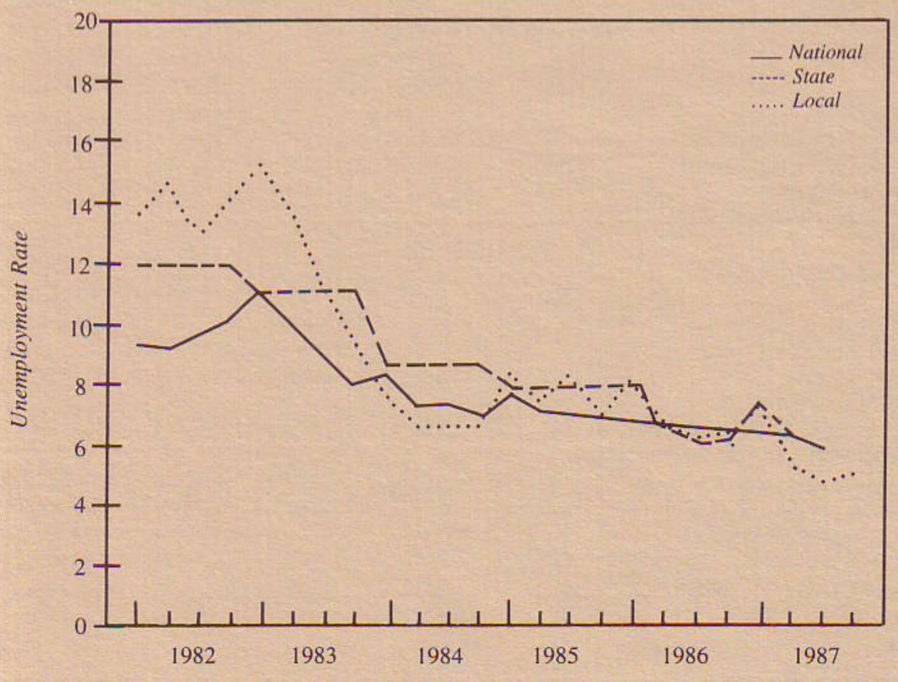
Both the estimated value of and number of permits issued for new-home construction are down significantly from both III Q 1987 and IV Q 1986. The decline from III Q 1987 largely reflects seasonal variations, as the III Q was up substantially from both the II Q 1987 and III Q 1986. The decline from IV Q 1986 to IV Q 1987 can be attributed to the fact that the IV Q 1986 fell fairly early in the local residential boom. Although demand is still strong, the IV Q 1987 results probably reflect a slowing of the frenetic pace established earlier in the recovery.

As long as the Federal Reserve Board continues to walk the tightrope between inflation and recession, Columbus can expect continued good fortune. The announcements by several firms to either build new plants or expand existing facilities bodes well for our continued growth and prosperity. As new firms build and other firms expand, the diversification will diminish (somewhat) the local sensitivity to national and international fluctuations.

Wages in the service sector, both nationally and locally, are likely to be bid up as the recovery continues. First, services cannot be stockpiled, making it more difficult for these firms to withstand a strike. Second, service wages have to compete (to some degree) with manufacturing jobs that offer higher pay. Third, most service firms do not face international competition to keep wages down. Therefore, wage pressure may be stronger in the service sector than in manufacturing. This is best exemplified by the "Massachusetts Miracle." The economy of Massachusetts has improved greatly from the days of dying firms and plant closings, but its very growth has led to a 2.9% unemployment rate and a labor shortage. Now short-order cooks and counter help receive $10 per hour--twice what they were paid only two years ago.

Finally, the anticipated further decline of the dollar relative to the yen and the currencies of most of our trading partners should help local manufacturing firms recover and even expand their share of the market both domestically and abroad. In fact, this may be a good time for local firms that have lost market share to foreign producers to go back to wholesalers, retailers, and producers to ask for a second chance. To retain this

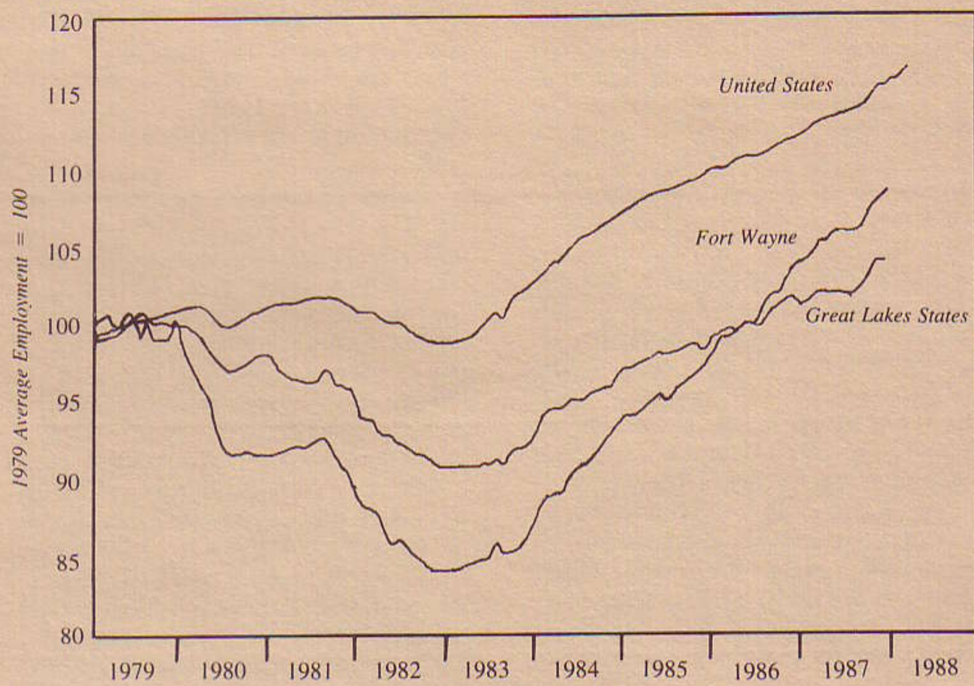
Figure
Unemployment Rates:
National, State, and Local



The state unemployment rates for 1982 to 1985 are yearly rates.

competitive advantage in the long run, however, domestic producers must invest not only to expand productive capacity but also to enhance productivity and quality. If local firms make such investments, then they will be able to capitalize on relatively cheap labor (given the value of the dollar) that is also highly productive. This winning combination could generate an industrial renaissance both locally and throughout the United States.

Figure
Nonagricultural Payroll Employment
United States, Great Lakes States[1] and Fort Wayne



[1] *Illinois, Indiana, Michigan, Ohio and Wisconsin.*

Fort Wayne

Thomas L. Guthrie

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

The original 1988 economic forecast for the Fort Wayne metropolitan area (*IBR*, December 1987) was for payroll employment to expand 2-3%, with all of the increase coming in the last half of this presidential election year.

The forecast was painted on a background of the October 1987 stock-market crash. Currently the crash damage appears to have been limited to the financial markets--an outcome I did not foresee last October.

Consequently, the Fort Wayne area economy continues to expand. Seasonally adjusted nonagricultural payroll employment increased from 189,400 last December to 194,400 in May. The outlook for continued increases in employment through the remainder of the year remains a mixed bag. On the negative side, area construction activity remains high, but is not likely to be a source of increased economic activity given the current trend in interest rates. Ditto for the transportation sector: to forecast further increases in auto and truck sales against a backdrop of rising interest rates and a four-year buying spree appears euphoric. Defense-related employment in the area remains on the defensive, because of seemingly intractable federal budget deficit problems.

On the plus side is the area's continuing success in economic development. For the 1982-1987 period, Fort Wayne area employment grew at a 5.2% annual rate, compared with 3.2% and 2.8% for the United States and the Great Lakes region (see the **Figure**).

As detailed in the original forecast, the dramatic drop in the foreign-exchange value of the dollar will continue to benefit the Fort Wayne area substantially.

One caveat relative to increasing exports locally is the need to have local, efficient access to world markets. This is why the debate over the refurbishing and upgrading of the Baer Field facilities is so critical to the long-run economic health of the area.

In summary, the initial employment forecast for the Fort Wayne area in 1988 appears likely to be low, given a brighter first-half economy nationally than originally forecast. Employment growth for the year of 4-5% is more likely.

However, the fragility of the forecast resulting from economic crosscurrents and presidential election-year rhetoric remains.

Evansville

Maurice Tsai

Professor of Economics, University of Evansville

In 1987, the Evansville economy remained active but did not perform better than in 1986. The original projection of 1.4% growth did not materialize; instead, the Evansville Area Business Index (see the **Table**) dropped .5%. The decline was caused by a slowdown in both public and residential construction. However, two major sectors--industrial production and trade and services--showed solid improvement, thereby offsetting most of the slowdown caused by construction.

Public construction, including the Lloyd Expressway and a new airport terminal, is currently going strong in the region. Both projects are expected to be completed in the latter part of 1988. The decline in residential construction, beginning in the middle of 1987, was triggered by higher mortgage rates. Thus the construction index in 1987 stood at 131.46, which still is high compared to most other years in the 1980s. A further tapering-off in construction activities is anticipated in 1988.

Industrial production was one of the strong sectors in 1987. Its index rose 3.9%, the largest gain in the 1980s. No labor disputes occurred in the year. Manufacturing employment in primary metals, chemicals, and rubber and plastics increased, while employment in the furniture industry declined. Total manufacturing employment remained about the same as in 1986, but the activity level rose because of improved efficiency. Manufacturing employment's share of the labor force dropped to 24.4% from 1986's 24.9% figure. Trade and services gained in 1987, posting a 4.1% growth in its index. Trade employment increased 7.5%, with a majority of the increase in retails. Employment in the service sector gained 6.2%. The health-service sector, which suffered an overexpansion and layoffs a few years ago, showed 2.2% employment growth. Therefore, industrial production and trade and services, which together comprise about 70% of the income generated in the region, performed strongly to sustain the region's economy in 1987.

The transportation sector weakened somewhat in 1987. Air-passenger loading remained at the same level as in 1986. The financial sector began with a strong performance, but it slowed down in the second part of the year as interest rates rose.

The regional employment picture was mixed in 1987. The labor force and employment both declined, while the unemployment rate rose. Nonagricultural wage-and-salary employment increased from 123,200 in 1986 to 125,300 in 1987, which caused the employment index to rise by 2.0%. The decline in employment and the increase in nonagricultural payroll employment means that agricultural and self-employment declined by

Table
Evansville Area Business Index
(1977 = 100, Revised)

Period	Industrial Production	Trade & Services	Construction	Transportation	Finance	Employment	Composite Index
Quarterly Index							
1987 1Q	122.20	113.14	134.98	97.33	108.91	107.73	116.42
2Q	121.23	115.42	139.80	97.97	108.79	108.33	117.41
3Q	120.47	115.27	134.50	98.86	109.32	110.05	116.92
4Q	118.37	117.13	116.56	98.02	112.92	111.97	115.56
Annual Index							
1984	114.99	106.01	103.66	95.03	106.16	103.76	107.95
1985	113.42	108.87	108.70	99.16	105.29	106.82	109.44
1986	116.04	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 (proj.)	124.00	118.70	120.00	99.50	111.50	111.00	118.10
Annual Growth Rates (%)							
1985	−1.4	2.7	4.9	4.3	−0.8	2.9	1.4
1986	2.3	1.7	60.5	0.3	4.4	0.5	7.1
1987	3.9	4.1	−24.6	−1.4	0.1	2.0	−0.5
1988	3.0	3.0	−9.0	1.5	1.4	1.4	1.3

Source: School of Business, University of Evansville.

about 40% in 1987. The unemployment rate climbed from January's 7.1% to 8.3% in May, declining to 6.4% in December. For the entire year the unemployment rate (7.1%) stayed higher than the national and Indiana rates (6.2% and 6.4%).

The regional employment situation should improve further, with unemployment rates staying in the range of 6.0-6.8%.

In the first two months of 1988, the regional economy revealed a strong performance in the major sectors: industrial production and trade and services. The construction sector continued its trend of tapering off. Total employment held its late 1987 level. The outlook for 1988 is another year of slow growth; no recession is anticipated, but the economy may experience 4-5% inflation as it is near the full-employment level. Industrial production and trade and services are both likely to grow by 2.5-3.5%. The construction index may drop another 10% as major public projects approach their completion. The transportation, finance, and employment indices should grow at a 1.5% rate. Since 1988 is a national election year, an easy money policy may erase the possibility of a recession. The regional employment situation should improve further, with unemployment rates staying in the range of 6.0-6.8%.

In summary, 1987 was stationary and 1988 will be a year of moderate growth. More economic growth can be anticipated after 1988, when the region will have completed massive improvements in its infrastructure. The real growth, however, depends on national economic trends and on how successful regional economic efforts are in attracting new firms and invigorating existing firms.

South Bend-Mishawaka/ Elkhart-Goshen

John E. Peck

Professor of Economics and Director, Bureau of Business and Economic Research, Indiana University at South Bend

This midyear assessment of the economic condition of the South Bend-Mishawaka and Elkhart-Goshen communities is based on 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 continue to experience growth that outpaces the expectations reflected in the 1988 area forecast (*IBR*, December 1987).

The **Table** summarizes the various 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. Comparative indicators and percentage changes are given for January and February, 1988 and--to highlight trends--for a February 1988 to February 1987 comparison.

South Bend-Mishawaka

Nonagricultural employment in the South Bend-Mishawaka area increased 4.7% from February 1987 to February 1988. In absolute terms, 5,100 more persons were employed in February 1988 than in February 1987. After seasonal adjustment, the indicator had reached its historical high. As has been the case over the past several years, however, overall gains came in the nonmanufacturing sector: manufacturing employment rested at an historical low. The fact that the manufacturing indicator is resting at its low point, however, is seen here as an encouraging factor, since the index has fluctuated between 73 and 75 for some 24 months. This development follows a period of decline that extended over more than two decades. Lending support to this encouragement is the fact that the community has recently experienced a substantial increase in the number of manufacturing firms--up 21% between 1979 and 1985.

Other South Bend-Mishawaka indicators provide similar signals over the last several months: new housing activity continues to be strong, if somewhat less so than a year ago; resale housing transactions show additional moderation over the heady activity experienced over the past two years; and new passenger car sales remain soft. The monthly new car sales index number has come in under 100 in ten of the last 12 months.

Elkhart-Goshen

The pace of growth in the Elkhart-Goshen area continues to be the envy of most other areas in the state and the nation. Total nonagricultural employment was up 6.7% from February 1987 to February 1988, and both manufacturing and nonmanufacturing shared in the advance. Indiana's Department of Employment and Training Services has noted recently that this record places Elkhart County in the number-one position among the state's 13 Metropolitan Statistical Areas. Elkhart's gain in manufacturing employment (4,000 jobs between 1986 and 1987) was twice that experienced by second-place Fort Wayne; the remaining 11 MSAs lost 1,100 manufacturing jobs over that 12-month period. Every reported sector of the county's work force showed an increase in employment from February 1987 to February 1988.

The remaining Elkhart-Goshen indi-

Table
Economic Indicators

	SOUTH BEND-MISHAWAKA			% Change from		ELKHART-GOSHEN			% Change from	
	February 1988	January 1988	February 1987	January 1988	February 1987	February 1988	January 1988	February 1987	January 1988	February 1987
Employment Data										
Establishment Employment										
Nonagricultural Employment	128.3	126.1*	122.5	1.7%	4.7%	193.0	193.7	180.9	−.4%	6.7%
Manufacturing Employment	74.1	74.5	74.5	−.5%	−.5%	176.0	176.5	163.0	−.3%	8.0%
Nonmanufacturing Employment	159.0	155.7	149.7	2.1%	6.2%	218.1	218.8	207.5	−.3%	5.1%
Unemployment Rate	4.7	4.9	5.6	n/app	n/app	4.1	4.0	4.8	n/app	n/app
Help Wanted Advertising	132.5	148.2	129.2	−10.6%	2.6%	139.2	139.3	144.8	−.1%	−3.9%
Utilities										
Industrial Electricity Sales	171.9	167.4	160.0	2.7%	7.4%	217.1	216.8	219.3	.1%	−1.0%
Commercial Gas Sales	100.3	119.9	97.6	−16.3%	2.8%	104.2	124.3	97.0	−16.2%	7.4%
Industrial Gas Sales	66.3	73.7	62.6	−10.0%	5.9%	73.6	172.1	80.5	−57.2%	−8.6%
Retail Car and Truck Sales										
New Passenger Car Sales	76.3	70.0	89.8	9.0%	−15.0%	99.0	73.3	83.8	35.1%	18.1%
New Truck Sales	276.4	248.0	302.0	11.5%	−8.5%	146.7	142.1	129.6	3.2%	13.2%
Housing Construction Data										
Estimated Value of Permits	979.0	583.9	1,064.9	67.7%	−8.1%	577.2	351.9	912.1	64.0%	−36.7%
Number of Permits Issued	207.3	116.9	264.1	77.3%	−21.5%	118.8	130.9	206.1	−9.2%	−42.4%
Average Value Per Permit	523.8	536.6	445.9	−2.4%	17.5%	399.5	336.6	369.6	18.7%	8.1%
Residential Real Estate Data										
Number of Active Listings	1028	983	1077	4.6%	4.5%	1155	1114	1049	3.7%	10.1%
Closed Sales										
Average Days Listed	62	62	50	.0%	24.0%	80	80	83	.0%	−3.6%
Average Market Price	$58,874	$58,433	$54,794	.8%	7.4%	$60,421	$61,054	$54,743	−1.0%	10.4%
% of Sale to List Price	94.7	94.0	94.5	.7%	.2%	94.0	94.0	95.0	.0%	−1.1%

Index Numbers Seasonally Adjusted

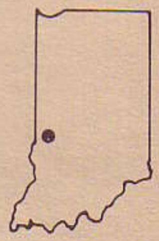
cators are, again, quite similar to those of South Bend-Mishawaka. The new passenger car index continues to rest below 100, and the housing indicators--both new and resale housing--suggest better than average activity with some softening in recent months.

Outlook

Our earlier tentative suggestion that the nation--and, therefore, both South Bend-Mishawaka and Elkhart-Goshen--would avoid recession this year seems to be confirmed by the recent encouraging performance of the national economy. Growth of GNP and civilian employment have exceeded earlier moderate forecasts. Several situations in St. Joseph County, including layoffs in health services, education, government, and defense contracting, bear watching. However, we expect these to merely slow the pace of growth, not to push the South Bend-Mishawaka economy into recession. We feel that nonagricultural employment in South Bend-Mishawaka will rise by about 1% by year's end. In Elkhart-Goshen, however, activity should outpace that in both St. Joseph County and the nation as a whole, with employment growth coming in at a minimum of 3-4%.

Several situations in St. Joseph County bear watching. However, we expect these to merely slow the pace of growth.

Terre Haute



Marvin Fischbaum

Professor of Economics, Indiana State University

Last year was an eventful one. Bad news included the announced cessation of operations at three factories and the termination of the principal line at a fourth, reducing manufacturing employment potential by more than 10%. On the other hand, four factories released plans for capital-intensive expansions that promised a burst of construction activity.

Figure 1
Employment by Residence, Vigo County
(March of Each Year)

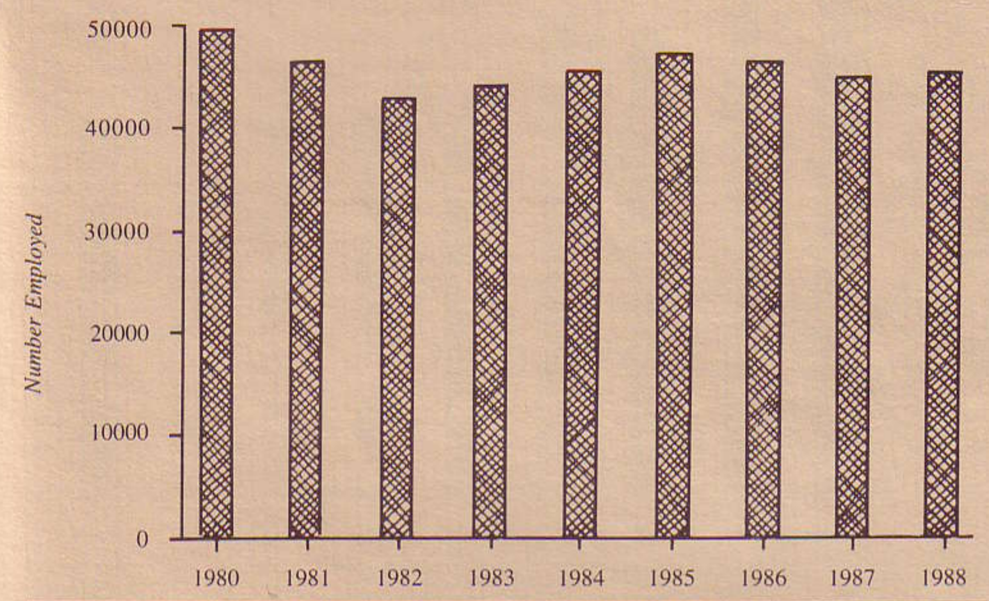
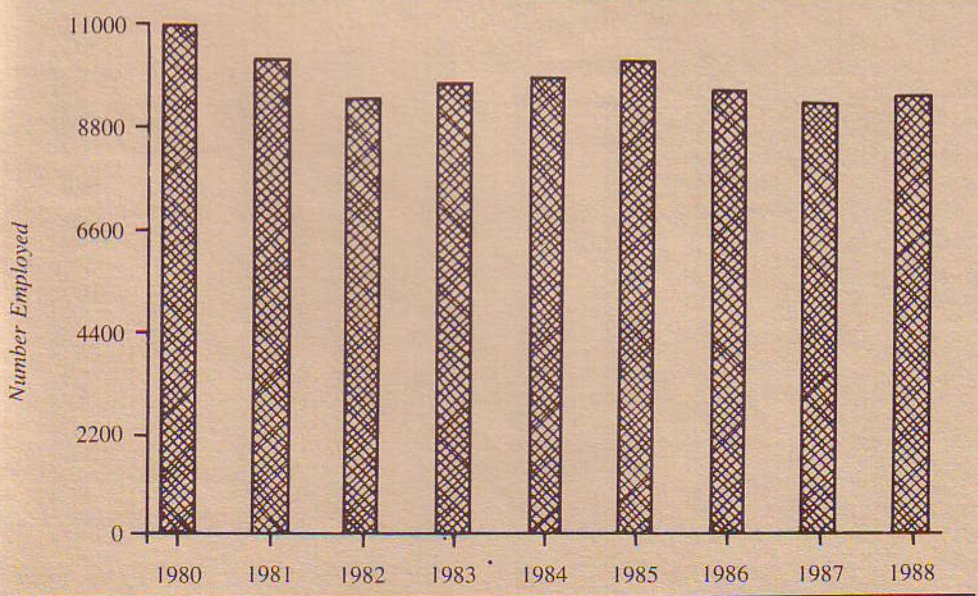


Figure 2
Employment by Residence, Clay County
(March of Each Year)



When the new facilities come on-line starting in late 1988, manufacturing employment will be modestly augmented. The first three quarters of 1987 saw both the unemployment rate and the number of jobs decline, a paradox explained by continued shrinkage in the labor force. Thus the outlook for 1988, a year sandwiched between a stock-market crash and a presidential election, seemed shrouded in uncertainty.

To date, events in 1988 have been less dramatic. Only one factory is closing--Indiana Gas and Chemical Corporation's coke plant. Following its sharp production curtailments in 1987, the shutdown will mean the loss of about 120 jobs. A few retail operations, including two Lowell's Supermarkets, have shut their doors. Some offices and retail shops, including a Wal-Mart, are under construction, as is the Cannon Inn, a 56-unit apartment complex geared to senior citizens, but no really large project has been announced. Nor has there been news of substantial industrial expansion.

The pace of economic activity in the Terre Haute area, at least as measured by employment estimates, has continued in 1988 on much the same path as in the previous year. Through March, unemployment estimates for the MSA (Vigo and Clay counties) continued, as in much of 1987, to run at levels at or slightly above the state and national averages. Unemployment in Vermillion County remained somewhat higher, and Sullivan County continued to experience the highest level of unemployment in the state; 13% for all of 1987, and 9.9% in April 1988. As was true six months ago, the trend in establishment employment (measuring employment by place of work) was more positive than the trend in the labor force estimate of employment (based on place of residence). But in contrast to shrinking employment through the first nine months of 1987, over the last quarter of that year and in the first quarter of 1988 the trend as measured by the labor force estimate was stable to slightly positive. As measured by establishment employment the trend was strongly positive. By the latter measure, the loss of 500 jobs over the past year in manufacturing was more than offset by gains of 500 jobs in retail and wholesale trade, 300 jobs in transportation, 400 jobs in construction, and 500 jobs in assorted service occupations.

Construction was expected to be the bright spot in the Terre Haute economy for 1988, but the boom has been slow in coming. As measured by employment, construction activity has remained on a plateau. Perhaps the explanation is that some of the projects announced in 1987, including the Porcine Somatotropin facility at Pitman-Moore and the downtown parking garage, have just broken ground, while other construction, including buildings at I.S.U., is not yet underway. Enough commercial, industrial, and institutional work is still in the pipeline to keep construction activity fairly strong through 1988 and into early 1989. Little help will come from the residential sector: the demand for housing remains weak, and residential construction activity appears to be trending downward. The value of residential building permits in Vigo County for the 12 months ending March 1988 was 5% less than for the previous 12-month period, and the decline may be accelerating.

Construction was expected to be the bright spot in the Terre Haute economy for 1988, but the boom has been slow in coming.

The market for existing homes remains soft, with listings for the Terre Haute area totalling about 1,600. Homes remain listed an average of 176 days, the same as last year, and the average selling price in the first quarter of 1988 was slightly lower than in the corresponding period of 1987. This sluggishness reinforces the impression that although employment may be improving, the local economy is far from ebullient.

Figure 3
Employment by Residence, Sullivan County
(March of Each Year)

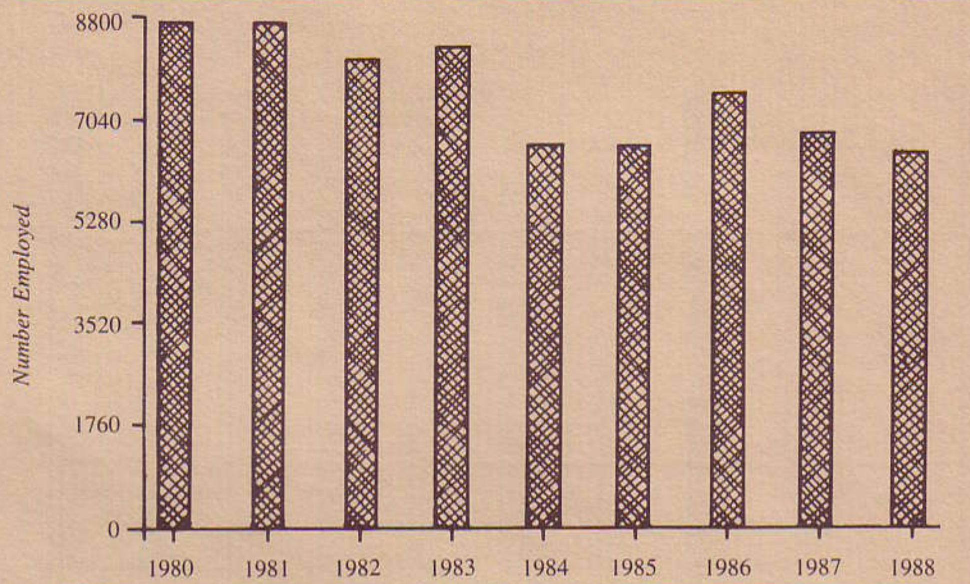
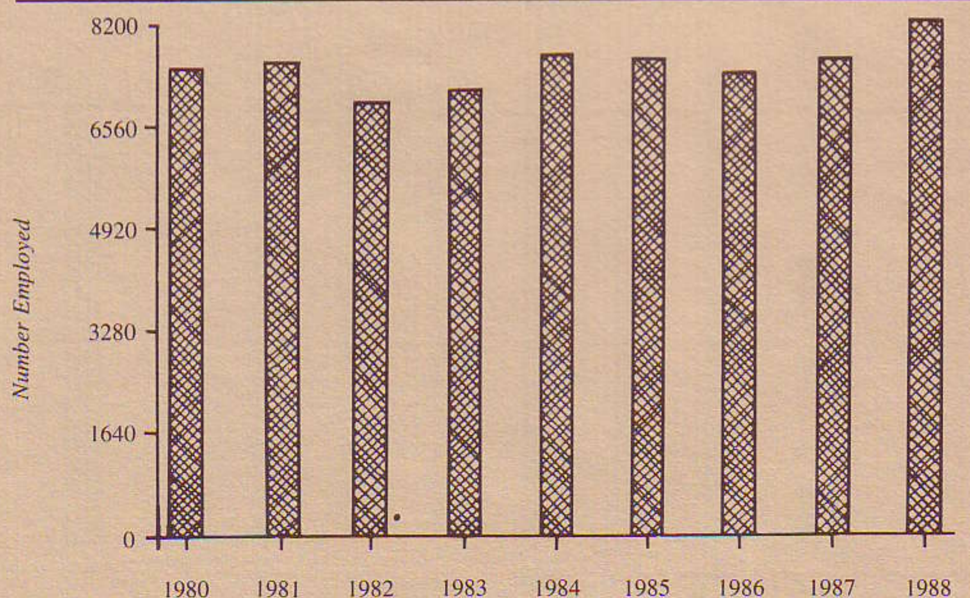


Figure 4
Employment by Residence, Vermillion County
(March of Each Year)



The **Figures** are intended to put the recovery of the Terre Haute area economy in a long-term perspective. They illustrate that the 1980s have been a period of protracted stagnation in total employment. Employment of residents of Vigo and Clay counties is lower today than it was in 1980. Employment of Sullivan County residents is at its lowest point of the 1980s. Only in Vermillion County, where Eli Lilly & Co. is the largest employer, is the trend positive.

In the first half of 1988, the U.S. economy performed near the upper limit of reasonable expectations. Given that environment, the Terre Haute area economy also improved. The region is still searching for at least partial replacement of its lost manufacturing base; unless and until that occurs, Terre Haute remains vulnerable.

Gary-Hammond-East Chicago (Calumet Area)

Leslie P. Singer

Professor of Economics, Indiana University Northwest

The Northwest Indiana economy is progressing along the path we had predicted six months ago. The manufacturing sector has stabilized, and the nonmanufacturing sector is gradually expanding. Average weekly hours worked in steel are in excess of 43 (reflecting overtime), and gross weekly earnings average over $650, the highest of any Indiana industry.

This sounds like good news, and it is. We must, however, point out that although we predicted stabilization in the local manufacturing sectors, we do not foresee much long-run growth. The nonmanufacturing sectors will, of course, continue to expand, gaining almost 2,000 new jobs by this time next year. In terms of a full-time equivalent (a 40-hour week), the 2,000 nonmanufacturing jobs, which are for the most part in retail and miscellaneous services, correspond to less than 1,500 jobs because average hours per week are below 30. Gross weekly earnings in nonmanufacturing are only slightly above $200, compared to $650 in steel.

Table 1
Short-Term Forecast (Quarterly Averages)

	1988 1Q	*1988 2Q*	*1988 3Q*	*1988 4Q*	*1989 1Q*	*1989 2Q*
Manufacturing Employment	55.6	56.8	56.4	55.8	56.8	57.0
Steel Mills	35.3	35.9	35.6	35.0	35.9	36.6
Other Manufacturing	20.3	20.9	20.8	20.8	20.9	20.4
Nonmanufacturing Employment	165.5	166.1	167.3	168.6	166.4	167.8
Construction, Transportation	10.5	10.9	10.9	10.7	10.4	10.9
Services and Trade	103.2	103.4	104.5	105.4	104.0	104.2
Public Sector	31.8	31.7	31.7	31.8	31.4	31.3
Health Care	20.0	20.1	20.2	20.7	20.6	21.4
Total Employment	221.1	222.9	223.7	224.4	223.2	224.8

Table 2
Establishment Employment Projections
(in 1000s)

	1980 Actual	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*
Manufacturing Employment	97.27	56.98	56.46	56.94	57.42	57.90	58.39	59.37	59.86
Nonmanufacturing Employment	159.33	167.38	168.91	170.32	173.03	175.78	178.58	181.42	184.30
Total Employment	256.60	224.36	225.37	227.26	230.45	233.68	236.97	240.79	244.16

We must put these economic developments in a global context. The rebound in local steel can be attributed about 35% or 40% to restructuring, reorganization, and improved productivity, and about 60% or 65% to lower export prices for steel (because of the depreciation of the U.S. dollar). In the long run (three to four years), I estimate that the improved competitive position of local steel in global markets will diminish as foreign currencies gradually adjust to new equilibrium levels. Consequently, to remain competitive local steel firms will have to modernize at an accelerated rate, in spite of rising costs of borrowing. In other words, local steel companies will have to draw on retained earnings to a much greater extent than they have been able to do in the past, when they suffered losses. The current rise in steel's profitability cannot become an inducement for labor to extract further wage gains. Moderation in both prices and wages is necessary to retain global market shares.

U.S. capital-goods industries and steel (a supplier of intermediate products) are currently benefiting from a flood of orders for machinery from Korea, Taiwan, and elsewhere. Foreign buyers wish to take advantage of the devalued dollar before revaluation occurs. In a perverse sort of way, the U.S. stock market's poor performance makes U.S. goods more attractive than dollar-denominated securities. This, in turn, boosts our exports of capital goods and communications equipment.

Northwest Indiana, as did many other parts of the country, suffered what must be considered a cultural shock when we realized how much our manufacturing leadership has slipped relative to foreign economies. There are many causes of this state of affairs. While most Western nations were busy building better and more powerful economies, the U.S. was busy building a better society. We are rightly proud of our accomplishments in this regard, but we must be prepared to bear the opportunity costs incurred in the process.

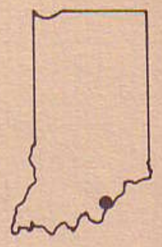
What should be clear to most of us is that the U.S. was advancing on two fronts while many of our trading partners did better on one of these fronts. Many local leaders belittled the expansion in the service sector by putting almost their entire emphasis on manufacturing, which has traditionally supplied secure, high-paying jobs for relatively unsophisticated populations.

However, there is a high-skilled, high-wage service sector as well as a low-skilled, low-wage service sector. The challenge for Northwest Indiana is to expand the high-skilled, high-wage sector, which until now we have failed to achieve. If we track high-skilled service sectors on the East and West Coasts, we note that average wages in many service sectors, such as finance, insurance, communications, and health sciences, are significantly higher than average earnings in steel. In many advanced economies, such as those of Japan or West Germany, incomes in the technologically and analytically sophisticated service sectors grow more rapidly than incomes in other sectors--including the manufacturing sector. We believe that Northwest Indiana can achieve a reorientation of its service sector by improving the quality of its human capital. One of the important findings of several industrial studies I have made is that in modern economics, improvement in the quality of human capital precedes improvement in the quality of physical capital. Moreover, just as local industries have discovered the absolute necessity of industrial quality control, our educational institutions must devise and implement methods of quality control for our stock of human resources.

The anticipated decline in Lake County's population will help us attain a better-balanced and a more sustainable growth economy. The anticipated decline in the number of young entrants into the labor force will match the expected slow growth in manufacturing. The anticipated increase in the older population will increase the demand for services, including high-wage financial health care, education, and other services. The ancient city of Venice had almost no manufacturing or agriculture. However, its service sector made that city one of the richest and most prosperous of the medieval world.

Short-run and long-run forecasts for this region are shown in **Tables 1** and **2**.

Jeffersonville-New Albany (Louisville Area)



Fay Ross Greckel

Professor of Economics, Indiana University Southeast

The seven-county Louisville metropolitan area economy grew at a more robust pace than expected during the last several months of 1987, and that rather brisk expansion has continued into early 1988 in most sectors. Preliminary data suggest that this trend will continue for the next several months, resulting in a stronger economy in 1988 than was predicted here six months ago.

Employment statistics are particularly encouraging, with gains reported in both manufacturing and nonmanufacturing, in both the Indiana and Kentucky portions of the metropolitan area. As **Table 1** shows, there was little or no employment growth during the first half of 1987. But about 14,000 jobs were added during the last six months of the year. (The third-quarter statistics published in this column in December were recently revised upward by the reporting agencies.) Seasonally adjusted data indicate gains of an additional 6,500 jobs during the first quarter of 1988--a very healthy start for the year.

For the first time in several years, the number of manufacturing jobs appears to have increased. Preliminary figures for the first quarter of 1988 show a gain of about 800 manufacturing jobs from the same period of 1987. Most of the gains occurred in nondurable goods industries, particularly food and kindred products. About 200 of the new jobs were located in the Indiana portion of the metropolitan area (Clark, Floyd, and Harrison counties), reflecting the start of the Hitachi Cable plant in New Albany and increased employment in the metals/machinery and chemicals/allied products sectors. Clark, Floyd, and Harrison manufacturing employment, which had fallen to a low of 11,400 jobs in 1983, is now nearly back to the 1981 peak of 13,600 jobs.

Although the manufacturing increases are heartening, most of the employment expansion is still occurring in nonmanufacturing. Between the first quarter of 1987 and the first quarter of 1988, nonmanufacturing employment in the metropolitan area increased by an impressive 21,000 jobs. Job gains were about 7,000 in retail and wholesale trade, nearly 5,000 in the service sector, about 4,000 in the construction industry, about 2,000 each in government and in the transportation, communications, and utilities sector, and about 1,000 in finance/insurance/real estate. In the Indiana counties, job losses in construction and services were more than offset by job gains in trade and government em-

Table I
Louisville Area Employment and Unemployment, 1984-88[1]
(in 1000's)

Louisville Metropolitan Area[2]	*Total Nonfarm Employment*	*Manufacturing Employment*	*Nonmanufacturing Employment*	*Unemployment Rate %*
Annual Averages				
1984	396.7	89.2	307.6	8.6
1985	410.8	87.0	323.7	8.0
1986	421.2	86.2	335.1	7.1
1987	436.0	86.3	349.7	6.9
Quarterly Averages				
1987 1 Q	430.4	86.5	344.0	7.0
1987 2 Q	431.8	86.2	345.6	7.2
1987 3 Q	436.1	86.0	350.0	7.0
1987 4 Q	445.8	86.5	359.4	6.5
1988 1 Q	452.3	87.3	365.0	6.2
Clark, Floyd, and Harrison Counties				
Annual Averages				
1984	51.4	13.0	38.4	9.2
1985	53.4	13.1	40.3	8.1
1986	55.6	13.2	42.5	6.3
1987	58.3	13.3	45.0	5.9
Quarterly Averages				
1987 1 Q	58.0	13.2	44.8	6.1
1987 2 Q	57.9	13.1	44.8	5.9
1987 3 Q	58.3	13.3	45.0	5.9
1987 4 Q	58.8	13.4	45.3	5.6
1988 1 Q	59.0	13.4	45.6	5.0

1. The employment data 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; Kentucky Cabinet for Human Resources.

ployment, for a net increase of about 800 nonmanufacturing jobs.

Employment conditions have improved in other ways as well. A few firms have converted part-time jobs to full-time jobs. Average weekly hours for factory workers increased in 1987 in 12 of the 13 manufacturing sectors (the sole exception was furniture and fixtures). Many new jobs are in technical fields, and some of the lower-paid jobs provide computer training. Local unemployment rates continue to decline steadily on a seasonally adjusted basis. According to government statistics, by the first quarter of 1988 the unemployment rate for Clark, Floyd, and Harrison counties had fallen to only 5%, while that for the whole metropolitan area had declined to 6.2%. Although many of these developments suggest a tightening labor market, labor shortages do not seem to be a problem in this region at present.

In line with the greater employment opportunities, demand for many emergency social services, while still considerable, is declining. Dare To Care, for example, supplied 76,300 emergency food allotments to area residents in 1987, compared with 82,200 in 1986. That was the second year of decline in emergency food requests, and the trend is continuing. Nearly 5% fewer individuals received emergency food allotments in the first quarter of 1988 than in the first quarter of 1987.

Contrary to national trends, residential construction was one of the stronger sectors of the local economy during 1987. As indicated in **Table 2**, Jefferson County, Kentucky--which includes the city of Louisville--issued permits for a record 3,169 residential units last year. In 1987 Floyd and Harrison counties issued the second highest number of residential unit building permits issued in this decade. As 1988 began, construction in the Indiana counties, particularly in Floyd County, still looked fairly strong, but there was a sharp decline in the number of permits issued in Jefferson County--largely because of a hiatus in apartment building. During 1987, in response to a very low apartment vacancy rate, permits were issued for more than 1,800 apartment and condominium units; the corresponding total for the first four months of 1988 was 67 units. While some increase is likely in the remaining months of 1988, this sector of the economy will be much weaker than in 1987.

However, commercial and industrial development should continue to flourish. Each year the Louisville Chamber of Commerce reports on major investment plans by new and expanding industrial and commercial enterprises. In 1986 these totaled a record $313.7 million for industrial development and $295.1 million for commercial development. Most of these projects were begun in 1987, and work on many of them is still underway. The Chamber's tabulation of major investment plans announced during 1987 was nearly double the record level of 1986: 644 firms announced expansion or development plans, totaling $767.6 million in the industrial area and $348.3 million in the commercial area. These projects are expected eventually to provide 17,255 new jobs, more than double the employment growth expected to result from the projects announced during 1986.

Development plans continue to invade the news. Recent examples include expansion of a major suburban mall; the decision of WAKO, a Japanese electronics firm, to locate its U.S. manufacturing and distribution operations in Louisville; and plans to build Stony Brook, the $800 million office-retail-theater-medical-retirement housing-apartment-new homes complex in southern Jefferson County, over the next six to eight years. Among the expanding firms is UPS, whose national hub is located at Louisville's Standiford Field, contributing to the surprising fact that the Louisville airport ranks eighth in the world in air cargo volume. (In the U.S. only New York, Los Angeles, Chicago, and Miami handle more air cargo than Louisville does.)

Despite higher interest rates, real estate sales have remained strong. According to the Louisville Board of Realtors, 1987 sales totaled more than $426 million, a 5.7% increase over 1986 (which was also a good year). During the first four months of 1988 reported real estate sales were substantially ahead of the same period a year ago, although some of the apparent gain may be the result of a change in data-reporting procedures.

It is very difficult to gauge consumer spending because of the lack of current data at the local level. However, retail sales jobs increased more rapidly during

Table 2
Louisville Area Residential Building Permits, 1984-1987
(Number of Dwelling Units)[1]

Period Covered	*Jefferson County, Kentucky*	*Clark County, Indiana*	*Floyd County, Indiana*	*Harrison County, Indiana*[2]
1984	2571	237	199	89
1985	3141	232	294	148
1986	2634	252	427	218
1987	3169	224	397	157
1985 1 Q	1406	85	126	47
1986 1 Q	734	53	103	56
1987 1 Q	1816	72	127	50
1988 1 Q	601	64	141	46

[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.

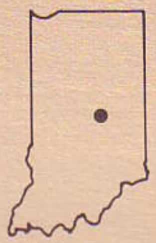
the last half of 1987 and the first quarter of 1988 than in the corresponding periods 12 months earlier, suggesting some improvement in that sector. Although new car sales declined sharply in 1987 as expected--down 17% in Jefferson County and 10% in Clark and Floyd counties--in the first quarter of 1988 area dealers sold about 13% more new cars and light trucks than they did in the first quarter of 1987.

The Louisville area economy performed considerably better than expected in the early months of 1988, and there is no indication of any serious reversals in the months ahead.

All in all, the Louisville area economy performed considerably better than expected in the early months of 1988, and there is no indication of any serious reversals in the months ahead. The major weakness appears to be multi-unit residential construction; it is difficult to tell at this time if this is merely a temporary pause in new construction or if most builders feel that the projects currently underway are sufficient for the present housing market. In either event, construction will continue on major projects begun last year, as well as on single-family dwellings and commercial and industrial projects.

With most economists predicting moderate expansion nationally and with exports expected to increase, the local economy should have support from most external markets for the remainder of the year. Thus, the revised outlook for 1988 is for a stronger economy overall than in 1987 despite the slowdown in apartment building. The widespread expansion could produce the largest annual increase in Louisville area employment since the late 1970s.

Anderson



Gilbert Crouse and Jerrald Fox

Professor of Economics, and Instructor of Business and Economics, Anderson University

The dismal double-dip slump of the early 1980s produced extremely high levels of unemployment in Madison County. Levels peaked at more than 22% in 1980 and again in 1982. The out-migration that began in the mid 1970s grew as the availability of jobs, particularly in manufacturing, diminished. From 1978 to 1982 manufacturing employment declined more than 34%, producing a wave of out-migration that contributed to a population decrease of 5,300 persons between 1978 and 1983.

If the labor force participation rate had not dropped from 44% in 1978 to 40.5% in 1982, the reported unemployment rates would have been even higher.

This out-migration combined with a significant number of early retirements and the drop-out of discouraged workers to produce an 11.4% decline in the labor force, a reduction of 7,000 workers. If the labor force participation rate had not dropped from 44% in 1978 to 40.5% in 1982, the reported unemployment rates cited above would have been even higher.

The period from 1983 through 1987 has seen a further reduction in the county's population by an estimated 5,100 persons. This second round of population decline occurred largely because the expansion of manufacturing employment from 1983 to 1985 proved to be weak and short-lived. From its low of 17,000 jobs in 1982, manufacturing employment rebounded to a post-recession peak of only 19,100 jobs in 1984 and 1985. Manufacturing had provided 27,400 jobs in 1974.

In 1986 manufacturing employment once again began to lose ground, and by 1987 it was almost back to its 1982 level. Based on the outlook for the national economy, conditions in the auto industry in general, and General Motors' problems in particular, our forecast for 1988 projects a decline of an additional 800 manufacturing jobs to an average level of 16,500 for the year.

Our forecast for 1988 projects a decline of an additional 800 manufacturing jobs to an average level of 16,500 for the year.

Manufacturing's Declining Role

Manufacturing employment provided just under 60% of all establishment jobs in Madison County in 1974. By 1987 its share of total establishment employment was less than 36%, and we are projecting that it will fall to less than 34% in 1988. This erosion in the relative share of manufacturing jobs is a consequence of the absolute loss of manufacturing jobs described above coupled with steady growth in the nonmanufacturing sector, particularly in the area of services--which has added over 2,200 jobs since 1979 and now accounts for nearly 20% of total establishment employment.

Due to these employment losses, manufacturing has contributed progressively smaller and smaller percentages of personal income at both the state and county levels. From a share of 58.5% in 1973, manufacturing income dropped to