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The National Outlook

The State Outlook

The Outlook for 1989

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We expect positive but sluggish growth in real GNP in 1989. Thus the current economic expansion, which began in November 1982 and is already the longest peacetime growth period in the nation's history, will extend its record. Real GNP looks to increase between 2.3% and 2.8% in 1989, compared to an expected 4.0% growth rate for 1988. **Figure 1** shows actual and expected annual rates of change of real GNP in this decade.

With continued positive growth in the economy, we think further increases in employment are possible. The unemployment rate should fluctuate in the 4.9% to 5.4% range for most of the year. We see no signs that a recession is on the horizon unless there is some unexpected shock to the economy, such as sharp increases in oil prices, a crash in financial markets, or very tight monetary policy. Growth in 1988 has been better than we anticipated last year; the unexpectedly strong sectors were exports and business investment. In the last few quarters, the expansion has been led by exports. This has caused a strain on capacity in many export-oriented sectors of the economy and has fueled a boom in plant and equipment spending. We see neither sector having as strong a growth rate in 1989 as either one had in 1988.

Fiscal policy is likely to remain restrictive in 1989. We think it is unlikely that there will be a tax increase in 1989, and real government spending at the federal level is expected to decline. There will be continued concern about the federal budget deficit, and the soon-to-be-released report by the National Economic Commission may provide some politically palatable guidelines on how to reduce the

Figure 1
Change in Real GNP, Expected and Actual

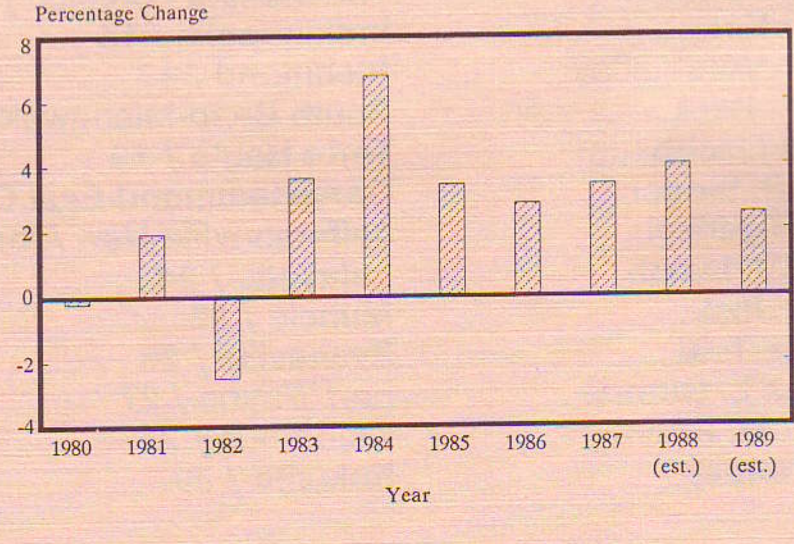
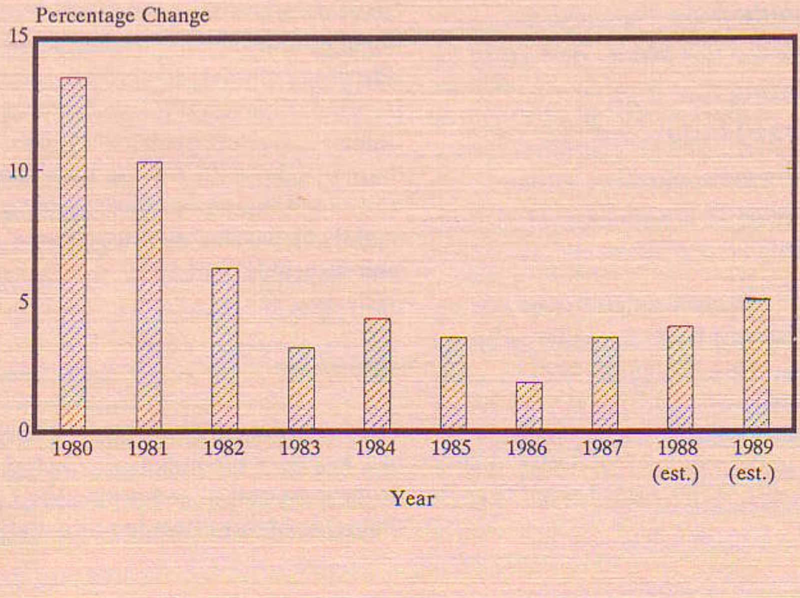


Table 1
GNP and its Components

	1987 ($ bil. 1982)	Percent Change from Previous Year[1] 1988 (est.)	1989 (predicted)
GNP	3847	4.0	2.5
Personal Consumption Expenditures	2521	2.9	1.5
Gross Private Domestic Investment	674	6.9	4.1
Nonresidential Fixed	445	10.2	7.0
Residential Fixed	195	-2.4	0.2
Change in Business Inventories	34	40.0	35.0
Net Exports	-129	-97.0	-78.5
Exports	428	17.3	9.0
Imports	557	7.5	4.5
Federal Government Spending	339	-3.0	-0.5
State and Local Spending	441	2.8	3.1

1. Except for Change in Business Inventories and Net Exports, both of which are in billions of 1982 dollars.

Figure 2
Change in Consumer Price Index



deficit while meeting the spending priorities of the new administration. Nonetheless, the deficit should remain flat, about $150 billion. The growth rate in the money supply is likely to remain slow, on the low end of the Federal Reserve targets. As a result, we expect interest rates to remain at approximately their current (late December) levels.

Inflation is likely to pick up slightly in 1989 but not be a serious problem for the economy. The Consumer Price Index will rise at about a 5% rate in 1989, and the broader GNP deflator should rise in the 4% to 4.5% range. The upward pressure on prices will come from rising import prices (partially caused by dollar depreciation), continued tightening of labor markets, high capacity-utilization rates, stable or rising commodity prices, and tighter monetary policy. **Figure 2** shows the significant declines in the inflation rate from 1980 to 1986 and modestly increasing rates thereafter through 1989.

There is some evidence that growth in the rest of the world's economies is slowing down. One of the implications of this observation is that these economies are likely to increase their purchase of U.S. exports less than in the past year, so our trade balance is unlikely to show any significant real improvement between 1988 and 1989. Further declines in the value of the dollar are likely, as markets adjust toward making the U.S. economy more competitive.

Consumption spending, the largest component of GNP, is likely to grow at a slightly slower pace than overall GNP. The savings rate has increased slightly in 1988 compared to the 1987 level, but it remains quite low by historical standards.

Some of the policy issues that must be watched carefully include:

* Discussions relating to protectionism and the implementation of the U.S.-Canadian Trade Pact;

* Efforts to reduce the federal budget deficit; and

* The inevitable bailout of the FSLIC and the farm credit system and subsidies to banks and savings and loans.

Table 1 lists real GNP and its components for 1987 and expected rates of increase for 1988 and 1989.

Personal Consumption

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Personal consumption spending is significant in our forecast for three main reasons. First, consumption spending constitutes the largest component (about two-thirds) of GNP. Any major change in its magnitude will thus substantially influence the national economic output. Second, during the early phase of the current expansion, consumer spending was the sector that did the most to propel the economy forward. It lost that position later, but the question remains whether it can at least continue to play a strong supporting role as the expansion ages. Third, many experts forecast that the October 1987 stock market crash would lead to a downturn in the real economy as individuals' wealth levels dropped and expectations dimmed. We did not forecast such a turn of events then, but some still wonder if some effect may yet be felt.

We do not foresee any negative move in consumption spending during 1989. Overall, we forecast approximately a 1.5% growth in aggregate consumption. Although both consumer spending and confidence flagged somewhat during the third quarter of 1988, we still believe that both will remain reasonably strong over the next year. In fact, consumer spending picked up somewhat during the final quarter of 1988, and it should remain around our forecast level.

Within aggregate consumption, spending can vary widely among product groups. Spending on services has been strong for the past several years; we anticipate its remaining so for 1989. The sustained demand for services results from the tendency of consumers in higher income countries to demand a greater number of services and also from such social changes as the increased participation of women in the labor force. As women move into non-household occupations, the demand for such services as restaurants, day-care centers, and personal investment services increases. On the other hand, for 1989 we foresee spending on consumer nondurable goods as weak and spending on durables as steady or somewhat weakened relative to 1988.

What vitality the sector possesses will emanate from the service sector. We do not see its returning to the leading role it played in the early years of this record economic expansion.

Overall, total consumption expenditures are forecast to grow less than this year's level. What vitality the sector possesses will emanate from the service sector. We do not, of course, see its returning to the leading role it played in the early years of this record economic expansion.

Our forecast also includes an outlook for three activities that bear on next year's consumption expenditure: automobiles, energy, and agriculture.

Automobiles

For 1988, auto sales will total about 10.5 million units. Domestic brand sales have been relatively stable, import sales have been down, but purchases of foreign makes assembled in the U.S. have risen sharply. Purchases of light trucks have also risen this year. For 1989, we anticipate a further decline in import buying and a slight gain for American brands. Sales of domestically-assembled foreign brands are expected to continue strong. Overall, we foresee stability, or perhaps a modest gain, in aggregate automobile sales in 1989.

Energy

Energy demand growth, particularly for fossil fuels, is slackening in most major industrial economies. This results partly from heightened efficiency in industry, a movement toward nuclear power in some countries, and the relative shift of manufacturing production away from traditional producing nations. On the other side of the market, oil supplies remain plentiful. Recent OPEC decisions are not expected to affect petroleum prices dramatically in 1989. Thus, both demand and supply conditions favor stable or only slightly higher energy prices. Some unforeseeable world crisis could obviously alter this situation.

Agriculture

The primary concern regarding agriculture has been the potential effect of the drought on output and prices. We believe that most of this effect has already been felt in food prices at the retail level. For 1989 we anticipate only modest (if any) additional increases in agricultural prices. The only major exception could be meat products, the prices of which could increase as a consequence of the accelerated slaughter of animals this past summer. Fruit and vegetable production was not substantially influenced by the dry weather. The prices for other basic crops already reflect the drought's effects. Thus, food prices should not rise sharply during the year unless nature repeats its dry weather pattern this summer.

In summary, we foresee consumption spending in 1989 to be largely a continuation of the pattern set during the preceding year but growing overall by a modestly slower rate. We also expect the national savings rate to remain at its currently low level. Any expansion in consumption expenditures will thus generally parallel the growth in disposable income.

Nonresidential Investment

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Nonresidential investment includes business fixed investment (BFI, which includes business spending on structures and equipment) and inventory investment. Last year we predicted that BFI would rebound from its lackluster pace in 1986 and 1987 and grow more quickly in 1988. This prediction was accurate.

Although real BFI has increased by about 5% per year since the economic recovery began in 1982, it has grown in fits and starts. For example, problems in the oil industry and changes in tax laws kept growth over the last three years to about a 2.2% annual rate. This snail's pace was mostly the result of a contraction in spending on structures (since 1985, structures spending has fallen at a rate of about 5% per year). Sales of producers' durable equipment, on the other hand, have been consistently strong since 1982. Although the growth rate of total equipment sales did dip a little over the last three years, demand for information processing and related equipment (computers and telecommunications gear) has more than offset sluggish growth in industrial and transportation equipment. This kept total BFI growing by more than 8% per year since the recovery began. The strong relative growth of equipment is reflected in the portion of BFI commanded by equipment sales. The share of equipment has gone from 61% of BFI in 1982 to 74% in 1988. Nevertheless, in the last year spending on both structures and equipment picked up enough to cause BFI to grow by more than 10%.

Spring 1988 surveys conducted by the U.S. Department of Commerce indicated that manufacturing firms planned to raise plant and equipment spending by about 11.9% in 1988. Such plans can change quickly, and this bullish outlook is not presently being extrapolated to 1989 by many forecasters. In fact, preliminary third quarter estimates of actual BFI in 1988 reveal a slowdown in capital spending. With interest rates creeping up, export growth declining from its rapid pace in 1988, and overbuilding in office structures, there is some reason to forecast slower BFI growth in 1989; some forecasters project increases of only 2%-3% for next year. We are not that pessimistic. There are several factors that we believe will keep BFI strong in 1989, at a growth rate of about 7%.

First, much of the recent growth of BFI has come through equipment sales, the great majority of which were electronic goods that have ended up in service industries. Therefore, the investment that has been made has not greatly added to capacity in manufacturing. By one estimate, the factory sector's capital stock rose by only 1% in 1987, well below its long-term trend of around 4%. If manufacturing firms are going to expand capacity to facilitate continued growth of sales to both domestic and foreign buyers, then we can expect further growth in BFI.

There is good reason to predict a snap-back in the manufacturing-structures component of BFI to augment continued strong growth in equipment sales to the service sector.

Second, we expect that both foreign companies and U.S. multinationals will continue to relocate plants in the U.S. as long as the long-term expectation is for a gradually depreciating U.S. dollar. Third, as capacity-utilization rates in manufacturing creep toward the 85% level, there is growing pressure for capacity expansion. This is especially true for the textiles, paper, and chemicals industries. Thus there is good reason to predict a snap-back in the manufacturing-structures component of BFI to augment continued strong growth in equipment sales to the service sector. With 7% growth in 1989, BFI will command almost 12.5% of GNP; this would put it back near where it was in 1985.

Inventory investment occurs when

firms increase the amount of inventories on hand. Expressed in constant 1982 dollars, annual growth in inventories increased from $15.6 billion in 1986 to $34.4 billion in 1987. The annualized average rate so far in 1988 is a little over $55 billion, but most of the increase came in the first quarter. The increases were not concentrated at the retail level but mostly arose in durable goods industries at the wholesale level and to a lesser extent in durable goods manufacturing. It now appears that inventory-sales ratios, although not outside of historical norms, are reaching a point where further accumulation is unnecessary. Thus we cannot count on this sector to contribute to the growth of output as mightily as it did in 1987. An increase in inventories of about $35 billion in 1989 would keep inventory-sales ratios in their normal range.

Fiscal Policy

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At midnight September 30, 1988, fiscal year (FY) 1988 ended, and FY 1989 began. The old fiscal year ended with a federal deficit of $155 billion, up slightly from the FY 1987 total of $150 billion and the seventh straight year with a deficit of more than $100 billion. Wasn't the Gramm-Rudman-Hollings (GRH) legislation supposed to guarantee deficit reduction by forcing spending cuts if budget targets weren't achieved? Yes and no. The legislation certainly was designed with that goal in mind, but by its very nature it is impossible to enforce if the budget deficit is anywhere near target.

Consider FY 1988. A history of forecasts of the FY 1988 deficit is shown in **Table 1**. The original GRH target for the year was $108 billion. At the same time the so-called current services deficit, which assumes no changes in policy, was estimated at $150 billion. But because of proposed reductions, the projected deficit was only $94 billion. One year later, in January 1987, the current services deficit was still estimated at $150 billion; the projected deficit had risen to $108 billion, exactly equal to the GRH target.

The huge discrepancy between the current services deficit and the projected and GRH deficits meant something had to give. Unfortunately, it was the GRH target, which was revised upward to $148 billion (close to the other two deficit figures). The final deficit, as mentioned earlier, hit $155 billion, meaning that in two years neither the executive nor the legislative branch could reduce the deficit.

The current services budget only changes if policy changes or if the

Table 1
FY 1988 Federal Deficit Projections Made at Various Times (billions of dollars)

	Jan. 1986	*Jan. 1987*	*Jan. 1988*
Current Services	150	150	148
Proposed	94	108	147
Gramm-Rudman-Hollings	108	108	144

The actual deficit was $155 billion.

Source: OMB, Budget of the U.S. Government, FY87, FY88, FY89

Table 2
FY 1989 Federal Deficit Projections Made at Various Times (billions of dollars)

	Jan. 1986	*Jan. 1987*	*Jan. 1988*
Current Services	139	147	139
Proposed	68	93	147
Gramm-Rudman-Hollings	72	72	136

The October 15, 1988 GRH baseline estimate was $145 billion.

Source: OMB, Budget of the U.S. Government, FY87, FY88, FY89

Table 3
Government Purchases of Goods and Services
(billions $1982)

	1988:3	*1988:4*	*1989:1*	*1989:2*	*1989:3*	*1989:4*
Federal	325	324	323	322	321	318
State/Local	455	458	461	464	467	470

economic assumptions used to project revenues and expenditures turn out to be incorrect. The economic forecasts made in 1986 and 1987 turned out to be quite accurate, so the fact that the current services deficit did not stray far from $150 billion indicates that few policy changes were made.

Now consider FY 1989, which began in the fall. The history of deficit reduction for this fiscal year is given in **Table 2.** In January 1986 the GRH deficit target for FY 1989 was set at $72 billion. Two years later it had been raised to $136 billion. Thus, for the current year the deficit only has to fall by about $10 billion to get within $10 billion of the target and avoid automatic cuts. But these cuts have already been avoided, because that decision is based on a view of the budget at the beginning of the fiscal year. The estimate at that time was of a deficit of $145 billion, slightly less than $10 billion above target and above the current services estimate made in January 1986. So, once again, Congress and the Administration have been unable to reduce the deficit.

To avoid automatic cuts next fall, the projected deficit for FY 1990 will need to be less than $110 billion, $10 billion above the FY 1990 GRH target. The actual deficit as that fiscal year begins, however, is likely to be near $150 billion. Thus, the budget submitted for FY 1990 will need to include some $40 billion in tax increases or spending reductions. How can we get there?

One obvious way is to revise the GRH targets again. The problem is that all credibility may be destroyed by such action. Another way would be to implement the flexible freeze advocated by President-elect Bush. However, that would not produce a reduction in the FY 1990 budget anywhere near large enough to meet the GRH target. This means that the GRH target would need to be altered, again hurting credibility. It appears that only cuts linked to a tax increase would be sufficiently large to reach the targets this year. Given that neither Congress nor the president-elect favors tax increases, the GRH target probably will be raised. However, even a higher target probably can only be achieved if Congress also makes significant cuts in spending.

The International Economy

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The United States is in its sixth year of economic expansion following the recession of 1980-82. The present business-cycle expansion has exceeded the average length of recoveries in the postwar period by three and one-half years. One reason for the sustained recovery is the U.S. export boom. The boom started in 1987 when exports, measured in 1982 dollars, rose 13% from the previous year. In the first quarter of 1988, exports went up by an annual rate of 13.6%; in the second quarter the rate was 16.2%. In contrast, imports (again measured in 1982 dollars) increased by 7.9% in 1987, 6.9% in first quarter 1988, and 5.9% in second quarter 1988. In sum, the volume of U.S. exports and imports has responded to the dollar depreciation in the direction predicted by theory.

The story is somewhat different for current-dollar data. In 1987 the trade deficit was $160 billion and the current-account deficit--a measure that includes services and unilateral transfers--was $154 billion. In sum, the progress toward a balanced current account has been much lower than anticipated.

Reasons for the Slow Adjustment

There are three principal reasons for this phenomenon. The first is that the lags with which trade flows respond to exchange-rate changes are becoming longer. Previously we believed that it would take, on average, 12 months for exchange-rate changes to affect trade. The recent experience suggests a lag twice as long. The longer lags are accounted for by the role of the dollar as a key international currency and by large profits earned by foreign producers on their exports to the U.S. The International Monetary Fund reports that approximately 70% of U.S. imports are invoiced in dollars. Clearly, the extent of this practice impedes the effects changes in exchange rates have on the trade balance. As well, the existence of large profits is another consideration in preventing foreign producers from raising the dollar prices of their exports.

The second reason is structural. The U.S. has a low share of manufactured products in exports, both in relation to the composition of its own imports and the composition of exports of countries such as Japan. Consequently the response of U.S. export volume to income and price changes is smaller than the response of U.S. imports. For example, a 1% increase in real GNP in the U.S. and abroad would generate a U.S. trade deficit if other factors did not intervene.

The response of U.S. export volume to income and price changes is smaller than the response of U.S. imports. A 1% increase in real GNP in the U.S. and abroad would generate a U.S. trade deficit if other factors did not intervene.

The third reason is linked with economic policies. The U.S. has pursued economic policies (budget policies) that have made this country spend in excess of what it produces. In contrast, West Germany and Japan, the two largest current-account surplus countries, have pursued policies that have restrained spending relative to home production. The U.S., in addition, has enjoyed higher real rates of interest than the rest of the world. This has resulted in large net capital inflows and consequently in large current-account deficits. (Note that the sum of the current-account balance and the capital-account balance is zero under flexible exchange rates.)

Projections

The existing pattern of current-account deficits and surpluses in the world cannot persist. The U.S. has become a debtor country. Although the actual size of this indebtedness is unknown with any degree of precision, it is clear that current and prospective current-account deficits will add significantly to net debt. The implied net interest payments will further deteriorate the current-account deficit. It follows that the U.S. trade turnaround will have to be much larger than if the U.S. had been a net foreign creditor.

The adjustment needs to be accomplished with a combination of spending policies and changes in the terms of trade. By spending policies we mean that the U.S. will have to restrain its spending relative to its ability to produce; in practice this will mean a reduction of the federal budget deficit. West Germany and Japan will need to proceed in the opposite direction. Such prescriptions are well known in Washington, Bonn, and Tokyo. Washington is exerting pressure on Bonn and Tokyo for those two governments to take a more expansive fiscal stance. Bonn and Tokyo are putting pressure on Washington for the U.S. government to restrain fiscal profligacy. This type of "international cooperation" has produced few results so far, however. On the margin, one can say that the U.S. is the country that has cooperated the least. Despite the record, we look for economic growth abroad to exceed that in the U.S., a factor that will contribute to a reduction of the U.S. external deficit.

In principle, there is a value of the exchange rate that, other things the same, will ensure equilibrium in the current account. The difficulty in computing such a value is that exchange-rate changes bring about changes in prices and incomes with the result that *ceteris* are no longer *paribus*. We believe, however, that the dollar remains under pressure and that an additional real depreciation is in the making. This depreciation will take place regardless of whether or not the monetary authorities of the seven Summit countries intervene in the foreign exchange market.

The summary of our forecast is as follows:

	1988	*1989*
Exports ($1982, NIA, % change)	20	9
Imports ($1982, NIA, % change)	6	4.5
Trade Deficit ($billion)	-128	-115
Current Account ($billion)	-138	-130
Dollar/yen Depreciation (%)		10
Dollar/German mark Depreciation (%)		8
Effective Exchange Rate Depreciation (%)		5

Interest Rates and Financial Markets

Robert C. Klemkosky

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

Interest rates should remain relatively stable in 1989. If anything, they may even nudge a little higher. For U.S. Government securities, the short-term rate should remain in the 7.5%-8.5% range, and long-term rates should be from 8.5%-9.5%, tending toward the higher end of the ranges.

There are several reasons for this forecast. First, real economic growth will decelerate in 1989 to 1.5%-2.5% from the 3.5% figure reached in 1988. This slower growth could still place slight upward pressure on interest rates, as they usually peak with the economy. Second, inflation should increase slightly in 1989; this increase will be embodied in interest rates. The sources of the upward pressure on prices will be wages (because of lower unemployment rates) and capacity constraints at some of the basic industries and wages.

An important determinant of interest rates in 1989 will be the value of the dollar relative to other foreign currencies. If the dollar should weaken significantly, it may be necessary to raise interest rates to protect its value. Under this scenario, the economy would probably not grow at the forecasted rate. Likewise, a stronger dollar would result in higher inflation abroad and corresponding higher interest rates. Slow growth or no growth abroad would result in lower exports by the U.S. and slower economic growth in 1989. Since exports were responsible for 40%-50% of U.S. economic growth in 1988, economic growth may not materialize with lower exports, and interest rates may fall below the lower range of the above forecasts. This dilemma of the dollar obviously will require careful coordination among the G-7 countries in 1989.

A final factor that dictates stable interest rates in 1989 is the relatively flat yield curve that prevails at this time (December 1988). The yield curve has gotten progressively flatter in 1988, as short-term interest rates have increased much more than long-term rates. This indicates that expected interest rates will be only slightly higher in 1989.

Even slightly higher interest rates do not bode well for the stock market this year. Price-earnings ratios are not at historical highs, but neither are they at historical lows. Stocks appear to be adequately valued given the forecast of slightly higher interest rates and slower economic growth in 1989. The growth rate of corporate earnings is also expected to decline substantially. For the S&P 500, 1988 earnings per share increased 15% over 1987. In 1989, they are expected to increase by only 6%-7%. Stock prices historically have not done well after the rate of earnings growth has peaked.

It is important to common-stock values that economic growth in 1989 be in the 1%-3% range. Anything outside that will not be viewed favorably by the stock market.

The stock market faces an economic dilemma similar to the dollar dilemma facing interest rates. If the economy should grow too rapidly, inflationary pressures and expectations would build. The resulting higher interest rates would be a drag on stock values and increase the possibility of a recession via a tight money policy by the Federal Reserve. A weaker economy would translate into lower or perhaps negative earnings growth, and this scenario would also be bearish for the stock market. It is important to common-stock values that economic growth in 1989 be in the 1%-3% range. Anything outside that will not be viewed favorably by the stock market. As mentioned earlier, the strength or weakness of the dollar will be a major determinant of economic performance in 1989.

The stock market is still concerned with the monthly trade figures. At current exchange rates, the U.S. will probably not see much improvement in the trade deficit in dollar terms. Exports have already reacted to the lower dollar by increasing 20% in 1988 over 1987. At the current rate, it is expected that exports will increase by 5%-8% in 1989. Although some progress has been made against imports in real terms, imports probably will not decline from present values in dollar terms. A major concern is that the trade balance will deteriorate in 1989. Such an event would obviously weaken the dollar and mandate higher interest rates.

Another factor that may affect the stock market in 1989 is the corporate restructuring that has prevailed over the last five years. During that period $550 billion of common stock has been retired because of mergers, leveraged buyouts, repurchase plans, and other corporate restructuring. Even considering the issuance of new shares, the loss has been $400 billion. Many of the restructurings have been financed with high-yield, or junk, bonds. Anything that interferes with the issuance of junk bonds will lessen the corporate demand for common stock. Alan Greenspan, chairman of the Federal Reserve Board of Governors, has already advised commercial banks to be judicious in lending for corporate restructuring deals. Although much of the market's performance in 1988 can be attributed to the corporate demand for shares, regulatory action or major defaults may eliminate this demand for common stock.

A related concern is the highly leveraged balance sheets of publicly traded corporations in the U.S. At the end of 1988, it is expected that the debt/equity ratio will approximate 1.0, compared to 0.6 in 1980. Likewise, 25% of earnings before interest and taxes will be needed to service debt, versus 17% in 1980. Corporate earnings are thus subject to more risk than ever before.

A dramatic fall for the stock markets in London or Tokyo will have repercussions here, just as the U.S. crash of October 1987 was a worldwide event.

Another worry for the stock market in 1989 will be what happens abroad. The world's major markets have become globalized in the 1980s, and the U.S. markets cannot be isolated from stock market events in Tokyo or London. A dramatic fall for the stock markets in London or Tokyo will have repercussions here, just as the U.S. crash of October 1987 was a worldwide event.

The market's performance in 1988 has been a pleasant surprise, given the events of the previous October. However, much of the performance can be attributed to lower oil prices, a stronger dollar, record earnings growth, and corporate restructuring. Unfortunately, all of these factors may not recur in 1989, and thus the forecast is for a flat-to-down market. This is not to say that a dramatic decline is predicted; but common stock values look unrewarding relative to the returns available on money market instruments and bonds. As a result, the recommended asset allocation is basically unchanged from last year: 30% money market instruments, 30% bonds (five-year maturities or less), and 40% equities.

Inflation, Unemployment, and Capacity Utilization

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Since 1980, when inflation exceeded 10%, both the broad GNP deflator measure of inflation and the narrower, but better known, Consumer Price Index (CPI) have shown a nearly continuous decline, with inflation rates staying below 5% after 1982. Although we have experienced quarters when the inflation rate was nearly 0%, since 1985 general inflation has averaged about 3% per year with consumer goods inflation a little higher, between 3.5%-4% per year.

Consumer goods prices have been climbing at nearly a 5% rate since the middle of 1986. As a result, there is understandable concern that inflation is racheting upward and may threaten economic prosperity in 1989 and beyond. There are several reasons why this concern may be exaggerated. Neither demand conditions, cost factors, nor special events presage much higher inflation than we have experienced in the last three years. We see inflation rising in the 4.5%-5.5% range in 1989.

Demand Factors

Whenever the demand for goods and services grows faster than the capacity of firms to increase output, there is a tendency for the unemployment rate to fall and for the inflation rate to rise. We are forecasting that aggregate demand will grow in 1989, but not as quickly as it did in 1988. There is less stimulus coming from government spending, and we believe that we can count on the Federal Reserve to continue leaning against inflation. Any stimulus in demand from the foreign sector should also be less in 1989 than it was in 1988. Therefore, although we are forecasting a fall in the unemployment rate for 1989, the fall will be moderate and compatible with other special factors in labor markets that should not bring higher inflation.

The capacity of the economy is most commonly measured by the capacity utilization rate or the employment rate (or its more common inverse, the unemployment rate). Both measures have improved substantially during the decade, but we believe further improvement is likely in 1989 without significantly fueling the inflationary fires. The capacity utilization rates for manufacturing and total industry have fluctuated in the 81%-84% range in the last 12 months; the manufacturing capacity utilization rate has exceeded the overall rate by about 0.3% for most of the period. We see this trend continuing into 1989. Although the overall rate is unlikely to exceed 84%, some sectors--especially business equipment, and electric utilities if we have another hot summer--may be faced with capacity constraints.

The unemployment situation is similar. The rate for all civilian workers peaked at 9.7% in 1982 but declined to about 5.6% in 1988. We anticipate a 5.4% rate for 1989. However, there will still be considerable overall employment slack in the economy. The unemployment rate for women who maintain families was more than 8% in 1988, and the rate for minorities exceeded 10%. There is still a considerable amount of involuntary part-time employment.

Cost Factors

Wholesale costs started to increase in early 1987 after falling during many of the previous 24 months. Nevertheless, the three-year moving average of percentage changes in wholesale prices is at the 1% level. In addition, the general tendency (as measured by the three-year moving average of annual percentage changes) of unit labor costs, which reflect how much extra labor costs are embodied in each additional unit of output, also has barely risen above its value in 1985. This moving average has risen from a yearly level of 2.2% in 1985 to about 2.8% in 1988. Although compensation may increase in 1989, it is likely that slower employment growth will keep labor productivity from falling and unit labor costs from rising significantly from 1988 levels.

Judging from the behavior of inflation rates in 1988, much of the increased food prices will have worked their way through the system before the end of the year.

Special mention should be made of food and energy prices in 1989, as a result of the drought of 1988 and the decrease in hostilities in the Iran-Iraq war. Food and energy prices are important components of the CPI and are volatile. Because of these facts, they can produce sharp swings in the inflation rate. Those effects, however, are usually of short duration. Judging from the behavior of inflation rates in 1988, much of the increased food prices will have worked their way through the system before the end of the year. Furthermore, the farm value of food and feed commodities, where the drought had its major impact, is a relatively minor share of retail food costs. Farm value is only 31% of grocery store purchases and only 26% of all consumer food expenditures. Nevertheless, with food prices rising a little faster on average than in 1985-87, we predict moderate sustained increases in 1989.

Energy is a different matter. In 1986, when energy prices took a nosedive, the fall was reflected in the overall inflation rates through much of 1986 and 1987. Although the glut in oil markets has not been as pronounced this year, if a barrel of oil hovers around the $15 mark for a while longer, we can expect downward pressure on inflation from the energy sector reaching into 1989. Combining food and energy, then, there is no implication for higher inflation. The prices of industrial commodities other than oil, such as chemicals and metals, moved sharply upward in 1988; we expect this trend to continue in 1989.

Other Factors

One final important determinant of inflation is the behavior of the value of the dollar. Although it has oscillated, the overall value of the dollar has depreciated persistently since February 1985. The depreciation makes imports more expensive and has a tendency to drive up prices of domestically produced goods and services as domestic producers find foreign competitors at a price disadvantage. As a result, continued growth in import demand, coupled with further declines in the value of the dollar, are likely to lead to significant price increases for imported products. This is the one major negative on the inflation front.

Housing

Jeffrey D. Fisher

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The movement in mortgage interest rates should parallel that of interest rates in general. Rates for both fixed-rate and adjustable-rate mortgages are expected to either remain at their current level or rise slightly during 1989.

At the time of this forecast, housing starts are running at a seasonally adjusted annual rate of about 1.45 million units. The trend during 1988 has been slightly downward, and this is likely to continue as mortgage rates nudge upward. The estimated number of starts for 1989 is 1.4 million units. Housing in the Midwest has been stronger than for most of the nation, reflecting recent recovery in the Rust Belt. This strength is likely to continue during 1989.

Nationally, the price of new homes has been falling on average recently due to weakness in the Northeast and West, where prices had increased significantly in recent years. In the Midwest, where home prices have only recently begun to rise, further increases are likely. New home prices in the Midwest are expected to keep pace with inflation, increasing about 5% during 1989.

Housing affordability has been dropping slightly nationally, as home prices and interest rates have risen. However, affordability in Indiana and the Midwest remains very high relative to the rest of the nation because of a much lower median price. The median price of an existing home in Indiana is about $57,000 versus $91,000 for the nation.

The sharp decline in multifamily construction caused by the 1986 Tax Reform Act is now creating a shortage of rental property in some areas of the country. This is putting upward pressure on rental rates for apartments. Rental rates will most likely rise with inflation during 1989.

The Indiana Forecast

Morton J. Marcus

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

The Indiana economy has been one of the beneficiaries of the decline in the value of the dollar. Hoosier industries have been able to recapture some foreign customers and, most particularly, reestablish market positions within domestic markets. The most notable success stories have been in the steel industry and other sectors contributing to producer and consumer durable goods. Current estimates indicate that manufacturing employment has grown within Indiana during 1988 by 17,500 jobs, an increase of nearly 3% over 1987.

Total employment growth during 1988 has been nearly 100,000 jobs, a 4% increase. The monetary value of these gains have equaled more than $1.2 billion in real wages and salaries for Hoosier workers.

The anticipated decline in the rate of growth for the national economy will be matched by a decline in the growth of Indiana's economy in 1989. Employment growth is expected to be only 60,000 jobs in the year ahead, with real wages and salaries advancing by $700 million--less than 2%. As manufacturing gains are reduced (10,000 added jobs are expected in the state's factories during 1989), the potential for growth in other sectors is similarly limited. Although service activities can be important contributors to the export base of a state, Indiana has not developed its services in this manner. The state still relies on manufacturing, agriculture, and mining for its export strength.

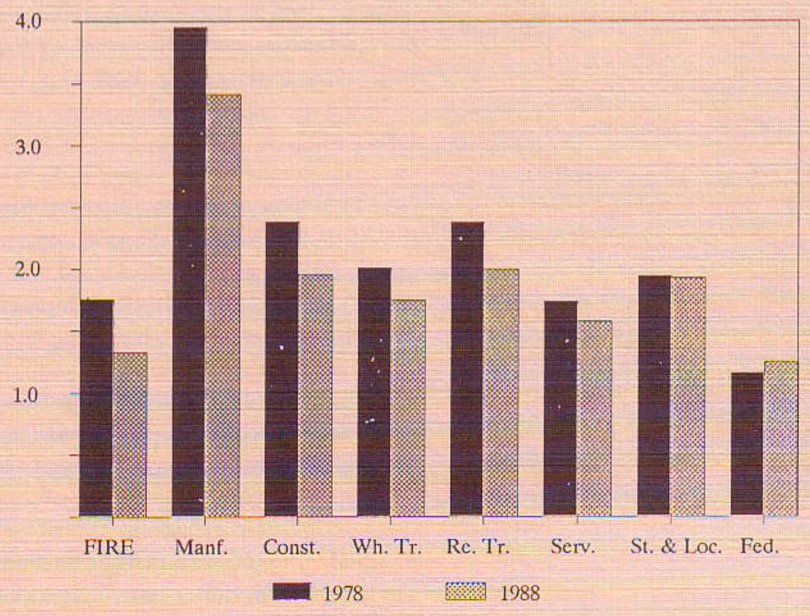
Next year may show stronger personal income growth than we currently expect for 1988. Because of the drought, Indiana farm proprietors' earnings are estimated to be a negative $1 million, compared with a positive $809 million in 1987. (Farm proprietors' earnings in 1987 equaled 1.1% of total personal income.) This cut the rate of growth for Indiana's personal income (after adjustment for inflation) to 2.1% for the year 1988. If farm proprietors' income is excluded, the state's personal income grew by 3.5% in 1988.

For 1989, we anticipate that farm proprietors will again have positive income (over $900 million). The result will be an "increase" in the rate of growth of personal income from 2.1% to 2.2%. If these drought-influenced figures are left out, the rate of growth for Indiana's personal income will decline from 3.5% to 1.1%. Hence, the $1 billion swing in farm earnings will leave Indiana looking stronger in 1989 than the majority of sectors in the economy actually will be.

Long-term Issues

Indiana's growth in the past year and in

Figure 1
Indiana's Share of Earnings, 1978 and 1988
(percent of nation)



Source: Computed via the Economic Development Network (EDIN) from data provided by the U.S. Bureau of Economic Analysis the year ahead must be understood in a longer-term perspective. We are not keeping pace with the nation; there are strong differences in the growth patterns within the state. Consider these fragments of evidence:

* Relative to the nation, Indiana continues to decline. Population and personal income growth rates in the state remain slower than the nation as a whole. Out-migration is no longer at a high rate, but the state's aging population offers little hope for major gains through natural increase. Total personal income in the state has continued to grow less rapidly than in the nation. In 1987, Indiana enjoyed 2.024% of the nation's personal income; in 1988 this figure is estimated to be 2.021%, and the 1989 figure is expected to fall below 2%. This continues a trend that has been virtually unbroken since 1969.

Indiana's rank in earnings among the states is lower in 1988 than it was in 1978. (Data in this section are for the second quarter of each year respectively; these are the most recent data available at this writing.) **Table 1** presents the Hoosier state's rank in earnings for major sectors of the economy. Only in state and local government has the state's rank among the 50 states improved, and that by just one place. In all other sectors Indiana is lower in rank that it was 10 years ago and no better than in the depths of the recession of 1982.

These data are reinforced graphically by **Figure 1**. Here Indiana's share of earnings originating in each sector are shown as a percent of total earnings in that sector nationally. In all sectors, except Federal government, Indiana's share declined from 1978 to 1988.

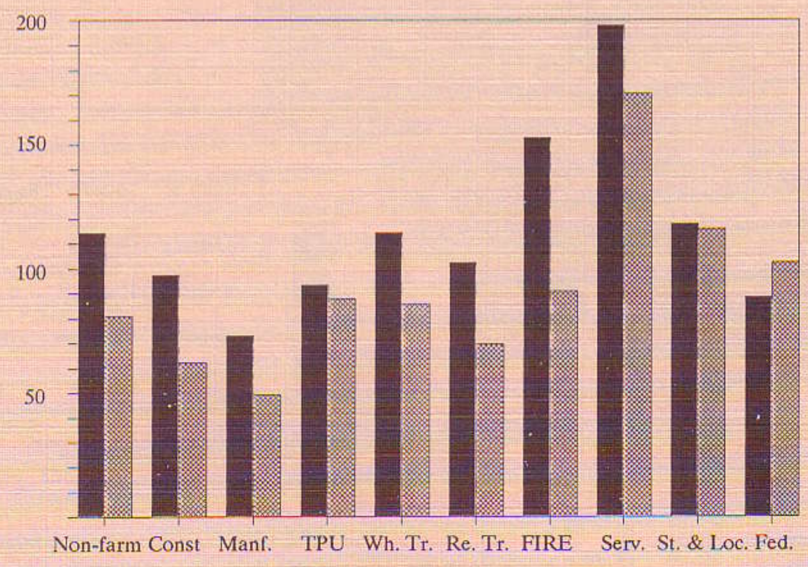
That decline in share is the result of slower growth in each sector for Indiana than in the nation as a whole. This slower growth is seen in **Figure 2**. Nominal non-farm earnings grew from 1978 to 1988 by 114.3%. Indiana's growth was just 81.0% for that decade. The greatest discrepency between growth rates for the nation and the state was in Finance, Insurance, and Real Estate: U.S. growth was 152.9%, Indiana 90.8%. Only in earnings from federal government employment did Indiana outperform the nation.

Employment growth within the state from October 1978 to October 1988 was 263,100 jobs, or 10.7%. There are, however, still 27 counties with *lower* levels of employment in 1988 than they enjoyed ten years earlier. These counties are mainly along the western border of the state and in a band of counties running southeast from Carroll to Fayette.

Figure 3 shows that the experiences of our 92 counties in recession and recovery have been quite different. Of the 65 counties with higher employment in 1988 than in 1978, 21 experienced no decline in employment between 1978 and 1982. Monroe, Hamilton, Johnson, Porter, and 27 others gained jobs in both the recession and in the recovery periods. A more expected pattern was found in 44 counties. Marion, Allen, Elkhart, St. Joseph, and 40 others had declines in employment during the recession, but bounced back to record gains from 1982 through 1988 that overcame the earlier losses.

The story for the remaining 27 counties is less positive. There were 18 counties, including Vigo, Grant, Howard, and Wabash, that experienced declines in the recession but have not yet had

Figure 2
Growth in Earnings by Industry, 1978 to 1988
(1988 as a percentage of 1978)



Source: Computed via the Economic Development Network (EDIN) from data provided by the U.S. Bureau of Economic Analysis sufficient job growth to have employment levels in 1988 above those of 1978. Five counties (Lake, Jay, Sullivan, Clay and Rush) had declines in employment in both periods. Another four are truly different: Spencer, Warren, Pike, and Brown are the.contrarian counties with minor gains in employment during the recession that were wiped out by losses during the recovery.

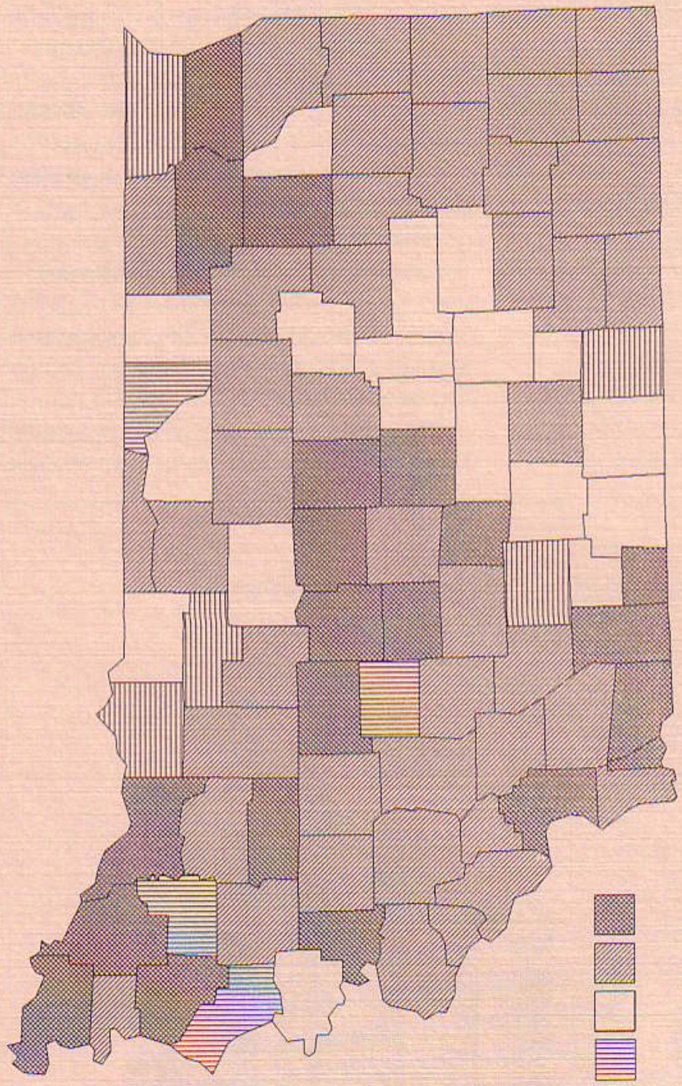
In sum, the state is growing, will continue to grow in 1989, but has failed to keep pace with the nation and exhibits strongly divergent patterns of change among its counties. These findings suggest that the tasks of economic development for the new administration are different from those faced by its predecessors. Divergent patterns of development and growth may demand more attention than general improvments in economic well-being.

Table 1
Indiana's Rank Among the 50 States

	1978	*1982*	*1988*
Non-farm Earnings	11	14	14
Construction	12	16	16
Manufacturing	9	9	10
Trans., Comm., & Util.	13	15	15
Wholesale Trade	14	19	20
Retail Trade	11	14	16
FIRE	16	19	19
Services	16	19	19
State & Local Gvt.	17	19	16
Federal Government	26	26	26

Source: Computed via the Economic Development Information Network from data provided by the U.S. Bureau of Economic Analysis.

Figure 3
Employment Growth Patterns, 1978-88



1982-88	1978-82	Number
Growth	Growth	21
Growth	Decline[1]	44
Growth	Decline[2]	18
Decline	Growth	4
Decline	Decline	5

1. For these counties the growth from 1982-88 offset the decline from 1978-82.
2. For these counties the growth from 1982-88 did not offset the decline from 1978-82.

Source: Computed via the Economic Development Information Network from data provided by the Indiana Department of Employment and Training Services (IDETS).

Indianapolis

Robert Kirk

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The Indianapolis economy has been moving on the fast track for the past several years. However, in 1989 the rate of performance will slow, from a 4% rate of employment growth to a 2.5%-3% rate. The primary impetus behind this slower rate is the concern of the Federal Reserve System about inflation and the expression of that concern through upward pressure on interest rates--at least during the first part of the year.

Consumer durables and residential housing starts, which are interest-rate sensitive, will be negatively affected. Also, as national discussion focuses on ways to deal with the federal budget deficit, consumer confidence may be weakened. Typically, when uncertainty increases, the consumer adjusts by postponing purchases of durable goods such as automobiles.

Other factors affecting demand for vehicles are the ability to pay the price of a new car and the age distribution of the population. More weeks of work are required to earn the price of a car than before. However, the consumer has adjusted by extending the maturity on the car loan to keep the monthly payment at a reasonable level.

Demographically, at one end of the age spectrum the pool of first-time car buyers is shrinking. At the other end people are living longer and more have private pension income, but the elderly tend to spend on services rather than durables. Therefore, buyer incentives will continue to be a feature of the automobile market.

Indianapolis Performance

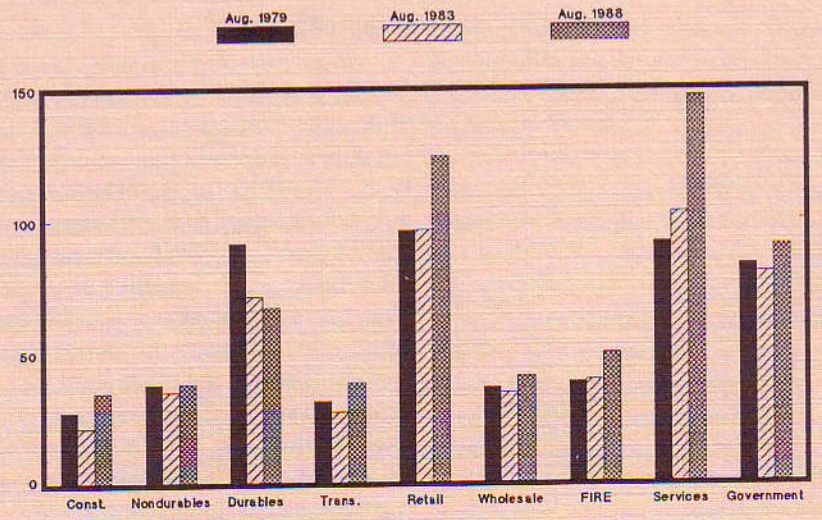
How has Indianapolis performed compared to the region during the current expansion? **Table 1** shows the percentage change in total employment for selected metropolitan areas in the Great Lakes region.

There have been significant employment shifts by industry in the Indianapolis economy (**Figure**). The year 1979 was a peak in the business cycle in the Midwest before the 1980-82 recession, while 1983 was the first year of expansion. Growth in employment has been concentrated in construction, retailing (including restaurants), business services, and health services. Some of the components of business services are direct mail advertising, janitorial services, computer programming, temporary help, management consulting, and public relations. Many of these activities have shown growth, locally and nationally, because of a process of contracting out to specialized firms that can take advantage of economies of scale. Urban areas provide sufficiently large markets and specialized labor pools to support the degree of specialization found in the industries mentioned above.

Table 1
Changes in Establishment Employment, Selected Metropolitan Areas, Aug. 1983-Aug. 1988 (percent change)

Columbus	24.5
Indianapolis	23.5
Cincinnati	22.3
Detroit	17.6
Chicago	15.2
St. Louis	13.8

Figure
Employment by Industry, August 1979, 1983, and 1988 (in thousands)



Construction

Building cranes will continue to loom against the Indianapolis skyline as major construction projects progress or are initiated. The list includes Bank One, Eli Lilly, the Circle Centre Mall, the State Office Complex, and IUPUI. However, difficulty in obtaining financing because of increasing vacancy rates may put a damper on new office building projects unless the developer can obtain substantial preleasing.

What about the residential housing market? Upward pressure on mortgage rates will lower housing starts. Also, the 1986 Tax Reform Act raised the cost of owning homes by lowering marginal tax rates, reducing the value of housing deductions, and by raising the standard deduction, making it more difficult to generate housing deductions. At the local level, housing inventories, expected rates of appreciation in housing prices, and population shifts by age play a role. Opportunities for appreciation of home values will vary by location within the metropolitan area. **Table 2** shows estimates of population change by age group for the Indianapolis metropolitan area, Indiana, and the U.S., 1980-87.

Home-buying age groups continue to show large percentage increases, although this demographic stimulus to housing is diminishing. To meet the needs of the expanding 60+ market, alternative ways to supply housing, such as conjugate housing, may become attractive. To meet the need to rehabilitate substandard housing, the Indianapolis Neighborhood Housing Partnership has been established. A revolving loan pool derived from corporations, foundation endowments, religious organizations, Community Development Block Grants, and individuals will be developed.

Table 2
Estimated Population Change
Indianapolis, 1980-87

Age Group	*Percent Change*
0-4	7.7
5-9	-2.4
10-14	-7
15-19	-10.7
20-24	-1.9
25-29	4.1
30-34	10.6
35-39	28.8
40-44	29.6
45-49	11.2
50-54	-5.2
55-59	-4.6
60-64	14
65-69	14.3
70-74	12.5
75-79	14
80-84	14.1
85+	29.9
Indianapolis	5.3
Indiana	0.7
United States	7.4

Nonprofits

Indianapolis has become the home of many nonprofit groups, including membership, social, and religious organizations. The 1986 Tax Reform Act may affect the nonprofits in two ways--both positively and negatively. As marginal tax rates decrease, the resulting increase in after-tax income makes it possible for the household to *increase* the charitable contribution. On the other hand, as marginal tax rate decrease--thereby lowering the value of the tax write-off--the resulting rise in the price of giving will *decrease* the charitable contribution.

The tax change is only one factor that affects the level of giving. Other factors include increases in employment and real per capita personal income. Nonprofits have been giving more attention to the development of revenue-generating activities. Indianapolis has become a national center for teaching, research, and public service in philanthropy through the establishment of the Center on Philanthropy on the IUPUI campus.

As the Figure indicates, there has been a large increase in retail employment. This employment growth represents the entry of many firms in to the marketplace. Can the local personal income growth support the employment growth? One indicator is the number of dollars of real personal income per employee hour in retailing. Since this ratio has declined in recent years, the implication is that the 1989 retail marketplace will be a highly competitive one.

Supply-side Constraints

As the population estimates of Table 2 indicate, from 1980 to 1987 there have been contractions in the 15-19 and 20-24 age groups--from which new entrants into the labor force are drawn. Since 1985, the Indianapolis labor market has grown faster than both the U.S. and Indiana labor markets. This suggests no serious labor supply constraint. On the other hand, when 10,000 apply for jobs at a new auto plant while there are lengthy lists of job openings at the $4-$6 per hour level, there appears to be a wage rate below which some people are unwilling to supply their labor. Employers are adjusting by hiring older workers, substituting capital for labor where possible, and raising wage rates.

Another supply constraint is the Indianapolis airspace, specifically its waste assimilative capacity. We dispose of our waste products in the air, but its capacity to absorb waste is limited. Since capacity is a scarce resource but commands no price, we tend to overuse it at times. In 1987, the Environmental Protection Agency indicated that the inventory of sources of air pollution, as well as air pollution planning, should extend beyond Marion County to include the seven suburban counties. Given the spillover nature of air pollution, coordination across county lines of efforts to deal with air pollution needs to be developed. This effort will challenge local and state governmental officials in 1989 and beyond.

Richmond

Ashton I. Veramallay

Director, Center for Economic Education, Indiana University East

As the national economy goes, so goes Richmond's. Given this interdependence, the Richmond area economy can expect slow growth in 1989. As the current national economic expansion, the longest in peacetime history, enters its twilight phase, real GNP growth will increase by less than 3%; inflation will rise to about 5.5%; and unemployment will decline to about 5%.

For the local economy, this expected performance in 1989 means that the unemployment rate will hover around 7%. At least 50% of the firms responding to my survey are being affected adversely, in varying degrees, by current economic conditions. Employment growth in the manufacturing sector will be sluggish unless it is offset by internal business expansion. An erosion of this sector's base is likely if labor costs are not contained. It is important to note that wages constitute more than 60% of the gross local income. Consequently, the flight of high-paying jobs from Richmond will ultimately affect both economic growth and quality of life.

The service sector will continue to expand, as the demand for services of various kinds increases. Service jobs are often part-time, and their wage rate is below that of the manufacturing sector. Also, real personal income growth will increase by less than 2%, and the county's median household income will remain below $20,000, with aggregate demand lagging behind the 1986-88 levels.

This phenomenon is partly attributable to the fact that at best 20% of the county's adult population did not graduate from high school. Low education means low skills, low wages, low purchasing power for goods and services, and hence a low quality of life. It also translates into a higher dependency ratio with increased transfer payments.

Consumer spending will remain fairly stable in 1989. If voter preference as expressed in the recent presidential election is an indication of consumer confidence in the economy, then the results augur well for the retail and service sectors. The initial fears following the 1987 stock market crash, at least those associated with consumer spending, were not justified in 1988. Consumers are again entering the market to buy big-ticket items such as automobiles, houses, appliances, entertainment sets, furniture, and recreational amenities. Local merchants can therefore expect a relatively good year if consumer confidence continues.

Investment spending, on the other hand, will grow at a slow pace. Although about 90% of the surveyed firms are optimistic about business conditions in 1989, only 38% of them plan to expand. If inflation increases it will lead to high rates of interest, which could further dampen capital spending. Improvements in plant, equipment, and structures will, however, generate positive effects within the local economy.

Further, the dollar's depreciation will boost sales of local firms engaging in international trade. The lagged effects in exchange rate movements, coupled with the belief among many U.S. consumers that imported products have superior qualities that make them attractive despite price increases, will slow the adjustment process to eliminate the trade deficit. Continuing deterioration of the dollar will invite tight monetary policy, eventually driving interest rates upwards with concomitant effects on the credit markets. Finally, if the international economy experiences slow or flat growth, it will curtail U.S. exports and worsen the trade deficit.

South Bend-Mishawaka/ Elkhart-Goshen

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This year-end assessment of economic conditions in the South Bend-Mishawaka and Elkhart-Goshen communities is based on an analysis of the latest available economic indicators 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 areas continue to experience growth at a rate outpacing that expected at midyear (*IBR*, June 1988).

Table
Economic Indicators

	South Bend-Mishawaka August 1988	July 1988	Percent Change	August 1987	Percent Change	*Elkhart-Goshen* August 1988	July 1988	Percent Change	August 1987	Percent Change
Employment Data										
Establishment Employment[1]										
Nonagricultural Employment	129.0	128.7	0.2	123.5	4.5	197.1	196.1	0.5	184.5	6.8
Manufacturing Employment	72.7	74.0	-1.8	74.4	-2.3	181.4	180.8	0.3	165.9	9.3
Nonmanufacturing Employment	160.8	160.1	0.4	151.5	6.1	219.5	218.6	0.4	211.7	3.7
Unemployment Rate	5.1	5.1	n/a	5.5	n/a	3.8	3.8	n/a	4.7	n/a
Help Wanted Advertising[2]	156.1	139.7	11.7	148.7	5.0	181.9	176.3	3.2	157.4	15.6
Utilities[3]										
Industrial Electricity Sales	169.9	167.9	1.2	166.1	2.3	224.4	219.6	2.2	220.2	1.9
Commercial Gas Sales	88.8	81.3	9.2	99.4	-10.7	80.5	69.9	15.2	98.2	-18.0
Industrial Gas Sales	75.7	85.9	-11.9	114.4	-33.8	58.2	59.7	-2.5	54.6	6.6
Retail Car and Truck Sales[4]										
New Passenger Car Sales	66.5	78.9	-15.7	88.8	-25.1	69.3	72.6	-4.5	80.2	-13.6
New Truck Sales	235.3	267.8	-12.1	294.0	-20.0	119.0	122.7	-3.0	119.5	-0.4
Housing Construction Data[5]										
Estimated Value of Permits	807.9	597.0	35.3	694.2	16.4	506.5	401.9	26.0	332.3	52.4
Number of Permits Issued	145.2	112.2	29.4	156.4	-7.2	138.0	121.8	13.3	106.1	30.1
Average Value Per Permit	577.6	565.0	2.2	468.8	23.2	376.9	374.9	0.5	349.6	7.8
Residential Real Estate Data										
Number of Active Listings	1186	1183	0.3	1288	-7.9	1309	1299	0.8	1179	11.0
Closed Sales										
Average Days Listed	54	53	1.9	51	5.9	84	87	-3.4	86	-2.3
Average Market Price	64,715	63,452	2.0	56,250	15.0	62,510	61,578	1.5	63,314	-1.3
Percent of Sale to List Price	94.3	95.0	-0.7	95.8	-1.6	95.0	95.0	0.0	99.0	-4.0

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

The accompanying **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 July and August 1988. To highlight longer-term trends, the same figures are also given for August 1987.

South Bend-Mishawaka

News about the South Bend/Mishawaka economy is somewhat mixed. The growth in non-agricultural employment over the past year (4.5%) was twice what was forecast. On the other hand, the month-to-month and year-to-year declines in manufacturing employment are of some concern. There has been hope that since the manufacturing employment index has fluctuated in the narrow range of 73 to 75 for about three years--that is, manufacturing jobs currently total between 73% and 75% of the 1969 total--the two-decade pattern of a declining number of manufacturing jobs may be ending. But although the August index is not dramatically lower, when the situation is placed in light of the recent announcement by AM General that its Chippewa military truck plant (employing 650 people) would be closing, the possibility of renewed deterioration arises. Also fueling this concern is that transportation equipment manufacturing employment was off 800 jobs from last August to this August. Area analysts will make a point of monitoring manufacturing employment closely.

One cannot help but be impressed by the strength in new housing permits. This index has been exceptionally strong and running counter to national trends for the past 18 months. The continuing softness of the passenger car sales figure, however, is more reflective of conditions in the automobile business nationally.

Elkhart-Goshen

As usual, the most startling Elkhart-Goshen trends lie in employment data. About 55 percent of Elkhart County's employment is found in manufacturing, as compared to about 25 percent nationwide; this has been the fastest growing sector of the area's work force. The 9.3% increase in the index from last year to this year was the largest 12-month gain in memory and helped lead to an exceptionally high help-wanted index and an exceptionally low unemployment rate. Elkhart's labor shortage has caused the area's leadership to advertise for workers in the help-wanted sections of out-of-state newspapers. Sectors leading the year-to-year gain included recreational vehicles, lumber and wood products, furniture, services, and retail trade.

As was the case with South Bend-Mishawaka, Elkhart-Goshen housing indicators were especially strong but car sales were particularly soft. Again, the strength of the housing market is a local phenomenon that runs counter to the national trend.

The Outlook

The outlook for South Bend-Mishawaka and Elkhart-Goshen continues to suggest that local employment growth will experience some moderation in the coming months, given what is expected to be moderating growth nationally. Most forecasters see growth slowing to an annual rate of between 2% and 3% in 1989. For the local economies, other things being equal, this should translate into employment growth of about 2% in South Bend-Mishawaka and 4% in Elkhart-Goshen.

Terre Haute

Marvin Fischbaum

Professor of Economics, Indiana State University

In 1988, local economic activity maintained a fairly even keel. In contrast to recent history, no new plant closings were announced. At least the bleeding has stopped; 1989 may be the year when meaningful recovery begins.

In 1986 and 1987 the unemployment rate in the Terre Haute area fell only because the labor force decreased more rapidly than the number of jobs. This year saw both labor force and jobs confined to a fairly narrow range. MSA manufacturing employment stayed between 9,800 and 10,100. September, the most recent month for which data is available, saw the peak in nonmanufacturing employment at 44,800, while August saw the trough at 41,500. Seasonal factors clearly dominated any trend. For much of the year, unemployment rates ran at their lowest levels of the 1980s, but as the labor force began to expand, seasonally adjusted unemployment rates began to rise. Paradoxically, September brought not only the year's highest level of employment and the year's longest average work week in manufacturing (43.3 hours), but also the highest seasonally adjusted unemployment rate.

For the broader region the employment picture was more clearly positive. Nearby non-metropolitan counties, including Vermillion and most notably Sullivan County (where unemployment problems had been especially severe), benefited from improving labor markets.

The record of construction activity reinforces the impression that local economic conditions are no longer deteriorating and may even be getting better. For much of the year, construction employment ran 20% to 25% above the level of 1987. Year-to-year comparisons show a rise of 12.5% in the value of Vigo County residential building permits and of more than 50% in the value of non-residential permits.

This activity, however, was largely embodied in projects long in the works. The downtown renaissance has all but stalled. Plans to renovate the old Meis Department Store fell through, but the Alliance for Growth and Progress has agreed to underwrite the demolition of the structure. Plans to turn the Terre Haute House into a luxury suites hotel have been off again, on again. Currently there is renewed optimism.

New commitments for construction were not of the blockbuster variety, but they were widespread. For example, the

Honey Creek Mall area will be the site of a number of new retail businesses, including a strip shopping center anchored by Wal-Mart, a freestanding Sam's Wholesale Club, a Phar-mor Drug Store, and an exotic car dealership. A survey of 187 local businesses conducted by the Center for Research and Management Services at Indiana State University found that 23% of the surveyed businesses expanded their plants in the past year, while 31% engaged in renovation. For the coming year, 22% plan to expand and 25% plan to renovate. Of the 38 manufacturing plants in the survey, 42% expanded and 40% renovated; 39% plan to expand in 1989 and 37% plan to renovate.

The residential real estate market has been steady. The number of homes sold increased substantially, but average time on the market is essentially unchanged from a year ago, and the average selling price actually declined slightly.

The new year will almost certainly be better for providers of seed, fertilizer, herbicides, pesticides, and drought insurance.

Farmers endured the worst drought in 50 years. They were helped by higher prices and--where crops failed--by government assistance. On soils that hold moisture, crops came in with much better yields than had been anticipated. With smaller crop carryovers, farmers look forward to a better 1989. The new year will almost certainly be better for providers of seed, fertilizer, herbicides, pesticides, and drought insurance.

There are signs that manufacturing may be starting to come back. New firms are emerging from the ashes of the old. Specialty Blanks, formed out of discontinued operations at Alcan, is doubling its capacity. Shenango Industries will utilize 150,000 square feet of the Stran Steel building and will initially employ 125 persons to manufacture castings. What was Indiana Gas and Chemical will reopen as Terre Haute Coke, with output perhaps at 80% of the old level.

Evergreen Express is likely to initiate daytime operations and add substantially to its work force. It may also open an aircraft maintenance facility. Hercules has stated that Terre Haute is in competition with another city for a possible $100 million expansion of production facilities. And BASF is considering locating in Terre Haute an automotive paint factory that would employ 500 workers. Initially, the community reacted enthusiastically to the BASF proposal. But after strong opposition developed at an alternative site (Evansville), and after BASF made it clear that some of the hazardous waste to be stored on the site would be trucked in from other locations, local opinion has been sharply and vocally divided.

During the 1980s Terre Haute's economy has consistently underperformed both the state and the nation. Local incomes have fallen further behind the state and national averages. In 1987, annual wages averaged $18,100 in Terre Haute--the second lowest of the state's 12 metropolitan areas. As in previous years, the rate of increase was lower than the national average. Perhaps 1989 will be different. The survey by the Center for Research and Management Services revealed that although local businesses are not overly optimistic regarding their own prospects, 74% of the firms surveyed believe that the Terre Haute economy will improve over the next two years. Perhaps the entry of new industry will turn the tide.

Gary-Hammond-East Chicago (Calumet Area)

Leslie P. Singer

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In the past three years the northwest Indiana regional economy has begun to gain a more diversified base. This process is likely to continue for ten years or longer.

First and most decidedly, the region is moving toward a metro economy, even though individual urban and nonurban political fiefdoms may not as yet admit the existence of these inevitable forces. Our old economic base, manufacturing, has now stabilized after shrinking to a much lower level; newly entering firms provide much-needed diversification.

Economically, northern Indiana is tied to the Great Lakes region much more than to the state or the nation. During the recession of 1973-75 and the recovery that lasted until 1978, the Midwest and northwest Indiana almost paralleled each other. However, since the dramatic downturn from 1979 to 1982, the Midwestern and northwest Indiana manufacturing sectors slumped and never regained the 1973 output levels, while the U.S. industrial sector has recovered (output and employment are now about 50% above 1973 levels).

Since the end of 1986 the Midwestern manufacturing sector has expanded at rates that exceeded U.S. rates by almost 1%. Northwest Indiana has reflected these trends as well, and they are likely to continue until about the second half of 1989.

Total establishment employment in northwest Indiana rose at an annual rate of 3.51% in the third quarter of 1988, compared with 3.72% in the state. Nonmanufacturing employment rose 4.08% in

Table
Northwest Indiana PMSA Employment and Payroll Short-Term Forecast
(Employment in thousands)

	1988:2	*1988:3*	*1988:4*	*1989:1*	*1989:2*	*1989:3*	*1989:4*	*1990:1*	*1990:2*	*1990:3*
Manufacturing	56.67	56.90	57.57	57.86	58.83	58.32	60.61	61.07	67.58	59.75
Steel Mills	35.37	35.20	35.90	35.93	36.41	36.19	37.14	36.99	37.01	36.22
Other (including petroleum)	21.30	21.90	21.67	21.93	22.42	22.13	23.47	24.08	24.57	23.53
Nonmanufacturing	171.70	174.00	176.12	174.81	178.84	181.25	179.80	178.15	185.23	189.32
Construction	12.77	14.17	11.79	11.12	13.15	15.11	11.21	11.28	14.43	16.04
Trade	54.33	55.53	55.28	53.82	56.21	57.69	54.52	55.50	58.09	59.84
Services, Trans. & Util., Health	73.07	73.73	74.55	75.06	76.92	77.93	80.59	79.16	80.84	82.12
Government	31.60	30.57	31.39	32.62	32.82	31.46	32.58	33.10	34.03	32.36
Total	228.37	230.90	233.69	232.67	237.67	239.57	240.41	239.22	246.81	249.07
Manufacturing Payroll ($ billion)	1.8172	1.8645	1.9240	1.9449	1.9841	2.0138	2.1118	2.1198	2.1521	2.1952

the region compared with 4.15% in the state. In other words, northwest Indiana is keeping pace with the state as a whole--good news, considering that the region was doing so much worse than the state for the first half of the decade.

Manufacturing employment in the region increased 1.18% and steel employment rose .54%. It appears that for every 1% increase in real GNP, local employment tends to rise about .91% and manufacturing employment tends to rise about .29%. The manufacturing payroll in nominal dollars tends to rise about 1.28% for every 1% increase in real GNP. This relationship is expected to hold in 1989.

Manufacturing payroll was $1.94 billion (nominal) in the third quarter of 1983 during the short recovery. Subsequently it declined and then recovered, reaching $1.95 billion (seasonally adjusted, nominal) in the third quarter of this year. We expect nominal payroll to rise a little more than 4.5% in 1989, which may be below the rate of inflation. The foregoing projections are based on an expected real GNP growth rate of about 3.51% and a regional inflation rate of about 4.85%.

It would appear on the surface that the real manufacturing payroll will make almost no contribution to northwest Indiana growth in aggregate employment. However, upon closer examination a more complex relationship emerges. Nominal manufacturing payrolls stimulate the local economy and cause employment to rise even though the real (deflated) payroll declines. This money illusion appears to be quite consistent. For example, even in periods of zero growth of real local payroll, local nonmanufacturing employment rises about .395% for every 1% increase in the nominal payroll after other injections of money into the regional economy are taken into account.

These other injections include federal, state, and local transfer payments, private pension remittances, contributions of public and private insurance, and dissaving (depletion of accumulated wealth, and dividends and interest receipts). As we have noted before, contributions to the local economy (and to its aging population) from nonwage income are rising at more than double the rate of wage income.

The local economy is thus moving toward a different and better-integrated structure, one that is sustainable and potentially stable in the long run. One implication is that a moderate rise in interest rates or a rise in the deficit, which would increase the yield of locally held liquid assets or transfers, may induce a marginal rise in consumption and consequently a marginal increase in nonmanufacturing employment.

Finally, we must gauge the effect of foreign trade on the local economy. The impact of exports is indirect, even though USX is expected to export more than 1 million tons of steel at almost $800 a ton in 1989.

The higher price of exports, as compared to an average domestic price of about $460 a ton, will contribute to USX's profits on account of the depreciated dollar. However, most of the impetus for a rise in local derived demand for steel will come from a decline in imports of foreign cars and from a rise in exports of electronics, chemicals, pharmaceuticals, and other products, which may raise the demand for local flat rolled steel and structural steel. Furthermore, national investment in structures and non-electrical machinery may rise in 1989 at an anticipated annual rate of about 7.5%, even though investment in the less steelintensive information and communication sector is likely to proceed at a slower pace than in 1988.

All of these anticipations are summarized in the forecasts in **Table 1**. Four things could vitiate the forecasts:

* A new wage spiral induced by collective bargaining agreements in leading manufacturing sectors in 1989;

* An effort to raise or maintain the exchange rate of the dollar in 1989;

* Drastic reductions in public spending on durable goods (including defense) in an effort to reduce the deficit without cutting public consumption expenditures; and

* A significant rise in income and corporate taxes as opposed to consumption taxes (with substantial exclusions for necessities).

Individually, none may become a serious handicap to growth. The tail end of a long recovery is fragile, however, and so any combination of the above may induce a slowing down or possibly even a reversal in the pace of regional economic growth in 1989.

Jeffersonville-New Albany (Louisville Area)

Fay Ross Greckel

Professor of Economics, Indiana University Southeast

The Louisville area economy, like that of the nation, continued to expand in 1988. Growth was stronger than expected in some areas, but weaknesses were evident in others. The overall expansion should continue well into 1989, but at a slower pace than in this year and with significant exceptions.

Table 1
Employment (establishment) and Unemployment (residents), 1984-88

	Total Nonfarm Employment	*Manufacturing Employment*	*Nonmanufacturing Employment*	*Unemployment Rate (%)*
Louisville Metropolitan Area				
Annual				
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				
1987:1	430.4	86.5	344.0	7.0
1987:2	431.8	86.2	345.6	7.2
1987:3	436.1	86.0	350.0	7.0
1987:4	445.8	86.5	359.4	6.5
1988:1	452.3	87.3	365.0	6.2
1988:2	453.0	87.7	365.1	6.6
1988:3	453.4	88.1	365.4	6.0
Clark, Floyd, and Harrison Counties				
Annual				
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				
1987:1	58.0	13.2	44.8	9.1
1987:2	57.9	13.1	44.8	5.9
1987:3	58.3	13.3	45.0	5.9
1987:4	58.8	13.4	45.3	5.6
1988:1	59.0	13.4	45.6	5.0
1988:2	58.7	13.0	45.8	4.8
1988:3	57.8	13.0	44.7	5.7

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

Table 2
Emergency Food Aid Provided by Dare to Care

Period	*Number of Food Packages Provided*[1]
Jan-Sept 1983	54,500
Jan-Sept 1984	58,500
Jan-Sept 1985	60,200
Jan-Sept 1986	60,700
Jan-Sept 1987	57,200
Jan-Sept 1988	61,900

1. Each package contains three to seven days' food supply for one person. Recipients must be referred and may obtain aid a maximum of four times per year.

Source: Dare to Care, Louisville

The economy's strength, as well as some of the weaknesses, can be seen in the employment statistics shown in **Table 1**. Establishments in the seven-county metropolitan area (Clark, Floyd, and Harrison counties in Indiana and Jefferson, Oldham, Shelby, and Bullitt counties in Kentucky) employed nearly 20,000 more workers in the third quarter of 1988 than for the same period a year earlier. This gain was the largest in the decade. Year-to-year gains since 1984 have typically been about 10,000 to 15,000. However, most of the jobs were added during the last quarter of 1987 and the first quarter of 1988. On a seasonally adjusted basis there was very little net job growth after midyear.

Manufacturing employment increased for the first time in many years. About 1,000 jobs were added, most of them in nondurable goods industries. As usual, nonmanufacturing accounted for the bulk of the employment growth. Although major gains occurred in all nonmanufacturing categories, half of the new jobs were in retailing and services. The transportation/communications/utilities sector added more than 2,000 jobs, and construction and wholesale trade employment grew by well over 1,000 jobs each.

Nearly all the net gains in employment occurred in Kentucky. The data presently available from the Indiana Department of Employment and Training Services show employment in Clark, Floyd, and Harrison counties averaging 58,500 jobs (seasonally adjusted) during the first three quarters of 1988--a gain of only 400 jobs over the same period of 1987. A slight decrease in manufacturing jobs was offset by small increases in nonmanufacturing.

Table 1 shows that the Indiana counties' employment peak was reached in the first quarter. Declines in the second and third quarters were caused partly by layoffs of temporary employees at the Census Bureau in Jeffersonville, as work on a special census wound down. Increases in retailing jobs offset a surprising decline in service-sector jobs.

Employment opportunities in the Indiana counties have probably been a little better than these statistics indicate. Early this year, Indiana revised the 1987 employment statistics for these counties sharply upward. The same sort of upward revision can be expected in early 1989. Nevertheless, the trend of declining employment in the Indiana counties is likely to continue for the next few months, if layoffs announced in several manufacturing industries materialize. Most significant would be the loss of 600 jobs at the ammunition plant in Charlestown as a result of smaller Army contracts. A few months from now a substantial number of jobs will become available at the Census Bureau as preparations for the 1990 Census accelerate.

Since commuting is common and since the number of jobs in the Kentucky portion of the metropolitan area should continue to expand (although more slowly than in 1988), employment prospects for Indiana and Kentucky residents should continue to be favorable. The Louisville Chamber of Commerce reported that during 1987, many new and expanding businesses announced major investment plans that would result in about 4,250 new jobs for the metropolitan area. Some of those jobs have already begun, but many will be coming on-line in the months ahead. More recent announcements include the prospect of nearly 1,000 more jobs at UPS after its planned $32 million facilities expansion is completed. (UPS has expressed concern over limited airport capacity, but it seems likely that the expansion of Standiford Field, already in process, will be adequate for the firm's needs.)

The prevalence of low-wage jobs in the expanding employment categories remains a concern. In fact, there are indications that the problems of marginal income and poor families are becoming more acute, despite a decrease in the number of unemployed residents. As **Table 2** shows, requests for emergency food rations from Dare to Care reached a record level for the first nine months of 1988 after declining in the same period of

Table 3
Residential Building Permits, 1979-1988
(number of dwelling units)

	Jefferson Co. KY	*Clark Co.*	*Floyd Co.*[1]	*Harrison Co.*[2]
Jan-Sept 1979	1860	463	316	
Jan-Sept 1982	670	111	200	46
Jan-Sept 1983	1766	185	259	115
Jan-Sept 1984	1649	193	166	78
Jan-Sept 1985	2102	215	232	126
Jan-Sept 1986	2165	208	298	122
Jan-Sept 1987	3013	295	188	116
Jan-Sept 1988	1807	249	334	126

1. Number of residential units for which building permits were issued, including single-family dwellings, apartment units, and condominium units.
2. Excluding Corydon, for which data were not available.

Source: Kentuckiana Regional Planning and Development Agency.

1987. Several social agencies and utilities also reported increases in applicants or in households having trouble paying their bills, particularly in recent months. Many of the families in trouble contain an employed adult, but the job held appears typically to be low-wage or part-time with no benefits included.

Construction

Construction continues to play an important role in the current economic expansion. The Louisville Chamber of Commerce tally of major business investment projects announced during 1987 showed that 644 industrial and commercial firms expected to spend more than $1.1 billion, a record, on planned expansions. Some of these are complete, others are underway, and still others have yet to be started. The chamber has not released statistics for 1988, but the many projects announced in the local papers--including expansions by American Commercial Barge Lines in Jeffersonville, Capital Holding and Tesseract in Louisville, and shopping malls and theater complexes on both sides of the Ohio River--point to another strong year. Even if some plans are never implemented, a solid base of nonresidential construction appears to be in place for 1989.

Residential construction presented a mixed picture in 1988. As **Table 3** shows, during the first nine months residential building permits rose sharply in Clark and Floyd counties, rose slightly in Harrison County, and fell drastically in Jefferson County. In all counties, construction of single-family dwellings rose. The only county in which multifamily construction is normally a major factor is Jefferson County. There, as elsewhere in the U.S., changes in income tax provisions and fear of overbuilding led to a sharp decline in multifamily building starts. Permits fell from 1,789 dwelling units in the first nine months of 1987 to 509 units in the same period for 1988. With rising interest rates adding to the other concerns, a reversal of that trend seems unlikely in the near future.

In other sectors, real estate sales rose in both southern Indiana and Jefferson County. Sales of cars and light trucks also increased in both areas.

The Forecast

The metropolitan area should continue to grow, albeit at a slower rate, in 1989. As in 1988, growth will be quite uneven. Manufacturing jobs should continue to increase slightly, but most job gains will again come in nonmanufacturing and in the Kentucky counties. Single-family residential construction should continue to be fairly strong as long as interest rates do not rise much further; the same should be true for real estate sales. As in the recent past, it should be a reasonably good year for most in the area, but there should be increased attention paid to the hardships faced by those who have not shared in the expansion of the local economy.

Lafayette

Gerald J. Lynch

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Last year I speculated that the Lafayette economy would do well in 1988. I went in the right direction, but not far enough. As the national unemployment rate fell to a 14-year low, Lafayette's rate fell even more. In fact, the unemployment rate for September was 2.3%, the lowest figure recorded in the 20 years that local unemployment data have been collected. Given that the labor force in Tippecanoe County is around 62,000, this means that there were fewer than 1,500 unemployed persons in the county in September. Furthermore, many of the people who are currently unemployed are effectively unemployable. Thus, the local economy is producing near capacity; if it is below capacity, the reason is a shortage of labor with available skills.

There are a number of job openings in the Lafayette area right now. Some of these openings are minimum-wage or slightly above minimum-wage jobs; one can look in the window of almost any grocery store or restaurant in town and see that they are hiring. However, there are also a number of skilled and professional positions currently unfilled in the local economy. Add to all of this the fact that the SIA plant will offer between 800 and 900 new jobs by September 1989--and a full 1,700 by May 1990--and the obvious conclusion is that the new jobs will not be filled solely by people from Tippecanoe County.

From 40% to 60% of these jobs will probably be filled by people from within the 8 counties surrounding Tippecanoe County. Not all of them will move into Tippecanoe County, but even those who locate in surrounding counties will have an impact on this area. Lafayette is a regional retail shopping area, a regional finance center, and a regional provider of health care. All of these areas will experience a further upturn in the coming year.

In addition, we can expect that locally produced goods and services will probably increase in price. Two that come to mind in particular are housing and labor. And although higher housing and wage costs may not be welcomed by all, both of these phenomena are part of the cost of economic growth.

Muncie

Robert Jost

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Indiana ranked fourth in employment growth among the 50 states in 1987. For the period of second quarter 1987 to second quarter 1988, Indiana's nominal *non-farm* personal income grew at 8.2%, ranking 16th; the major thrust came from the manufacturing and construction sectors. If the troubled farm sector is included, the growth of nominal personal income slips to a still-respectable 6.9%. The Muncie MSA shared some of the benefits of this freshet of economic activity, as nominal personal income grew 5.6% in 1986 (matching that of the state), and based on a rough imputation from 1987 payroll data, also grew significantly in that year. Between October 1987 and October 1988 manufacturing employment increased 4% in Muncie, in sharp contrast to the 2.3% decline of neighbor Anderson. Average hours worked in Muncie manufacturing increased to 44, highest among the state's MSAs and hinting at potential skill shortages in certain industries.

Mention has heretofore been made of the achievements of Horizon 91's economic development team, which combines the efforts of business, government, and labor (*IBR*, July 1987). Muncie has now added a new tool to its urban redevelopment arsenal: the central downtown and southern portion of the inner city has been given Enterprise Zone status by the Indiana Enterprise Zone Board.

The antecedents of the Indiana Enterprise Zone program can be traced to the supply-side recommendations President Reagan espoused when running for office in 1980. According to supply-side economists, enterprise zones are preferable to direct government expenditures on public services, infrastructure, or direct transfer payments targeted to residents of distressed areas. Essentially, this preference for enterprise zones is based on the premise that providing tax incentives to the private sector will unleash entrepreneurial incentives while minimizing government intrusion into the local economy. The current conventional wisdom adheres to the view that although enterprise zones do not cure economic decline, they do represent a potentially effective component of urban rejuvenation.

James Papke, who authored the well-known study on the taxation of the Saturn Corporation, has developed a systematic analytical framework for monitoring and evaluating Indiana's enterprise zones. Papke readily acknowledges an inability to adequately separate the impact of enterprise zone incentive programs on investment and employment decisions from the myriad of causal agents that influence those decisions. Nevertheless, Papke has developed a microanalytic tax simulator that captures the effects specific tax provisions have on firms differentiated by type and location. Based on preliminary data sources from ten Indiana enterprise zones, Papke tentatively concluded that the experiment, although it yielded some ambiguous results, appeared to be "worth the effort and resources expended." Final judgment on the program, Papke concluded, must await the acquisition of additional data and further research.

The cost of creating the enterprise zone's tax-incentive program is financed by shifting the tax burden to the local community outside the enterprise zone. As Muncie's designated enterprise zone is near the maximum three-square-mile limit and includes major manufacturing firms (General Motors' Hydramatic Plant, Ontario Forge) and some 350 businesses, its tax shift must be far greater than the estimated $356,835 shift for Anderson's enterprise zone (which excludes GM's plants there). Estimates for Muncie's tax shift have become political footballs, with current estimates ranging from $750,000 to more than $2 million. As the inventory tax credit (ITC) program is scheduled to be in force for 10 years, concern has been registered that much of the tax burden will be shifted to low- and middle-income people. Obviously, the costs have to be measured against the benefits, which is hoped would include the retention and expansion of existing firms within the enterprise zone as well as the attraction of new firms to these distressed areas. It is argued that if at the margin the ITC induces a firm like Hydramatic to remain and expand production in Muncie and tips the scales of new firms toward Muncie's side, then the benefits may exceed the costs over the 10-year period.

John Schwarz and Thomas Volgy recently (see *Harvard Business Review*, March-April 1988) studied metropolitan areas under Conservative Party control in Great Britain that had initiated experiments with enterprise zones in 1981, and areas under Labor Party control that had simultaneously created enterprise boards to intervene directly in local economies by investing public funds in endangered but potentially strong private firms. (This approach is similar to the Chrysler bailout in the U.S.) The enterprise boards used a "social cost accounting" program that in effect required the job program to be self-financing. This constraint required the enterprise board to spend no more to save or create a job than it would otherwise spend on unemployment benefits and foregone taxes. Recent evaluation of the relative benefits of the two programs revealed that the enterprise zones have stimulated little new economic activity or employment. Moreover, what little growth occurred frequently came at the expense of areas adjacent to the enterprise zone. The cost per job created in the enterprise zone was estimated to be $67,000, whereas the cost estimate of creating or saving a job in the enterprise board areas was but $13,000.

This analyst believes that there are insurmountable measurement problems in assessing the effectiveness of enterprise zone tax incentive programs, and thus views the Schwarz/Volgy finding with a jaundiced eye. However, given the extreme differentials in estimates of cost per job, their findings can hardly be ignored. Perhaps we have listened too long to those who proclaim we should lift the burden of taxation from the businessman's back, free the corporation, minimize the role of government, and return our individual and collective destiny to the deft and sure fingers of the invisible hand. If Indiana is to reverse its long-term decline in real per capita personal income relative to the rest of the nation, government must increase the more positive role it has recently assumed in industrial policy.

The enterprise zone tool may well be far less cost-effective and more risky than direct government investment in existing enterprises or improvements in infrastructure. There is an abundance of empirical evidence that the level of public nonmilitary capital expenditures strongly influences the net return to private capital. Even Adam Smith argued it was the responsibility of the "sovereign or commonwealth" to provide an adequate structure of public works to "facilitate the commerce of society."

Evansville

Maurice Tsai

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The Evansville economy will conclude its 1988 performance with a small growth rate, 0.9% in the Evansville Area Business Index (see the **Table**). Industrial production grew slowly this year, at 1.4%, while the trade and service industries maintained their 1987 pace by growing at a 4% rate. The transportation sector became more active than in previous years, showing 3.2% growth. Construction, which reached its peak in 1986, had been leveling off for the past two years. Finally, the financial sector is still attempting to recover from the 1987 setback. Thus, the performance for 1988 has been modest.

During the past several years of slow growth, Evansville's economy invested heavily in its future. Numerous highway and street projects and a new airport have either been completed or will be completed within a year. Many expansion projects in industrial and commercial physical structure also have been undertaken. For a medium-sized city, Evansville is well stocked with medical, recreational, and cultural facilities. These efforts should pay off in the years to come.

The new year will be the beginning of a period of sustained growth for the region. The growth rate in 1989 is projected to be 2.4%, with the manufacturing sector playing a leading role. Based on the projected growth of personal income and improved management-labor relations in the area, manufacturing should be able to expand activities and increase employment further.

The trade and services sectors have

Table
Evansville Area Business Index
(1977 = 100)

	Industrial Production	*Trade & Services*	*Construction*	*Transportation*	*Finance*	*Employment*	*Composite Index*
Quarterly							
1986:1	121.04	109.77	157.07	99.32	106.80	106.72	116.75
1986:2	111.58	109.97	187.75	97.95	110.23	106.20	115.91
1986:3	111.91	111.14	178.67	101.04	111.55	107.35	116.43
1986:4	123.13	111.93	174.26	99.61	111.05	109.16	120.24
1987:1	122.20	113.14	134.98	97.33	108.91	107.73	116.42
1987:2	121.23	115.42	139.80	97.97	108.79	108.33	117.41
1987:3	120.47	115.27	134.50	98.86	109.32	110.05	116.92
1987:4	118.37	117.13	116.56	98.02	112.92	111.97	115.56
1988:1	124.34	118.53	113.49	101.04	108.38	110.85	117.68
1988:2	118.87	120.14	116.30	99.92	107.03	110.91	116.51
Annual							
1985	113.42	108.87	108.70	99.16	105.29	106.82	109.44
1986	116.92	110.70	174.44	99.48	109.91	107.36	117.33
1987	120.57	115.24	131.46	98.04	109.99	109.52	116.58
1988	122.20	119.86	112.04	101.16	108.36	112.67	117.59
1989	128.77	123.68	101.73	102.78	108.09	116.25	120.44

1988 figures estimated; 1989 figures projected.
Source: School of Business, University of Evansville.

been the stable and supportive base for the region for years. These sectors will grow at a 3.2% rate next year.

As most major public construction projects have been completed, the construction sector will slow further next year. The 1989 construction index will be about 9% below the 1988 level. Residential construction will remain at the 1988 level unless there is a sharp rise in interest rates.

Transportation is a newly revised sector because of Evansville's better highway network and street system. Air transportation will increase with the new airport facilities. Thus, the growth rate for this sector will be above 2%.

Banking activities in 1989 will be about the same as in 1988. Other financial subsectors need new stimuli for growth, such as the revival of the securities market or a surge in lending activities for housing and automobiles. The savings and loan associations in Evansville are financially healthy.

Regional employment will increase further in 1989. Total employment may rise another 2%, and the unemployment rate will stay at around 5.5%. Thus, the coming year will be better than 1987 and 1988. The prospect of continued better years for 1990 and afterward is quite encouraging.

Fort Wayne

Thomas L. Guthrie

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The Fort Wayne area economy in 1988 is destined once again to outpace the remainder of Indiana, the Great Lakes region, and the United States in employment growth. Through October, area[1] payroll employment increased approximately 10,000 to a total of 199,400. The 5.2% increase equals the compounded annualized growth rate the area economy experienced the previous five years. In contrast, U.S. employment increased 3.5% through October and at a compound annualized rate of 3.2% the previous five years.

Consistent with the national economic outlook for 1989, employment in the Fort Wayne area is forecast to increase 2% to 3%--4,000 to 6,000 jobs--in 1989. To forecast a seventh consecutive year of expansion obviously is done with genuine concern and caution. The area economy's ability to recover quickly from shocks, however imposed, is much greater in the first year than in the seventh.

One concern is with possible supply constraints. Fort Wayne has returned to its customary position of posting unemployment rates 1%-2% below the national average (see the **Figure**). The two metro areas in northeast Indiana (Fort Wayne and Elkhart-Goshen) had the lowest unemployment rates in August of the 10 metro areas in the state not driven primarily by university employment. That an adequate supply of labor will be available in the Fort Wayne area in 1989 rests on the assumption of in-migration, possibly from some other parts of Indiana where job opportunities have lagged.

Between July 1986 and July 1987, the U.S. Census Bureau estimated population to have increased 8,200 in the nine counties comprising northeast Indiana. This constituted 29.3% of the estimated *total increase* in population for the state during that time period. The nine counties have approximately 10% of Indiana's population.

The availability of sufficient plant capacity to support the 1989 forecast also is a concern, but the absence of local data prohibits a quantitative assessment of the potential problem. One possible proxy of need, the dollar value of commercial construction permits issued in Allen County, continued to increase through October. Commercial construction should be a growth industry in 1989.

One caution associated with the area forecast is that it is a high-risk forecast. Consider the U.S. trade deficit and two ways to reduce it:

* Increase exports;

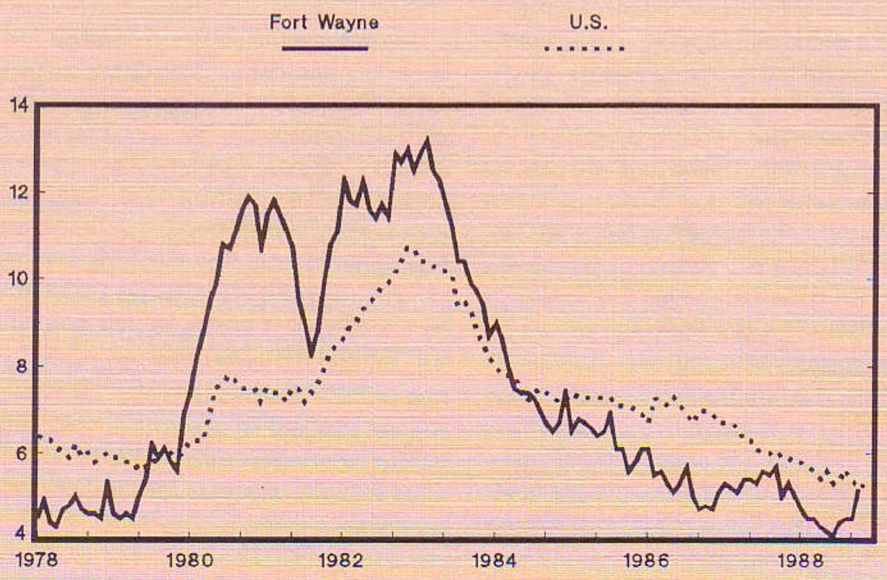
* Drive the economy into a deep recession, causing a massive shrinkage of both imports and exports.

Given the relative ease of exporting products versus services, area economies disproportionately tied to manufacturing will experience boom or bust, depending on which scenario becomes reality. Fort Wayne is such an economy. One out of every three jobs in northeast Indiana is in manufacturing, versus less than one out of every five jobs at the national level. Whether by design or default, northeast Indiana has a high-risk economy. High risk generally leads to either a big reward or a big loss.

1. Adams, Allen, and DeKalb counties.

2. In the 1980s, manufacturing employment in the official Fort Wayne area has decreased. That decrease has been offset largely by increases outside the area but within northeast Indiana.

Figure
Unemployment Rate--U.S. and Fort Wayne



Columbus

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All available data indicate that the local labor market has continued to grow in the last year. The number of employed persons has grown 6% from third quarter

1987 to third quarter 1988 (see the **Table**). The number of unemployed has fallen 7% from the level of a year ago; however, it is up 8% from the second quarter of this year. The unemployment rate has fallen 15%. The number of continued and new unemployment insurance claims have fallen 15% and 11% in the past year. Finally, the number of local help-wanted advertisements grew 34% from this time a year ago and 26% from the second quarter of this year.

The increased demand for local labor is not coming from the housing construction industry, which experienced a 28% decline in the estimated value of permits issued and a 49% decrease in the number of permits issued between third quarter 1987 and third quarter 1988. This dramatic decline *is* somewhat overstated, as the 1987 data include construction of an apartment complex that greatly increased both the value and number of permits issued. Without that project, permits are up 27% and value is up 14%. But the housing construction boom does appear to be slowing down, as both value and number of permits in the third quarter were down more than 20% from the previous quarter.

The local residential real estate market, however, indicates continued strong demand. The average number of days listed for sold properties fell 22% from last year and 9% from the previous quarter. More importantly, the average market price of sold homes increased 26% from a year ago and 18% from the previous quarter. The Housing Affordability Index for Bartholomew County for second quarter 1988, while unchanged from a year earlier, is above average for both the state and the nation. This indicates that households earning the median income in our county can more readily afford to purchase the median-priced home.

Given the large increase in the average price of sold listings, local residents must be spending a disproportionately high share of their incomes on housing; this trend seems to have resulted in a decrease in both new and used car sales. New car registrations are down 23% from the level of a year ago and 13% from the second quarter. Used car registrations are also down, 11% from last year and 10% from the second quarter.

The most recent data demonstrate that Bartholomew County's per capita personal income (PCPI) grew significantly between 1985 and 1986, as well as from 1976 to 1986. The bad news is that it has grown more slowly than the state and national averages during both periods. For example, from 1985 to 1986 the county's PCPI increased 3.6%, but the state's PCPI grew 5.6% and the U.S. PCPI grew 5.2%. From 1976 to 1986 the county's income growth (6.8%) was slightly slower than the state's (7.4%) but noticeably slower than the nation's (8.2%).

This lower growth rate has been caused by the slowdown in wages and salaries in the durable goods industry. From 1976 to 1986, wages and salaries in this sector grew at an average annual rate

Table
Columbus-area Data

	1988:3	*1988:2*	*Percent Change*	*1987:3*	*Percent Change*
Employment Data					
Number of Persons Employed	30,900	30,300	2	29,200	6
Number of Persons Unemployed	1,300	1,200	8	1,400	-7
Unemployment Rate	4	4	5	5	-15
Continued Unemployment Insurance Claims	1,098	1,242	-12	1,287	-15
New Unemployment Insurance Claims	220	199	11	246	-11
Help Wanted Advertising (1987 = 100)	162	129	26	121	34
Utilities					
Industrial Electricity Sales (millions of kwh)	n/a	23,081		25,404	
Housing Construction Data					
Estimated Value of Permits Issued ($ 000)	1,783	2,402	-26	2,469	-28
Number of Permits Issued	28	36	-22	55	-49
Average Value per Permit ($ 000)	64	67	-4	45	42
Sales Data					
New Car Sales	463	534	-13	602	-23
Used Car Sales	2,515	2,780	-10	2,817	-11
Residential Real Estate Data					
Number Sold	231	258	-10		
Average Days Listed	105	115	-9	134	-22
Average Market Price	73,875	62,449	18	58,770	26

of 5.6% while service industry compensation grew at an annual rate of almost 10%. This differential reflects the loss of market share by U.S. producers to foreign firms, especially in the early 1980s when the dollar was extremely overvalued. The share of total wages and salaries paid by the durable goods industry fell from 58.8% in 1976 to 52.6% in 1986; service compensation grew from 7.3% of the total in 1976 to 10% of the total in 1986.

The Local Forecast

After falling at times more than 50% during the last six years, farmland prices have increased 8-9% this year. Coupled with increased prices caused by the summer drought, this will generate a two- to three-year production-led farm recovery--which should benefit the Columbus-area economy, as farmers attempting to replenish diminished inventories will need more inputs such as labor and fertilizer.

The lower value of the dollar and its expected continued fall should present continued growth in local employment opportunities. The more favorable exchange rate makes our goods more competitive both abroad and at home. Furthermore, it encourages foreign producers to invest here, something exemplified by the success of our local economic development efforts. In the last three years, four firms have expanded and 13 new firms have invested in the Columbus area. Of these, 11 are U.S. firms and six are foreign firms. These firms will have invested $124.2 million and created 2,365 new jobs. They have also attracted $1.8 million in state economic development grants to Columbus. These grants are used to establish revolving loan funds, so they will continue to enhance local economic development long after the first projects are completed. Of the 17 companies, 13 are in operation and have created at least 1,765 jobs thus far. The other four are still organizing; approximately 600 new jobs are expected to be created in these companies.

All of this good news is dampened somewhat by the recent uncertainty in the local economy. Local manufacturers continue their efforts to remain cost-competitive in world markets in an era of global competition and in both labor and product markets.

Kokomo

Dilip Pendse

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Kokomo's economy has displayed surprising strength and resiliency since the dark days of 1980-83 when the unemployment rate hovered in the high teens. Today, the economy is lean and healthy. Kokomo's economic landscape is more diverse and stable. The worst is behind it.

The percentage of the working-age population with jobs has risen from 75% in 1980 to 78% in 1988. With the unemployment rate standing at 4.6% in October (the lowest rate in 11 years), the number of unemployed shrank to 1,900, the lowest since 1977. Not only are more people working, but they are working longer hours and earning more. Manufacturing workers, for example, averaged 2.1 hours a week in overtime during the first eight months of 1988, and weekly earnings reached an all-time high of $788 in the first quarter of the year. Today's weekly earnings in manufacturing are double those of ten years ago. With the declining unemployment rate, the number of initial unemployment claims has declined in recent months.

Undoubtedly the sector making the economy hum is manufacturing. But Kokomo's economy has gone through an immense restructuring in the last ten years. Manufacturing employment is around 18,500 now, down 5,500 from the 1977 peak. This loss has resulted mostly from closing older plants and trimming the work force. Few manufacturing jobs have been created from the opening of new plants or expansions of existing ones. The contribution of manufacturing to total employment has fallen from 60% in 1977 to 54% now.

The bulk of new jobs created in the economy has come from outside manufacturing, particularly the service and retail trade sectors. Consequently, the small business sector (firms employing fewer than 100 people) has become a powerful force in Kokomo. The number of service-sector jobs has swelled from 3,500 in 1976 to 7,200 today. The number of jobs in health services totaled 2,300 in August, making it the area's largest service industry. The number of health services jobs has grown by 38% since 1981. The retail trade sector's jobs have also increased significantly, from 6,400 in 1982 to 9,300 today.

A shift away from excessive dependence on manufacturing jobs implies many things. Since the service sector is usually less sensitive to recessions, Kokomo's economy is likely to be less vulnerable to economic downswings. Fluctuations in jobs will be less wild than in the past because of the trend away from the dominance of manufacturing. Additionally, women and older citizens will likely benefit from the restructuring of the job market because the retail and service sectors usually hire them in large numbers. Of course, historically the average compensation of workers in the non-manufacturing sectors has been 30% to

40% below that of manufacturing workers. It suggests that the total earnings of all employed will inch upward at a slower pace than in the past.

During the first eight months of 1988 the economy lost 338 manufacturing jobs, compared with a loss of nearly 1,000 jobs during the same period a year earlier. However, the economy created 1,140 jobs in nonmanufacturing sectors, nearly 35% of those in retail trade and 26% in services. Unlike in 1987, Howard County's unemployment rate remained below the state average for five of the first ten months of 1988.

For the fourth successive year, Kokomo's median household spendable income was the highest in the state ($28,476 in 1987). Again for the fourth straight year, the percentage of households in Kokomo earning more than $50,000 a year in spendable income was the highest among the 12 metropolitan areas in the state. However, according to *Sales and Marketing Management*, Kokomo's national ranking based on median household spendable income slid from 55th in 1986 to 78th in 1987.

Also according to *Sales and Marketing Management*, retail businesses in Kokomo rang up sales of $776.1 million in 1987, up 72% since 1980. Kokomo is among the top 55 MSAs in the country, with retail sales per household in excess of $20,000. Since 1980 Kokomo has moved up 122 places in that category.

Housing

Housing also remained moderately healthy during the first nine months of 1988. The number of existing houses resold during the first three quarters increased 7% over those sold in the same period in 1987. At this rate, sales of existing homes could exceed 1,300 by the end of the year. Along with rising home sales, home prices continuously rose during the period; the median price of an existing house was 3% higher than in 1987. Home affordability is not a serious problem, however, since the Center for Real Estate Studies at Indiana University lists Kokomo's affordability index as among the highest in the state's 19 regions.

In general, the music of hammer, drill, and ripsaw was a little softer than it was a year ago. The number of building permits issued in the first three quarters of 1988 was 4% below that of 1987. Home owners spent $2 million on home improvements and home repairs during the same period as compared with $1.1 million. Residents indulged more in building porches, patios, swimming pools, gazebos, and wooden decks than in garages, room additions, and sheds.

Business investment in new offices, parking lots, warehouses, and other structures remained strong during the first nine months of the year, as 40 permits valued at $13.5 million were issued. In 1987's first three quarters, 32 permits valued at $2.2 million were issued.

New home permits eased just a bit during the same period, and multiunit housing construction sagged considerably. Eight multiunit housing permits valued at $1.3 million were issued in January-September 1988, compared with 13 permits valued at $2.6 million in 1987's first nine months.

Agriculture

Various quarterly surveys of agricultural bankers conducted by the Federal Reserve Bank of Chicago show that good farmland is rising in value. The agricultural bankers in the Kokomo area have reported strong gains--an almost 14% increase over last year's values. Also, the pace of farm real estate transactions has quickened in recent months, according to these surveys.

Nearly 70% of the farmers in Howard and Tipton counties may qualify for drought relief. But the checks will arrive only after verification of losses.

Other Positive Developments

Kokomo's misery index remained around 10 for the fifth year in a row, thanks to a low inflation rate and a low unemployment rate. In 1980, the index topped 29. Thus, Kokomo has reduced discomfort (or suffering) substantially for its population, at least according to this measure.

In its Fall 1988 issue, *Money* rated Union Bank (Kokomo's largest and oldest) among the six safest banks in the state and among the 175 safest banks in 41 states. In the first week of November, the Beach Boys' single "Kokomo" rose to the top of the *Billboard* charts. More than half a million copies of the single have been sold thus far. In the same month, the city was again thrown into the national spotlight when Transamerica Commercial Finance, a Chicago-based insurance firm, featured Kokomo in its advertising spots on CBS radio stations and in such weekly magazines as *Time*, *Newsweek*, and *U.S. News and World Report*. Whether these and other national exposures will bring jobs to Kokomo is anybody's guess.

In May, DuPont Tau Laboratories changed its name to DuPont Photomasks Inc., tying DuPont's other photomask facilities in with Kokomo. Former Continental Steel employees began receiving pension and other settlement checks. And in the first week of November, Governor Orr announced that Kokomo's Delco Electronics was one of the six Indiana companies selected to supply parts to Lafayette's Subaru-Isuzu plant.

The Bad News

Not all the news in 1988 was positive. Despite a "Hands Around Accurate Parts" rally in July that attracted more than 200 people, Accurate Parts' parent, Echlin Corporation, decided to shut the 64-year-old operation down permanently by year's end, wiping out 180 jobs. The machinery from the local plant will be moved to Echlin's operations in the South.

The future of 87-year-old Kingston Products, a manufacturer of parts for trucks, buses, and boats with a total employment of 120, is still in the air. Its management has sent signals strongly indicating a desire to move the operation to the South.

According to a study conducted by the Census Bureau and the I.U. School of Business, Howard County is one of 38 in the state that has lost population since 1980. The county has lost 2,496 people in this decade.

One casualty of the declines in population and manufacturing jobs has been public school enrollment. This figure declined by 366 in Howard County in 1988, the seventh consecutive decline.

The effect of the summer's drought showed up at the check-out stands in local grocery stores. The total cost of 15 regularly monitored grocery items rose 11% from March to October; during the same period of 1987 the total cost had actually declined 0.3%.

The Outlook

The long-term outlook for the economy looks promising. Kokomo is now in the "auto alley" running through Lafayette. This will certainly create some jobs in the future. It would not jolt the economy, but it would at least be a shot in the arm. There is also a possibility that a manufacturer of machines and support items for circuit boards will locate its operation here. Kokomo's future employers will be of the high-tech, low-pollution type, not the smokestack type.

For the near term, although it is too early to whisper the word "recession," it is time to utter the word "slowdown." Kokomo's economy is currently operating in the full-employment zone. Further improvement is hard to come by. The manufacturing sector will keep chugging, but at a slower pace. Manufacturing employment should decline further, but not by a large number. Some short-term layoffs may occur in the latter half of the year. Overall, the unemployment rate should remain around 6.5%. Retail trade employment will grow by 200-300 jobs. The service sector should post modest gains. The scope for further growth in new-home construction and home improvement is limited, and the real estate market will remain soft. Prices of existing homes will not likely post strong gains next year.

Although some troubling signs have emerged in the past and will keep creeping up from time to time, the worst is behind now. Because of the growing importance of the nonmanufacturing sector, even if a recession occurs in late 1989 the fallout will not be as great as it was in previous recessions.

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