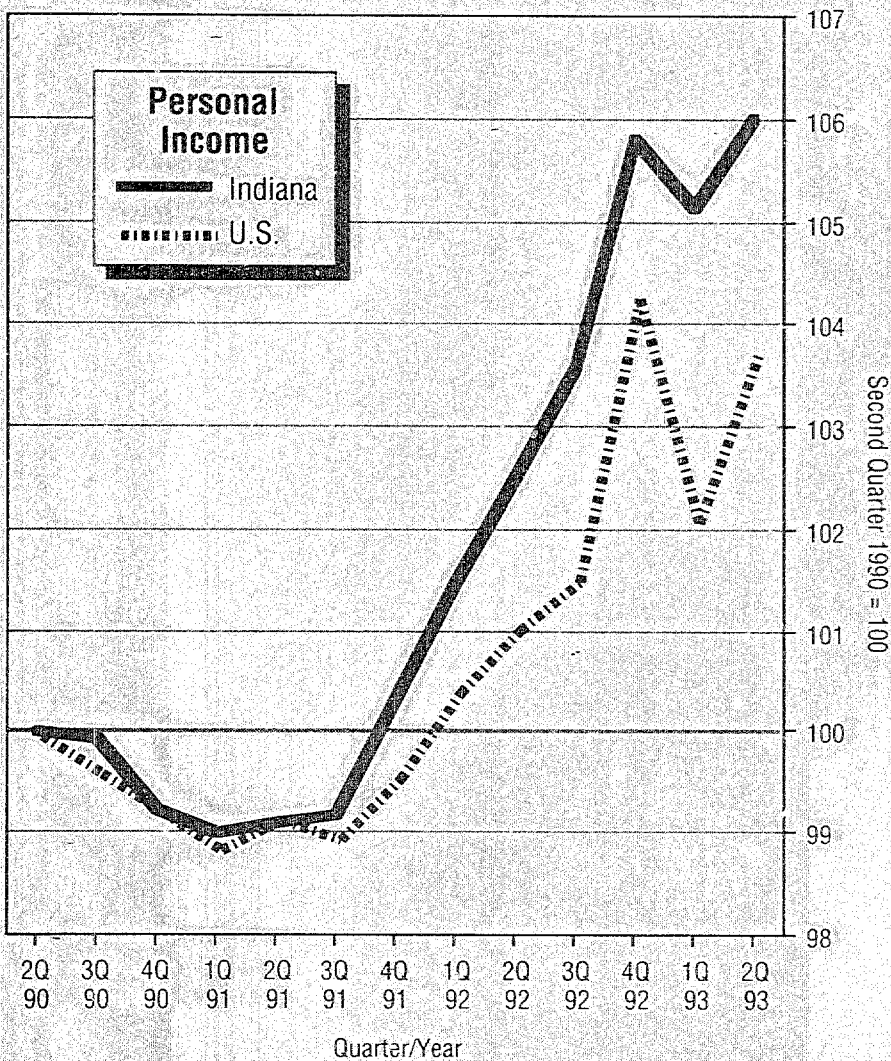


Indiana

Business Review



A publication of the
Indiana Business
Research Center,
Indiana University
School of Business

**The 1994 Business and Economic Outlook:
Recession, Recovery, and Expansion**

Winter 1993-94

Contents

Indiana Business Review

Volume 68, Number 4
Winter 1993-94

Published four times each year
by the Indiana Business Research
Center, Graduate School of
Business, Indiana University

John Rau, Dean; Morton J.
Marcus, Director and Editor;
Brian K. Burton, Managing Editor;
Melanie Hunter, Assistant Editor;
Melva Needham, Dorothy Fraker,
Circulation; Jo Browning, Office
Manager. Printed by Indiana
University Printing Services.

Unless otherwise noted,
information appearing in the
Indiana Business Review is
derived from material obtained by
the Indiana Business Research
Center for instruction in the
School of Business and for
studies published by the Center. —
Subscriptions to the *Indiana
Business Review* are available to
Indiana residents without charge.

- | | | | |
|-----------|--|-----------|--|
| 1 | Bruce Jaffee
The 1994 Business and Economic Outlook:
The Economy Keeps Rolling Forward,
But Slowly | 18 | Leslie P. Singer (and E.L. Smith)
Northwest Indiana |
| 2 | R. Jeffery Green
Consumer Spending and Nonresidential
Investment | 20 | John E. Peck
South Bend/Mishawaka-Elkhart/Goshen |
| 3 | Jeffrey D. Fisher
Housing | 22 | Richard L. Pfister
Bloomington |
| 4 | Carol A. Lehr
Fiscal and Monetary Policy Outlook | 23 | Barry C. Ritchey
Anderson |
| 6 | Michele Fratianni
The International Economy | 24 | Marvin Fischbaum
Terre Haute |
| 8 | Michael Simkowitz
Corporate Profits, Interest Rates,
and the Stock Market | 25 | Dilip Pendse
Kokomo |
| 10 | Morton J. Marcus
A Review of Recession, Recovery,
and Expansion | 29 | Patrick Michael Rooney
Columbus |
| 14 | Robert Kirk
Indianapolis | 30 | A. Charlene Sullivan
Lafayette |
| 16 | Thomas L. Guthrie
Fort Wayne | 31 | Ashton I. Veramallay
Richmond-Connersville-New Castle |
| 17 | Maurice Tsai
Evansville | 32 | Fay Ross Greckel
Jeffersonville/New Albany (Louisville Area) |

The 1994 Business & Economic Outlook: The Economy Keeps Rolling Forward, But Slowly

Bruce L. Jaffee

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

Last year we predicted we would see a moderate business upturn in 1993, with real gross domestic product (GDP) growing at about a 3% rate—its best performance since the late 1980s.

We expected that the most rapidly growing sector of the national economy would be investment, with an estimated 9.5% growth in constant dollar terms from 1992. Equipment purchases by businesses were to be especially strong.

Qualitatively, our forecast of these variables was quite good. Real GDP is now estimated to increase about 2.8% for the year, up modestly from 1992's growth rate of 2.6%. Investment was the key "driver" in 1993, with business fixed investment expected to increase nearly 11% for the year and residential investment by approximately 7.5%. Within the investment sector, equipment purchases, especially computers and other electronic equipment, are estimated to grow at a strong 15% rate in 1993.

Unfortunately, whereas 1993 was a modest step forward down the road to sustainable recovery, our forecasts for the year ahead see the economy continuing to move forward but at a slower pace. The **Table** summarizes the major components of our forecast for 1994.

We see real GDP growing at approximately a 2.4% rate in 1994, with no sector of the economy showing the level of growth needed to boost income, employment, or general economic activity substantially. Employment growth will be modest, and the unemployment rate will hover around 6.5%.

An important contributor to the growth of the economy in 1993 was consumer spending. In fact, consumer spending rose faster than overall GDP in 1993 and more than the increase in consumer in-

come. The disparity between consumer income growth and consumer spending in 1993 was due primarily to declines in the personal saving rate and increases in disposable income that were generated by mortgage refinancing. Neither of these factors can be relied upon to stimulate consumer spending in 1994. The savings rate is about as low as it can go, and with mortgage rates unlikely to fall any further, the boost stimulated by mortgage refinancing should be viewed as a one-time stimulus for the economy. For 1994 we predict that both consumer spending and real disposable income will increase by approximately 2.4%, in line with the overall increase in growth of constant dollar GDP.

Investment, especially the equipment category, increased substantially in the last year, stimulated in part by lower interest rates and a decline in equipment prices, especially in the computer sector. We expect interest rates to remain low but not to decline further. We expect equipment prices to decline again in 1994, although at a slower rate than in 1993. As a result, the equipment portion of business investment is likely to be strong in 1994 but with a growth rate substantially less than in 1993. Investment in structures has been on a downward slide since 1985. Although we think the bottom has been reached, we do not see any significant upturn until late 1994 or 1995.

The final major component of business investment is inventory change, which grew significantly between 1992 and 1993. However, with only modest increases in consumer spending predicted for next year, we think inventory investment will be quite modest. We estimate that residential investment, as measured by housing starts, will be up only marginally from the 1.35 million unit rate of 1993. However, the

Table
GDP and its Components

	1992 (\$ bil. 1987)	% Change from Previous Year*	
		1993 (est.)	1994 Forecast
GDP	4.986	2.8	2.4
Personal Consumption Expenditures	3.342	3.2	2.4
Gross Private Domestic Investment	733	11.0	7.9
Nonresidential Fixed	529	10.7	5.2
Residential Fixed	197	7.5	10.0
Change in Business Inventories	7	\$16	\$18
Net Exports	-34	-\$76	-\$100
Exports	578	2.4	4.7
Imports	612	9.2	7.8
Federal Government Purchases	373	-4.5	-0.5
State and Local Purchases	572	1.7	2.0

*Except for Change in Business Inventories and Net Exports, both of which are in billions of 1987 dollars.

declines in interest rates and mortgage refinancing have stimulated investment in existing residential structures, and we can see this sector growing 10% in 1994.

Government spending at all levels constitutes about 20% of the U.S. gross domestic product. With spending restraints at all levels, increases in taxes viewed as "political suicide" by elected officials, near paranoia about the federal budget deficit, and continuing downsizing of the federal military establishment, stimulus from this sector of the economy is extremely unlikely. In fact, we expect real government spending in 1994 to show minimal growth compared to 1993. Monetary policy, from the supply side, is likely to remain stimulative but have little effect on economic growth until the demand for investment funds by business increases significantly—which we do not expect to occur in 1994. On the positive side, we expect the Federal Reserve to remain in an "accommodation mode" and feel little pressure to increase interest rates or fight inflation. In fact, we see inflation increasing at about 3% again at the consumer level and at about 2.7% as measured by the broader GDP deflator.

In the late 1980s net exports provided a major "engine of growth" for the U.S. economy. By 1995 that engine is expected to have cooled off considerably. This change is not due to a lack of competitiveness of U.S. industries; in fact, the relative competitiveness of the U.S. is increasing because of productivity improvements, wage increase restraints, and exchange rate adjustments. Rather, the economies of our major trading partners have recently been considerably weaker than that of the United States. With continued weak demand for exports in 1994, we expect our trade balance to deteriorate slightly and the value of the dollar to increase by about 5% relative to the Japanese yen and the German mark.

The most difficult sectors of the economy to predict are corporate profits, interest rates, and the stock market. For 1994 we estimate that corporate profits will grow, but at less than the 8-9% rate expected in 1993. Cost cutting, layoffs, and restructurings are likely to continue through the year.

On the interest rate front we see short rates rising slightly between the end of 1993 and the end of 1994 with long rates declining slightly. The decline of long rates is expected to be due to decreases in inflationary expectations and less competition from high rates abroad as other money centers, especially Germany and Japan, cut their interest rates to stimulate their economies. With corporate earnings growing modestly and no significant stimulus from interest rate declines, we do not see a bull market for 1994. Stock market returns in 1994 should be positive, but the indexes should grow less than they have in 1993.

Consumer Spending and Nonresidential Investment

R. Jeffery Green

Professor of Business Economics and Public Policy and Co-Director, Center for Econometric Model Research, Indiana University School of Business

Recent revisions of the National Income and Product Accounts show that consumer spending has been much more robust over the past year than had previously been supposed. For the year ending in third quarter 1993 (the last quarter for which we have data), constant dollar consumer spending rose by 3.5%, a considerable improvement over the 2.6% increase in the year ending third quarter 1992. Spending on durable goods has been particularly robust, rising 7.4% in the latest four quarters. What produced the improvement in consumer spending, and is this improvement sustainable?

The most important determinant of consumer spending is disposable personal income. However, income growth was not the driving force for consumer expenditure growth over the year ending third quarter 1993, since real disposable personal income rose by only 2.2%. Its largest component, wage and salary disbursements, also rose 2.2% over the same period. Employment grew only 1.7%, so real wages per employee increased only a scant 0.5%. Some other income components did better. Transfer payments, for example, increased by more than 3.2% in real terms.

Consumers were able to expand their purchases at a 3.5% rate over the last four quarters despite income growth of only 2.2% by spending a larger than usual fraction of their income and saving less. In third quarter 1992 the personal saving rate—the fraction of disposable personal income saved rather than spent on consumer goods—was 4.9%. By third quarter 1993 it had fallen to 3.7%. This decline was one source of strength in consumer spending.

The other major spur to consumer spending was the result of refinancing home mortgages. Long-term interest rates declined rapidly over the past year, and mortgage rates fell dramatically. Consumers have been able to refinance their homes and significantly lower their monthly housing payments. This acts like an increase in disposable income and has stimulated spending, particularly for durables.

What are the prospects for the rest of 1993 and 1994? Unfortunately, we expect the growth in real

consumer spending to slow during the next year. Large firms are still downsizing and restructuring, and as a result employment is expected to continue to grow slowly. Real wage rates are also expected to grow slowly in a labor market with significant unemployment. The result should be no more than a 2.4% growth in real disposable income over the next year.

The saving rate is already at a low level, so no additional stimulus to spending should come from further declines in the saving rate. The stimulus from mortgage refinancing should also become less important, as more and more consumers have already availed themselves of this one-time benefit. The result should be that real consumer spending should increase at about the same rate as real disposable income (2.4%). The biggest slowdown will occur in the durable goods markets that have been strongest this year.

Nonresidential Investment

The three components of nonresidential investment spending are investment in business equipment, investment in nonresidential structures, and the change in business inventories. Constant dollar total nonresidential investment grew at a strong 10.6% rate over the year ending in third quarter 1993. However, the components showed very diverse behavior.

Inventory investment fluctuated widely during the year but averaged \$14.8 billion for the four quarters ending in September. With the spread of newer inventory control methods and a forecast of slow growth in consumer spending, increases in this component should be small, and we expect inventory investment to average about \$18 billion in 1994.

Constant dollar investment in business equipment increased by 14.9% over the last four quarters. Most of the increase was in computers and other information processing equipment. Though lower interest rates may have lent some stimulus to equipment spending, the biggest spur to growth was the decline in equipment prices. Led by computer price declines, average prices for business equipment declined by 4% in the latest four quarters. We expect interest rates to remain low but not decline further, and we expect equipment prices to decline again in 1994, though at a slower rate than in 1993. As a result, we expect real investment in equipment to grow at about a 7% rate in 1994, slower than in 1993 but still a very strong performance.

Constant dollar investment in structures includes factories, office buildings, retail space, oil field structures, and a variety of other building types. Spending on these types of structures peaked at \$197 billion in 1985 at the height of the 1980s speculative boom and declined almost continuously until late 1992. During the four quarters ending in September 1993, constant

dollar investment in structures increased 1.3% but still remained more than 20% below the 1985 peak.

There are several reasons to believe that further growth in investment spending for structures will be very slow. Among the most important are: domestic oil production continues to decline; commercial real estate remains fairly weak because of all the overbuilding in the 1980s; there is still some RTC property available; the substitution of capital for labor in U.S. industry—for example, the spread of personal computers—often leads to a need for less space; and just-in-time and other recent inventory control methods sometimes lead to a decline in space needs as well. For these reasons, we expect real investment in structures will grow by less than 1% in 1994.

In the aggregate, consumer spending and nonresidential investment account for almost 80% of GDP. Our forecast shows moderate growth for consumer spending, continued rapid growth for investment in equipment, and little or no growth for inventory investment and investment in structures.

Housing

Jeffrey D. Fisher

*Associate Professor of Finance and Real Estate and
Director, Center for Real Estate Studies, Indiana
University School of Business*

Mortgage interest rates are at their lowest level in well over 25 years, with fixed rate mortgages available for well under 7%. Mortgage rates will follow the trend of long-term interest rates in 1994. Low interest rates, combined with the fact that home prices have not risen much in recent years, have resulted in some increases in home starts since a year ago, although we are well below the levels of housing construction experienced during the 1970s.

Housing starts are currently running at a seasonally adjusted annual rate of about 1.35 million units—the highest in seven years. The rate is expected to be about 1.24 million housing starts for 1993, which would be up 23% from the recession low in 1991. (Housing starts peaked at an annual rate of 1,972,000 in January 1972 and reached a low annual rate of 837,000 units in November 1981.) Housing starts during 1994 should increase to a level of about 1,370,000 units, up slightly from the estimated number for 1993.

The increase in housing starts is due primarily to increases in single-family activity. This increase has to some extent been at the expense of multifamily construction. The outlook for market-rate rental construction is still bleak in most markets, because low mortgage interest rates have helped move people out of rental housing and into home ownership. This has exacerbated the persistent glut of vacancies and prevented rents from rising to the levels needed to support new construction. A positive note for multifamily housing, however, is the passage of legislation this past August that reinstated on a permanent basis the program of tax credits for investors in new rental housing for low-income households. This program accounted for nearly half of all multifamily rental units built in 1992.

There are differences of opinion as to the longer-term outlook for housing starts. Because the "baby boom" generation is aging, there will continue to be fewer people in the 25-to-34 age group, which has traditionally been the largest source of first-time homeowners. The size of this age group in Indiana is expected to decline by about 10% over the next ten years. The effect of the decline in housing demand from this age group, however, may be offset by an increase in the demand from the 35-to-64 age group. The size of this age group is expected to increase by 16% over the next ten years, and although many of them already own a home, trade-up activity from this group is expected to continue as the economic recovery takes hold.

Housing starts in the Midwest should continue to outperform the rest of the nation because the Midwest did not suffer from the price appreciation and speculative building in the 1980s that occurred in other parts of the country. About half of all starts in the Midwest tend to be "spec" homes, versus about two-thirds in the rest of the nation.

Sales of existing homes rose to a seasonally adjusted rate of 3.9 million in September—the second highest level in 14 years—as buyers in droves took advantage of the low mortgage interest rates. Sales of existing homes reached a rate of 4.04 million last December; the previous peak of 4.09 million was back in May 1979. The rate for the first nine months of 1993 was 7% higher than the same period the year before.

Home prices in Indiana have been rising slowly but steadily in recent years, and this trend is projected to continue through 1994. We expect the price to rise faster than the rate of inflation. The median home price in Indiana was \$75,500 during the second quarter of 1993, compared with \$106,500 for the nation. This gap gives home prices in Indiana much room for growth relative to the rest of the nation.

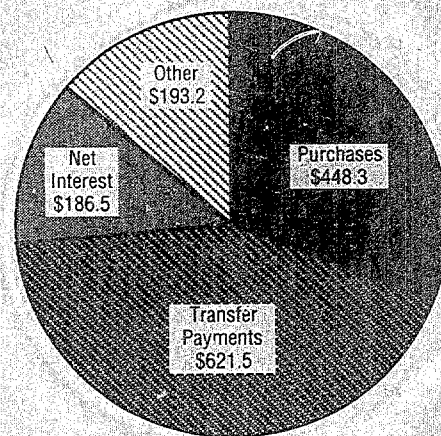
Fiscal and Monetary Policy Outlook

Carol A. Lehr

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

Although it has been three years since the onset of the last recession, the economy has not yet rebounded with any vigor. Several factors are contributing to the lackluster performance. First, consumers are reluctant to finance spending by adding to already high debt loads, and may in fact be using income to reduce their loan balances. Second, although the Federal Reserve has been trying to pump reserves into the banking system, bank loans to businesses have actually declined. It is debatable whether the drop is primarily due to depressed demand or supply (or most likely a combination of the two); nevertheless, the result is that businesses are also not borrowing to finance additional spending. Third, uncertainty over future taxes have helped keep business hiring low. Finally, corporate America is in the midst of a restructuring that is shedding jobs by the thousands. The restructuring will probably result in leaner and more productive organizations. However, in the transition it can lead employees into feeling less secure in their employment, which tends to depress consumer spending.

Figure 1
Federal Government Expenditures: 1992
(in billions of dollars)



The lack of a strong spending motive has kept inflation low and helped move long- and short-term interest rates down to their lowest levels in more than 20 years. However, to translate these favorable conditions into economic activity, businesses and consumers must be willing and able to borrow and spend.

Fiscal Policy

Within the economic framework laid out above, the federal government might be able to boost demand by some quick spending increases or by cutting taxes. However, fiscal maneuverability is hamstrung by persistent record-breaking budget deficits. Neither Congress nor the American public is willing to tolerate large increases in government spending or decreases in taxes that would lead to larger deficits. In fact, those sorts of actions would probably be counterproductive because larger deficits would tend to push up long-term interest rates, thus eliminating the only spending impetus in place at the moment. Therefore, the administration is concentrating its efforts on reducing the deficit and establishing major reforms it believes will have long-term positive benefits.

Last August Congress passed a version of the Clinton administration's budget proposal. The package is designed to reduce the government budget deficit by close to \$500 billion over the next five years. In the process, the administration was forced to reduce planned expenditures on some programs proposed during the 1992 presidential campaign. Meanwhile, corporate and personal tax rates (on individuals and families with higher incomes) were raised and a 4¢ per gallon gasoline tax was imposed. The health care task force is laboring on proposed legislation that would mandate universal coverage and increase government regulation in the ways in which

health care is provided and priced. Other major initiatives include Vice President Gore's plan to streamline government and a welfare reform package whose ambitious goal is to change the incentive scheme generated by the current system.

As **Figure 1** shows, transfer payments comprise the bulk of government spending. (In fact, the ratio of government purchases to GDP has not changed that much over the last ten years). The explosion in social spending has been mostly due to skyrocketing medical costs (Medicare and Medicaid payments). Moreover, the vast majority of the transfer payments are entitlements, which means that cutting expenditures in that area must be accompanied by some kind of reform that alters the way in which beneficiaries qualify for payments. Therefore, successful reduction of the budget deficit requires the successful implementation of both health care reform and welfare reform.

The outlook for fiscal stimulus in 1994, then, is somewhat bleak. The government budget deficit will come down as tax revenues rise. However, it seems unlikely that a health care reform package will make its way through Congress soon enough to have much of an impact in 1994. Meanwhile, if businesses keep their hiring plans at bay until the uncertainty of future health care costs is settled, the delay could prove costly in terms of new job creation.

Monetary Policy

When the last recession began in fourth quarter 1990, the discount rate was 7%. Now that rate stands at 3%. Moreover, the yield curve has flattened, with the prime rate at or below 6%. **Figure 2** shows the growth rates of the monetary base, M1, and M2. Whereas the base and M1 have displayed healthy growth rates, M2 growth has been continually low and below the Fed's target. In part this is a result of the low interest rate environment, which lowers the opportunity cost of keeping funds in M1 instruments.

However, the Fed has been stymied in its attempt to stimulate the economy by the depressed level of business borrowing. Typically, when the Fed pumps reserves into the banking system, it hopes that banks will convert those reserves into new loans, lower interest rates, and hence more spending. Although reserves have been growing (reserves are part of the base), **Figure 3** shows that loans to businesses have actually fallen. The largest growth component of banking balance sheets has been investments, which are primarily government securities.

The outlook for monetary policy, like that of fiscal policy, is for little change. As long as inflation remains in check (which apparently will be the case) and the federal deficit does not increase, the Federal Reserve will feel little pressure to raise interest rates

Figure 2
Growth of Money Aggregates

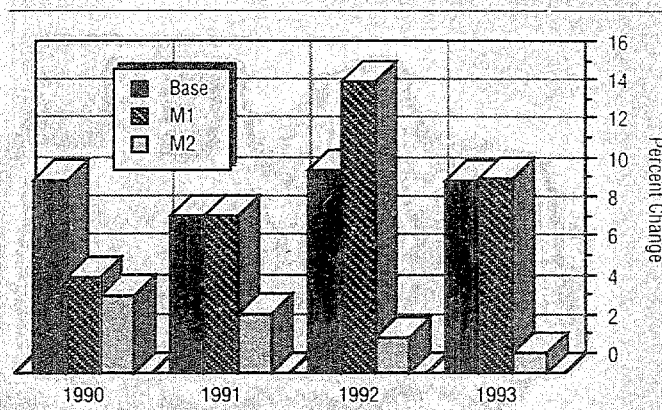
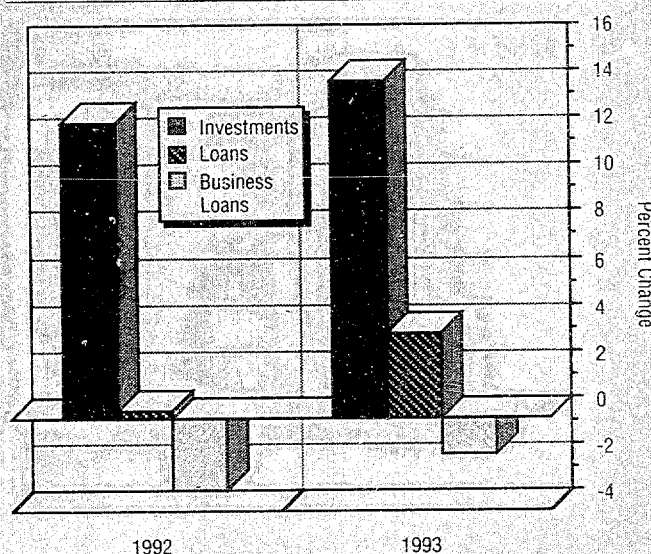


Figure 3
Growth Rates of Bank Assets



substantially. Moreover, although the employment numbers have been improving, unemployment is still relatively high. If those numbers continue to show lackluster growth, the Fed will be reluctant to clamp down. However, short-term rates can go no lower under the current inflationary scenario, because they are already close to zero in real terms. It is also unlikely that long-term rates will fall much further.

The International Economy

Michele Fratianni

Amoco Faculty Fellow and Professor of Business Economics and Public Policy, Indiana University School of Business

Economic growth around the world is clearly below trend growth, mostly because of lackluster performance in the industrialized countries (see the Table). Over 1975-89, output of goods and services grew at an average annual rate of 3.5% in the world. Industrial countries, which account for the lion's share of world output, grew at an average of 2.8%. Of the so-

called G7 countries—the elite of the industrial country grouping—only Japan and Canada grew faster than the industrial average. Developing countries, which account for a relatively small share of world output, grew almost twice as fast as industrial countries. The growth of Asian countries was faster than that, and Pacific Basin countries even faster.

In 1990 the United States went into a recession that lasted through part of 1991. During that year the growth of U.S. GDP was about 4% below trend. Canada and the United Kingdom mimicked quite closely the U.S. business downturn. Continental Western Europe slid into hard times in 1991, and Japan in 1992.

Germany paid the front-loaded costs of German monetary unification. The policy goal of raising almost overnight the East German standard of living put pressure on government spending and real rates of interest in Germany. The Bundesbank (Germany's central bank) tightened monetary policy to offset the inflationary effect of the higher expenditures. Interest rates rose and stayed high as a consequence.

Countries participating in the European Monetary System had a choice: either maintain existing exchange rate parities and thus import the high interest rates, or adjust the parities. Political leaders and central bankers opted for the credibility of the European Monetary System and had to tighten monetary policy. This was not a good choice because of its deflationary implications. In mid-September 1992, there was a currency crisis, the result of which was forced parity adjustments by some countries and the decision of Italy and the U.K. to abandon the exchange rate mechanism that kept rates within a narrow band of fluctuation. Neither of these two countries has returned to the system.

Table
Growth in World Output, 1975-1993

	1975-89 ¹	1990	1991	1992	1993 ²
WORLD	3.5	2.0	0.6	1.8	2.2
Industrial Countries	2.8	2.1	0.2	1.5	1.5
U.S.	2.7	0.8	-1.2	2.6	3.0
Japan	4.2	4.8	4.0	1.3	1.3
Germany	2.0	5.1	1.0	2.0	-2.0
France	2.4	2.2	1.1	1.8	-0.8
Italy	2.7	2.1	1.3	0.9	-0.5
U.K.	2.3	0.5	-2.2	-0.6	1.4
Canada	3.4	-0.5	-1.7	0.9	3.2
Developing Countries	4.7	3.7	4.2	6.1	5.1
Asia	6.7	5.7	5.8	7.9	6.7

¹Average

²Estimated

Source: International Monetary Fund

At the end of August 1993 there was a second currency crisis centered around the French franc. The French authorities were unwilling to adjust the par value of their currency, and the collapse of the exchange-rate mechanism was averted by a compromise of widening the bands from plus or minus 2.5% to plus or minus 15%.

These two currency crises provided the impetus for a more expansionary policy in Western Europe. Short- and long-term interest rates have been falling and stock market prices have been booming in anticipation of the business recovery. Germany, France, and Italy are now at the bottom of their recessions. In short, Western Europe is approximately one and a half years behind the U.S. in terms of business cycle timing and monetary policy actions to counteract the effects of recession.

Japan is undergoing its worst economic performance since World War II, with the exception of 1973. Several factors are at work here: the deflation of the real estate price bubble; the deterioration of the quality of bank assets that has led to a credit crunch; and the sharp slowdown of Japanese exports following an appreciating yen, declining output growth rates in the rest of the world, and pressures on the country to reduce its current-account surplus. The new Japanese government is contemplating a reduction in income tax rates in 1993, followed by higher consumption tax rates a year from now. The stimulus package is estimated at around \$100 billion. In the meantime, Japanese firms are investing heavily in the "booming" Pacific Basin countries. The latter, however, are growing at 1-2% below 1992.

Inflation rates in the industrial countries remain at historically low levels (below 3%). Inflation rates in the developing world, which have been much higher historically, are coming down. In the fast-growing Asian countries, inflation averages approximately 7%. Nominal and real rates of interest are declining, reflecting in part the more expansive monetary policies of the industrial countries and in part the low inflationary environment. It is hard to imagine a return to the negative real rates of interest of the 1970s. The rise in the global demand for capital and the drain on the world saving pool caused by large government deficits suggest that real rates of interest cannot decline in a secular way.

There are two important international agreements that will affect the future international trade environment: NAFTA and the Uruguay Round. A decision on the latter, which has yet to take place as of this writing, is far more important from a global per-

spective. The net economic benefits of NAFTA will be small in relation to the size of the U.S. economy, given the relative small size of Mexico. The Uruguay Round, in contrast, is a global trade negotiation that promises to lower trade impediments on a variety of products and services that hitherto have been subject to protection.

Forecast

Beginning with 1989, U.S. trade and current-account balances have been improving markedly in response to the declining value of the U.S. dollar in the exchange markets and lower economic growth in the U.S. relative to that of our trading partners. This trend seems to have stopped in second quarter 1992, when both trade and current-account deficits rose relative to the values in first quarter 1992. The reason lies in the slowdown of output growth abroad relative to output growth in the U.S.—thus reducing the growth of our exports while raising that of our imports. We foresee a reinforcement of this cyclical position in the next 12 months; consequently, we are forecasting that U.S. net exports of goods and services will deteriorate by \$25 billion—from a projected level of -\$75 billion in 1993 to -\$100 billion in 1994.

As to the value of the U.S. dollar in the exchange markets, the fundamentals suggest an appreciation of the dollar relative to the two key currencies: the German mark and the Japanese yen. The two fundamental factors at work are differences in output growth rates and in monetary policy actions. The expected improvement in the U.S. cyclical position relative to that of trading partners favors an appreciation of the dollar. The more expansionary monetary policies in Germany and Europe as a whole will reinforce the output effect. Naturally, we are assuming that the Fed will not further loosen monetary policy.

The case for a dollar appreciation is stronger vis-à-vis the German mark than the Japanese yen. Japan maintains a large trade and current-account surplus with respect to the United States—a source of great friction between these two countries. The U.S. government vigorously "talked" the yen up in 1993, and should this continue in 1994, normal market forces would be partly blunted. Furthermore, the Japanese repatriated large amounts of capital in 1993, fueling the appreciation of the yen. The deterioration in banks' and insurance companies' assets may encourage Japanese capital to stay at home and shore risk rather than seek higher returns abroad. Should this trend continue, the yen depreciation relative to the dollar will be smaller.

Corporate Profits, Interest Rates, and the Stock Market

Michael Simkowitz

*Professor of Finance and Director, Alumni Programs,
Indiana University School of Business*

Our overall forecast for the economy is for growth to be slightly less in 1994 than it was in 1993. In tune with this sluggish economy, we are predicting that corporate earnings as described by the S&P 500 will be growing at a lower rate in 1994 than they did in 1993, when operating profits for the S&P 500 expanded by 8-9%. For 1994, we're looking for an expansion at the rate of 6-8%. As in the previous few years, this profit expansion will be primarily a result of cost cutting and a continuing decline in interest expenses as opposed to a significant expansion of revenue.

It is important to remember that there is a significant difference between reported earnings and what we call operating earnings. Reported earnings are operating earnings less writeoffs. And in recent years, writeoffs have been quite large. The reasons are many and varied; some are the result of changes in accepted accounting rules. The latest and most significant change is the way a company accounts for its future liabilities to retired workers. This accounting ruling, known as FASB 106, requires companies to take a charge against current earnings in order to recognize their future liability to retired workers now instead of on a cash basis when the benefits are actually paid.

Other writeoffs are driven by the desire of corporations to clean up their balance sheets by writing down the value of old and underperforming assets. There is a large preponderance of research, both academic and Wall Street, indicating that the market rightly discounts these writeoffs as a correction of past performance, and that the proper measure of earnings to look at when evaluating stocks is the operating earnings before the writeoffs. On an S&P 500 share basis, the writeoffs have been as high as \$6.28 in 1991 and are expected to be in the \$5 plus range for 1993, down to around \$2.50 for 1994, and anybody's guess for 1995.

Dividends that lag earnings and cash flow will begin to respond, but slowly. Dividend growth in 1991 and 1992 was in the vicinity of only 1% on the S&P 500; in 1993 the growth was only 3-4%. We're expecting the dividend growth to expand a little bit

faster (4-6%) in 1994, so per-share dividends on the S&P 500 in 1994 will be around \$13.40 (see **Table 1**).

If we lengthen our telescope a little and take a look at 1995, we should see a better year than 1994 for both corporate profits and dividends. It is important to realize that the weakness we're forecasting in 1994 is not the precursor of a recession but really just a flattening of the growth due to the lack of stimulus from government, exports, or domestic investments. The year 1995 should begin to see some expansion in the net export figure as well as a resumption of some healthy investment figures. This longer look is important because the capital markets, particularly the stock market, are looking ahead at least one year and possibly longer as they price financial assets.

Interest rates as of the third week of October 1993 are shown in **Table 2**. We are forecasting small changes in the interest rate structure over the next year, with the short rates coming up very little and the long rates down a bit. Our reasoning for these small shifts is that we expect the economy to begin to pick up again by the end of 1994. There may be some very minor pressure on short rates as a result, but we look for a continuing erosion of rates at the longer end due to a number of factors. First, there should be less and less competition from high rates abroad as both Germany and Japan cut their interest rates, relieving any upward pressure on the long-term rates in this country. Second, we expect inflation expectations to con-

Table 1
Dividend Growth: 1991-1995

	S&P 500 Operating Earnings	Dividends
1991	22.25	12.20
1992	24.65	12.38
1993	26.75*	12.75
1994	28.60*	13.40*
1995	31.45*	14.61*

*Estimated.

Table 2
Interest Rates

Maturity	Yields to Maturity October 1993	Forecast Yields October 1994
9 days	3.06	3.2
3 years	4.10	4.2
5 years	4.70	4.7
10 years	5.25	5.1
30 years	5.90	5.6

tinue to be reduced. If our prediction for what will happen to long-term interest rates is correct, then the return to holding 30-year bonds for the next year should be a total of about 10%.

Our forecast calling for a slight decline in the growth of the economy and subsequently slow growth in earnings should mean there will be a correction in the stock market. But with the timing of such a correction and the difficulty of getting in and out at the appropriate times, it is most likely imprudent for long-term investors to try and reduce their exposure to the market on the basis of this correction. If our longer look at 1995 is reasonably correct, then we would expect the market to be close to or slightly above its current levels a year from now. This would provide a return of approximately 4-6%; but the margin of error for one-year predictions on the stock market is quite large. The risk to the long-term investor of abandoning equities with the hope of buying them back at a lower price is higher than the reward of success. Any correction should be limited to no more than 10-15% by the very high level of funds that continue to move into long-dated financial assets. The stock market should continue to attract a large volume of funds, because the individual households' exposure to equities is still less than historical norms.

Short-term speculators might find it worthwhile to reduce their exposure to equity and speculate on the bond market doing as well as we're forecasting. It is important to remember, as we look at the interest rates currently available, that over the long term these

rates are closer to normal than the high rates we saw in the 1970s and 1980s. Although the stock market currently appears to be fully valued with a yield on look-ahead dividends of around 2.9%, it is important to remember that the stock market spent a good part of the late 1950s and 1960s at consistently high valuations, and the nervous investor who departed from the market in 1958 missed some significant wealth-increasing opportunities in stocks. It is my opinion that given the choice across three products—short-term money market instruments, long-term bonds, or equities—that the long-term investor is best served by staying in equities as opposed to trying to play a market timing strategy of jumping from equities to short-term money instruments and back again.

In summary, because we are looking at an economy that will slow a little in 1994, corporate earnings will most likely disappoint the typical observer on the street. This disappointment should give rise to a stock market correction at some point during the year. The weak economy and lack of inflation should also allow long-term rates to decline a little bit further than they have; but most of the decline in long-term rates is behind us. Looking at 1994 as an isolated event, the best return will most likely be in the bond market. But for the prudent long-term investor, stocks still appear to be worth retaining. The short-term speculator can either switch to long-term bonds or stay in the money markets and look for targets of opportunity in both the bond and stock markets.

A Review of Recession, Recovery, and Expansion



he latest detailed data available for the economy of Indiana only take us through June. Of late, the employment and the unemployment numbers for our state have come under heavy scrutiny, and the personal income data issued quarterly by the U.S. Bureau of Economic Analysis give the best available view of how our state is performing.

Indiana's path through the late recession, the subsequent recovery, and the current recovery can be seen in **Figure 1**. Our decline fairly matched the national recession, if we use the nation's cyclical peak of second quarter 1990 as the reference point. (The actual peak for Indiana was in the first quarter of that year, which would suggest that we went into the recession earlier. But it is easier to ignore such details since no one would recognize a Hoosier-led recession.)

After reaching the bottom in first quarter 1991 and bumping along there for two more quarters, Indiana began to diverge from the nation in fourth quarter 1991. Then, until the middle of 1992, Indiana outpaced the national recovery. Both Indiana and the nation show a spike in fourth quarter 1992, when a considerable amount of income was taken in anticipation of the 1993 income tax increase. This behavior also accounts for the apparent decline in personal income during first quarter 1993. The fact that this

decline was more severe in the nation than in this state may indicate that we have fewer people in a position to accelerate income payments.

The recovery was complete in Indiana a full quarter before it ended in the nation. By fourth quarter 1991, Indiana's personal income had surpassed its level at the start of the recession. For the nation, this point was not reached until first quarter 1992. By midyear 1993, Indiana's real personal income was 6% ahead of its previous peak, whereas the nation was up just 3.8%. Our gain exceeded that of Illinois, Michigan, and Ohio, but trailed the 7.4% gain of Kentucky.

Net earnings (which include all compensation for employed Indiana citizens—regardless of where they work—less contributions for social insurance) fell by more than personal income and began their rise directly from the bottom of the recession in first quarter 1991 (see **Figure 2**).

State unemployment insurance benefits (see **Figure 3**) rose with the beginning of the recession, as a good counter-cyclical measure should, although they took off in early 1992 when Congress (as usual) recognized the hardships of the recession only after hearings had proven the needs of displaced workers.

Other government transfer payments (see **Figure 4**) continued to add to income during both the recession and the recovery. These payments, largely for

Morton J. Marcus

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

Figure 1
Personal Income

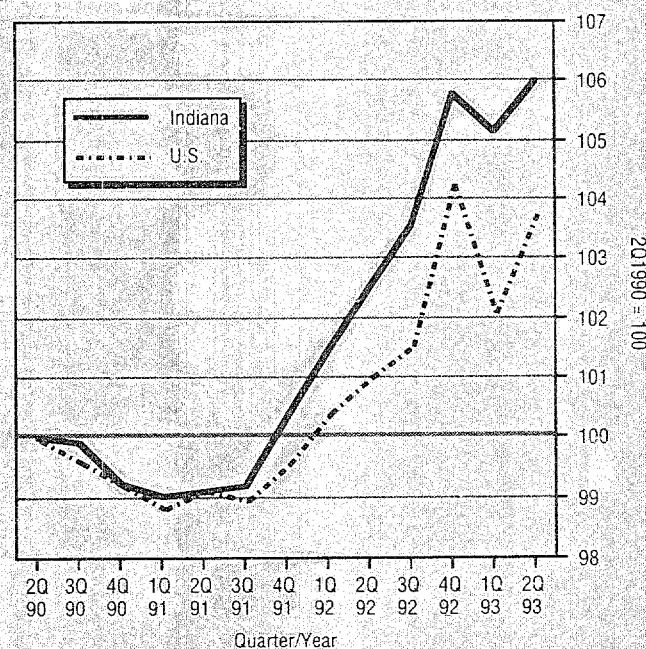


Figure 2
Net Earnings

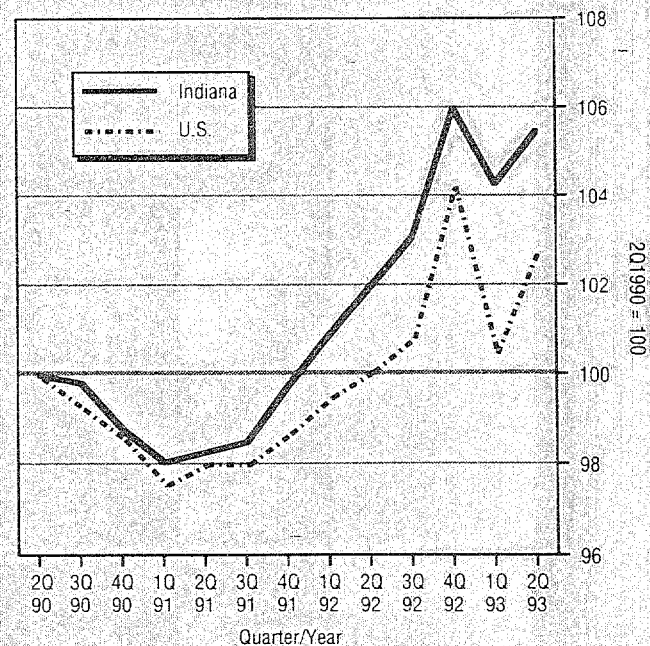
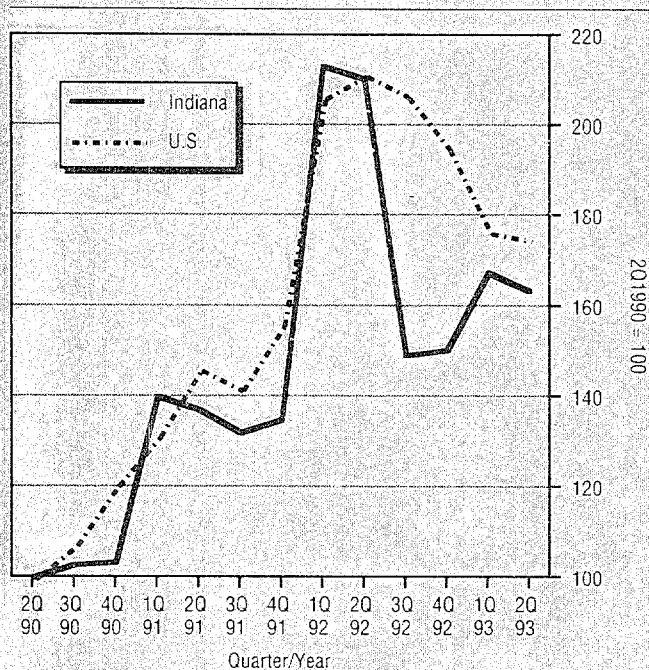


Figure 3
State Unemployment Insurance Benefits



Social Security and federal employee pensions, are meant to be sustaining and are not intended as anti-recession income-maintenance measures.

The distinctive aspect of this business cycle was the sharp decline in dividends, interest, and rents (see **Figure 5**). With interest rates falling and dividends cut or missed, there was a 7% decline in Indiana by first quarter 1992; the nation continued to fall for another half year. By midyear 1993, these receipts were still more than 5% below their previous cyclical peak.

Figure 6 shows that the recession hit Michigan hardest of our neighboring states, with a 2.1% decrease in real personal income from second quarter 1990 to first quarter 1991. Indiana's decline in this period was just 1%, almost even with the nation. Kentucky experienced only a modest decline and realized the greatest growth from the trough in first quarter 1991 through second quarter 1993.

An industry-by-industry analysis of real earnings in **Figures 7** through **10** shows where Indiana, each of its neighbors, and the nation stood in second quarter 1993 compared with the previous peak three years earlier. Farm earnings are worse in Indiana than in our neighboring states. Our decline in mining was exceeded by that in Kentucky, while our gains in construction were unsurpassed in this comparison (see **Figure 7**).

Figure 4
Other Government Transfers

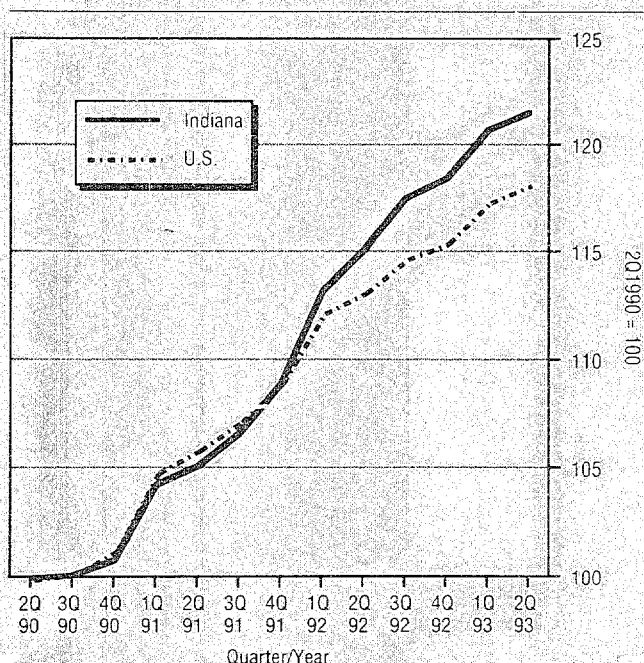
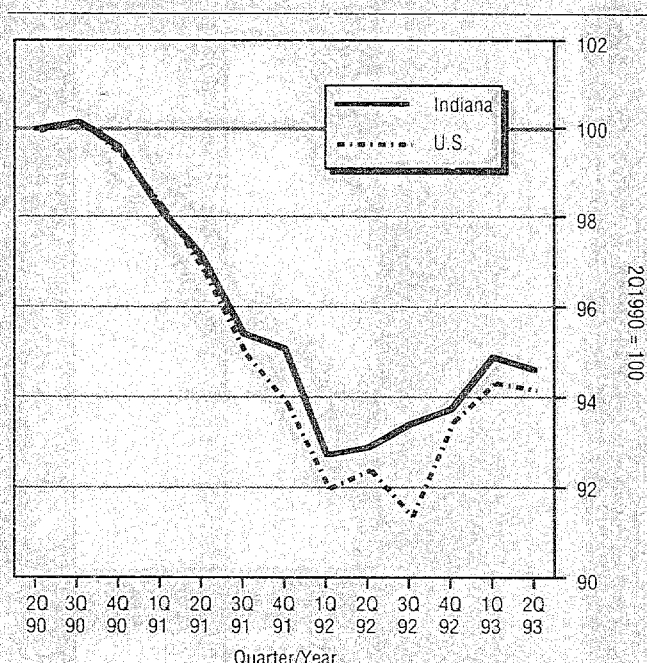


Figure 5
Dividends, Interest, and Rent



Durable goods manufacturing in Indiana has seen an advance, while elsewhere declines are the rule (see **Figure 8**). At the same time, we have failed to regain our previous peak in nondurable manufacturing as well as in transportation and public utilities, although the nation shows gains in both areas.

Indiana has outperformed the nation in each of the four industries of **Figure 9**. Finance, insurance and real estate has been a particularly strong sector.

In the government sector (see **Figure 10**), federal military earnings continue to rise across the nation, but not in our region. Four of the five states are below their second quarter 1990 levels. Indiana has done particularly well in federal civilian earnings (5.8% vs.

1.7% nationally), while our neighboring states all show declines. Except for Ohio, Indiana has the most modest gain in state and local government earnings, which show a 5.3% increase nationally and 5.8% in this state.

Continued employment growth in the year ahead is to be expected. Establishment employment will probably come in about 30,000 higher in 1993 than in 1992, with a gain of 40,000 to 50,000 in the next year. This should translate into an increase of 1.5% in real personal income. Retail trade and services will continue to lead the employment growth, with no gains expected in manufacturing employment as a result of weak exports and a tempering of consumer spending.

Figure 6
Percent Change in Real Personal Income: U.S., Indiana, and Neighboring States

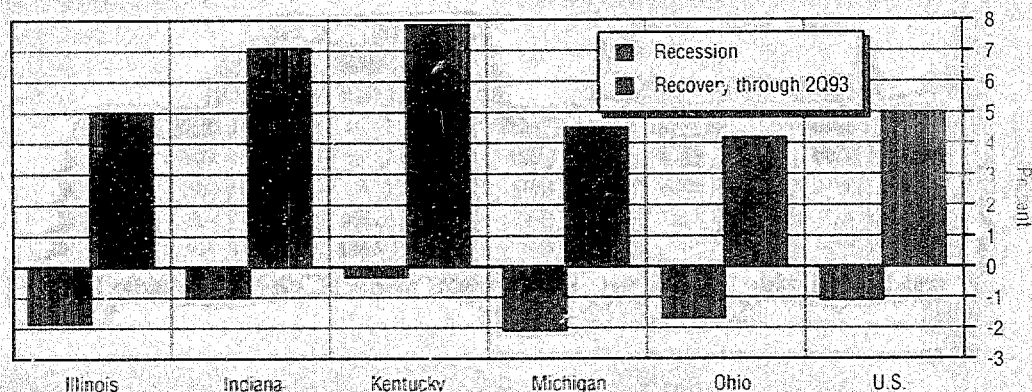


Figure 7
Percent Change in Real Earnings, 2Q90-2Q93: Farming, Mining, and Construction

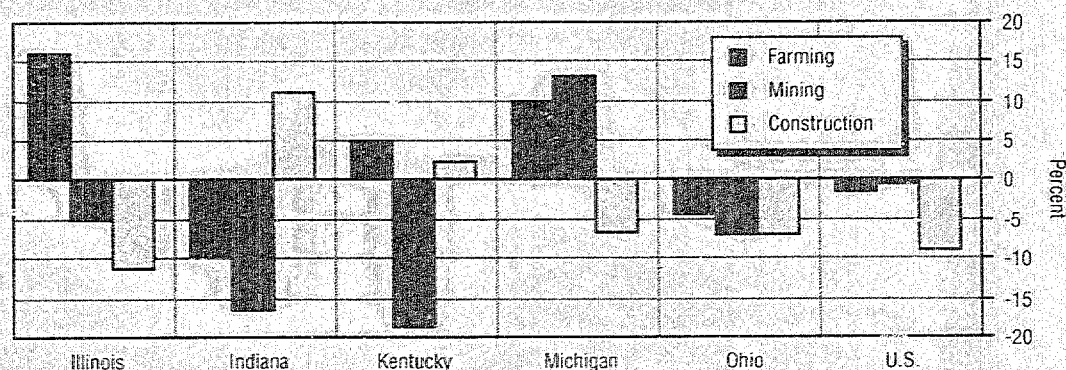


Figure 8
Percent Change in Real Earnings, 2Q90-2Q93: Manufacturing and Transportation & Public Utilities

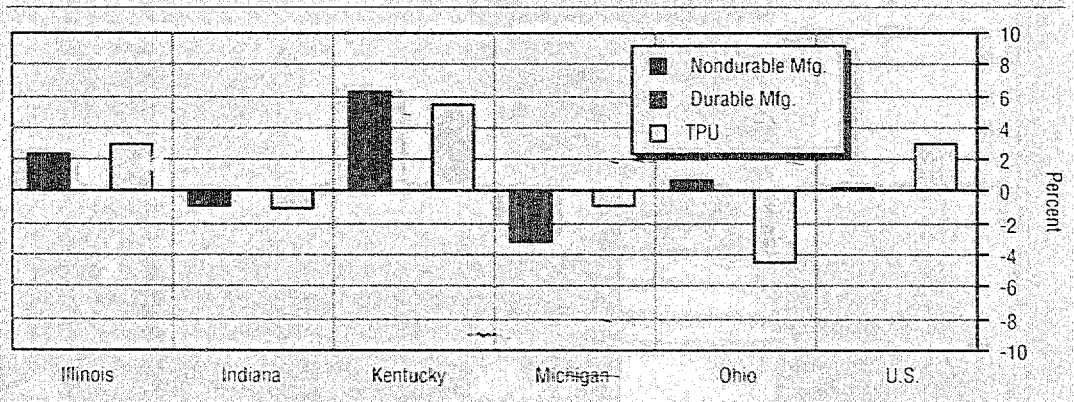


Figure 9
Percent Change in Real Earnings, 2Q90-2Q93: Trade, Finance/Insurance/Real Estate, and Business & Personal Services

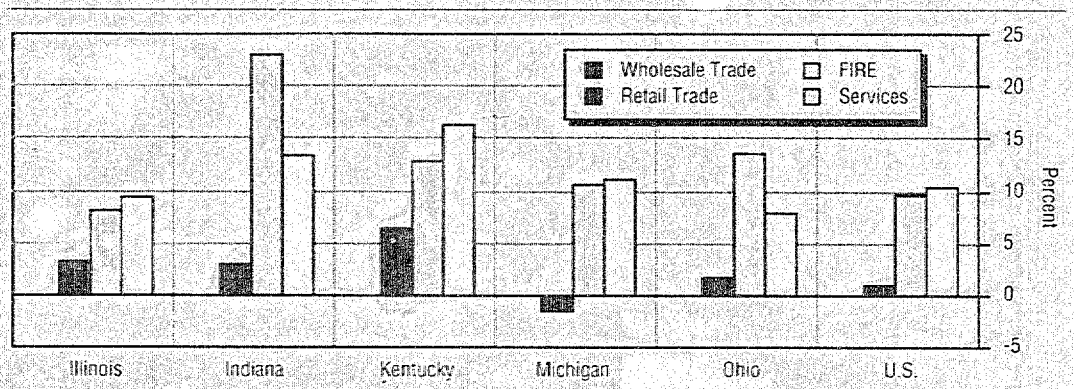
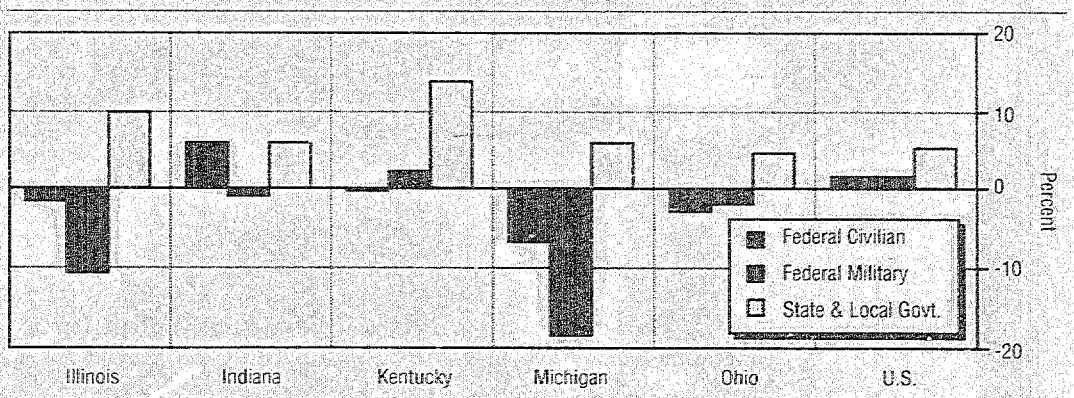


Figure 10
Percent Change in Real Earnings, 2Q90-2Q93: Federal, State, and Local Government



Indianapolis

Robert Kirk

Professor of Economics, Indiana University-Purdue University at Indianapolis

Employment in 1994 for the Indianapolis metropolitan area is expected to increase 1.25-1.75%. Industries expected to be major contributors to employment growth are transportation services (United Airlines Maintenance Center), wholesale and retail trade, financial services, and business services. Because of Indianapolis's relatively low business cost environment and central location, existing firms should be able to expand locally. These same factors, along with relatively low housing costs and the increasing national attention received by the city's innovative ways of dealing with financial challenges, should attract new firms to the area.

Table 1
Metropolitan Area Employment Percent Change, 3Q92-3Q93

Metropolitan Area	Total Employment	Manufacturing Employment
INDIANAPOLIS	1.3	2.2
Chicago	1.6	0.9
Cincinnati	1.7	-1.5
Columbus, OH	0.8	-0.8
Detroit	1.1*	2.2*
Louisville	1.2*	-0.1*
St. Louis	0.3	-3.6

*For July and August only.

Source: Establishment employment estimates from Departments of Employment.

Table 2
Change in Age Distribution of the Population, 1980-1990

Age Group	Indianapolis	United States
0-4	10.5	12.3
5-9	1.5	8.4
10-14	-10.3	-6.2
15-19	-20.8	-16.1
20-24	-17.0	-10.3
25-34	18.8	16.4
35-44	42.2	46.6
45-54	6.4	10.6
55-64	-2.9	-0.2
65-74	15.3	16.2
75+	26.8	31.3
Total	7.1	9.8

Source: Census of Population, 1980 and 1990.

Table 1 compares Indianapolis's performance from third quarter 1992 to third quarter 1993 with other metropolitan areas in the region. For Indianapolis and Chicago, the industrial machinery industry was the primary source of the strength in manufacturing. The 1994 national forecast for continued growth in capital goods spending, but at a slower rate, means that the employment growth rate in this industry locally will diminish. Cincinnati and St. Louis experienced cutbacks in aerospace, while St. Louis was affected by automotive industry reductions as well.

Demographics and Economics

The changing age distribution of the population provides a framework for analyzing economic change. Table 2 shows percentage changes in the population from 1980 to 1990 by age group for the U.S. and the Indianapolis metropolitan area.

Home purchases by the Baby Boomers (by and large, the 25-44 age group) have stimulated the housing industry. Indianapolis has had two very good housing years. Based on the national forecast of no major upturn in mortgage rates, the level of housing construction-related employment should be sustained. We may see a few more apartment complexes listed in the housing permit data. Retail furniture and appliance sales have benefited from the new and existing home sales. New food stores have opened near the new housing developments. The retail industry continues to be highly competitive with the entry of major regional and national retailers.

The echo effect (0-10 age group, or the babies of the Baby Boomers) resulted in the issuance in 1993 of construction permits worth millions of dollars for remodeling, additions, and new K-12 school buildings. However, it is doubtful that this level of building permit issuance can be sustained in 1994.

The Baby Bust (age 15-19) declined 21%. This partly explains the many "help wanted" signs in retail establishments. Retailers are increasingly hiring senior citizens who want part-time jobs. The Baby Bust is a factor in lower enrollments or slower rates of increase in higher education institutions. As a consequence, these institutions have developed marketing strategies that include offering more courses where employees work.

For the 65-and-over group, household surveys indicate they tend to consume greater fractions of their wealth than younger households. The growth of government entitlement programs—Social Security, Medicare, and Medicaid—has contributed to a shift in wealth toward this group. There has been a growth in the use of annuities as a form of retirement saving. Annuity income allows one to consume at a higher rate than would have been possible without access to the annuity. In recognition of this large amount of

purchasing power, firms are giving increasing attention to new product development for this age group.

Restructuring

Indianapolis industries have had to make adjustments in the face of changing market conditions. These industries include transportation equipment (Allison Transmission and Allison Gas Turbine), drugs (Eli Lilly), and air transportation (USAir). For many employees, the adjustment has been in the form of early retirement; for others, layoffs.

As the price of labor has increased relative to capital, capital has been substituted for labor and increased the productivity of labor. Where have the gains from productivity gone? Frequently, they have been used to finance higher health insurance premiums, leaving little for increases in nominal wages and salaries. When adjusted for inflation, these nominal increases have become decreases in purchasing power for workers in some industries. One benefit of health care reform may be that by reducing the rate of growth in insurance premiums, more of the productivity gain will be available for retained earnings, dividend payouts, and increases in real wages and salaries.

The market for health services differs from other markets. There is uncertainty in the sense that no one can predict the outcome from any given procedure or treatment—giving rise to “best treatment of the day,” which in turn gives rise to problems of expenditure control. Because individuals are directly responsible for only a fraction of the costs of health care, they extend the level of demand beyond the point at which the additional benefit equals the additional cost. There is extensive government control over prices, quality, and entry to the market.

The Indianapolis health care industry was a major source of employment growth in the 1980s. However, efforts to contain costs through, for example, limits on Medicare and Medicaid reimbursement have created incentives for delivery of services through outpatient facilities and for hospitals to cooperate in the acquisition and use of expensive equipment. Although the congressional debate on the Clinton health care reform has just begun, Indianapolis employers, insurers, and providers are beginning to form alliances to deal with costs and access.

Sights and Sounds

In March 1994, residents will begin seeing the first United Airlines 737s to arrive at United's Indianapolis Maintenance Center for seat checks. By the end of the year, about 1,000 people are expected to be employed at the Center in heavy maintenance activities.

Meanwhile, downtown one will see and hear the ongoing construction of the Circle Centre Mall—a

\$325 million project with major financing by the City of Indianapolis, local corporations, and foreign banks. Residents have a major financial interest in the success of the project. A new \$20-25 million downtown stadium for the Indianapolis Indians AAA baseball team could draw significantly more attendance and contribute to the viability of public and private sector investments downtown.

Government

Federal, state, and local government together constitute a major employer in Indianapolis. This government sector (with the exception of metropolitan area schools) is not expected to be a source of employment growth. In fact, the City of Indianapolis has reduced its payroll. Through a regulatory study commission, the city is attempting to reduce its regulatory burden. It is making a major contribution to the local economy through a multimillion-dollar infrastructure improvement program with a focus on neighborhoods. This program will be financed by user fees and restructuring of the city's debt service requirements. There is to be no increase in the property tax burden for debt service. Privatization of the waste water treatment facility is expected to save dollars and allow those dollars to be used for needed sewer infrastructure improvements.

Differences in property tax rates between Marion County (especially Center Township) and surrounding counties are a concern for maintaining the economic viability of the central city. The Minneapolis-St. Paul metropolitan area responded to this concern by developing tax-base sharing in the 1970s. There were two objectives: (1) to induce a more efficient pattern of land use by reducing competition of local governments within a metropolitan area for new development, and (2) to reduce inequities among local governments within the metropolitan area. The method used in the Twin Cities was to allocate 40% of the change in commercial/industrial-assessed valuation to an area-wide base. The results indicated that the tax-base sharing did not affect the distribution of development (no change in variation in business tax base), but did reduce differences in assessed valuation among local government units.

For the purposes of economic analysis, Indianapolis is considered a large labor market. But in a governmental context, this labor market is divided into many jurisdictions. As a result, we tend to think in terms of “turfs” rather than people—place prosperity rather than people prosperity. We want a system of local government in which (1) the service delivery systems respond to the differences in voters' preferences for different packages of government services, and (2) there are incentives for the provision of these services that promote equity and efficiency.

Fort Wayne

Thomas L. Guthrie

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

Crucial to an informed forecast is an accurate determination of the current state of the area economy. Using employment data as a proxy of current economic activity has become highly suspect. The benchmark revision to area employment in March 1992 eliminated 5,000 jobs.¹ The March 1993 benchmark revision added 5,000 jobs. Changes of this magnitude on an employment base of approximately 200,000 render the data series useless in signaling trends.

The **Figure** shows employment and industrial use of electricity on the same chart. The electricity data series suggests consistent growth in the local economy since March 1991, the end of the national recession. (The advantage of the electricity data series is that it is not subject to revision.)

The convergence of the two data series suggests that either (1) the most recent portion of the employ-

ment data series is incorrect again, or (2) employment slack left over from the 1990-91 recession has been largely eliminated; thus, future gains in production should result in concomitant employment gains.

Unfortunately, the outlook for overall production growth in 1994 is tepid. The auto and light truck sector is the one component of area employment most likely to grow in 1994. Area defense-related employment will continue to shrink as a result of the continued downsizing by the Department of Defense. The recent purchasers of local Magnavox operations, the Carlyle Group, have indicated a desire to convert local operations to non-defense related production; however, this is easier said than done.

The area health care industry is likely to be a source of employment weakness in 1994 rather than the source of significant growth to which we have become accustomed. The industry will be responding to market forces, such as group purchasing, that are finally beginning to exert themselves, as well as the continued uncertainty spawned by the comprehensive health care legislation announced by the Clinton Administration. The portion of area employment attributable just to the three community hospitals' portion of health services exceeds 7%, according to a 1990 study made by the Community Research Institute.

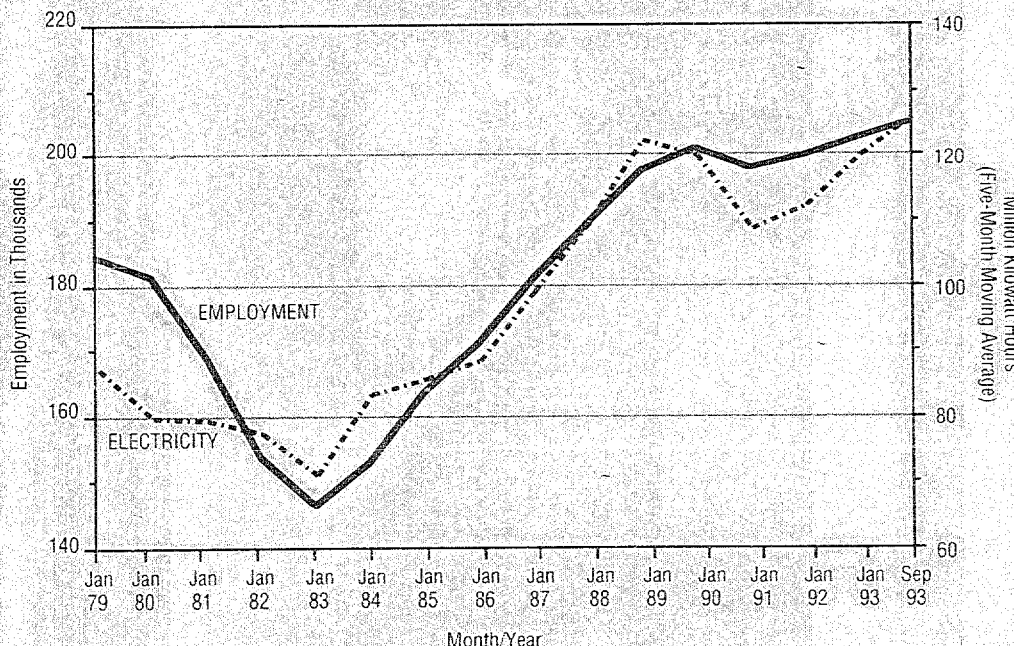
Growth in manufactured exports, another source of substantial employment gains between 1987 and 1991 (as indicated by state data), is also likely to be weak in 1994. Specifically, many of our major trading

partners, such as the European Community and Japan, remain mired in recession. Furthermore, the exchange rate of the dollar is now increasing modestly versus the 1986-89 period, when it fell more than 50%. (A rising dollar makes exports more expensive, and vice versa.)

In summary, then, area employment growth in 1994 is forecast to be approximately 1%, or about 2,000 jobs. If the announced intention of Michelin to close the local Uniroyal Goodrich tire plant next April does occur, the odds are overwhelming that area employment will decline in 1994. Closing the plant with its 2,000 relatively high-paying (\$18+/hour) jobs plus *at least* another 2,000 jobs from the multiplier effect will swamp predicted employment gains from national economic growth.

Assuming that the relatively slow growth rate of the national economy continues, it will take two to three years for the local economy to recover from the announced plant closure. The potential problem with that prediction is that

Figure
Fort Wayne Area Payroll Employment and Industrial Use of Electricity



the analysis is static. The dynamics surrounding the last major plant closure resulted in "trading in" a technologically obsolete 1920's style (IH) heavy-duty truck assembly plant for a technologically world-class 1985 (GM) light-truck assembly plant.

Notes

1. The most recent employment data are based on a sample. The data are revised each March based on quarterly reports submitted by all employers.

Evansville

Maurice Tsai

Professor of Economics, University of Evansville

Following a moderate growth of 2.8% in 1992, the Evansville economy has grown at an estimated 4.2% rate in 1993 (see the **Table**). The leading sectors are manufacturing, construction, and finance. The trade and service sector and area employment have improved from their 1992 performance. The six-month-

old strike in the coal industry so far has had little adverse effect on the area economy.

In 1993, the manufacturing sector showed exceptional strength by posting 6.7% growth—the best year since 1984. Area employment in this sector began to rise in 1992 and 1993, a reverse in the trend since 1978. Electric consumption by the manufacturing sector rose 5.8% in the first three quarters of 1993. The financial sector expanded 6.5% this year. Low interest rates stimulated bank loans and deposits by about 20%, while financial employment grew by 5.4%. Construction activities in residential and business structures rose in the first three quarters of this year, with 800 more workers added.

The weakest sector in 1993 was transportation, with the number of air passengers dropping 12% in the first three quarters. However, other modes of transportation improved slightly by adding 200 more workers. Thus, area employment still rose as a result of more activities in most sectors; the growth rate was 1.6%, which was lower than 1.9% in the previous year.

The Evansville economy will continue to grow in 1994 at around 4.5% or better. In contrast, the national economy is projected to grow at 2.8%, and the Indiana economy at a similar moderate rate.

Manufacturing and construction sectors will continue to lead the area growth. The trade and services and transportation sectors are expected to wax

Table
Evansville Area Business Index (1977 = 100)

	<i>Industrial Production</i>	<i>Trade & Services</i>	<i>Construction</i>	<i>Transportation</i>	<i>Finance</i>	<i>Employment</i>	<i>Composite Index</i>
<i>Quarterly Index</i>							
3Q1992	125.66	131.14	112.48	109.75	132.56	121.76	125.22
4Q1992	128.36	133.89	111.02	105.60	133.86	124.35	127.11
1Q1993	126.85	135.41	120.14	104.84	137.12	122.51	127.81
2Q1993	130.43	133.84	120.99	104.40	136.15	121.71	128.39
3Q1993	139.13	131.71	113.07	108.70	136.78	121.95	131.16
<i>Annual Index</i>							
1989	123.57	121.78	118.76	113.86	122.86	116.55	121.11
1990	124.06	128.82	112.62	112.25	121.64	118.35	122.86
1991	121.32	129.08	98.19	106.86	127.54	118.85	121.18
1992	125.01	131.10	112.24	106.62	128.52	121.13	124.56
1993 (est.)	133.35	134.60	118.30	106.70	136.80	122.54	129.84
1994 (proj.)	139.00	140.00	125.00	110.00	143.00	126.20	135.70
<i>Annual Growth Rate (%)</i>							
1989	0.4	1.7	2.8	2.7	1.2	3.4	1.5
1990	0.4	5.8	-5.2	-1.4	-1.0	1.5	1.4
1991	-2.3	0.2	-12.8	-4.8	4.9	0.4	-1.4
1992	3.1	1.6	14.3	-0.2	0.8	1.9	2.8
1993 (est.)	6.7	2.7	5.4	0.1	6.5	1.6	4.2
1994 (proj.)	4.2	4.0	5.7	3.1	4.5	3.0	4.5

Source: School of Business Administration, University of Evansville

stronger in the coming year. Thus, 1994 will be a better year than 1993, with overall growth in employment and incomes. Unemployment rates should fall to below 6% if the labor force does not surge abruptly.

The national trend of rising demand for durable goods and revived manufacturing production will be reflected fully in this area. The weak spots are declining aluminum prices and uncertain impacts of health care reform on local pharmaceutical products. Invigorated retail activities in the national as well as the local economy will expand the retail employment. The service sectors, especially medical services, will continue to grow in 1994. Most sectors are projected to grow at 3% or higher. Area employment may add up to 4,500 jobs, bringing the unemployment rate down to under 6%. Therefore, we expect a solid growth trend for the coming year and probably for a few more years to come.

Northwest Indiana

Leslie P. Singer, with assistance from E.L. Smith

Professor of Economics, Indiana University Northwest; MBA student, IUN

During the last quarter of 1992, several revisions of employment data were made by the Indiana Department of Work Force Development, in cooperation with the U.S. Department of Labor. These revisions make it difficult to establish precise secular trends in labor and payroll data (see *Northwest Indiana Business Conditions*, No. 4, for an explanation). With the foregoing caveats in mind, we offer the following analysis and forecast.

Second and Third Quarters 1993

The 1993 data indicate that the manufacturing sector and, in particular, steel are gradually gaining employment on a monthly basis. These gains are largely due to the uptick in the automobile replacement cycle and, to a lesser degree, to the rise in new home construction buoyed by historically low mortgage rates. Our studies of the northwest Indiana economy show that purchases of flat-rolled steel by the auto makers account for more than 80% of the variation in local steel production and sales.

The official labor data for second quarter 1993 show a 1,300-job loss in steel employment compared to second quarter 1992, and a 1,600-job shortfall in

manufacturing for third quarter 1993. Our 12-month moving average auto-regressive model, which is based on steel output and productivity variables, estimates a shortfall of about 750 to 1,000 steel employees, instead of the 1,300 reported by the Indiana Employment Security Division. Be that as it may, in spite of the global recovery, northwest Indiana manufacturing employment shows a job deficit that is likely to persist well into 1994, despite modest monthly gains in local hiring and re-entry.

Official estimates reported a deficit of 3,200 jobs in the goods-producing sector at the end of second quarter 1993, and a deficit of 6,000 at the end of the third quarter. Most of these jobs were lost in the volatile construction industry, which by the end of third quarter 1993 had 5,400 fewer employees than the same quarter in 1992. Again, our smoothing functions show that the reported job losses might have been exaggerated.

In the service sector the growth cycle has slowed down, except for retail trade, which showed an increase of 1,300 jobs in second quarter 1993. The retail sector will continue to add jobs through most of 1994. The pace will diminish later in the year, as temporary saturation is reached in eastern Lake and Porter counties. Retail development, however, will continue in the southwestern regions of the MSA until about second quarter 1994. Our studies show that the state tends to underreport the growths in employment in the service sector.

To analyze intersectoral job creation or job loss—that is, loss of jobs in manufacturing and gain in services—we must bear in mind the following:

- The number of average weekly hours worked in general retail merchandise is 28 to 29, with an average hourly wage between \$6.80 and \$7.30.
- The number of average weekly hours in primary metals varies from 43.5 to 45, at an average hourly wage of \$19 to \$20 for nonsupervisory employees.

Thus, an average job lost in primary metals reduces the weekly payroll by about \$885 to \$890 dollars, whereas, at the extreme, some jobs gained in retailing will add only \$200 to \$210. That is, they will recoup only about 23% of the loss in the manufacturing payroll. The lowest gains per job occur in eating and drinking places, where average weekly hours range from 24 to 26 and average hourly wages are \$4.90 to \$5.10, with average weekly earnings of \$130 to \$132. These wages are paid for the most part to young people who will gradually filter into higher paying jobs. Thus, if we apply the full-time equivalent (FTE) and payroll equivalent criteria to employment growth in the first three quarters of 1993, the results are narrowly negative, in spite of some growth in the number of jobs.

Wages and Loss of Manufacturing Jobs

We noted in the Summer 1993 *IBR* that most of the job losses in local steel were not due to lower output—that is, to the drop in the demand for steel due to the recession—but rather to rises in productivity brought about by substitution of capital for labor. Namely, as both nominal and real steel wages rise it becomes profitable to modernize plants. We tested this hypothesis on the basis of quarterly data from all 13 Indiana MSAs.

If the hypothesis were correct, then either the average wage in manufacturing or the highest hourly wage would explain gains or losses in manufacturing jobs. Other things being equal, high-wage MSAs would lose jobs and lower-wage MSAs would gain jobs (or lose fewer jobs). We used average weekly hours and growth in average weekly hours as a proxy for demand for output; that is, if average weekly hours were rising over a 12-month span or were above 40 hours, this would indicate market pressure to increase output.

We found a strong correlation between high-wage MSAs and loss of manufacturing jobs and lower-wage MSAs and gains in employment. Owing to the fact that monetary and fiscal policy and other economic conditions affected all Indiana MSAs about equally, relative wages could be considered the principal factor in determining both absolute and relative annual gains or losses in manufacturing employment. In addition, historically low interest rates relative to the marginal product of capital will continue to stimulate capital well into 1994 and 1995, and may adversely affect manufacturing employment in such high-wage industries as steel and chemicals.

It appears, then, that for every dollar the average hourly wage rises above the mean Indiana manufacturing wage, 296 jobs are lost, presumably through substitution of capital for labor induced by high wages and historically low interest rates. Demand pressures are statistically insignificant when average wage is used, but become statistically significant when the highest wage is included in the regression equation. We also show that a dollar rise in average hourly wages may induce a 1.4% decline in manufacturing employment. Wage reductions will have the opposite effect: raising employment by equal amounts.

Our findings clearly impinge on local steel employment, which will not keep pace with the current upswing in steel output. In addition, inroads by electric furnace producers continue to squeeze out BOP production. In first quarter 1992, electric furnace (mini-mill) production was 37.2% of total steel output; a year later it stood at 41.6%, with no end in sight to its encroachment upon the traditional markets of integrated steel.

There are a number of positives in the short run. The number of 1994 passenger cars sold is expected to rise above seven million units; trucks may approach six million. Home appliance sales may rise over 5% in 1994; metal container sales may rise over 2.6%. All of these markets positively affect local steel production, which is expected to exceed 22 million tons in 1994. In spite of these stimuli, local steel will lose 450 to 500 jobs in 1994-95.

Summary

Tables 1 and 2 summarize seasonally adjusted employment and payroll forecasts and annualized nomi-

Table 1
Northwest Indiana: Employment and Payroll Forecasts (Seasonally Adjusted)

	3Q		Actual Forecast		Projected Forecast		Percentage Corrections (P.C.) in Rebenchmarking			
	1993	4Q 1993	1Q 1994	2Q 1994	3Q 1994	4Q 1994	1Q 1995	2Q 1995	Employment	P.C. * in 3Q
Total Employment	243.3	244.2	245.1	245.9	246.7	247.6	248.3	249.1	9,599	+3.90 +0.62
Manufacturing	52.4	52.3	52.2	52.3	52.2	52.1	52.0	51.9	-262	-0.50 -0.57
Nonmanufacturing	190.9	191.9	192.9	193.6	194.5	195.5	196.3	197.2	12,218	+6.40 +0.69
Steel	31.6	31.5	31.4	31.3	31.1	31.0	30.8	30.9	-129	-0.41 -1.89
Non-Steel	20.8	20.8	20.8	21.0	21.1	21.1	21.2	21.0	-62	-0.03 +1.46
Construction	14.2	13.9	13.8	14.0	14.2	14.3	13.9	13.8	-3,167	-22.30 +10.07
Trade	58.7	59.1	59.2	59.3	59.5	59.7	59.7	59.9	1,960	+3.40 +0.86
Services	56.3	56.4	56.3	56.5	56.6	56.6	56.2	56.3	4,390	+7.80 -0.36
Health	22.8	22.9	22.8	22.6	22.5	22.6	22.6	22.7	-422	-1.85 -0.44
Government	35.0	34.8	34.7	34.6	34.7	34.8	35.1	35.1	-4,450	-2.70 -0.57
Education	17.0	17.3	17.3	17.2	17.5	17.6	17.7	17.7	-289	-1.70 -2.94

* A plus sign in rebenchmarking means that data were overstated; a minus sign means data were understated.

Table 2
Northwest Indiana: Annualized Nominal Wages (\$ billion)

	Actual	Forecast						
	3Q 1993	4Q 1993	1Q 1994	2Q 1994	3Q 1994	4Q 1994	1Q 1995	2Q 1995
Annual Mfg. Payroll	2.105	2.229	2.201	2.250	2.246	2.224	2.239	2.344
Steel Payroll	1.495	1.551	1.607	1.661	1.607	1.619	1.691	1.719
Nonmfg. Payroll	4.040	4.097	4.149	4.203	4.204	4.157	4.158	4.157
Total Payroll (est.)	7.640	7.874	7.763	8.113	8.056	8.000	8.088	8.320
Average Weekly Hours								
Manufacturing	46.2	46.9	45.1	46.8	46.3	46.2	45.2	47.2
Steel	48.6	48.7	47.9	48.2	48.1	47.9	45.3	48.5

nal wages for Northwest Indiana. Highlights of the area forecast are:

- The Indiana Department of Employment and Training has downsized employment totals by 9,599 jobs, and nonmanufacturing jobs by 12,218.
- The Indiana economy will grow at a somewhat reduced rate in 1994, with manufacturing job losses due to productivity outstripping increases in output.
- Most of the rise in output will be handled by overtime. Weekly hours in steel are near an all-time record.
- We are predicting a significant rise in the nominal payroll that will stimulate local retail business, services, and residential construction. All three sectors will show higher profits in 1994-95.
- It is possible that both the psychological and the real effects of the passage of NAFTA will affect our manufacturing forecasts. Thus it is conceivable that both steel and other manufacturing employment will show a small gain of jobs instead of a small loss.

South Bend/Mishawaka-Elkhart/Goshen

John E. Peck

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

This year-end assessment of the economic condition of the South Bend/Mishawaka and Elkhart/Goshen communities is based on an analysis of the latest available economic indicators for the area tracked by Indiana University South Bend's Bureau of Business and Economic Research (BBER). A look at the indica-

tors—particularly those relating to local employment—suggests that through late summer the area economies had performed about as expected in the midyear area forecast (IBR, Summer 1993). There were signs, especially when looking at the job picture, that recovery from the recession—recovery that began in mid-1991—was continuing slowly through August 1993. On the other hand, it was equally clear that conditions were mixed and that progress has been agonizingly slow.

The **Table** summarizes the various indicators of local economic activity compiled by the BBER. 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 1986 values. It is noted that comparative indicators along with percentage changes are given for July and August 1993. To highlight longer-term trends, the same figures are also given for August 1992.

South Bend/Mishawaka

After registering moderate gains in the overall employment level over the prior three months, the South Bend/Mishawaka area experienced a decline of 0.4% in August. This decrease was powered principally by a seasonally adjusted drop of 1.7% in manufacturing employment. On a year-to-year basis, the picture is one of moderate growth overall. A testament to the sluggish nature of the recovery in St. Joseph County is the fact that only 600 more people were employed locally in August 1993 than in August 1992. The good news is that all of these jobs came in the manufacturing sector, which has been hit hard by both the latest recession and the trend toward a more service-oriented industrial restructuring in recent years.

Other South Bend/Mishawaka area indicators were for the most part quite positive. The help wanted advertising index has risen steadily throughout the year, standing 32.6% greater in August than a year before. New car and truck registrations rose dramatically over July. New housing permits issued continued to show remarkable strength, and the average number of days that resale housing was listed fell by 2.2%. Only a decline in energy sales and a high number of nonbusiness bankruptcies stood out among nonemployment indicators as weaknesses in August.

Elkhart/Goshen

In absolute terms, manufacturing employment rose by 200 from July to August 1993, and the non-manufacturing sector grew by 400. On the other hand, these gains were smaller than usual, so the seasonally adjusted index numbers all registered declines. Even though 3,000 more people were employed in August 1993 than in August 1992, from an employment standpoint, the Elkhart County economy

has been adrift since the first of the year. The overall nonagricultural employment index was only 0.1 higher in August than it was in December 1992—again, a testament to the slow progress being made in Michiana to recover from the latest recession.

With respect to the remaining Elkhart/Goshen area indicators, the picture closely mirrors that in neighboring St. Joseph County. The help wanted advertising index, which has been a relatively good leading indicator, was high. New car and truck registrations were up, with truck activity particularly vigorous. New and existing housing indicators were quite positive. Energy sales and nonbusiness bankruptcies were the only negative postings in August.

Outlook

Each month seems to confirm that the economy is recovering and beginning to pick up a little more steam. Employment is traditionally a lagging indicator, and we are learning that our present experience is not an exception. In this recovery, however, there has been an unusual amount of job trimming and downsizing to boot, so there tends to be a bleaker feel to the recovery than what we have come to expect.

Nevertheless, most signs, including the index of leading economic indicators, suggest we are moving in the right direction. We feel that the pace will speed up in the first half of 1994 and that the Michiana area will share in that improvement.

Table
South Bend/Mishawaka-Elkhart/Goshen Economic Indicators

	South Bend/Mishawaka					Elkhart/Goshen				
	August 1993	July 1993	August 1992	% Change July 1993	From August 1992	August 1993	July 1993	August 1992	% Change July 1993	From August 1992
<i>Employment Indicators</i>										
Nonagricultural ¹	112.5	112.9	111.9	-0.4%	0.5%	112.9	113.3	109.8	-0.4%	2.8%
Manufacturing	87.4	88.9	84.5	-1.7%	3.4%	107.7	108.0	104.5	-0.3%	3.1%
Nonmanufacturing	119.7	119.8	119.9	-0.1%	-0.2%	118.6	119.3	115.5	-0.6%	2.7%
Unemployment Rate	3.5%	5.4%	5.8%			3.1%	3.2%	5.5%		
Help Wanted Advertising ²	87.5	77.1	66.0	13.5%	32.6%	111.4	118.0	90.6	-5.6%	23.0%
<i>Utilities³</i>										
Industrial Electricity Sales	104.2	100.5	98.9	3.7%	5.4%	110.4	108.2	107.2	2.0%	3.0%
Commercial Gas Sales	89.4	96.5	100.5	-7.4%	-11.0%	101.3	117.9	109.4	-14.1%	-7.4%
Industrial Gas Sales	34.5	37.9	67.6	-9.0%	-49.0%	48.9	53.6	49.9	-8.8%	-2.0%
<i>Car and Truck Registrations⁴</i>										
New Passenger Cars	61.2	43.6	53.6	40.4%	14.2%	49.5	45.9	48.0	7.8%	3.1%
New Trucks	118.4	68.8	90.9	72.1%	30.3%	99.7	69.9	75.7	42.6%	31.7%
<i>Bankruptcies-South Bend Division⁵</i>										
Business	70.5	95.7	60.0	-26.3%	17.5%	(Included in South Bend Division)				
Nonbusiness	172.8	168.2	180.3	2.7%	-4.2%					
<i>Housing Construction Data⁶</i>										
Estimated Value of Permits	197.8	110.4	123.9	79.2%	59.6%	233.1	125.8	174.0	85.3%	34.0%
Number of Permits Issued	148.8	90.5	109.3	64.4%	36.1%	137.4	90.8	93.3	51.3%	47.3%
Average Value per Permit	130.9	119.3	111.1	9.7%	17.8%	183.0	137.8	198.1	32.8%	-7.6%
<i>Residential Real Estate Data</i>										
Number of Active Listings	1,457	1,482	1,607	-1.7%	-9.3%	1,500	1,517	1,785	-1.1%	-16.0%
Average Days Listed	89	91	95	-2.2%	-6.3%	105	111	109	-5.4%	-3.7%
Average Market Price	\$78,621	\$71,134	\$74,608	10.5%	5.4%	\$77,944	\$77,397	\$76,670	0.7%	1.7%
% of Sale to List Price	94.5	95.9	95.0	-1.5%	-0.5%	96.0	96.0	94.0	0.0%	2.1%

Note: All figures except Unemployment Rate and Residential Real Estate Data are seasonally adjusted index numbers with base year 1986 = 100.

¹St. Joseph and Elkhart Counties.

²South Bend Tribune and Elkhart Truth.

³Electricity Sales include cities of South Bend and Elkhart; Gas Sales include St. Joseph and Elkhart counties.

⁴South Bend Division comprises Cass, Elkhart, Fulton, Kosciusko, La Porte, Marshall, Miami, Pulaski, St. Joseph, Starke, and Wabash counties.

⁵St. Joseph County, excluding cities of South Bend, Mishawaka, Osceola, Walkerton, and New Carlisle; Elkhart County, excluding cities of Elkhart, Goshen, Nappanee, and Millersburg.

Bloomington

Richard L. Pfister

Professor Emeritus of Business Economics and Public Policy, Indiana University, Bloomington

The Bloomington MSA (Monroe County) experienced relatively good employment growth in the first nine months of 1993. The 1993 monthly percentage increases over the same month a year ago have been greater for Bloomington than for the state or the nation. Thus, the local economy seems to have developed some momentum that, along with other indicators, suggests that 1994 could be another relatively good year. The local economy is, however, heavily dependent upon national and state developments. Strong growth in Bloomington cannot occur unless the nation and the state also grow at reasonably good rates. Before considering 1994 in more detail, let us review recent trends in the local economy.

From January through September, monthly establishment employment in Bloomington grew an average of 2.5% over the same months of 1992. This growth rate translates into about 1,400 new jobs over year-ago levels. Total establishment employment in September 1993 was 60,100. (Establishment employment does not include agricultural employment, the self-employed, domestics, and unpaid family workers.) Although this growth is not spectacular, it is, as mentioned above, better than the rates for Indiana and the United States. Furthermore, the growth in the first nine months of 1993 follows almost equally good growth in 1992. Total establishment employment is now above the recession low in 1991 by about 3,000 jobs. The unemployment rate is very low—2.6% in August—although there is some question about the reliability of estimates of county rates.

The largest employment gains have occurred in retail trade, which has shown an average monthly gain of 6.1% in 1993 over the same months in 1992. Total employment in this sector was 12,000 in September 1993. Unfortunately, employment growth in the retail sector does not give a concomitant boost to personal income because of the low wages and prevalence of part-time work in this sector. The additional jobs and income resulting from the growth of this

sector are apparently a net gain, however, as these jobs do not seem to be replacing jobs lost in other higher-wage sectors.

Selected services showed strong employment gains early in 1993, but in the July-to-September period employment was slightly below year-ago levels. After declining slowly for several years, manufacturing employment seems to have stabilized at about 9,000 jobs. Employment in the government sector has been stable despite concerns about budget difficulties at most levels of government. In September 1993 this sector accounted for more than 19,000 employees—a total that is bolstered by the large employment at Indiana University. The other non-goods-producing sectors (transportation, communications, and public utilities; finance, insurance, and real estate; and wholesale trade) had a combined employment total of about 5,500 in September. This combined total has shown a slight upward trend over the past couple of years.

Two series that are generally considered leading indicators have positive implications for the Bloomington economy in the near future. Initial claims for unemployment insurance for the first nine months of 1993 were down 17% from the same period of 1992. These claims have now been falling for two years in a row. The value of building permits for single-family homes increased 27% from January to August 1993, as compared to the same period in 1992. The value of permits for nonresidential buildings was also up sharply—57% over 1992. Strong growth in home building in the state and the nation would provide a boost to the local economy's manufacturing sector, with its concentration on appliances.

Bloomington has become a retailing center for south central Indiana; thus, consumer spending in the region will be a key for this sector. If employment and incomes in the region show good growth in 1994, the local retail sector should also show good growth. The national outlook is for consumer spending to rise less in 1994 than it did in 1993. If this slower growth holds for south central Indiana, Bloomington's retail sector will probably not be able to sustain the recent pace of growth. Still, the general condition of the Bloomington economy suggests cautious optimism for 1994. The caution is necessary because if the state and national economies falter, Bloomington will not be able to escape the effects.

Anderson

Barry C. Ritchey

Associate Professor of Economics, Department of Business and Economics, Anderson University

There were no major deviations in the path of economic transition in 1992 for the Anderson community. For the eighth year in a row, manufacturing employment fell, resulting in nearly 700 fewer jobs by year's end. This brought manufacturing's share of employment in the county down to an historic low of 31.7%.

The other side of job loss is job creation. For the first time in the 1990s, enough new jobs were created in Madison County in 1992 to offset the loss in manufacturing. Employment gains were realized in both the service sector and the public sector.

Closely related to employment is personal income, which has grown at a very slow rate in the 1990s. For the first two years of this decade, per capita personal income has grown at approximately 1.2%—about half the national average. I see three possible explanations for this slow growth. First, the share of personal income derived from transfer pay-

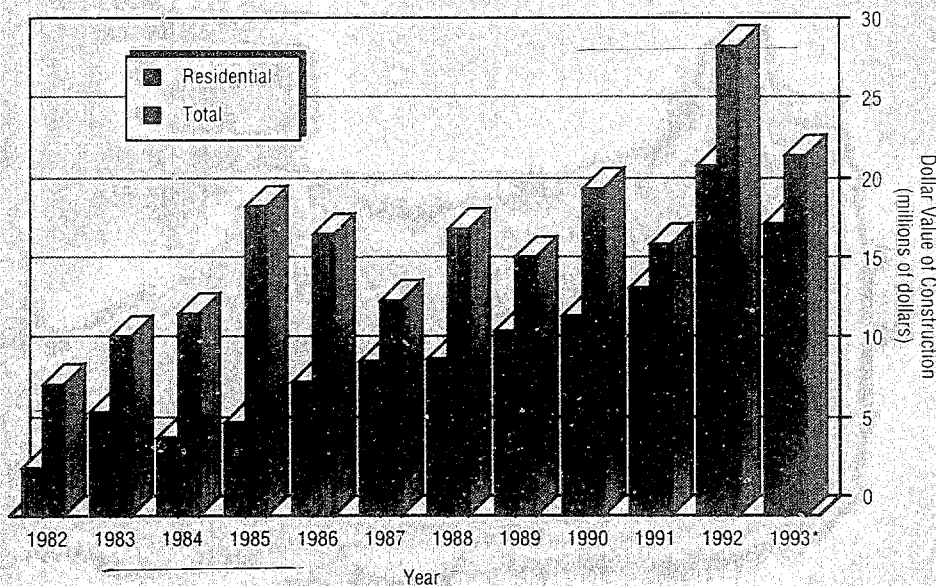
ments has risen in the 1990s to 27%, compared to only 14% just 15 years ago. Because transfer payments tend to rise more slowly than other sources of personal income, growth tends to be slower in the presence of greater dependence on transfer payments. Second, personal income depends on the local manufacturing payroll, which has fallen in the face of the national recession and the slow recovery of the early 1990s. Although wages have remained relatively high, the number of hours worked has fallen. Third, the jobs created locally have been in sectors that traditionally pay lower wages than the manufacturing jobs that have been lost.

The changes in the unemployment picture have been encouraging. In the last 13 years, Madison County's unemployment rates have been above the national average (the only exception being in 1986). For the first eight months of 1993, the local rate has averaged 7.1%, whereas the national average for the same time period has been 6.9%. This is as close as we have been for quite some time. Third quarter 1993 has been particularly strong, with July's rate at 6.1% and August falling to 4.9%. We are on a pace to improve upon 1992's yearly average of 8.3%.

The most positive aspect of the local economy is the construction activity of the 1990s. The **Figure** shows the relative increase of residential housing construction and total construction that has occurred since 1982. (The figures for 1993 are only for the first eight months of the year.) Construction tends to be a rather volatile component of local GDP. In Madison County, however, residential construction has been a consistently growing component that has not shown this typical pattern of volatility. In the first eight months of 1993, there were 197 residential housing permits issued. This follows on the heels of a 12-month total of 209 permits in 1992. Looking only at the first eight months of each year throughout the 1980s, the average number of permits issued for residential housing was 115. The same average for the 1990s is 167.

For the first eight months of this year, the dollar value of residential permits exceeded \$18 million. Nonresidential construction has also been high for 1993: more than \$4 million of permits had been issued through August. This compares favorably with the pace for nonresidential construction in the past seven years. The eight-month total for 1993 construction exceeds the 12-month total for every year since 1982, with the exception of the \$29 million issued for 1992. When the totals for all four quarters are available for 1993, we will surely have experienced one of the best two-year totals in the county's history.

Figure
Madison County Construction



*1993 includes the first eight months only.

Terre Haute

Marvin Fischbaum

Professor of Economics, Indiana State University

Between 1988 and 1992, employment and payrolls in the Terre Haute area grew steadily and at a moderate pace. The region largely escaped the effects of the national recession of 1990-91, and one year ago, as the recovery of the national economy appeared to accelerate, the local outlook seemed bright indeed. However, in 1993 Terre Haute fell victim to an endless series of announcements of layoffs, retrenchments, and plant closings. With staff reductions not yet fully implemented, prospects for 1994 appear restrained.

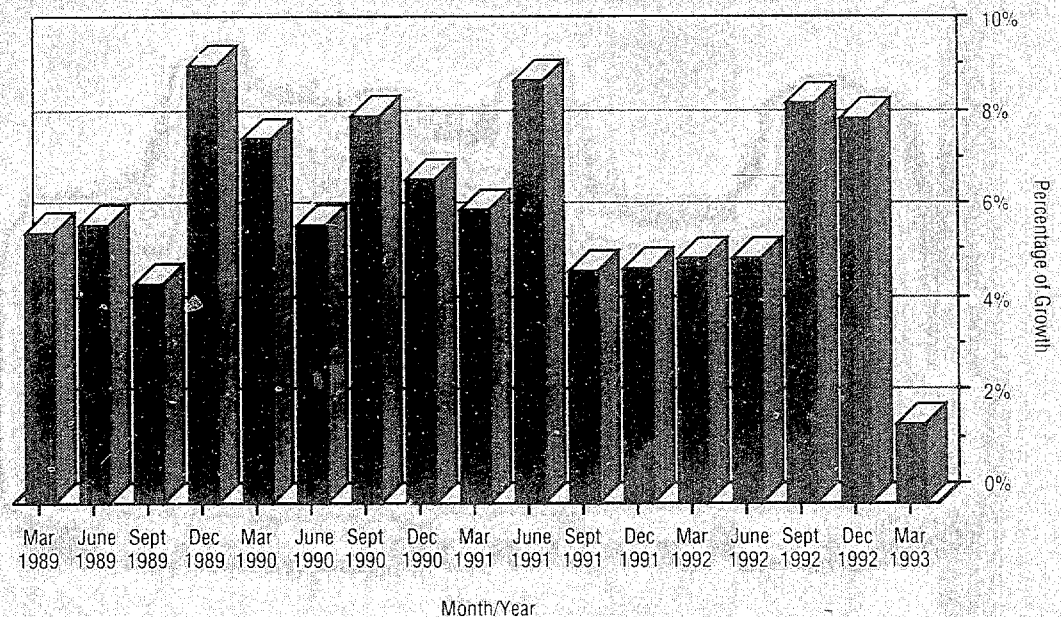
As measured by quarterly payroll data, the Terre Haute economy sailed along from 1988 through 1992. The situation soured, though, in first quarter 1993—the most recent quarter for which data are available. The **Figure** presents the percentage growth in payrolls in Clay, Sullivan, Vermillion, and Vigo counties by quarter, on a year-to-year basis, as a rough adjustment for seasonal factors. For the 12 months ending in March, payrolls grew by only 1.6%. Comparing the last quarter of 1992 with first quarter 1993, payrolls

fell 8.5%. One suspects that payroll growth remained sluggish through 1993, and that slow growth will continue well into 1994.

Cutbacks have affected virtually every sector of the local economy. Some shutdowns were in process before the year began, including Peabody Coal in Vermillion County and Pillsbury in downtown Terre Haute. By midyear, Snacktime had also closed its doors, while Ivy Hill cut production sharply and Pittman-Moore announced it was discontinuing most of its Terre Haute operations.

By autumn, three of the largest employers in the Wabash Valley had announced corporate-wide retrenchments. Eli Lilly, which employed 1,374 at its Clinton laboratories, intends to reduce employment by about 10% through early retirement and attrition. A similar number of independent consultants will also be eliminated. At the Clinton facility, 134 workers, earning an average wage of \$59,000, are eligible for early retirement. Buffeted by the same forces in the pharmaceutical industry, Pfizer, with 600 Vigo County workers, announced a similar corporate-wide cutback, and is transferring its 21-person animal research unit to Connecticut. Donnelley Directory plans to reduce employment by about 25% between its facilities in Terre Haute, which employed around 500 people, and Scranton, Pennsylvania. It also hopes to rely mostly on attrition and early retirement.

Figure
Terre Haute Four-County Area: Payroll Growth in Corresponding Quarters



Source: *Statist*

GTE eliminated its Terre Haute customer service staff. General Housewares moved some operations out of Terre Haute. Woolworth's and Reliable Drugs closed their Terre Haute stores. Applied Computer Devices, Regional Hospital, and school systems throughout the Wabash Valley all made reductions in staff. With the elimination of federal subsidies, Terre Haute lost Lone Star Aviation, the only commuter airline serving the area.

Employment statistics still do not indicate severe damage to the local economy. MSA establishment employer data have been erratic. Year-to-year changes were down 200 in June, 1,900 in July, 1,800 in August, and 1,000, or 1.8%, in September. From September 1992 to September 1993, the largest declines were a loss of 600 jobs in the government sector and 500 jobs in a construction sector that nonetheless remains active. Manufacturing jobs actually increased over the period, with gains in durable goods—reflecting expansion at Great Dane and DADC—more than offsetting losses in nondurable goods.

As has been generally true throughout Indiana, recent household survey data for the local area has painted a brighter picture of employment and unemployment. For the Vigo/Clay MSA, year-to-year comparisons were down 1,000 in June, down 700 in July, up 150 in August, and up 200 in September. For the four-county area, the trend was more positive: down 1,300 in June, even in July, up 1,300 in August, and up 1,150 in September. Reflecting statewide trends, the estimated rate of unemployment fell sharply in June, and even more sharply in July. In October the rate for the MSA stood at a suspiciously modest 5.1%, down 1.1% from the previous year.

The region has experienced some positive developments. After successfully fighting off a hostile takeover, PSI and Destec started construction on the coal gasification plant. Columbia House expanded into a new building, and expects to hire 474 new workers. A \$34 million expansion at Bemis is expected to bring 76 new jobs. Even Ivy Hill expects to maintain local employment as a result of new investment in equipment.

For Vigo County, building permit data indicate continuing strength in nonresidential construction, which grew 3.2% in the 12 months ending in September, as compared with the 12 months ending September 1992. Using the same time comparison, residential construction virtually exploded—up 69.1%! Activity was concentrated in low to moderately priced houses, duplexes, apartments, and a new nursing home built with the Certificate of Need from the old County Home. Sales of existing homes have been buoyant. For homes sold through the Multilist, comparing the third quarter with that of a year ago, average selling price rose 12.9% to \$63,400, while the number of days on the market until sold dropped

from 134 to 115. The total number of homes sold did fall modestly from 508 to 489.

In 1994, Terre Haute will lose some jobs that pay well, it will gain some jobs in occupations in which compensation is more modest, and its business climate should remain fairly flat—all of which is not exactly a new story.

Kokomo

Dilip Pendse

Associate Professor of Economics, Indiana University Kokomo

The economic picture emerging from the first three quarters of 1993 strongly suggests that Kokomo's economy is fundamentally strong and vibrant. All cylinders of the economic engine are fired up. Increases have been logged in the labor force, the factory work week, farm land values, and business earnings. The local business community in general is satisfied with the current state of finances and expects it to improve in 1994. At least 15 small to large stores and restaurants have opened for business. Help wanted signs are everywhere, partly because of labor shortages and seasonal demand. Decreases have occurred in the jobless rate and the unemployment rate range. And unlike in the past, local factories have made no official announcements of layoffs.

For what it's worth, Kokomo's name flashed all over the country on two occasions during the first nine months of 1993. In its September issue, *Money* magazine ranked Kokomo among the nation's top 100 places to live. In Indiana it was ranked second to Bloomington. (Interestingly, a year ago neither Kokomo nor Bloomington made *Money's* annual list.) Kokomo also received nationwide publicity for having affordable housing. According to the data compiled by the National Association of Home Builders, among 160 markets, Kokomo was ranked fifth most affordable nationwide in second quarter 1993.

Early Arrival of Santa

The best economic news delivered this year was from the manufacturing sector. In August, Chrysler Corporation announced plans to invest \$250 million in Kokomo's huge transmission and casting facility, the area's second largest employer. The local facility will receive new state-of-the-art machinery and equipment, as well as add 250 jobs to its existing work

force of 6,200. The new high-wage jobs will boost Chrysler's payroll by \$10 million, which in turn will boost the economy through the multiplier effect. According to the *Economic Policy Institute*, about four secondary jobs are created for every new manufacturing job. It may take some time, but there is a potential for 800 new secondary jobs in the years to come. Chrysler has been doing well lately, and because of its strong earnings in 1992, Kokomo's 6,200 workers earned a combined bonus of \$3 million at the beginning of 1993. And there is more. Kokomo's Chrysler plant will be supplying transmissions to Mitsubishi Motors beginning model year 1995.

Although Delco Electronics, Kokomo's largest employer, did not announce new capital expansion plans, it took major initiatives to enable the local operation to grow and prosper. These include: (1) bringing back 160 jobs from Mexico to Kokomo; (2) accommodating 160 idled workers from GM's plant in Marion; (3) restructuring the local operation and opening two offices overseas; and (4) cosponsoring the Indy 500 Parade and the NASCAR races. The last two measures are in line with Delco's new strategy of capturing a bigger share of the world market in automotive electronic components.

In addition to developments at Delco and Chrysler, Kokomo's two small manufacturing plants, Tri State Foods Processing Co. and Cannon Valley Wood Works, unveiled plans to modernize and expand existing facilities and double their combined current work force of 110. The mayor's office, the local chamber of commerce, and the state government played a constructive role in making modernization and expansion plans possible.

Finally, Syndicate Sales announced plans to invest \$2.5 million to expand its manufacturing capacity. The expansion plan is expected to create 13 additional manufacturing jobs in Kokomo.

Job Machine Revving Up

Kokomo's economy created 2,200 new jobs during the twelve months ending in September 1993—700 more than during the same period a year ago. It was the largest gain in the past five years. While the job gains remained broad-based, the service sector accounted for 82% of new jobs. Except for the construction and transportation/utility sectors, all sub-sectors posted job gains from a low of 100 in the wholesale trade to a high of 800 in the local government sector.

The labor force responded positively to job opportunities, swelling to 43,180 in July. The average size of the labor force grew to 40,245 during January-September, 1% higher than during the same period a year ago. Not only that, it was the largest labor force in the past five years and eighth largest in 19 years.

The swelling of the labor force strongly suggests that improved economic conditions are luring people to Kokomo. In addition, discouraged workers are returning to the labor force in the new hope of landing a job.

A net addition of 2,200 new jobs was certainly a driving force behind increases in the payroll numbers and decreases in the unemployment rate. While the payroll number climbed to 49,700, the unemployment rate plunged to 3.9% in August—a 16-year low. The jobless rate ranged from a low of 3.9% to a high of 7.5%, making it the narrowest range in 15 years and the third narrowest in the past 19 years. The average unemployment rate during the first three quarters of 1993 stood at 6.2%—more than one percentage point below last year's 7.5%. It was the second best average jobless rate in five years and the fourth best in 19 years. Although Kokomo's average quarterly jobless rate remained below the national level, it stayed above the state level.

Kokomo's natural unemployment rate is about 7%. For the past two years the average unemployment rate was at or above the natural rate. This year, however, it remained below the natural rate—another sign of solid economic growth.

Average Annual Pay Second to None in Indiana

During January-August 1993, the humming factories increased the average work week to 40.9 hours, up from 40.4 hours a year ago. Despite limited overtime, manufacturing workers in Howard County earned \$849 per week during the first quarter, the second best in the state and \$246 above the state average. This year's first quarterly manufacturing wages remained second best among similar quarterly earnings in ten years. Fifteen years ago, manufacturing workers earned \$368/week during the first quarter. In other words, the first quarterly manufacturing wages have more than doubled since 1978.

Speaking of income, either the signs of maturity are finally showing up or other young metropolitan areas are catching up fast, because Kokomo's average annual pay level is gradually slipping downward in national ranking. In 1985, Kokomo's average annual salary was ranked fourth highest in the country. Seven years later, the ranking slipped to 30th among the nation's 320 metropolitan areas. The latest U.S. Census Bureau statistics show that Kokomo's average annual pay rose at a moderate rate of 2.9% in 1992 to \$28,676. Despite a moderate increase, for the 12th straight year Kokomo's annual average pay remained second to none in the Hoosierland. Last year's average annual pay level was 22% above the state average of \$23,570 and 11% higher than the national average of \$25,903. Interestingly, Kokomo's average annual salary of \$28,676 in 1992 was 40% above the average salary earned in 1983.

According to *Sales and Marketing Management*, median household spendable income in 1992 was \$32,558, up from a year ago and \$903 above the state median income. The spendable income of all households in the area totaled \$1.4 billion. Last year, Kokomo's median household spendable income was fifth highest in the state and 128th nationwide. While at the state level Kokomo's ranking has remained unchanged in the past ten years, the national ranking has moved up 49 places. A year ago, one out of every five households in Kokomo earned at least \$50,000 in spendable income.

Housing Not Scaling New Peaks

The unprecedented low interest rates lit up life in the otherwise not-so-hot housing sector. According to classic theory, current low mortgage rates should have sparked a near stampede among home buyers. It didn't happen in Kokomo, however. No new peaks were scaled. Home sales in the first half of 1993 totaled 451, compared to 454 in 1992 and 491 in 1991. More than \$29 million in home sales were registered during January-June. Kokomo logged a \$6,100 median price increase, from \$53,900 in the first quarter to \$60,000 in the second quarter. Whereas about a third of existing homes sold were priced at \$71,000 and above, four out of every ten houses sold remained in the price range of \$40,000-\$70,000.

The Kokomo area Housing Affordability Index (HAI) dropped from 258 in the first quarter to 243 in the second quarter. This 15-point drop reflects declining interest rates and an 11% increase in the median price. Kokomo's HAI remained at least 50 points above the state level during the first two quarters, suggesting softness in the housing market.

The number of building permits issued during the first three quarters of 1993 totaled 623, just shy of 625 a year ago. The dollar value of permits issued totaled \$42 million, compared with \$74 million a year ago. Historically low interest rates failed to spark activity on both residential and nonresidential fronts. The number of residential building permits totaled 473 during January-September, just 1% below the number reached a year ago. Nonresidential building permits skidded 13% to 55, down from 62 a year ago. Single-family building permits totaled 156, or 5% less than a year ago. It was still the third best nine-month showing since 1983. Ten years ago, during the depths of severe downturn and double-digit interest rates, only 55 building permits were issued in the area.

Lower interest rates enabled families to build up-scale homes. The construction value registered on the single-family building permit averaged \$117,000, or 10% higher than the same period a year ago. It was also the highest single-family dwelling construction value registered in the past ten years. Generally, 84%

of single-family permits are issued during the first nine months. Based upon the past trends, 186 single-family building permits should be issued before the end of 1993, down 5% from a year ago. Nonetheless, it will be the second best showing in ten years.

Retail Sector Becoming a Shopper's Haven

While manufacturing firms unveiled new strategies, giving local operations a new image and gearing them up for new opportunities, the service sector also revealed its own new strength and vigor. At least 15 stores and restaurants opened in Kokomo, including Sam's Club, Wal-Mart, Cub Foods, Western Auto, and Fazoli's. These new stores have created 700 new jobs, as well as traffic jams. Because of the arrival of nationally known stores, Kokomo has become a haven for shoppers in the surrounding counties.

Along with the new stores, two Kokomo retailers, Hills and Elder Beerman, expanded and modernized existing facilities. In addition, Wal-Mart relocated its regional office from Muncie to Kokomo, and Kokomo's Big R opened another department store in the state. Mijer, a Michigan-based department store, will begin construction on its megastore in Kokomo in 1994. When completed it will create 250 new jobs. Lowe's, the Wilkesboro, N.C.-based hardware retailer, opened for business in its brand new location on the south side. It will create jobs for 100-130 people.

According to *Sales and Marketing Management*, retail sales totaled \$844 million in the Kokomo area in 1992. The dollar volume of sales was larger than in Muncie and Bloomington. Retail sales in the area ten years ago totaled about \$500 million. In 1982, in terms of retail sales per household, Kokomo ranked 182nd nationally, and ninth in the state. The city's low ranking that year was caused by a severe economic downturn. In 1992, however, in terms of retail sales per household, Kokomo ranked third among Indiana's 11 metropolitan areas and 110th nationwide.

Banking, Finance, Insurance, and Real Estate

A trio of Kokomo's largest banks—Society Bank, First National Bank, and Central Indiana Bancorp—reported strong earnings compared to a year ago. Delco, Chrysler, United Presidential Life Insurance Co., and a host of other businesses also reported robust earnings. Kokomo's Central Indiana Bancorp flexed its financial muscle and acquired the First Federal Savings and Loan Association of Peru.

Construction began on Indiana University Kokomo's \$12 million library, scheduled to open before the end of next year. It will be one of the largest learning enhancement centers north of Indianapolis. IUK has added three or four new buildings in recent years, and while the number of employees has doubled, its budget has tripled in the past five years.

Two other major construction projects were announced this year. Howard Community Hospital unveiled plans to construct a \$500,000 ten-bed living facility for mentally ill patients. Country Development announced plans to build Wildcat Creek Golf Course, the area's first public golf course in more than ten years, which is scheduled to open in 1994.

Agriculture

According to a survey of 430 agricultural bankers conducted by the Federal Reserve Bank of Chicago, farm land values in the Indiana section of the 7th Federal Reserve Bank District, including all counties surrounding Howard County, registered the largest gains in the five-state area. Farm land values rose 4% in Indiana during April 1992-April 1993 and edged up 2% between July 1992-July 1993. Nevertheless, these increases were larger than those registered in Michigan and Wisconsin, though somewhat lower than in Iowa and Illinois.

Major Developments in Surrounding Areas

In July, Thomson Consumer Electronics, the world's top producer of very large screen (VLS) picture tubes, announced plans to invest \$8 million in Marion and add 100 jobs at the plant. This addition would make the plant's total work force exceed 2,400, accounting for 5% of Thomson's total worldwide work force of 50,000. Meanwhile, in nearby Gas City, Amcast Industrial Corporation, a producer of aluminum wheels, announced plans to increase its work force to 350, more than four times its current level of 80.

In Wabash, another neighbor of Marion, Lox Equipment Co., a maker of cryogenic trailers for transporting liquid oxygen, disclosed plans to shut down its operation in Delphi and in Logansport. Wabash will also lose its GTE customer service center.

A mixture of good and bad economic news came from Logansport. In March, Modine Manufacturing Co. unveiled plans to invest \$5 million in its Logansport plant, which makes oil coolers and exports them to ten nations in Europe and the Americas. This will create 70 new jobs and increase the work force to 265. Unlike Modine, GenCorp, Inc., a maker of automotive components, announced plans to transfer about 70 jobs from Logansport to Wabash.

Anxious times await Wilson Foods' 1,200 workers in Logansport. In a city of 17,000 people, Wilson is the largest employer, with the capacity to slaughter 1.5 million hogs. Recently, IBP, a meat packing and processing firm, announced plans to acquire the financially ailing Wilson Foods' plant. IBP is contemplating modernizing the existing slaughtering plant and adding a meat processing operation. The plan would cost about \$23 million and increase the existing work force to 2,200 over the next five years. The

state government has shown strong desire to help IBP and the Logansport community.

In Tipton, Kokomo's southern neighbor, the 40-year-old Adler's clothing store closed its doors for good, while Val-Store announced plans to open its store in town. In Peru, Kokomo's neighbor to the north and the home of Grissom Air Force Base, the thunder of jet planes gradually dimmed as several squadrons bid a final goodbye to the base. The base will complete its realignment in October 1994 and will officially become a reservists' facility. Because of the base closing, Ball State University ended a 26-year tradition of offering classes at the base. While Air Force personnel were winding down their active duty operations in Peru, two businesses announced new developments. Peru-based Nixon Newspapers acquired the Connersville *News-Examiner*. More important, Nails Unlimited, a division of Itochu International Inc., employing 41 people, announced plans to buy new machinery and equipment and construct a new facility. The program is expected to add 20-25 jobs in the near term.

In Clinton County, Ag Max Inc., one of the state's largest farmer-owned cooperatives, announced plans to lay off 15 people from its payroll. Tri Mas Fasteners Inc., a subsidiary of the Michigan-based Masco Corp., unveiled plans to construct a new plant in Frankfort, increasing its work force to 150 in five years.

What Is In Store For The Birthday Bash?

Next year will be an important year in the area's history. It marks the 150th birth anniversary of both Howard and Tipton Counties. It also marks the centenary of Elwood Haynes' first automobile ride. A sesquicentennial celebration is planned during the months of June and July. The question is, will the economic candles keep burning brightly to celebrate the birthday bash?

Kokomo's economy is currently in the second year of recovery. Normally, local economic recovery lasts three to four years before taking a pause. I foresee one more year of strong economic performance. About 1,000-1,500 new jobs will be added to existing payrolls. And for the first time, the payroll number will exceed the 50,000 mark. The average unemployment rate should dip below 6%, with further narrowing of the range. Monthly unemployment rates should remain in single digits throughout 1994.

The labor force will continue to swell and the average factory work week will remain above 41 hours. The average income should rise 2-4% next year. Local businesses will report strong earnings. Retail sales in Kokomo will cross the \$1 billion mark. Chrysler workers in Kokomo will receive profit-sharing bonuses for the second year in a row—about \$500 per employee. The housing sector will remain

more active and strong next year. Due to an upward-pressure, median home prices should post a 4-7% gain next year.

In a nutshell, along with the growing national and state economies, Kokomo's economy will forge ahead with new vigor and strength. The recession wolf is not in sight. I hear no rustling noises in the economic landscape. On the contrary, what I see is the face of a joyful economy humming the tune "Happy Days Are Here Again."

Columbus

Patrick Michael Rooney

*Associate Professor, Department of Economics,
IUPUI Columbus*

The local employment picture appears to be quite good for the Columbus area. The number employed has grown 8.6% in the past year and almost 6% from second quarter to third quarter 1993 (to 33,250). Meanwhile, the number of unemployed has fallen more than 37% from a year ago and more than 34% since second quarter 1993 (to 1,050). The combined result is that the local unemployment rate has fallen from more than 5% in third quarter 1992 to just over 3% in the third quarter of this year.

Local residential construction has continued to show tremendous strength. The estimated value of permits has grown more than 44% during the past year. Because the number of permits has increased

32.6%, the average value per permit has risen almost 50% from third quarter 1992 to third quarter 1993.

The Housing Affordability Index for Columbus fell from 209 in first quarter 1993 to 193 in the second quarter, as median home prices shot up dramatically from \$66,700 to \$75,950. It seems that home prices were bid up as buyers sought to take advantage of the lowest mortgage rates in decades. The local story parallels the state and national trends. Perhaps most incredible is the fact that houses in Columbus have been selling at nearly 100% of the list price and the sales prices have increased from an average of \$81,590 a year ago to almost \$89,000 in the third quarter of this year.

Cummins and Arvin continue to do well in this recovery. Cummins, for example, posted its second best third quarter ever. Earnings almost tripled to \$40.7 million, compared to \$13.8 million a year ago. As seen in the **Table**, Cummins has continued to outperform both its reference industry (special machines) and the all-industry average in most categories. The only notable exception is the price-earnings ratio. Arvin experienced a decrease in net earnings (\$7.4 million) in the third quarter, compared to third quarter 1992's earnings of \$12 million. Sales fell slightly to \$474 million. For the first nine months of the year, Arvin's sales and net earnings were virtually flat compared to the same period last year. Although Arvin has continued to expand its American sales base, its European sales have suffered, thus diminishing its overall performance relative to both the auto parts industry and the all-industry average.

Although the local economy is strongly affected by the economic conditions of both Cummins and Arvin, we must keep in mind that their effects have diminished as a result of both their downscalings and the diversification of the employment base as other firms have located here. Furthermore, the numbers reported for Cummins and Arvin reflect their corporate results, which, although they may have both short- and long-term implications for local employment and income, are not likely to be a perfect proxy for the local economy. One indicator of local economic conditions is the total employment of the five largest firms—Cummins, Arvin, Cosco, Reliance Electric, and Golden Casting—which has remained fairly constant (at about 12,000) this past year.

The Office of Economic Development reports that for the year to date, one new company has located here, creating 120 jobs and adding \$5 million in investment. In addition, there have been 29 expansions of existing firms (mostly in newer companies), which have generated 513 new jobs and \$153 million in new investment in the past year. Since 1985, there has been \$1 billion in new investment in Columbus-area firms.

Table
Columbus Area Financial Performance

	<i>All Industry Average</i>	<i>Special Machines Industry</i>	<i>Cummins</i>	<i>Auto Parts Industry</i>	<i>Arvin</i>
% Change in Sales from 3Q 1992-93	4	4	9	9	0
% Change in Profits from 3Q 1992-93	26	262	195	67	7.4
Return on Equity (most recent 12 months)	12.1	12.2	32.3	17.3	9.4
Price/Earnings Ratio (based on Oct. 22 stock price and earnings for latest 12 months)	22	25	10	17	15
12 months' Earnings/Share	\$1.81	\$1.95	\$8.66	\$2.31	\$1.78

Source: Business Week, November 15, 1993.

Forecast

Because the most likely outcome (90% probability) for the national economy is modest but sustainable growth, hovering around 3%, Columbus can expect to continue to grow somewhat more rapidly. Its durable goods manufacturing base will tend to expand more rapidly than the national economy during this upward phase of the business cycle. Therefore, we can anticipate that local incomes will grow fairly steadily from both pay increases and increased employment.

However, an important caveat must be mentioned here. The pay and employment increases will not be as rapid or as dramatic as they may have been in the past. Domestic firms, especially in manufacturing, are trying to raise output without adding substantially to payrolls by boosting productivity. Furthermore, both domestic and international competition will encourage relatively modest pay gains.

There is a slight chance (1% probability) that both consumer and business confidence will dramatically increase, translating into robust growth exceeding 4% for the following year. This would mean even more rapid sales growth for our local manufacturing firms and would tend to drive down the unemployment rate, possibly to 2%. Unfortunately, it is more likely (9% probability) that there will be another recession, or very slow growth of 0-2%. While this could result from a variety of sources, its most likely candidates are either an overreaction to incipient inflationary pressures by the Fed or a dramatic fall in exports, if the dollar continues to appreciate so rapidly. Although this is not very likely to occur, its effects would be quick and painful. The most likely result would be another round of substantial layoffs and the concomitant economic and emotional pain that goes along with it.

Lafayette

A. Charlene Sullivan

Associate Professor of Management, Purdue University

As the national economy has slowly regained strength in the last 12 months, so have the economies of Lafayette and its surrounding counties. The outlook at the national level is for more of the same; likewise, the local economy is expected to continue its slow expansion. Major sources of economic growth and strength are consumer and business spending, gov-

ernment investment in highways and bridges, household investment in new homes, and continued redevelopment of the downtown business district and outlying malls and shopping districts.

The competitive pressure on small local retailers continues with the steady influx of large discount complexes, national chain merchants, and new local retail enterprises. As major manufacturing companies restructure and downsize in local plants, small technical start-up companies thrive with sales expansion into international markets. Availability of business credit exceeds demand and the structure of larger financial institutions in the local community continues to shift to reflect non-local ownership. Financial institutions are actively responding to the regulatory pressure associated with the Community Reinvestment Act, developing low-income housing and independent living facilities. Competition is very strong for consumer loans and mortgage credit.

Employment Outlook

Lafayette enjoys the benefits of having a well diversified economy, with large segments associated with a broad range of private-sector activities. For 1994, the outlook for employment in most industry segments represented in Lafayette is in line with average national expectations. However, the tight state budget, demographic trends, and tuition sticker shock may continue to curtail growth in the budgets and enrollment at institutions of higher education in the short term. As a result, Purdue University, the largest employer in the Lafayette community, will continue to curtail employment growth. However, national college placement statistics indicate that average growth rates in starting salaries for bachelor's degree candidates between 1992 and 1993 was highest in engineering, agriculture, and some of the sciences—a factor that bodes well for the demand for degrees granted by Purdue.

Household Spending

Slow growth in employment and salaries, low inflation, higher federal taxes, and low interest rates on savings will curtail the rate of growth in consumer spending for all ages. However, the household sector is operating from a strong balance sheet and has new spending power coming from savings associated with refinancing and restructuring of household debts. Although the slow growth in the household formation age group will keep spending growth at levels far below that experienced during the 1980s, a high rate of new home construction will keep the demand for household goods and appliances at a strong level in the local market during 1994. And a decline in the rate of consumer delinquencies and bankruptcies in Indiana in 1993 will loosen creditors' standards as the

competition for new consumer credit, both in the form of credit card balances and home equity lines of credit, increases at the local, regional, and national levels.

Housing Demand

The local market is experiencing a strong increase in demand for new single- and multi-family housing. The demand is especially strong for low-income housing. Although the supply of low-income housing has expanded in the last decade, the increase in overall population and number of households in this category has been faster, resulting in significant upward pressure on rental rates in the area. The community continues to be faced with the challenge of population growth among single-parent and low-skilled households.

Existing home sales have been strong all year and are expected to continue steady to strong in the next 12 months as mortgage rates remain stable or decline slightly. The number of homes listed for sale in the Lafayette community has been low, but the houses remain on the market for a longer period of time as more interested buyers opt to build their own homes, taking advantage of the low rate environment and the number of new subdivision developments in the area.

The Farm Economy

Farmers in the Lafayette area and surrounding counties enjoyed near perfect weather for their crops in 1993 and had above average yields at harvest time. However, commodity prices remain at unimpressive levels, producing only a small gain in farm income over last year. Many farmers in Indiana are now working from stronger balance sheets and expect to use their advantage while planning for the 1994 crops. Strong demand for farm equipment is expected next year. But farmers in the area express increased concern about the impact of new environmental regulations on the viability of their operations. NAFTA-related gains in exports of farm products from the Midwest are expected to have a positive impact in the near term on the region and the state of Indiana.

Overall

Slow, steady economic growth will continue in this region of Indiana for the foreseeable future. In the near term, the slow growth rate creates few opportunities for new workers entering the labor force in Lafayette from outlying rural areas. Ongoing efforts to improve the quality of public secondary education, vocational training opportunities, and the entrepreneurial environment of the state will pay dividends in the long term.

Richmond-Connersville-New Castle

Ashton I. Veramallay

Professor of Economics and Director, Center for Economic Education, Indiana University East

The national economy sets the pace for the local economy. Given this interdependence, Richmond-Connersville-New Castle (RCNC) can expect moderate growth in 1994. As the national economic recovery continues with an expected real gross domestic product (GDP) of 2.4%, an inflation rate of 3.0%, an unemployment rate of 6.5%, and consumer spending at 2.4%, it will influence economic activity in the local region.

Employment growth in the manufacturing sector will increase slightly unless offset by internal business expansions or new plant openings. In the Center's recent survey, about 35% of the manufacturing firms plan to rehire laid-off employees and 77% of them are optimistic about business conditions in 1994. A good number of firms are adversely affected by the lackluster recovery. However, a few of them are doing extremely well. Some of RCNC's firms, supplying valuable inputs to the transportation industry, will benefit from the expected increase in automobile sales of 9.5 million units in 1994.

Employment growth in the service sector, on the other hand, will continue to expand as the demand for various services, particularly financial and professional, increases. This also includes fast-food catering. Service jobs are often part-time and their wage rate is below that of the manufacturing sector. Thus, temporary workers are less costly to hire. Of the respondent firms, 15% plan to expand and 86% are optimistic about the economy. Despite the prospect for a less than robust GDP performance, there will be a net gain in regional employment. Consequently, the unemployment rate would lie in the 8-9% range. Corporate restructuring or right-sizing is likely to continue.

Moreover, gross fixed capital formation would rise to about 10% as investment spending on equipment and commercial and residential structures continues to improve. This also includes upgrading existing homes. The local housing market will remain favorable. Attractive rates of interest and low inflation are encouraging investment activity. Total investment will exceed \$43 million in RCNC.

The gross local product (GLP)—that is, the market value of final goods and services—would

increase modestly to about 3% of the state's output. The manufacturing and service sectors will create differential value-added to GLP, with the manufacturing sector contributing a higher proportion.

Related to GLP is consumer spending. Aided by low inflation, it will remain relatively stable. Consumers are still upbeat, although there is an element of hesitancy. Local merchants can therefore expect above-average sales during the holiday season and a relatively good year. By keeping inventories lean and offering consumers variety, merchants can maintain the bottom line. However, last year's retail performance in a post-election euphoria will not be repeated. It must be noted that consumer spending constitutes 66% of economic activity, whereas retail trade accounts for 22% of RCFC's employment.

Finally, the dollar's expected appreciation will have some effect on local firms engaging in international trade. American goods will become relatively expensive to foreigners and foreign goods will become cheaper to Americans. Our major trading partners—Canada, Europe, and Japan—are still in a recessionary phase. So export demand will be weak and the trade deficit will worsen. However, NAFTA will improve the trade picture. Mexico is a growing market for U.S. exports. Currently, the United States has a \$3 billion trade surplus with Mexico. Every billion dollars in exports creates 20,000 jobs at home. So the "giant sucking sound" you hear will be exports, not jobs. An overwhelming majority of area businesses are in favor of NAFTA. There is also a correlation between trade liberalization and economic prosperity.

Jeffersonville/New Albany (Louisville Area)

Fay Ross Greckel

*Professor of Economics, Indiana University
Southeast, New Albany*

The Louisville metropolitan area economy fared rather well in 1993. Although the recovery would not be described as robust, it appears that the seven-county metropolitan area (Clark, Floyd, and Harrison counties in Indiana, and Jefferson, Oldham, Bullitt, and Shelby counties in Kentucky) generally outperformed the economies of both Indiana and the nation.

The moderate growth that has characterized this economy during most of the last several years was

more pervasive and consistent than in 1992. There were fewer announcements of layoffs, employment curtailments, or companies closing or leaving the area, coupled with more announcements of expansions and new firms moving to the area.

Employment totals in firms located within the seven-county metropolis topped 500,000 (without seasonal adjustments) this past spring—a record level. For the first three quarters of 1993, employment averaged about 7,000 jobs more than the same period of 1992 (see **Figure 1**). Virtually all of the increase came in nonmanufacturing, with business services, recreation services, and "other" services each adding more than 1,000 jobs. Smaller hikes occurred in most other nonmanufacturing categories, but health services and government each lost more than 600 jobs.

Although the number of jobs in manufacturing did little more than hold its own (still a slight improvement over last year), the average number of hours worked by factory labor increased, as did average hourly wages. As a result, average weekly earnings of factory workers rose nearly 9%. The increase in hours worked per week is a particularly encouraging sign, since that is normally the necessary precursor of additional factory jobs.

When we separate out the Indiana portion of the metropolitan area, the picture changes considerably. As **Figure 2** illustrates, employment in establishments located within the three Indiana counties has been edging downward slightly for the past two years, with most of the decline centered in the manufacturing sector. The pattern elsewhere was mixed. For example, there was noticeable job growth in construction and services, but employment dropped in transportation and utilities. However, this does not mean there were fewer jobs held by *residents* of the Indiana counties, because job availability improved elsewhere in the metropolitan area and there is extensive commuting across the state line.

Regular readers of the *IBR* might have noticed some differences between the 1992 data reported a year ago and the data presented here. Those discrepancies are due to the revised statistics reported by the respective state agencies earlier this year. The 1993 employment data used in this article will be revised in 1994. In fact, a major data revision is likely next year as the boundaries of the metropolitan area are redrawn to reflect the results of the 1990 census. Scott County in Indiana will be added to the officially designated Louisville metropolitan area, while Shelby County, Kentucky will no longer be included.

The aforementioned rise in weekly factory earnings is one sign of higher personal incomes. Another indicator of improved well-being is the 7% decline in emergency food requests handled by Dare To Care, the Louisville area food bank.

Figure 1
Louisville Metropolitan Area Employment:
Seven-County Area Establishment Data (Seasonally Adjusted)

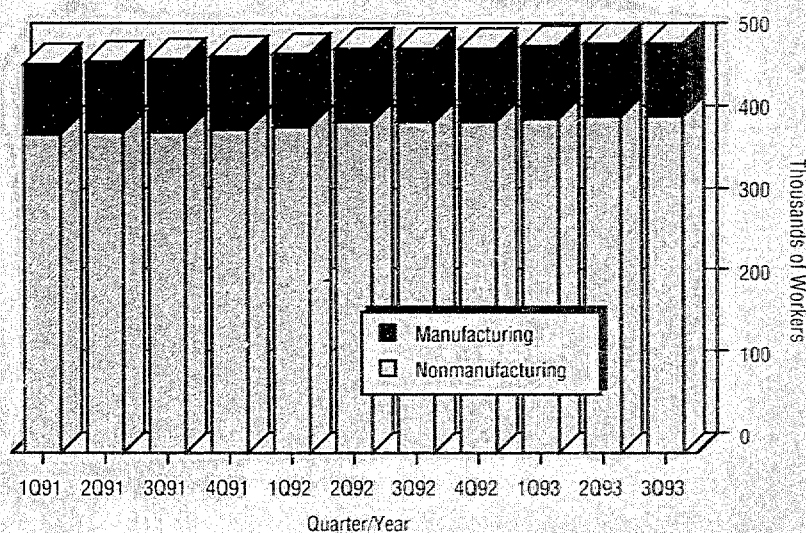
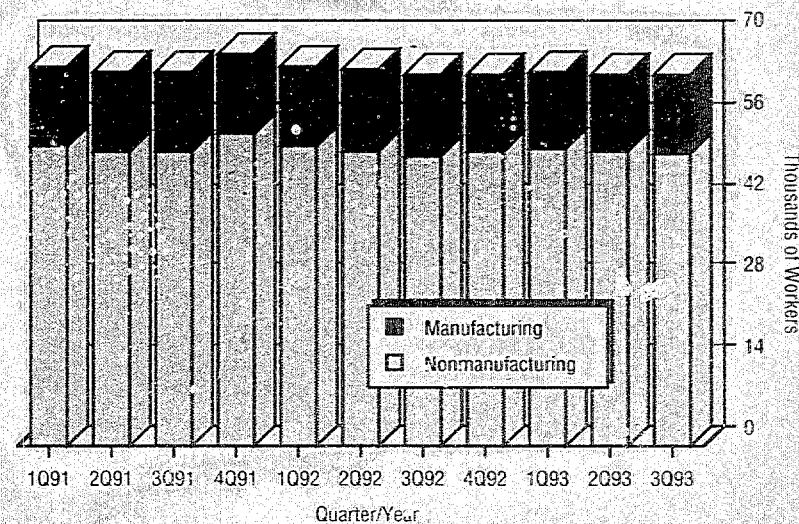


Figure 2
Clark/Floyd/Harrison Counties, IN: Employment Data (Seasonally Adjusted)



There is also evidence of increased spending—the result of higher incomes, greater consumer confidence, lower interest rates, and the higher discretionary income many families are enjoying after refinancing their homes at those lower rates. Sales of new cars and light trucks rose about 6%, comparing the first nine months of 1993 with the period a year earlier. There was an unusual disparity in the geographic distribution of those sales. Southern Indiana new car dealers reported a surprising and substantial drop in light truck sales, which are usually strong in this area, while car sales rose. At the same time, Jefferson County (Kentucky) car dealers reported a large increase in truck sales, but only a modest gain in car sales.

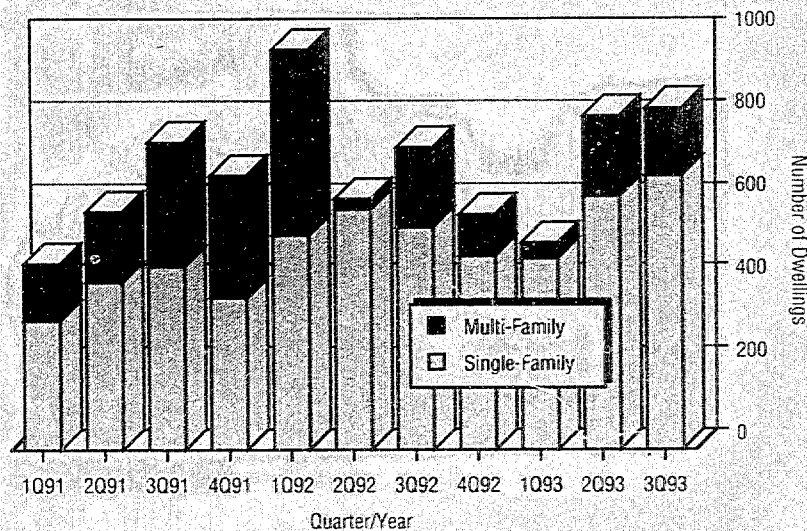
Realtors enjoyed an "excellent market" this year as a result of the favorable income and interest rate conditions discussed above. The Louisville Board of Realtors are optimistic that when the final figures are in, 1993 will turn out to be a record year for both the number of properties sold and the dollar volume of those sales. Although housing in this area is still quite inexpensive compared to many parts of the country, the median selling price of homes rose about \$7,000 in 1993, reaching \$77,500 (as of the first eight months of the year).

Residential construction continued to increase this year at what appears to be a solid and sustainable rate of growth. During the first three quarters of 1993, building permits for single-family homes rose 6% in Jefferson County and 2% in the Clark/Floyd/Harrison area (see Figures 3 and 4). As of September, permits for apartment units, which tend to be more volatile than those for individual houses, were running behind the 1992 totals in Jefferson County but were 5% ahead of 1992 totals in the Hoosier counties.

There is reason to be optimistic about growth in the months ahead, particularly if interest rates remain close to their present levels. The national trends in car sales, real estate sales, and new home construction should benefit important segments of the local manufacturing sector, particularly GE and Ford, which produces the popular Explorer at its Louisville plant. Many firms observed an increase in orders during the fall months.

Announcements of new and expanding industries appear to be accelerating. The news for the Indiana portion of the metropolitan area is especially encouraging, suggesting that net job growth should be occurring once again. For example, very recently

Figure 3
Residential Building Permits: Jefferson County, KY

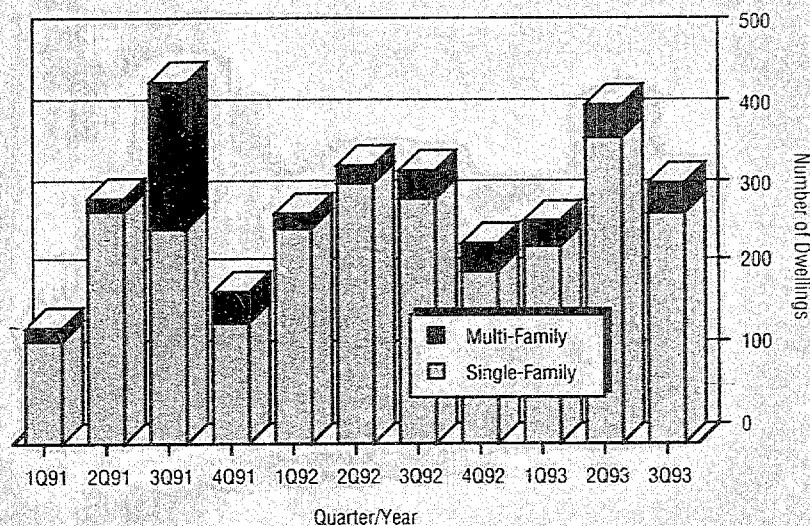


Source: Kentuckiana Regional Planning and Development Agency

Conway Enterprises announced plans for a major expansion of its New Albany plant facilities in early 1994, with the expectation of hiring another 200 to 300 workers over the next three years. During the last 12 months, at least nine new firms have located or committed to locating in Clark and Floyd counties alone, with the likely addition of some 700 jobs and about \$24 million in new capital investments. More such announcements are expected in the next few months.

The outlook, then, is for a pickup in income and employment throughout the metropolitan area in late 1993 and 1994. Although a "boom" year is not likely, the expansion should be stronger than in the past 12 months, especially in the Indiana counties.

Figure 4
Residential Building Permits: Clark/Floyd/Harrison Counties, IN



Source: Kentuckiana Regional Planning and Development Agency

Indiana County Population Projections: 1995 to 2030

Produced for the State of Indiana by the Indiana Business Research Center at the **Indiana University School of Business**, this publication provides two-page profiles with age data and graphics for all 92 counties, plus analyses of state trends.

Projections of the population provide vital input for business, government, and social service planning, with implications for health care, education, transportation, budgeting, environment, utilities, capital investment, and social services. This book provides detailed age projections along with age pyramids and graphics for each and every Indiana county, along with analyses of trends and a description of our projections methodology. Order your copy today and start planning for tomorrow.

Order Form

Name _____		
Agency _____		
Address _____		
City _____	State _____	Zip _____
Telephone Number _____	Fax Number _____	
Please send me _____ PRINT copies at \$18 each, plus 90¢ tax.		
Please send me _____ DISKETTE copies at \$18 each, plus 90¢ tax. (circle one: 3 1/2" 5 1/4")		
Enclosed is \$ _____. Please enclose your agency's tax exempt certificate, if applicable.		

(please allow 3 to 6 weeks for delivery)

Orders must be pre-paid.

A diskette version (Lotus .wk1 format) is also available.

Please make your check payable to *Indiana University*

Send check & order form to:

IBRC - Projections
IU School of Business
10th and Fee Lane
Bloomington, IN 47405

Indiana Business Review
Winter 1993-94

Indiana Business Research Center
Graduate School of Business
Indiana University
Bloomington, IN 47405

ADDRESS CORRECTION REQUESTED

Nonprofit Organization
U.S. Postage
PAID
Bloomington, Indiana
Permit No. 2
