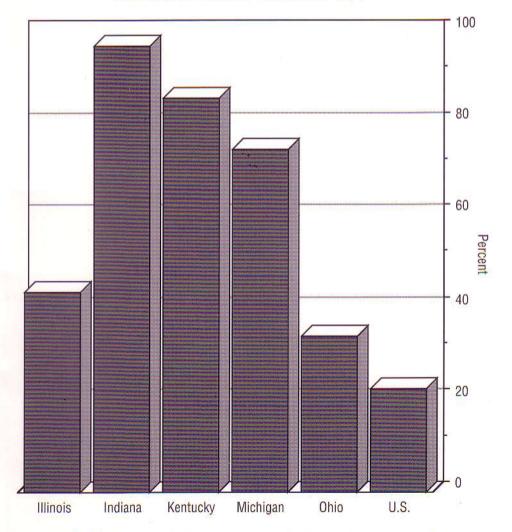


### The Labor Market Proficiency Index First Quarter 1990 to First Quarter 1994



A Reconsideration of Employment Gains in Indiana

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

Summer 1994 Midyear Review

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## The Midyear 1994 Business and Economic Outlook: An Economy Full of Surprises

Bruce L. Jaffee

Professor and Chairperson, Department of Business, Economics and Public Policy, Indiana University School of Business he economy ended 1993 with a stellar performance. Real GDP growth in the fourth quarter was at a 7.0% annual rate, the best quarterly growth rate since first quarter 1988. Although the growth rate declined to 3.4% in the first

quarter, even this rate is above trend—and it would have been higher but for the effects of extraordinary events such as the severe weather in the East and the California earthquake. Not only were we surprised by this robust performance, but so was the Federal Reserve. To try to sustain moderate growth and nip what it considered to be incipient signs of inflation, the Fed pushed up short-term interest rates. The Fed's moves surprised market participants, who sent interest rates up significantly for all maturities while the stock market took a sizable move downward. The Fed now seems to be satisfied with the current economic pace and rates of inflation, so we see little movement from current levels in financial markets for the rest of the year.

Consumer and business spending have been key drivers for the economy in the last six months. Consumer spending has, in fact, been outpacing the growth in personal income. We see consumer spending moderating a bit for the rest of the year due to higher interest rates, near record lows in savings rates, and high debt levels—especially if automobile leases are counted as debt. Nearly one-fourth of all new car sales are now leases.

Business investment for equipment, especially computers, will remain strong throughout the year. The pace, though, may slow from the spectacular rate achieved in the last 12 months. Commercial and industrial real estate prices have stabilized and even begun to increase slightly for most of the country, with the notable exception of California. However, vacancy rates are still relatively high in most parts of the country, so nonresidential investment in structures will wait until 1995 to show any improvement. As business confidence improves and capacity limits are approached in more sectors of the economy, investment in capacity expansion can be expected to provide a significant boost to the economy in the next year or two and prolong economic expansion.

U.S. growth has exceeded that of most of its major trading partners. This is good news in terms of income growth and employment gains, but the downside is the deterioration in our current account balance. The international sector will be a drag on the economy for the rest of 1994. However, we see a significant improvement for 1995—significant because net exports are likely to be the key driver needed to sustain the expansion into 1995.

The other weak sector of the economy is government spending. Downsizing of the military establishment is continuing apace, the federal budget deficit is declining, and the growth of state and local spending is not popular among voters and taxpayers regardless of the purpose. The chance of passage in 1994 of a major health reform package is declining, and there certainly will be no direct effect on government or private spending this year.

As a result of the events of the last six months we have revised our forecast upward. Real GDP growth is likely to be 3.1-3.3% for the year. Business investment will be the leading growth sector, as it was in 1993. Inflation, as measured by the CPI, will remain in check but move close to a 3.0% annual rate by the end of the year as more sectors of the economy near capacity. The unemployment rate will move down a bit but still end the year above 6.0%.

# 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

In the outlook issue last December, we forecast that consumer spending growth would slow from the high growth rates observed during much of 1993. The reasons for the expected slowdown included only modest growth in real disposable income and a stable or even rising saving rate. There was very little evidence of the expected slowing in first quarter 1994, but at midyear the consumer spending boom appears to be losing steam.

Real disposable personal income grew at an annual rate of 2.7% in first quarter 1994 and was 3.9% above its level of a year earlier. Fueling the increase in income were significant gains in employment. More than 2 million nonfarm jobs have been added to the economy in the last year. The personal saving rate in first quarter 1994 fell to 3.7 percent, the lowest level in more than a decade. Consumers have been earning higher incomes and spending as much of the increases as possible. Can it last? Probably not.

The Federal Reserve, worried that the economy was growing too rapidly and setting the stage for future inflation, moved aggressively over the past several months to increase interest rates. This policy

change will have important effects for consumer spending in three ways.

First, the increases in short-term interest rates will make it more expensive for consumers to borrow to purchase durable goods. The 1993 consumer spending boom was concentrated in spending for durables. Overall real consumer spending rose 3.3% in 1993, but spending on durables increased 7.3%. Among durable goods, spending on motor vehicles increased 5.1% and spending for furniture and appliances rose 11.1%. Consumers rely heavily on credit to finance these types of purchases.

Second, increases in short-term interest rates often lead to increases in longer rates, including mortgage rates. In the past several years, as interest rates fell, consumers refinanced existing mortgages at lower rates, thereby reducing their mortgage payments. Often those same consumers would use the money freed up in their budgets to purchase durable goods. Thus the refinancing blitz contributed to the consumer spending boom.

"Now that short-term interest rates are rising, mortgage rates have turned up as well and are now more than a full percentage point above their lowest level (reached late last year)."

Now that short-term interest rates are rising, mortgage rates have turned up as well and are now more than a full percentage point above their lowest level (reached late last year). Mortgage refinancing is drying up, and with it the extra stimulus to consumer spending.

Third, increases in interest rates will have a positive income effect on some consumers. This effect will work in the opposite direction of the first two and will tend to cushion the slowdown in consumer spending. Consumers are net savers. Although they borrow, in the aggregate they save even more. Interest income is the second largest component of consumer income. Many older consumers derive a significant part of their income from interest on CDs and other interest-bearing assets. The recent increase in interest rates will raise the incomes of these individuals and help them sustain their spending, although it

will likely cause them to save a somewhat larger share of their income.

The increase in interest rates will produce a slowdown in the growth of real consumer spending, particularly for durable goods. We expect real consumer spending to increase by 2.9% from fourth quarter 1993 to fourth quarter 1994. Real consumer spending on durables should increase by 5.0% during the same period. While this is solid growth, real durable goods spending rose 7.9% from fourth quarter 1992 through fourth quarter 1993.

#### Nonresidential Investment

In our outlook last winter, we forecast strong growth in nonresidential investment expenditures for equipment, and little growth in investment expenditures on nonresidential structures or for inventories. That earlier forecast appears to be on track.

Real nonresidential investment in equipment rose a phenomenal 16.3% in 1993, making it, along with consumer durable spending, the principal source of the relatively strong performance turned in last year. The equipment investment boom continued unchecked in first quarter 1994 as spending rose at a 13.5% annual rate.

Within equipment spending two sectors seem to be particularly strong. The first is computers and information processing equipment. Firms continue to search aggressively for efficiencies that can reduce costs, and investment in computers and information processing technology is a part of that search. Motor vehicles, particularly trucks, have also been remarkably strong. The improving economy has produced a need to move more goods, which has led to an increase in spending for new trucks.

The need for new equipment is expected to continue throughout this year. Technological change remains rapid in computers and information processing equipment, and the drive for efficiency continues for most firms. For truck producers, backlogs remain substantial. Overall, we expect real investment spending for equipment to rise by more than 14% in 1994. With spending on consumer durables expected to slow, equipment spending will be the major engine for continued economic growth.

It might be expected that the recent increases in interest rates would have a dampening effect on investment in equipment. However, the profit picture for most firms is expected to be bright in 1994, offsetting the increase in financing costs.

The outlook for investment in structures remains bleak. Real investment in structures grew only 0.6% in 1993 after posting declines for several years. It fell sharply again in first quarter 1994, although part of that can be attributed to severe winter weather. No shortages of commercial or industrial space are ap-

parent, and rising interest rates make structures more expensive. We expect real investment in structures to show no growth in 1994.

Inventory investment has been small during recent years as more companies work harder and harder to maintain lean inventories. That pattern changed slightly in first quarter 1994 as inventory investment jumped. It appears that the increase was unplanned and may have been related to severe winter weather. The situation bears watching, but we anticipate that firms will work down these excessive inventories, and that by year end inventory investment will be back down to 1993 levels.

In summary, real investment spending on equipment will be the big story in 1994, followed by a strong but less spectacular growth in spending on consumer durables. At the other end of the spectrum, investment spending on nonresidential structures will be stagnant.

# Economic Performance and Fiscal and Monetary Policy

#### Carol A. Lehr

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

Fourth quarter 1993 went out with an economic bang. Real GDP growth hit 7.0%, compared to an average of less than 2% since 1990. Although the numbers for first quarter 1994 were not as spectacular (3.4% real growth), the economy still shows many signs that recovery from the 1990–91 recession has finally arrived with some strength. In fact, first-quarter growth probably would have been higher had not severe winter weather put a clamp on some spending.

Economic performance has been particularly strong in the areas of consumer spending and business spending on equipment. Also, according to a Cleveland Federal Reserve report, many purchasing managers reported an increase in new export orders in April. Meanwhile, industrial production and employment are growing, capacity utilization in manufacturing is increasing, unemployment in April fell to 6.4%, and the index of leading indicators is rising. Finally, it must be noted that inflation has remained at

moderate levels in the face of a growing demand for goods and services. However, there are recent signs that inflation could increase in the future.

#### **Monetary Policy**

The Federal Reserve Board and its FOMC, which formulates monetary policy, deliberate on the ability of the economy to sustain both vigorous growth rates and low inflation rates. An additional factor the Fed must deal with is the nervous bond market. Market participants have seemed to take each piece of economic good news as bad inflation news, pushing down bond prices and raising yields.

As a dose of precautionary medicine, the Federal Reserve has engineered three interest rate hikes this year. In February, April, and May, the Federal Reserve increased short-term interest rates by 0.25% the first two times and 0.5% the third time. It is probably less costly to prevent inflation from occurring than to try to lower it once prices begin to accelerate. Though some have argued that the Fed's actions are too weak to combat incipient inflation, others contend that the Fed is fighting a ghost and should not weaken the current recovery. The pace of economic growth could be impeded by the recent rise in long-term interest rates.

However, the Fed directly influences only short-term interest rates, whereas long-term rates are determined by the markets. It appears that traders are still worried about inflation, or anticipate additional future short-term rate increases, because long-term rates have risen sharply in the first part of 1994. For example, home mortgage rates bottomed out in October, dipping below 7%. Currently, 30-year conventional mortgage rates have reached 8.5%.

#### **Fiscal Policy**

The administration has been unable to use fiscal policy as a short-term policy tool. Instead, the emphasis continues to be on budget reduction and long-term reform measures. The passage of a health care reform bill certainly has the potential to generate considerable economic consequences; however, it is highly unlikely that a package will be presented in time to have much of an impact during 1994. Looking further down the road, both health care and welfare reform's effects on the economy will depend on two things: the method of financing additional expenditures and the ability to create long-term savings.

At present, the administration does not seem to be vigorously opposed to the Federal Reserve's interest rate manipulations. If the Fed proves to have correctly judged the degree to which interest rates should be raised, then the chances are better for a healthy noninflationary environment in 1995.

## Corporate Profits, Interest Rates, and the Stock Market

#### Michael Simkowitz

Professor of Finance, Indiana University School of Business

Our forecast for interest rates last fall turned out to be terrible. Without spending an inordinate amount of time explaining our mistakes, it may be worthwhile to examine what did happen.

The economy in fourth quarter 1993 turned out to be far more robust and accelerating than anyone thought, and though the pace diminished somewhat, first quarter 1994 still had a solid growth rate. This resulted in the Federal Reserve tightening monetary policy sooner and to a greater extent than expected.

The long-term bond market reacted to this tightening far more than we anticipated and, judging from recent statements made by Chairman Greenspan, more than the Federal Reserve anticipated as well. The result is that long-term bonds have taken a substantial beating since last October. Stocks have corrected to some extent. The stock market has been caught in a tug-of-war, being pulled down by the rise in interest rates and buoyed by the strength of corporate profits.

Looking ahead, it appears that most of the damage to long-term bonds is now behind us. Long-term rates may come down a bit, and there may be a mild rally in long-term bonds. Short-term rates should continue to edge up, but rather slowly. Ninety-day T-bills are in the vicinity of about 4.3%, and they may edge up closer to 5% by the end of 1994. Monetary policy should be mildly constraining on the economy. One way of viewing the outlook is that the rise in short-term rates from this point on will be a result of the strength of the economy directly, as opposed to the rise over the last six months that has been more a result of the Federal Reserve action.

The strength of the economy in the first part of 1994 should translate into operating earnings being greater than we thought back in the fall of 1993, and dividends for 1994 will most likely turn out to be slightly higher than the \$13.40 on the S&P 500 we were calling for at the end of last year. This strength in dividends and operating earnings will be tugging the market higher, while the lack of accommodation from the Federal Reserve constrains any rallies.

The second part of 1994 will most likely be dominated by political events as opposed to eco-

nomic or monetary ones. It is becoming increasingly possible that health care reform, if it is accomplished during 1994, will be less far-reaching than might have been expected six or eight months ago. There is an increasing chance that the midterm elections of 1994 may provide a larger change in the makeup of Congress than any midterm election since 1974. There still tends to be a high degree of hesitancy in the business community to make long-term business plans while executives try to decipher how interventionist the Clinton administration really will be. If the midterm elections do result in a Congress that will be constraining on Clinton, the economy could respond favorably to a return to gridlock.

In summary, we expect short-term rates to rise another 50 to 60 basis points by the end of 1994 and long-term rates to essentially remain about where they are. The stock market will be subjected to a tug-of-war, with the lack of accommodation from the Federal Reserve tugging the market downward while the slightly improved economic performance will be pulling it upward. The uncertainty of the political climate will be a mild negative. If we add 5% to the current market's high for the year and subtract 5% from the market's low for the year, we have most likely defined the range within which the market will remain for the rest of the year.

## The International Economy

#### Michele Fratianni

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

Economic growth around the world remains below trend growth, mostly because of lackluster economic performance by industrial countries. In fact, as a group these countries have been "underperforming" for four years. Within the group, the English-speaking U.S., UK, and Canada are growing more rapidly than Japan and the three large continental European countries (France, Germany, and Italy).

The business cycle is far from being uniform around the world. The United States went into a recession in 1990 that lasted through part of 1991. During that year the growth of U.S. real GDP was about 4% below trend. Canada and the UK had a

similar experience. Continental Europe slid into a downswing in 1990, while Japan did so in 1992. Being late to move into a recession, continental Europe and Japan will be late in recovering. There are some signs, however, that this recovery is taking place.

Japan is undergoing deep structural adjustments, following the deflation of the real estate bubble, the deterioration of the quality of bank assets, and the real appreciation of the yen. The Japanese

"The large accumulated deficits of the 1980s are making governments of the industrial countries very cautious in using fiscal policy to boost aggregate spending."

government has injected funds into the economy through tax reductions and spending increases. The fiscal stimuli so far have had limited impact on global spending. Monetary policy has moved in the same direction as fiscal policy. Short-term rates have declined steadily and are now hovering at the 2% level.

The worst appears to be over for Germany, which has paid the front-loaded costs of German monetary unification. Since the September 1992 currency crisis, German short-term interest rates have steadily fallen, and the same has taken place in other European countries. The interest rate declines were driven by expansive monetary policies, which in turn aimed at reducing the gap between trend and current output growth. These declines have virtually come to an end. As the economies recover, the pressure will be for monetary policy to move first from an expansive to a neutral stance, and later from a neutral to a contractive stance. Short-term and long-term interest rates will be rising. The yield curve—the gap between long- and short-term interest rates—is likely to be positive and rising during the expansion phase of the business cycle.

The large accumulated deficits of the 1980s are making governments of the industrial countries very cautious in using fiscal policy to boost aggregate spending. This is particularly so for a country such as Italy, whose government debt by far exceeds the value of nominal GDP. The new Berlusconi administration is philosophically committed to privatization and con-

tainment of the government debt; yet it is under pressure to reduce unemployment. The net effect on the budget deficit and the ratio of debt to GDP is far from clear. The call for fiscal conservativeness goes beyond Italy. In fact, Germany, France, and the UK have embarked on policies aimed at reducing debt relative to GDP.

#### Forecast

The G7 countries—U.S., Canada, Japan, UK, France, Germany, and Italy—as a group are in "external" balance. This means that their current-account imbalances sum to virtually zero. The problem, however, is in the composition of the imbalances, with Japan having a surplus approximately equal to the combined deficits of the other G7 countries. Although we foresee an improvement of the U.S. current account in the short term, there is nothing in the horizon to suggest a fundamental restructuring of the aforementioned imbalances.

Cyclical conditions favor an appreciation of the dollar. There are two critical factors at work. The first is that the U.S. business cycle leads that of other countries. The second is that U.S. monetary policy has become more restrictive and will continue to be so relative to that of other countries.

## **Real Estate**

Jeffrey D. Fisher

Associate Professor of Finance and Real Estate and Director, Center for Real Estate Studies

The bad news is that interest rates have risen since the beginning of 1994, when they were at a 25-year low. The good news is that interest rates are still at a 20-year low and will probably remain at this level in the near future. Economists at the National Association of Home Builders in Washington, DC, expect long-term mortgage yields to remain in the 8-8.5% range for the rest of the year; however, they could rise to 9% by mid-1995 if long-term rates continue to rise.

Home sales are expected to be in the 3.9 to 3.8 million range this year. Warren Lasko, executive vice-president of the Mortgage Bankers Association, expects the recent increase in interest rates to reduce home sales by 300,000 to 400,000 units this year. Similarly, the National Association of Home Builders has reduced its housing starts forecast by 3% for

1994. National housing starts are currently at a seasonally adjusted annual rate of almost 1.5 million units. Housing starts peaked at 1,972,000 in January 1972 and reached a low of 837,000 units in November 1981.

The Midwest continues to outperform the rest of the nation. Housing starts in the Midwest rose 30% in March versus 7-8% elsewhere. Similarly, existing home sales were up almost 10% in March in the state of Indiana. First Chicago attributes much of the growth in the Midwest to the strength of the auto industry.

The median home price in Indiana was \$75,000 during first quarter 1994, which was an increase of 10.3% from first quarter 1993. The median home price is still considerably less than that for the rest of the nation, which was \$106,900 for first quarter

1994—up 3.4% from a year ago. The gap between home prices in Indiana relative to the rest of the nation suggests much room for growth, especially if the Midwest economy remains strong compared to the rest of the country.

The repricing of commercial real estate appears to be complete. Market values for most income-producing real estate are well below replacement cost. Vacancy rates are finally starting to drop, but new construction is not necessary in most markets.

Wall Street has rediscovered commercial real estate, and many companies have taken adavantage of the availability of capital from the public markets. Real Estate Investment Trusts (REITs) should continue to be the dominant source of equity capital. Commercial mortgage-backed securities will become a significant source of debt capital.

## A Reconsideration of Employment Gains in Indiana

ur state's recent record in the competition for jobs has been well documented. Indiana has been outperforming the nation, as well as three of our four neighbors. In **Figure 1**, for example, we consider a comparison of first quarter 1990

with the same quarter this year using data from the U.S. Bureau of Labor Statistics. Indiana had an increase of 4.5% compared to a paltry 1.3% nationally. Along with all of our neighbors, we exceeded the national rate of job gain in that four-year period.

Of special note is the fact that Indiana exceeded even our larger neighbors (Ohio, Michigan, and Illinois) in the number of jobs gained (see **Table 1**). Percentage points are fine, but people hold jobs. With

nearly 112,000 jobs gained, Indiana outpaced Illinois and Michigan, each of which achieved 100,000 job increases.

Another well-established aspect of this record is Indiana's superior performance, compared to the nation, in manufacturing. The United States dropped 7.6% of its manufacturing jobs from 1990 to 1994, a loss of more than 1.4 million jobs. Illinois, Michigan, and Ohio followed this national trend, though the loss rates were not as severe as they were across the nation (see **Figure 2**). But Indiana, along with Kentucky, went against the trend and added jobs in manufacturing.

In fact, Indiana was contrary to the nation in several employment sectors. As seen in **Figure 3**, our state went against the national trend not only in Manufacturing but also in Construction, Finance, Insurance, & Real Estate (FIRE), Wholesale & Retail Trade, and Transportation & Public Utilities (TPU).

#### What We Should Know

These data have been part of the state's "feel good" campaign. We congratulate ourselves because we make our comparisons with the nation, which is growing very slowly, and with neighboring states that are not in positions of national leadership.

In all the data cited thus far we have seen Kentucky as the regional leader. But Kentucky ranked 29th in the nation in its rate of employment growth be-



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

Figure 1 Percent Change in Employment by State, 1990-1994 (1Q Data)

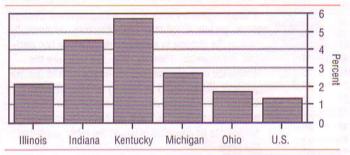


Figure 2 Percent Change in Manufacturing Employment, 1990-1994 (1Q Data)

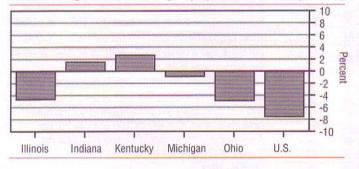


Figure 3
Percent Change in Employment by Sector, 1990-1994 (1Q Data)

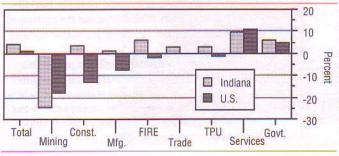


Table 1 Change in Employment, 1990-1994 (First Quarter Data)

		EM	PLOYMENT	CHANGE IN	000s			
	Illinois	Indiana	Kentucky	Michigan	Ohio	U.S.		
TOTAL	109.0	111.8	82.5	104.7	80.6	1,395.7		
Mining	-3.8	-1.9	-7.0	-1.4	-3.4	-125.7		
Construction	-21.0	3.7	1.6	-9.3	-14.6	-615.0		
Manufacturing	-46.1	9.4	7.3	-7.2	-54.2	-1,448.0		
Fin./Ins./Real Estate	9.5	7.3	2.0	2.7	6.7	-139.0		
Whsle./Retail Trade	0.6	16.2	16.5	5.4	11.4	-13.3		
Transp./Publ. Utilities	4.9	3.8	3.8	1.2	-6.6	-77.0		
Services	147.4	49.1	44.8	101.9	118.5	2,943.0		
Government	17.6	24.3	13.5	11.6	22.8	870.7		
		PERCENT CHANGE						
	Illinois	Indiana	Kentucky	Michigan	Ohio	U.S.		
TOTAL	2.1	4.5	5.7	2.7	1.7	1.3		
Mining	-19.7	-24.3	-19.9	-14.2	-19.7	-17.6		
Construction	-10.7	3.6	2.7	-7.4	-8.4	-12.6		
Manufacturing	-4.7	1.5	2.6	-0.8	-4.9	-7.6		
Fin./Ins./Real Estate	2.5	6.0	3.4	1.4	2.7	-2.1		
Whsle./Retail Trade	0.0	2.8	4.8	0.6	1.0	-0.1		
Transp./Publ. Utilities	1.6	2.9	4.9	0.8	-3.1	-1.3		
Services	11.2	9.5	14.1	11.1	10.3	10.7		
Government	2.3	6.4	5.1	1.8	3.1	4.8		

tween first quarter 1990 and first quarter 1994. Indiana, second in our region, ranked 31st in the nation in percent change in employment (see **Table 2**). All of

Table 2 Employment by State (First Quarter Data, in 000s)

Together the b	1990	1994	Change	% Change	Rank
U.S.	108,722.0	110,117.7	1,395.7	1.28	7
Idaho	368.4	444.9	76.4	20.75	1
Utah	702.0	831.6	129.7	18.47	2
Nevada	600.1	695.3	95.2	15.86	3
South Dakota	277.4	317.5	40.1	14.46	4
Montana	285.7	324.0	38.4	13.43	5
Colorado	1,490.6	1,685.3	194.7	13.06	6
New Mexico	566.4	632.5	66.1	11.68	7
Alaska	220.1	243.8	23.7	10.78	8
North Dakota	257.8	283.9	26.1	10.12	9
Mississippi	921.6	1,012.9	91.4	9.91	10
Arkansas	903.0	992.4	89.4	9.90	11
Arizona	1,474.0	1,609.5	135.5	9.19	12
Texas	6,939.7	7,574.4	634.7	9.15	13
Wyoming	188.1	204.3	16.2	8.61	14
Tennessee	2,157.9	2,339.9	182.0	8.43	15
Minnesota	2,078.2	2,247.8	169.6	8.16	16
Oregon	1,213.4	1,311.9	98.5	8.11	17
Wisconsin	2,221.2	2,388.6	167.5	7.54	18
Washington	2,087.9	2,244.2	156.2	7.48	19
Georgia	2,955.6	3,176.1	220.5	7.46	20
Iowa	1,195.6	1,276.8	81.3	6.80	21
Nebraska	710.3	757.9	47.6	6.71	22
Kansas	1,071.0	1,142.6	71.6	6.69	23
Alabama	1,609.8	1,717.2	107.4	6.68	24
West Virginia	614.3	653.9	39.6	6.45	25
North Carolina	3,087.4	3,275.4	188.0	6.09	26
Florida	5,389.7	5,713.2	323.5	6.00	27
Oklahoma	1,173.9	1,242.2	68.4	5.82	28
Kentucky	1,440.5	1,523.0	82.5	5.72	29
Louisiana	1,555.2	1,643.7	88.5	5.69	30
Indiana	2,474.8	2,586.7	111.8	4.52	31
Missouri	2,304.0	2,397.7	93.7	4.07	32
South Carolina	1,518.0	1,577.7	59.6	3.93	33
Hawaii	520.0	534.6	14.6	2.81	34
Michigan	3,889.3	3,994.0	104.7	2.69	35
Virginia	2,862.2	2,937.6	75.4	2.63	36
Illinois	5,188.6	5,297.6	109.0	2.10	37
Ohio	4,776.1	4,856.7	80.6	1.69	38
Delaware	340.6	344.7	4.1	1.20	39
Vermont	258.0	258.0	0.0	0.00	40
New Hampshire	507.1	504.8	-2.3	-0.45	41
Pennsylvania	5,113.2	5,059.1	-54.1	-1.06	42
Maryland	2,137.6	2,073.8	-63.7	-2.98	43
	524.5	508.5	-16.0	-3.06	44
Maine DC	682.7	660.1	-22.6	-3.32	45
Massachusetts	2,982.0	2,857.1	-124.9	-4.19	46
New Jersey	3,628.8	3,462.0	-166.8	-4.19	47
Rhode Island	447.8	425.6	-22.2	-4.96	48
New York	8,136.4	7,673.2	-463.2	-5.69	49
California		11,880.0	-841.5	-6.61	50
	12,721.5		-121.0	-7.41	51
Connecticut	1,632.8	1,511.8	-121.0	-7.41	31

the fastest growing states during this period were in the West. With the exception of California, all of the declining states were on the Atlantic coast (see **Figure** 4). (Vermont had no change in employment.)

Table 2 also helps us see that Indiana added fewer jobs (111,800) than did seven other states (Washington, Wisconsin, Minnesota, Tennessee, Arizona, Colorado, and Utah), all of which are smaller than Indiana.

Seen in this broad national perspective, Indiana's performance is not quite as good as we might have thought. A comparison to the nation is inevitably biased by the big states. New York and California, both held up only by Connecticut from claiming last place in the growth derby, tend to dominate the statistics. (The way New York has been losing jobs, it will soon be replaced by Texas as the second most populous state in the nation.)

#### A Supplementary Way to View Employment Change

When we talk about state labor markets, we normally look at the change in employment between two periods, for example, 1990 to 1994. We measure the difference between the two periods of time to get the numeric change (plus or minus) and the percent change (the numeric change divided by the base period value.) But this does not tell us how much turbulence or churning exists in the labor market of the state.

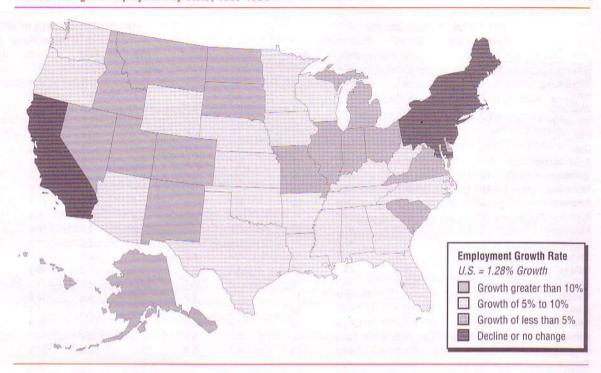
Consider, as an example, two states: Allswell and Notsogood. Both may have had an increase in employment of 100,000 people. But in Allswell, no one lost a job; there were only job gains. By contrast, in Notsogood there may have been 300,000 jobs added while 200,000 were lost. The net gain was 100,000, but there was a considerable amount of dislocation in the economy of Notsogood.

If we divide the net change in Notsogood's employment (100,000) by the *sum* of the jobs gained and lost (500,000), we get a figure of 0.2, which for convenience we multiply by 100 and call 20. For Allswell the number would be 100 (100,000 net change divided by the increase of 100,000 and multiplied by 100).

Clearly Allswell has had less dislocation in its labor market; its employees have not faced unemployment and job search. Notsogood, however, has suffered the usual costs of new hires and the traumas of layoffs. Labor market transitions are neither costless nor painless.

The value of 100 for Allswell tells us that this state has had a labor market that can be called more proficient than the labor market in Notsogood, where the computed index was 20. We propose calling this number a Labor Market Proficiency Index (LMPI), until a better name comes along.

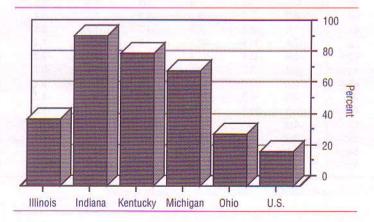
Figure 4
Percent Change in Employment by State, 1990-1994



Now Indiana can take heart once again. As seen in **Figure 5**, the LMPI for Indiana from 1990 to 1994, 96.7, was the highest in the region and far above the nation's 22.4.

These values were obtained by using more of the details in the data published monthly by the U.S. Bureau of Labor Statistics. Eight nonfarm sectors are reported. The sum of the losses and gains shown therein are the basis for the LMPI constructed here.

Figure 5
Labor Market Proficiency Index, 1990-1994
(First Quarter Data)



We would prefer to have data for individual firms showing job gains and losses. But they are not available for each state. Work now in progress at the Indiana University School of Business, in cooperation with the Indiana Department of Commerce and the Indiana Department of Workforce Development, will provide such information for this state and its counties at a later date.

The LMPI will run from +100 to -100. A value of zero will occur when there has been no net change in employment (as in the case of Vermont). **Table 3** shows the LMPI values for each state for the period of 1990 to 1994. Four states had index values of +100, although more detailed data would surely indicate less than perfection.

Indiana had an LMPI of 96.7, which was good enough for 15th place in the nation. California, with an LMPI of -82.4, was last in the nation. The detailed data behind these index numbers can also be found in Table 3.

The LMPI may offer a new way of considering labor markets. Just as we do not declare that today is wonderful on the basis of the thermometer alone, but wish to look at other indicators, so too we should not make judgments about economic performance on the basis of a limited set of data. Net changes fail to reflect the full range of activity in a market. The LMPI attempts to reflect the pain as well as the gain.

Table 3
Labor Market Proficiency Index and Changes in Employment by Sector, 1990-1994

	Total Change in Employment	Gains and Losses	Proficiency				EMP	LOYMENT C	HANGES BY Whsl./Reta		000s)	
	(000s)	(000s)	Index	Rank	Mining	Const.	Mfg.	FIRE	Trade	Publ. Util.	Services	Govt
U.S.	1,395.7	6,231.7	22.4		-125.7	-615.0	-1,448.0	-139.0	-13.3	-77.0	2,943.0	870.7
Vew Mexico	66.1	66.1	100.0	1	0.6	7.8	0.7	1.9	13.9	0.6	28.0	12.5
OMS	81.3	81.3	100.0	1	0.2	5.8	5.7	6.7	15.6	0.8	38.7	7.3
Wyoming	16.2	16.2	100.0	1	0.1	1.6	0.4	0.8	4.6	0.2	5.3	3.5
	167.5	167.5	100.0	1	0.1	8.6	9.1	13.8	19.7	9.6	81.8	24.
Wisconsin	47.6	47.7	99.9	5	0.0	5.5	7.2	2.4	9.4	1.5	14.3	7.
Nebraska				6		15.6	8.9	10.5	30.3	7.3	45.1	12.0
Utah	129.7	129.9	99.8		-0.1		8.1	1.8	8.8	1.7	12.7	5.
South Dakota	40.1	40.4	99.3	7	-0.1	1.8				2.1	82.8	27.
Minnesota	169.6	172.0	98.6	8	-0.7	1.8	10.9	15.3	31.3		105.8	17.
Tennessee	182.0	184.7	98.5	9	-1.4	0.2	12.7	2.8	31.6	12.9		
Arkansas	89.4	90.8	98.5	10	-0.7	1.8	15.7	3.0	17.1	1.0	38.7	12.
North Dakota	26.1	26.6	98.0	11	-0.3	2.3	3.3	1.5	5.9	1.4	10.4	1.5
Mississippi	91.4	93.5	97.7	12	-0.8	4.2	14.2	0.1	16.4	-0.2	48.4	9.
Montana	38.4	39.3	97.6	13	-0.5	3.5	1.1	2.0	11.5	0.2	16.4	4.
Nevada	95.2	98.0	97.1	14	-1.4	0.6	5.3	4.8	15.6	4.5	49.3	16.
Indiana	111.8	115.6	96.7	15	-1.9	3.7	9.4	7.3	16.2	3.8	49.1	24.
Texas	634.7	658.3	96.4	16	-11.8	34.7	10.2	4.4	143.2	28.5	283.2	142.
Idaho	76.4	79.5	96.1	17	-1.5	9.6	9.4	4.0	18.6	1.8	21.4	13.
Alaska	23.7	25.3	93.7	18	-0.8	2.0	1.3	1.2	4.3	3.2	7.5	5.
Colorado	194.7	210.4	92.6	19	-3.9	23.0	-3.9	11.9	48.8	8.7	85.6	24.
Kansas	71.6	79.5	90.0	20	-1.0	6.5	-3.0	0.7	10.7	1.9	37.8	18.
Oregon	98.5	110.2	89.4	21	0.1	6.8	-5.9	16.9	21.2	2.2	43.1	14.0
Georgia	220.5	247.6	89.1	22	-1.1	-12.2	-0.3	4.2	52.8	10.2	133.5	33.
Alabama	107.4	121.5	88.4	23	-2.0	-4.7	-0.3	3.7	30.3	2.0	57.7	20.
Kentucky	82.5	96.5	85.5	24	-7.0	1.6	7.3	2.0	16.5	3.8	44.8	13.
Arizona	135.5	163.4	82.9	25	-0.1	17.0	-10.0	7.6	26.6	-3.8	62.6	35.
Oklahoma	68.4	82.4	82.9	26	-7.0	4.7	3.7	1.6	14.4	4.5	38.8	7.
Louisiana	88.5	117.4	75.4	27	-9.2	10.2	6.7	-1.1	18.3	-4.2	49.6	18.
Michigan	104.7	140.6	74.4	28	-1.4	-9.3	-7.2	2.7	5.4	1.2	101.9	11.6
North Carolina	188.0	253.8	74.1	29	-1.8	-6.4	-24.7	8.8	30.0	5.8	122.4	53.9
	156.2	230.6	67.7	30	-0.2	9.3	-37.0	7.1	36.3	3.4	94.2	43.
Washington			62.8	31	-3.0	-38.9	-48.2	-5.7	20.6	12.0	317.2	69.
Florida	323.5	515.0					-26.9	3.1	12.7	1.3	87.7	15.9
Missouri	93.7	149.1	62.8	32	-0.9	0.7				2.1	28.1	8.
West Virginia	39.6	64.7	61.2	33	-6.3	4.7	-6.3	0.4	8.2			
South Carolina	59.6	122.4	48.7	34	-0.2	-18.2	-13.0	0.2	13.1	0.6	54.8	22.4
Hawaii	14.6	31.9	45.9	35	0.0	-0.9	-3.3	3.5	-3.2	-1.2	11.2	8.
Illinois	109.0	250.9	43.5	36	-3.8	-21.0	-46.1	9.5	0.6	4.9	147.4	17.0
Virginia	75.4	200.3	37.6	37	-2.7	-33.7	-26.0	6.4	8.1	3.2	95.2	24.9
Ohio	80.6	238.2	33.8	38	-3.4	-14.6	-54.2	6.7	11.4	-6.6	118.5	22.
Delaware	4.1	26.6	15.4	39	0.0	-3.1	-7.9	5.1	0.9	-0.3	7.8	1,0
Vermont	0.0	17.2	0.0	40	0.0	-3.6	-4.1	-0.9	0.6	0.0	6.5	1.
New Hampshire	-2.3	36.8	-6.2	41	0.0	-6.2	-9.9	-1.7	-1.7	0.2	12.9	4.
Pennsylvania	-54.1	277.0	-19.5	42	-7.1	-34.5	-90.4	3.0	-33.6	7.4	95.6	5.4
Maryland	-63.7	158.9	-40.1	43	-0.9	-43.4	-30.4	-1.2	-32.6	-2.7	45.8	1.3
Vlaine	-16.0	37.2	-43.1	44	0.0	-7.5	-11.0	0.7	-5.4	-0.7	9.9	-1.
Massachusetts	-124.9	264.3	-47.3	45	-0.2	-22.9	-87.6	-13.6	-55.3	-3.4	69.7	-11.
Rhode Island	-22.2	42.6	-52.1	46	0.0	-7.3	-15.5	-2.0	-5.7	-1.3	10.2	-0.
New Jersey	-166.8	271.8	-61.4	47	-0.5	-39.5	-102.2	-11.2	-62.8	-1.3	52.5	-1.
DC	-22.6	34.8	-65.1	48	0.0	-6.4	-1.8	-4.5	-10.2	-3.4	-2.4	6.
Connecticut	-121.0	166.3	-72.8	49	0.0	-18.4	-61.3	-15.0	-42.4	-4.1	22.6	-2.
	-463.2	608.0	-76.2	50	-0.1	-81.4	-184.7	-59.7	-139.4	-22.3	72.4	-47.9
New York		1021.5					-372.6	-60.5	-243.0	-25.0	57.4	32.
California	-841.5	1021.5	-82.4	51	-6.3	-224.0	-3/2.0	-00.5	240.0	20.0	07.4	UZ.

## Indianapolis

#### Robert Kirk

Professor of Economics, Indiana University-Purdue University at Indianapolis

Employment for the Indianapolis metropolitan area (nine counties now, with the recent addition of Madison) is expected to increase 1.5-2% for 1994 and a little less than 2% in 1995 due to a moderate increase in interest rates affecting interest-rate sensitive industries. Real wage and salary disbursements are expected to increase 2% in 1994 and a little more than that for 1995. Interest income, reflecting the higher level of interest rates, will result in the increase in real personal income being somewhat more than the increase in real wage and salary income. If the Federal Reserve continues to tighten monetary policy, then growth rates for employment and income would be reduced from the above and the probability of a decline in the level of economic activity in 1995 would increase a little.

#### **Recent Employment Growth**

The **Table** shows the change in employment using index numbers. The trough of the business cycle for the metropolitan economy was third quarter 1991, so employment is set to 100 in that quarter. The table indicates that total employment has increased 3.3% since the recession. In terms of employment growth, the leading sectors have been retail trade (8.7%) and finance, insurance, and real estate (5.1%). The contraction in transportation, communication, and public

Table
Employment Change for Indianapolis Metropolitan
Area, First Quarter 1993 to First Quarter 1994
(Third Quarter 1991 = 100)

Sector	1093	1094
TOTAL	101.6	103.3
Manufacturing	99.5	101.8
Construction	100.5	98.6
Transp., Comm., & Public Utilities	98.2	97.0
Wholesale Trade	99.8	103.1
Retail Trade	102.2	108.7
Finance, Insurance & Real Estate	103.0	105.1
Services	103.5	103.1
Government	102.2	102.6

Source: Indiana Department of Workforce Development and author's calculations

utilities reflects the restructuring that has occurred in utilities. The employment expansion occurring at the United Airlines Maintenance Center by the end of 1994 will appear in this sector.

#### Manufacturing

It is encouraging to see the increase in manufacturing during the past year—especially at a time when some metropolitan areas, such as St. Louis, have lost significant employment. A local diesel engine producer, Navistar, plans to hire more workers as a response to the strong demand for trucks. The refinancing of mortgages by households in 1993 resulted in lower monthly payment schedules and made more disposable income available to support increased consumer durable goods purchases, including automobiles. An increase in mortgage rates takes away that source of durable goods purchasing power.

As the number of weeks of income required to purchase a new car has increased over the past ten years. Detroit has sought ways to keep the monthly payment manageable. Leasing is the most recent strategy. Will leasing have an effect similar to the program cars that dampened new car sales? If there are comparable monthly payments between a leased used luxury car and a less expensive new car, many may prefer to lease the used luxury car. GM has been the most vertically integrated of the Big Three. The consequence of this has been higher cost, because in parts operations GM must compete with nonunion independents and foreign producers. The domestic auto market is maturing, so development in overseas markets with growing populations and disposable incomes becomes more attractive. NAFTA should provide increasing access to an expanding auto market. Indianapolis businesses that sell to Germany and Japan can expect some increased exports as these two economies are expected to show some recovery during the rest of 1994.

#### Construction

In 1993, commercial/industrial, special use, and multi-family construction, measured by square footage in Marion County, returned to 1990 (pre-recession) levels. Measured by dollar value, these types of construction were still below 1990 levels. The number of permits for multi-family units has increased slowly over the past three years. As reported in this review six months ago, the number of young people—a prime market for apartments—has declined but should begin to turn around slowly and support continued expansion in apartment activity.

#### **Retail Trade**

The Table indicates that retail trade has been the leading sector in employment growth, although many of

these jobs are less than full-time. Although retail trade was 19% of total employment in 1993, it generated 48% of the increase over the period from first quarter 1993 to first quarter 1994. Over the past few years, real personal income per retail employee in Indianapolis was about \$17,000. In 1994 the opening of four megastores will add significantly to the retail employment total: in September 1995 the opening of the Circle Centre Mall will add 1,500 more. So a healthy expansion in real personal income will be needed to support the increased employment in retailing. The shoppers in the Circle Centre Mall are expected to include conventioneers and visitors attending trade shows in the expanded Indianapolis Convention Center as well as events in the Hoosier Dome and other downtown locations.

Indianapolis appeals to regional and national franchisors because of a relatively strong economy. New franchisees open in new commercial areas that are serving new housing developments. Many "help wanted" signs are seen at retail establishments. Again, demographics is a factor—the number of people aged 15-19 and 20-24 declined from 1980 to 1990. The children of the baby boomers will begin to enter these age cohorts, but that won't help businesses needing labor in the short run. A shortage is a situation in which the quantity demanded is greater than the quantity supplied at a given price or wage rate. We would expect higher wage rates to increase the quantity supplied and decrease the quantity demanded.

When Subaru-Isuzu was recruiting people in Lafayette, we saw long lines on our TV screen. On the other hand, the small-business owner says, "I can't afford to pay a higher wage and stay in business." Alternatives include substituting capital for labor whenever possible and increasing the productivity of the existing work force. Work force development is one of the issues being addressed by the Metropolitan Association of Greater Indianapolis Communities (MAGIC), a group that includes area chambers of commerce, local economic development organizations, and regional employers.

#### Services

Services (business, health, and personal) was the sector that, along with construction and retail trade, led the Indianapolis economy in employment growth during the 1980s. As the Table indicates, services have not contributed to the local economy during the past year as might be expected. There are several reasons for this. For example, one component of business services is the building services industry (custodial services). During the 1980s, many new office buildings were constructed. The building services industry grew as building managers contracted out maintenance services. However, with few new

office buildings in recent years, expansion in building services has slowed. Additionally, the uncertainties over health care reform have encouraged hospitals and other health care agencies to increase labor productivity to gain better control over costs. The result has been reduced rates of employment growth.

#### Government

During the fall, state and local government officials will be interested in the outcome of the legal challenge to the constitutionality of Indiana's method of assessing real property. The challenge will present evidence that the method is arbitrary and treats households in similar economic situations differently. Thus, it is argued that the method violates the equal protection clause of the 14th Amendment to the U.S. Constitution as well as the Indiana Constitution.

Indianapolis received good news when it was announced that the Army Finance Center will remain open. Although Fort Benjamin Harrison will not be closed until July 1997, troops will be moving out during fiscal year 1995. Options for the land include a 700–acre state park and light industrial and educational uses.

#### **Productivity Growth**

Several local industries have been looking for employees. Trucking, for example, needs drivers. One way to get more is to offer higher wages, but that has a negative effect on profits.

Another approach to dealing with the lack of labor at the going wage rate is to increase labor productivity. What are the consequences of productivity growth? Historically, the prices of goods or services produced in industries with rapid productivity growth (such as electronics) have fallen relative to those in industries with slower growth. The periods of rapid productivity growth have been associated with increases in real wages and salaries and low inflation. Nationally, real wages and salaries have not increased for 20 years. However, compensation has increased because the productivity gains have been taken in the form of fringe benefits.

In some industries, measuring productivity growth is difficult because of the problem of defining output. In a metal stamping plant, such as the North American Truck Platforms, GMC Indianapolis plant, output (door panels) can be counted. But how do we measure output in the financial services industry?

As the Table indicates, the finance, insurance, and real estate sector has been a leading sector. Financial institutions consist of depository institutions (such as commercial banks), contractual intermediaries (such as life insurance companies), investment intermediaries (such as mutual funds), and financial brokers (such as brokerage houses).

Some observers have described banking as a declining industry. It is true that as a percent of assets of all financial institutions, commercial banks' share has been declining. But is share of assets the appropriate measure? If assets are defined more broadly to include "off-balance-sheet" assets, such as trust services, the downward trend is reduced somewhat. Recently, commercial banks have entered such new areas as securities brokerage, underwriting, mutual funds brokerage, and generating fee income from origination and servicing of loan packages.

Economists use value added as a measure of output. Value added is the value of the goods or services sold by an industry minus the value of the intermediate goods and raw materials purchased by it.

"The processes of restructuring and increasing productivity that began in the manufacturing sector during and immediately following the 1980-82 recession have spread to every major sector of the economy."

Applied to financial institutions, it can be defined as the difference between total receipts, including interest received, and interest paid. By this measure, both the total financial institutions industry and its commercial banking component have increased as a percent of GDP over time.

Indianapolis has witnessed the entry of a wide range of financial institutions in recent years. This entry has forced existing firms to develop marketing and productivity-raising strategies. The price of the personal computer, a capital good, has declined relative to the price of labor. From 1989-92, it has been estimated that the price of PCs, after taking into account speed, memory, storage, and expandability, decreased at an average annual rate of more than 30%. As a consequence, the computer has been substituted for labor and increased the productivity of labor in financial services.

The processes of restructuring and increasing productivity that began in the manufacturing sector during and immediately following the 1980-82 recession have spread to every major sector of the economy. How effective the private, public, and non-profit sectors of Indianapolis are in pursuing these processes will be a primary determinant of our economic well-being for the rest of this century.

## **Northwest Indiana**

Leslie P. Singer

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The industrial sector of the northwest Indiana economy is responding to national trends. Output of steel and steel-related industries is growing at a relatively rapid rate. Nationally, steel output rose from 91.605.000 tons to 96.077.000 tons from 1992 to 1993—an increase of 4.88%. Steel purchases by the automobile industry increased from 10,697,000 tons to 12,219,000 tons, or 14.23%. This unprecedented increase, which was largely generated by the steep rise in the automobile replacement cycle-as we had predicted—gave a significant boost to the local steel industry. Local steel plants rely principally on the auto industry. The largest increase in steel output was, however, in the general purpose commercial steel sector, shaped products, and so on, which the Department of Commerce summarizes under the category of "other." This sector's sales increased from 35,130,000 tons in 1992 to 45,510,000 tons in 1993—a whopping 29.55%. The segment of the steel industry that benefited most from the increase in shipments in this category were the 87 so-called mini-mills or melt mills, which are dispersed all over the continental United States and Hawaii, including the southern tier of the state of Indiana.

Local steel output increased more than 11.9%—to 23,340,000 tons per year from 20,846,000—with almost no increase in steel employment. Local integrated mills had substantial unused productive capacity, including excess labor, as we had noted earlier. Steel production this year may come close, though it may not exceed the 1988 peak of 24,196,000 tons per annum or the pre-recession peak of 23,565,000 annual tons of crude steel produced by northwest Indiana mills.

The tentative plans for the auto industry in 1994–95, both domestic and foreign-owned producers, call for an increase in the production of cars by a weighted average of 16.4% and in the production of trucks by 20.7%. GM, northwest Indiana steel's major customer, plans to increase the production of cars by 10.3% and the production of trucks by 21.5%. Chrysler plans the largest expansion among domestic producers, namely, an increase of 37.8% for cars and 33.0% for trucks. The largest increases are planned by Japanese transplants, particularly Honda (44.7%) and Nissan. We may conclude, then, that northwest Indiana integrated mills will continue to produce close to full capacity for the remainder of 1994 and most of

Table Northwest Indiana Employment (in 000s)

Seasonally Adjusted Annualized Trend

	ACTUAL	Tu i	7 5 620	FORE	CAST		
	1094	2094	3094	4094	1095	2095	3095
Total Employment	240.9	242.1	243.3	244.5	244.8	246.0	246.2
Manufacturing	52.6	52.6	52.7	52.7	52.8	52.8	52.9
Steel	30.6	30.6	30.6	30.7	30.7	30.7	30.7
Nonsteel	22.0	22.0	22.1	22.1	22.1	22.2	22.2
Nonmanufacturing	188.3	189.5	190.6	191.8	192.0	193.1	193.3
Construction	12.8	12.9	13.1	12.9	13.3	13.0	13.9
Trade	56.0	56.4	56.9	57.3	57.8	58.2	58.7
Services	58.0	53.3	58.6	59.0	59.3	59.6	59.9
Health	23.9	24.0	24.2	24.3	24.4	24.6	24.7
Government	35.5	35.5	35.6	35.6	35.7	35.7	35.8
(Local Govt.)	29.2	29.3	29.4	29.5	29.5	29.6	29.6
(Education)	17.7	17.7	17.8	17.8	17.9	17.9	17.9

Note: Manufacturing and nonmanufacturing employment may not equal total employment because of computer rounding.

1995. As shown in the **Table**, despite continued high output, we predict almost no rise in manufacturing employment.

#### **Forecast**

We have reset the local employment time series to correspond to the Department of Labor's downward revisions. Thus, our trend line will be set lower than was the trend line in our 1993 forecast for this year. The revisions do not indicate a loss of employment, only that errors in measurement have been corrected.

The annualized nominal manufacturing payroll stood at \$2.078 billion in third quarter 1993 and will be identical in third quarter 1994. The payroll of steel mills was \$1.388 billion in third quarter 1993 and will rise minimally to \$1.394 billion in third quarter 1994. In real terms, local industry has failed to give adequate support to the service-producing sectors of the local economy. We had not expected this situation in our previous forecast. With higher taxes and other charges, the industrial sector's real disposable income has deteriorated. We expect a slight reversal of the previous trend in real industrial wages in 1995 and 1996. Nominal manufacturing payrolls may rise, possibly by an accelerated rate, as shortages of skilled personnel, extended use of overtime, and performance incentive wages swell the payrolls. The auto-driven increase in steel output has failed to raise employees' real disposable income; rather, the mini boom in steel has only temporarily halted the longrun downslide in industrial employment.

Where, then, will the impetus for job creation in the service-producing sector arise? Some of the stimulus will come from an increase in federal and local transfer payments. Some of the rise in local consumer expenditures will come from exports of labor to the Chicago metropolitan region, and the balance will come from rising wages in the service sector. In other words, the rise in income and employment in the service-producing sector will be endogenously generated and will not, as before, depend on rising industrial wages.

#### Conclusions

The northwest Indiana economy will continue to show moderate growth in the service and retail trade sector and in residential construction. The industrial sector may show no employment gains; however, the secular decline in jobs is likely to temporarily subside. Weekly hours may decline from their record highs of 45.2 hours in steel in 1993. The real industrial payroll is likely to show a modest decline, in spite of a predicted moderate rise in nominal wages as a consequence of revised collective bargaining contracts (notably LTV).

## **Evansville**

#### **Maurice Tsai**

#### Professor of Economics, University of Evansville

The Evansville economy grew in 1993 at 3.1%, instead of the 4.2% estimated in the last report (see the **Table**). The manufacturing sector continued to grow in the first half of 1993, but it became stagnant in the third and fourth quarters; thus, it grew at only 3.0% for the entire year. The construction sector's growth rate was actually only 2.1%, not the 5.4% estimated earlier. The trade and services index rose 2.5%, the finance index rose 6.2%, and the employment index rose 1.6%, as estimated earlier. The transportation index showed 1.2% growth compared to the originally estimated 0.1%. Overall, 1993 was a better year than 1992, with concurrent growth in all sectors.

In 1994, the Evansville economy will maintain the growth rate it has achieved in the past two years. The growth rate for the year will be 2.5% or better. This revision is based on two developments. First, the rise in interest rates in the first half of 1994 will slow down the construction sector somewhat and probably have an adverse effect on the financial sector for the remainder of the year. Second, the riverboat casino industry will not bring much of an impact to the local economy until 1995.

Table
Evansville Area Business Index (1977 = 100)

	Industrial Production	Trade & Services	Construction	Transportation	Finance	Employment	Composite Index
Quarterly Index	77000000	00111000	Construction	ranoportation	Tindinoo	Employment	muox
101993	126.85	135.41	120.14	104.84	137.12	122.51	127.81
201993	130.43	133.84	120.99	104.40	136.15	121.71	128.39
3Q1993	129.81	132.39	112.78	109.76	136.12	122.66	128.91
4Q1993	127.79	136.00	114.65	107.88	136.47	125.53	128.76
101994	127.36	134.77	129.81	107.65	132.76	122.66	128.64
Annual Index							
1990	124.06	128.82	112.62	112.25	121.64	118.35	122.11
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	128.72	134.41	114.65	107.88	136.48	123.10	128.46
1994 (proj.)	132.00	139.80	121.00	110.80	133.75	125.50	131.60
Annual Growth Rate	(%)						
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	3.0	2.5	2.1	1.2	6.2	1.6	3.1
1994 (proj.)	2.5	4.0	6.0	2.7	-2.0	2.0	2.5

Source: School of Business Administration, University of Evansville

Given these developments, the manufacturing sector will grow at 2.5%, trade and services at 4.0%, construction at 6.0%, employment at 2.0%, and the finance sector will decline by 2.0%. Therefore, 1994 will be another growth year. The local unemployment rate was 5.3% for 1993; that rate could be repeated for 1994.

## **Fort Wayne**

#### **Thomas Guthrie**

Professor of Economics, Indiana University-Purdue University at Fort Wayne

The original forecast for 1994 for the Fort Wayne metro area remains primarily intact at midyear. As forecast, the auto/light truck sector probably has been the primary source of strength in the Fort Wayne area economy thus far in 1994. Domestic production of autos and light trucks is likely to increase 10.2% in 1994, from 11.8 million actual units to 13.0 million forecast units. Domestic production has been aided by overall strong sales increases, market share gains

by domestic producers, and production shifts to the U.S. by the transplants.

However, daily selling rates of new autos and light trucks have probably already peaked for the year. This sector will not be a source of continued employment gains in the last half of the year. Large transplant inventories, rising interest rates, and a predicted surge in the number of off-lease vehicles entering the used-vehicle market will combine to put downward pressure on domestic new auto and light truck sales and production.

Although difficult to document because area defense-related employment is not reported separately, recent local public announcements of downsizing are consistent with the forecast of continued shrinking in this sector.

As in the past, the ubiquitous personal and business services sector of the economy continues to grow—by 1,300 between April 1993 and April 1994 (preliminary data) in an employment base of 55,100. However, in stark contrast to the past, health services contributed nothing to the increase. In fact, as predicted, health services employment is likely to decrease given the recent announcement by one of the three community hospitals of plans to downsize. Market forces (finally) and continued uncertainty relative to national health care legislation have combined to halt the health care industry in both employment gains and price increases.

The one sector not mentioned in the original forecast but worthy of mention at midyear is the capi-

tal goods sector. As unused capacity continues to shrink and profits continue to grow, businesses have both the desire and the wherewithal to increase capital spending plans. This is good news for the industrial machinery sector of the area economy. The sector already grew 7.4%, or 600 jobs, between April 1993 and April 1994 (preliminary data) in an employment base of 8,100. And given the favorable capital spending outlook, that growth will continue.

The original forecast was for area employment to increase 1% (approximately 2,000 jobs) in 1994. Given the view at midyear, the direction of the forecast appears assured, but the amount appears low. An increase of between 1.5% and 2% seems more likely at this juncture.

Additionally, it should be noted that as a result of the 1990 census, the number of counties in the official Fort Wayne metropolitan area was doubled at the beginning of this year. Adams, Huntington, and Wells counties have been added to Allen, De Kalb, and Whitley counties. This increased the employment base by approximately 50,000. As a result, only the forecast percentage gain in jobs remains relevant.

The original forecast noted the likely closing of the local Uniroyal Goodrich tire plant in April 1994 and its adverse impact on the area economy. However, in an extraordinary week in February in the economic life of the region, not only was the labor-management impasse at Uniroyal Goodrich resolved, but plans to build a \$514 million steel mini-mill in De Kalb County were announced. Translated into jobs, the Uniroyal Goodrich announcement saved most of the 2,000 current jobs, and the steel mini-mill is projected to provide about 600 highly paid (around \$40,000) jobs when fully developed (zoning issues still remain with respect to the mill's location).

## **Terre Haute**

#### Marvin Fischbaum

Professor of Economics, Indiana State University

Following three years of relatively strong performance, the Terre Haute economy suffered several setbacks in 1993. A number of enterprises terminated operations, and three major employers—Eli Lilly, Pfizer, and Donnelley Directory—announced significant retrenchments. Despite an increasingly buoyant national economy, the 1994 economic outlook for

Terre Haute was tempered by an expected net loss of well-paying jobs, possibly offset by gains in employment elsewhere.

To date, 1994 has been marked by an absence of developments that would materially alter that outlook. The closure of the Breed power plant in Sullivan County (with a loss of 66 jobs) and continuing cutbacks at Ivy Hill Packaging have been more than offset by expansion elsewhere. Roadway Express, which less than a year ago established its air package express network with Terre Haute as the hub, added new routes that in turn added 175 mostly part-time jobs locally. With a burgeoning demand for CD-ROMs, Sony's DADC is expanding again. When completed, its newest \$8 million, 77,000 square-foot building should result in the addition of 125 workers to the current force of 1,225.

The actual state of local employment and unemployment levels over fourth quarter 1993 and first quarter 1994 is not at all clear. Unemployment estimates for third quarter 1993 were suspiciously low throughout Indiana. Starting in January, MSAs were redefined based on the 1990 census, so after a tenyear hiatus, Vermillion County again became part of the Terre Haute MSA. Also starting in January, the Current Population Survey (CPS) was thoroughly revamped. The questions and question sequencing to determine employment, unemployment, part-time employment, and discouraged workers have been revised thoroughly and fundamentally. Nationally, the new methodology has resulted in larger numbers of women recorded as unemployed and has boosted the unemployment rate between 0.1% and 1.0%. The impact of the change of employment and unemployment estimates for a small local area is anyone's quess.

For whatever reason, some rather dramatic moves occurred from December to January in CPS-estimated employment in counties adjacent to Vigo. Estimated employment in Sullivan County leaped from 7,450 to 8,580. In Vermillion County, employment as estimated by the household survey plunged 15.4%, from 8,410 in December to 7,115 in January. Between December and January, estimated unemployment rates soared throughout the region—from 4.7% to 7.2% in Clay, 8.0% to 10.5% in Sullivan, 6.4% to 12.6% in Vermillion, and 5.7% to 8.0% in Vigo counties.

For the 12-month period ending in March 1994, movement in CPS data was relatively modest. Estimated employment rose 1,000 in Vigo, 330 in Clay, and 1,555 in Sullivan counties, and it fell 1,280 in Vermillion County. Area CPS employment would have risen under the four-county SMSA used prior to 1984, or under the two-county MSA used between 1984 and 1993. Under the new three-county definition, MSA

employment was flat. The unemployment rate in March was 7.0% for Vigo County and 7.5% for the three-county MSA. With unemployment estimates of a year ago having been revised upward, the trend was toward fewer people out of work in the county and little change for the MSA. In contrast, establishment employment figures for the three-county MSA declined moderately. Over the 12 months ending in March, employment fell 700, or 1.1%, while for the year ending in April the decline was 1,400, or 2.1%.

Construction and real estate activity remain strong. For Vigo County, the value of housing permits for the 12 months ending in March totalled \$46 million, an increase of 51% over the previous year. Much of the activity is at modest to moderate price points, and the number of structures increased by 77%. Over the same time the value of nonresidential building permits increased by 65% to \$42 million. Vigo County sales by realtors using multilist also showed some strength. Comparing first quarter 1994 with the same quarter a year ago, the number of units sold increased 21%; time on market fell 7%; and average selling price rose 8.1%.

The Terre Haute economy seems to have been out of sync in recent years. It expanded through a recessionary period and probably contracted during 1993. Any expansion in 1994 has been modest. Regional fortunes may diverge because of the composition of local industry (shift), and because of changing competitiveness with industries (share). Though an oversimplification, shift may be viewed as chance and share, to some degree, as earned dessert.

A tale of two industries may provide insight on the divergent performance of Terre Haute. During the late 1980s and through 1992, the local economy was powered by growth in both the pharmaceutical industry, highly profitable in a benign regulatory climate. and compact disc production, a young product enjoying rapid diffusion. In 1993, while compact disc production continued to grow, the pharmaceutical industry initiated a staged contraction. Industry-wide reductions in staff to exceed 34,000 were announced. and virtually every major company participated. While the shape of a possible future national health plan may have been a concern, sharply lower profits stemming from managed care at home and stringent price controls abroad were very much a present reality. Clearly, shift factors played a part in the local business slowdown.

But share elements raise troubling questions.

One pharmaceutical producer—Pittman-Moore—
moved most of its Terre Haute operations out. Pfizer,
with three major manufacturing facilities (in Brooklyn,
Puerto Rico, and Terre Haute), thoroughly modernized
facilities in Brooklyn during the fat years, leaving its
Terre Haute plant relatively old and vulnerable.

Terre Haute was the site of the first CD manufacturing facility in the United States. Sony still accounts for half of all CDs produced in the U.S., but it is pursuing a policy of decentralizing production. Production both at Pitman, New Jersey and Carrollton, Georgia now nearly equals that at Terre Haute, and a new plant is being erected near Eugene, Oregon. Loss of share in these two industries might have nothing at all to do with the local business climate. Still, one may wonder.

## South Bend/Mishawaka-Elkhart/Goshen

John E. Peck

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

This midyear 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 indicators suggests that through the early months of 1994 the area economies of South Bend/Mishawaka and Elkhart/Goshen were performing about as expected in the year-end area forecast (*IBR*, Winter 1993-94). Employment gains continued to suggest that the area economies, as with the nation as a whole, were advancing but at a relatively slow pace. The slowness in this area of the state was particularly evident in the South Bend/Mishawaka economy.

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 February and March 1994. To highlight longer-term trends, the same figures are also provided for March 1993.

#### St. Joseph County

Employment conditions in the South Bend/Mishawaka area improved marginally in March, although the improvement was limited to the nonmanufacturing

Table
South Bend/Mishawaka-Elkhart/Goshen Economic Indicators

		South	n Bend/Misha	waka		Elkhart/Goshen				
		TENES :		% Change	From	all land			% Change	From
	March	February	March	February	March	March	February	March	February	March
	1994	1994	1993	1994	1993	1994	1994	1993	1994	1993
mployment Indicators										
Nonagricultural <sup>1</sup>	115.7	115.2	113.9	0.4%	1.6%	120.1	120.4	117.0	-0.2%	2.6%
Manufacturing	91.8	92.4	89.3	-0.6%	2.8%	114.8	114.9	112.5	-0.1%	2.0%
Nonmanufacturing	122.7	122.0	121.1	0.6%	1.3%	126.7	126.7	122.5	0.0%	3.4%
Unemployment Rate	5.4%	5.2%	6.2%			4.2%	4.3%	5.4%		
Help Wanted Advertising <sup>2</sup>	129.5	126.1	79.9	2.7%	62.1%	183.0	189.3	110.5	-3.3%	65.6%
Itilities <sup>3</sup>										
Industrial Electricity Sales	110.9	99.2	104.3	11.8%	6.3%	118.5	107.1	121.3	10.6%	-2.3%
Commercial Gas Sales	113.3	141.3	114.9	-19.8%	-1.4%	130.2	132.1	133.7	-1.4%	-2.6%
Industrial Gas Sales	75.6	72.0	81.6	5.0%	-7.4%	85.2	83.4	82.8	2.2%	2.9%
Car and Truck Registrations										
New Passenger Cars	47.0	61.1	45.8	-23.1%	2.6%	50.0	45.4	52.7	10.1%	-5.1%
New Trucks	88.4	95.4	73.4	-7.3%	20.4%	78.5	114.5	84.8	-31.4%	-7.4%
Bankruptcies-South Bend Division	2									
Business	41.3	24.0	56.0	72.1%	-26.3%	The state of the s	(Includ	ded in South B	Bend Division)	
Nonbusiness	179.2	168.9	183.5	6.1%	-2.3%	10.51	1.2			
Housing Construction Data <sup>5</sup>						- 8 75				
Estimated Value of Permits	130.3	141.4	151.8	-7.9%	-14.2%	98.0	55.9	158.0	75.3%	-38.0%
Number of Permits Issued	120.4	108.8	129.6	10.7%	-7.1%	90.4	64.8	111.1	39.5%	-18.6%
Average Value per Permit	115.2	124.9	123.5	-7.8%	-6.7%	110.8	82.0	142.6	35.1%	-22.3%
Residential Real Estate Data										
Number of Active Listings	1,567	1,424	1,381	10.0%	13.5%	1,281	1,271	1,498	0.8%	-14.5%
Average Days Listed	91	113	108	-19.5%	-15.7%	96	93	105	3.2%	-8.6%
Average Market Price	\$72,356	\$64,479	\$77,613	12.2%	-6.8%	\$78,905	\$79,061	\$75,706	-0.2%	4.2%
% of Sale to List Price	96.0	94.6	95.0	1.5%	1.1%	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.

sector. Manufacturing employment, which had been gaining strength steadily since mid-fall 1993, took a breather in March—dropping 0.6% from February's post-recession high. Overall, nearly 1,000 more people were employed in St. Joseph County in March 1994 than in March 1993. The unemployment rate remained relatively high, however, as the supply of labor—new entrants to the labor force—continued to rise. On the demand side, the help wanted advertising index in March (129.5) reached its highest level since 1978. This encouraging sign was supported by the latest quarterly Manpower, Inc. survey, which reported that some 37% of respondents expected to be adding workers during the spring months of this year, versus 10% expecting declines.

On the whole, remaining South Bend/Mishawaka indicators gave mixed signals in March. On the one hand, new car and truck registrations were down, and both business and personal bankruptcies rose. On the

other hand, housing indicators were quite positive. The new housing permits issued index rose 10.7%, and the average number of days existing housing remained listed dropped by 19.5%. The overall picture was one of an economy advancing, but at a modest pace.

#### **Elkhart County**

March employment indicators in the Elkhart/Goshen area were flat. The manufacturing index dropped 0.1% while the nonmanufacturing index was unchanged. The unemployment rate in Elkhart County remained low, and the help wanted advertising index recorded a reading of more than 180 for the second month in a row—there were 80% more job listings in March 1994 than were posted on average during the base year 1986. There continue to be many reports that workers available to be placed in the county's dominant recreational vehicle industry are scarce.

<sup>1</sup>St. Joseph and Elkhart Counties.

South Bend Tribune and Elkhart Truth.

<sup>&</sup>lt;sup>3</sup>Electricity Sales include cities of South Bend and Elkhart; Gas Sales include St. Joseph and Elkhart counties.

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

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

As in neighboring St. Joseph County, remaining March indicators in Elkhart/Goshen painted a mixed picture. New car registrations rose 10.1% from a sixmonth low recorded in February. On the other hand, new truck registrations dropped 31.4%. The new housing permits issued index rose significantly in March, but residential real estate drifted laterally. Again, the overall picture was one of a local economy that is moving forward, but at a relatively slow pace.

#### Outlook

For the last several months, it has been apparent that the two local economies tracked here have been performing in a manner very similar to that of the U.S. economy overall. That is, we have been experiencing growth in employment, output, and consumption at a modest pace. From the national perspective, this is an environment that to the person on the street masks the underlying positive movement—particularly in the face of continuing corporate downsizing. On the other hand, it is also an environment that tends not to be prone to unacceptably high inflation. The vast majority of nationally published economic indicators continue to be positive. The consensus opinion of those that forecast the course of the economy, and one that is shared here, is that we can expect a continuation of the pattern we have experienced recently through the remainder of 1994 and into 1995-that is, slow but

## **Bloomington**

Richard L. Pfister

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

Last winter, we were cautiously optimistic about the outlook for the Bloomington economy in 1994. Data for the first four months of the year are now justifying that optimism. Nonagricultural wage and salary employment was up over year-ago levels by an average of 3.9% for January-April. Employment levels were up by about 2,300 jobs over the first four months of 1993. These employment totals exclude agricultural workers, the self-employed, unpaid family workers, and domestic employees. The growth rate for Bloomington exceeded the comparable average rate of 2.2% for the state. Thus the city continues to show higher

growth rates than the state since the recession low of 1991. Total wage and salary employment for the Bloomington economy (Monroe County) was 61,500 in April, which is up nearly 6,000 from the 1991 level.

Services and miscellaneous were the major contributors to employment growth in 1993. The average increase for each month over the same months of 1992 was over 13%. The monthly increases in jobs over 1992 levels averaged 1,400. The growth in services employment, however, seems to be slowing down. The first three months of 1994 increased over the same months of 1993 by an average of just 5.4%. Employment for April 1994 actually declined slightly from the year before. Health care providers are under strong pressure to reduce costs. Employment by health care providers has grown substantially for several years. That strong growth appears to be at an end and declines may actually occur in the near future. Bloomington Hospital has announced plans to gradually reduce its employment by 180 over the next several months. Thus, the service sector of the local economy is not likely to contribute much, if any, to job growth in 1994.

"Bloomington's growth rate exceeded the comparable average rate of 2.2% for the state. Thus the city continues to show higher growth rates than the state since the recession low of 1991."

So far, employment in retailing is showing stronger growth than it did in 1993. For the months of January to April, retailing employment increased by an average of 12.3% over the same months of 1993. which translates into an increase of about 1,100 jobs over 1993. This high growth rate will not likely continue for the rest of the year, however. Fourth guarter 1993 showed strong growth over the levels of the first three guarters. Wal-Mart and Sam's Club opened during that quarter, which certainly boosted total employment in the trade sector. The level of employment in this sector has not changed much during the first four months of this year. In fact, it is about the same as the level in the October-December period of 1993. The employment total for retailing as of April was 12,700, which exceeds the level for services and miscellaneous by about 1,000 employees. Last winter

we expressed concern that consumer spending might slow down and affect Bloomington's retailing activity. So far any slowdown in consumer spending has not yet affected local employment in retailing.

One encouraging development has been in manufacturing employment, which has shown significant growth so far this year compared to the same months last year. The average monthly increase for January-April was 4.7%, or 400 jobs, over year-ago levels. These are the first increases of any magnitude since a slow downward spiral began in 1991.

Government employment has risen slowly over year-ago levels, continuing the trend so far in 1994. The level of government employment in the Bloomington economy has now reached 20,000. The level has not changed much in the last eight months, so this slow rise may not continue.

Employment has been steady in wholesaling; transportation, communication, and public utilities; and finance, insurance, and real estate. The total number of jobs in these three sectors is nearly 5,500. The steady figure for wholesaling is rather surprising because of the closing of Wetterau Food Services in early 1994, which constituted a loss of more than 300 jobs. It could be that those jobs have been made up elsewhere in this sector or that the data will subsequently be revised.

Employment for the construction industry is no longer provided by the State Department of Labor. Data on building permits show the total value of permits for residential houses to be up a healthy 50% over 1993 levels for the first four months of 1994. The value of nonresidential building permits is down from 1993 levels, but the aggregate value of permits for all construction appears to be stronger than in 1993.

Reported unemployment remains low. In the last 12 months the unemployment rate has ranged from 2.6% to 5.5%. The jump to higher levels was caused in part by a new method of estimating the labor force. The rate for April was 3.8%, which is well below the rate for the entire state.

The only sour note in the indicators is a rise in initial claims for unemployment insurance in four of the last five months. The sharpest increases were in January and February of this year, most of which was probably the result of the closing of Wetterau Food Services.

The Center for Econometric Model Research at the IU School of Business has forecast rather strong growth in the state economy for 1994. Bloomington has been more than keeping up with state growth in recent years. Consequently, good growth for the Indiana economy augurs well for Bloomington in 1994.

## Muncie

#### Patrick M. Barkey

Director, Bureau of Business Research, Ball State University

The east central Indiana economy has weathered the recession of 1991 and now appears to be claiming its share of the fruits of the post-recession expansion. Thanks primarily to high levels of production in the motor vehicle industry, manufacturing employment and hours worked in 1994 have held their own with the rest of the state. There are also a number of major developments under way, the most significant being the Daleville Outlet Mall, which could dramatically enhance the area's stature as a regional retailing center.

#### Muncie's Growth Since 1982

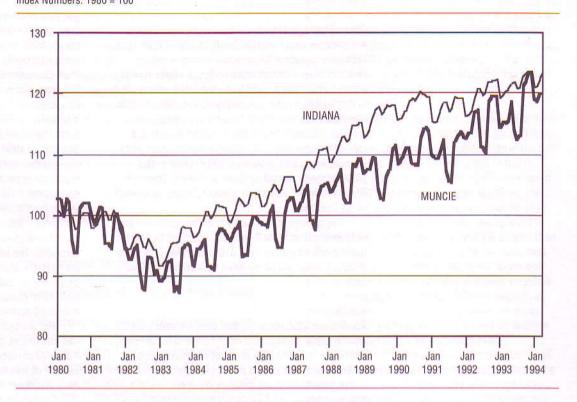
The Muncie economy did not fare as well as the rest of Indiana in the 1980-82 recession and in the subsequent recovery. The **Figure** shows Indiana and Muncie MSA establishment employment for the years 1980-94, indexed so that 1980 employment equals 100. The graph shows that the trough of the recession was deeper, in terms of employment, for Muncie than it was for the state. Muncie's employment level remained below the state for the remainder of the decade due to its relatively high concentration in the durable manufacturing industries that were shedding payrolls during this period.

Since 1991, the gap between Muncie and the rest of the state has closed considerably. As the Figure shows, this came about primarily due to a slowdown in the growth in statewide employment and cannot be attributed to an uptick in local area growth. Nevertheless, the relative stability of the area's economic base has enabled it essentially to catch up with the rest of the state over the last three years.

As the **Table** shows, the sectors that have led the way in Muncie employment growth have been transportation, communications, and public utilities, construction, and services. Since 1993, 500 new jobs have been added in trucking due to relocations and expansions of a few major firms. The services sector is now the largest in the Muncie MSA and has accounted for 4,600 new jobs—approximately one-third of the growth—since 1982.

In contrast, the manufacturing sector's share of total employment has shrunk, with manufacturing employment essentially flat over the 11-year period 1983-93. During this same time the state added about 60,000 manufacturing jobs.

Figure
Muncie and Indiana Employment, 1980-1994
Index Numbers: 1980 = 100



#### **Short-Term Growth Prospects**

The short-term growth of the Muncie MSA will depend on at least three things: the health of the domestic motor vehicle industry, the financial viability of some of the area's major manufacturing concerns, which have recently reorganized, and the success or failure of the Daleville Outlet Mall in the southwest corner of Delaware County.

Table Muncie Establishment Employment Growth Since 1982

	Percentage	Percentage Growth Rates, 1983-93				
	Average	Low	High	Employment		
Above Average Growth						
Transp., Comm. & Public Utilities	8.2	-6.7	65.6	7.1		
Construction	5.1	-7.3	17.9	3.8		
Services	3.7	-1.6	6.7	23.1		
Below Average Growth						
Finance & Real Estate	1.7	0.0	4.4	3.2		
Government	1.4	-2.7	7.8	21.4		
Retail & Wholesale Trade	0.9	-2.8	4.4	22.1		
Manufacturing	0.1	-4.1	7.0	19.0		
Total Employment	1.9	-0.7	3.6	100.0		

While there are a number of other major manufacturing concerns in Muncie, most notably the ABB (formerly Westinghouse) facility producing electric transformers and Indiana Steel and Wire, the bulk of industrial activity in the area is automotive-related. Since the fall of last year, when sales of domestic vehicles began to accelerate, production levels have been high at local factories, and overtime-induced increases in weekly earnings have pumped a considerable amount of cash into the local economy. As the automotive industry begins to cool, this extra stimulus will be reduced and spending will taper off.

In the last few years, three of the area's eight largest manufacturing employers have reorganized. There is every reason to expect them to be successful financially. Nevertheless, were any of the three to run into difficulty, there would be a significant impact on the local economy.

Finally, there is the question of the \$40 million Daleville Outlet Mall currently under construction near Interstate 69 in the southwest corner of the county. Its backer's projections of 500 new jobs and a \$10 million payroll would be a shot in the arm for that community. If this mall and its associated developments do succeed in attracting shoppers from the

northeastern portion of the Indianapolis MSA, then it may fulfill these hopes and bring new dollars into the area

#### Other Developments

A number of developments hold promise for future economic growth in Muncie and the surrounding counties of east central Indiana. Tyson Foods recently announced it would construct a food processing plant in Portland that could eventually add as many as 600 new jobs to economically hard-hit Jay County.

New Venture Gear's \$96.6 million investment currently under way in its Muncie transmission plant is projected to add more than 300 new jobs. The plant, formerly owned by General Motors' Chevrolet Division, should also retain about 150 jobs as a result of the overhaul.

The growth in retail activity in the northwest part of Muncie along State Road 332 continues to flourish. Ground will be broken on a \$10 million Meijer's store in July. It soon will be followed by a \$6 million Sam's Club.

#### Conclusion

The Muncie MSA economy has grown steadily, if not spectacularly, through the early 1990s. It is currently benefiting from the high levels of production in automobile-related industries and could continue to experience growth if the car industry prospers, and if a number of major developments currently under way produce the results their investors anticipate.

## Richmond-Connersville-New Castle

#### Ashton I. Veramallay

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

The midyear economic outlook for Richmond-Connersville-New Castle (RCNC) is for continued growth in the next two quarters of 1994. This assessment hinges on national economic performance. Although the national economy is slowing down, it remains sufficiently strong to produce sustained job growth, which will influence the local economy.

The recent drop in the RCNC unemployment rate into the single-digit range, after a protracted period of high unemployment, is exhilarating. Firms are rehiring

laid-off employees and recruiting new workers. Currently, there are at least 12 business expansions at various stages in the region. As more workers are gainfully employed, they contribute positively to both their communities and the state's coffers. In doing so, they help stimulate business activity and reduce government transfer payments, particularly unemployment compensation. Compared to a year ago, there has been a 25% decrease in unemployment claims. If this trend continues, barring any major plant closings, it is likely that RCNC could experience an unemployment rate of between 5.5-6.5% during the remaining quarters of 1994, the lowest since 1989.

Furthermore, the decline in the RCNC unemployment rate is partly attributable to local economic development initiatives. The existing private-public sector partnerships at all levels are beginning to pay off through the aggressive marketing of RCNC as an attractive business area. The business climate here is favorable. The labor force is adaptable to technological changes and labor-management relations are in a progressive mode. The infrastructure is improving as well. All of these ingredients are vitally important to enhanced economic development.

But the task of revitalizing the area's economy has just begun, given the skewed income distribution. About 40 percent of RCNC households have an annual income of less than \$20,000, while 5% of households have an annual income of \$75,000 or more. The poverty rate, which relates current income to the minimal needs of a family, is also increasing. Most of the jobs created are low-paying jobs, which in turn will increase income disparity—with far-reaching consequences for economic stability and growth. Thus, one of the tasks of economic development is to ensure an equitable distribution of income along with full employment.

Related to employment is consumer spending. Consumers are becoming more confident about the future course of the economy, despite corporate restructuring. Local merchants can therefore expect sales to follow along seasonal patterns. The Memorial Day weekend, highlighted by the Indy 500 and Pacers mania, has already given RCNC merchants a good start. The Rose Festival and tourism business will provide additional fuel to the retail engine, which generates a significant proportion of gross local product. Also, to reassure consumers, the Fed's recent hikes of short-term interest rates were preemptive strikes to dampen inflationary expectations or pressures due to the robust growth in fourth quarter 1993. The national economy is fundamentally strong, and I predict it is in for another period of economic expansion—provided there is a right mix of fiscal and monetary policy and an absence of adverse exogenous conditions.

However, the recent observance of the 50th anniversary of D-Day is a grim reminder of the volatile political landscape, both at home and abroad. Democracy inflicts a heavy price. It is not inimical to economic development. In the absence of an ideal world of democratic institutions there is no reason for complacency. Accordingly, vigilance is of quintessential importance. Together as Americans, we can ensure it. By understanding the correlation between peace and prosperity, we underscore the interdependence principle—and RCNC is not immune to it.

## Columbus

#### **Patrick Michael Rooney**

#### Associate Professor of Economics, IUPUI Columbus

The Columbus employment base has experienced tremendous growth for the past year, and especially for the past quarter. The number employed has grown 25% between first quarter 1993 and first quarter 1994, and 11.6% since fourth quarter 1993. To demonstrate how much faster than usual employment has grown during this period, let us examine the historical

Table 1 Columbus Area Employment Growth: 1974-1994

wat gay	Unemployment Rate (Mean)	Total Number Employed (Mean)	Average Monthly Employment Growth Rate
Short Run		V. 15,750.2	
1974-1979	5.23	25,461	0.25%
1980-1989	8.24	27,662	0.10%
1990-1994	5.26	30,415	0.40%
101994	4.28	36,673	3.88%
Long Run			
1974-1994	6.72	27,588	0.20%

Table 2 Columbus Area Financial Performance

	All Industry Average	Special Machinery	Cummins	Auto Parts Industry	The "New" Arvin
Sales: % change 1Q93-1Q94	7	14	5	15	6
Profits: % change 1Q93-1Q94	16	228	33	49	-9
Return on equity	12.5	18.0	26.8	-5.0	9.3
Price earnings ratio (4/22/94)	19	19	8	15	15
12 mos. earnings/share	\$1.84	\$2.63	\$5.21	-\$0.63	\$1.78

averages (see **Table 1**). For the past two decades (first quarter 1974-first quarter 1994), employment growth has averaged 0.2% per month. From 1974-80, employment grew 0.25% per month on average. The 1980s averaged 0.1% per month. From 1990 to first quarter 1994, the growth rate picked up dramatically, growing at 0.4% per month. However, for the past year, employment growth has averaged 2.1% per month for the past year and 3.9% per month since fourth quarter 1993.

Likewise, the unemployment rate has fallen from 5.6% a year ago to a 4.3% average rate for first guarter 1994. However, the unemployment rate in the first quarter edged up from a very low 3.8% in fourth quarter 1993. This was due to the 24.2% increase in the number of unemployed between fourth quarter 1993 and first quarter 1994. This jump seems to be somewhat seasonal, as the number unemployed in the first guarter of this year is only 5.4% greater than a year ago. Several local business people have said that the local unemployment rate "feels" lower than 4.3% and gave evidence of many fast food establishments paying higher than the minimum wage to attract sufficient labor. Also, there seem to be many "Help Wanted" signs posted in windows throughout the city that remain for long periods of time.

The theory that the fluctuation in the number of unemployed and the unemployment rate between the end of last year and the beginning of this year was attributable to seasonal factors is further evidenced by the behavior of unemployment insurance claims. While continued unemployment insurance claims increased 62.1% from the end of last year to the beginning of this year, they actually fell almost 15% from a year ago. Likewise, initial unemployment insurance claims grew almost 11% from the end of last year but are virtually unchanged from the same period a year ago.

Residential construction started this year with a bang. The estimated value of permits issued in the first quarter averaged \$4.3 million per month and \$118,900 per permit. Monthly construction is up 16.7% from the end of last year and 52.3% from a year ago.

The real estate market has continued to appreciate. Of those houses that sold in the first quarter, the average sale price was \$92,805, which is up more than 6% from a year ago. The number of houses sold is up a healthy 13.3%, and the average number of days on the market is 11% lower. Sellers continue to receive top dollar, having received 96% of the list price in the first quarters of both this year and last. During this time, housing in Columbus has remained quite affordable. The Housing Affordability Index (HAI) dropped slightly from 207 in first quarter 1993 to 204 this year, still above the state average of 193.

Table 2 shows that the "New Arvin" has performed about the same as the overall "all industry" average in most categories—the main exception being profit growth. Arvin outperformed the auto parts industry with respect to return on equity and 12 months' earnings per share, but it has not done as well in either growth of sales or profits between first quarter 1993 and first quarter 1994. Arvin continues to restructure itself, selling off its non-core divisions. In the process, it continues to increase production with less space and fewer labor inputs. Its European

Figure Columbus Area versus National Unemployment: 1974-1993

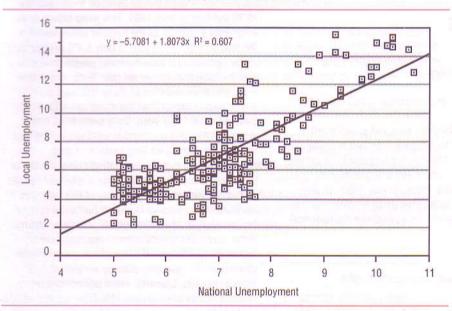


Table 3 Columbus Area Economic Data

	1094	4093	% Change 4093-1094	1093	% Change 1093-94
Labor Market					
Number Employed	36,673	32,847	11.65%	29,337	25.01%
Number Unemployed	1,640	1,320	24.24%	1,733	-5.37%
Unemployment Rate	4.3%	3.8%	13.16%	5.6%	-23.21%
Cont'd Unemp. Ins. Claims (000s)	3,880	2,394	62.08%	4,560	-14.93%
Initial Unemp. Ins. Claims (000s)	533	482	10.73%	531	0.44%
Residential Construction/Real Estate					
Est. Value of Permits (\$000)	4,279	3,668	16.68%	2,811	52.26%
Number of Permits Issued	36	34	5.88%	32	12.50%
Number of Homes Sold	196	n/a	n/a	173	13.29%
Avg. Number of Days Listed	119	n/a	n/a	134	-11.19%
Avg. Market Price (sold)	\$92,805	n/a	n/a	\$87,389	6.20%

Sources: Indiana Business Research Center, Indiana University; The Republic: Multiple Listing Service

acquisitions should boost Arvin's numbers after Europe resumes faster growth.

Cummins has outperformed both the "all industry" average and its reference group, "special machinery," in return on equity and 12 months' average earnings per share. Cummins is slightly below the overall average and well below its industry average with respect to sales growth. Although Cummins' growth in profits is double that of the overall average, it is only a fraction of the industry average. (Though the "special machinery" group's 228% increase in profits is affected by very large increases for a few firms, more than 40% of the firms in this category experienced profit growth in excess of 140%.)

#### The Forecast

Using a simple econometric model, we can try to predict changes in the local unemployment rate associated with changes in the national unemployment rate. As we can see in the Figure, since 1974 a 1% increase in the national unemployment rate is associated with a 1.8% increase in the local unemployment rate. Since the national rate just fell from 6.4% to 6.0%, we can expect the local rate to fall by approximately 0.75%. It should be noted that because the local unemployment rate is already quite low, this relationship may not hold for such low rates. However, the overall relationship between local and national unemployment rates does reflect the procyclical nature of the Columbus economy. In other words, much of the local employment base is dependent on durable goods manufacturing, so the local economy tends to move in the same direction as the overall economy, only in a more pronounced fashion.

Because so much of the economy is driven by the demand for durable goods, the local economy is also more sensitive to fluctuations in interest rates. Another econometric model found that increases in the federal fund rate are associated with small but significant increases in the local unemployment rate and decreases in local employment (initial unemployment insurance claims nationally is also a good predictor of the local labor market). Since the Fed has just raised interest rates four times in the past four months, we can expect some of the local growth to be attenuated by the increased interest rates.

Overall, I am forecasting a continuation of the current recovery, which is 39 months old. I anticipate an 80% probability that the economy will continue to experience moderate, sustainable growth of about 3% for the rest of this year as well as next. This implies continued downward pressure on the national and local unemployment rates but very little upward pressure on inflation.

There is a small (10%) chance that the economy will ignore the interest rate increases and grow more

rapidly than expected. If this happens, the bond market will react unfavorably, and long-run interest rates will be driven higher fairly quickly as investors brace for an increase in inflation, thus choking off further excessive growth.

Finally, there remains a small (10%) probability that the interest-rate sensitive sectors, which have provided almost 80% of the growth this past year, will react violently to the current or any future interest rate increases. This would create "recessionary growth" (real growth between 0-2%) or a full-blown recession. Such a scenario would see the national unemployment rate moving back up and the local unemployment rate worsening at almost twice the speed of the national employment rate.

**Table 3** provides a more detailed look at various Columbus area economic data.

## Kokomo

#### Dilip Pendse

Associate Professor of Economics, Indiana University Kokomo

Kokomoans deserve applause! Both Howard and Tipton counties turned 150 in June. And Kokomo is celebrating the centennial of one of its many firsts—the nation's first automobile, designed by Haynes and built by Apperson Brothers. Since 1894, Kokomo's love affair with the auto industry has withstood recession, restructuring, downsizing, and foreign competition. It has survived and thrived on the economic rollercoaster. The year 1994 will perhaps be one of the glorious years in Kokomo's economy.

Kokomo is celebrating its humming factories. Local plants are churning out goods at a pace unheard of in recent years. Manufacturers are pushing workers into long hours of overtime. Through the first four months of 1994, the average length of a factory work week remained at 47.9 hours—4.2 and 8.6 hours longer than during the same period in 1993 and 1992, respectively. In April, the average weekly earnings in the durable goods sector stood at \$940.38, compared with \$844.20 in 1993 and \$709.53 in 1992.

The city is also celebrating its growing labor market and the rolling job machine. Signs such as "Now Hiring" and "Help Wanted" have become a common sight in the area. Howard County's labor force has reached a new peak. Through the first four months of 1994, the average size of the labor force

swelled to 43,018, compared with 41,303 in 1993, 39,603 in 1992, and 39,368 in 1991. On the average, 2,303 people remained jobless per month during January-April, compared with 3,680 a year ago, 3,185 in 1992, and 4,625 in 1991.

In a technical sense, Kokomo is virtually at a "full employment" stage. Average unemployment during January-April plunged to 5.4%. The average rate is 1.1, 2.6, and 6.3 percentage points below the rate reached during the same period in 1993, 1992, and 1991, respectively. Through the first four months of 1994, Howard County's unemployment rate remained below national and state levels.

Kokomo's job machine is rolling in high gear. In April, 49,400 people remained on payrolls in the greater Kokomo area—600 more than a year ago and 2,800 more than two years ago. During the 12 months ended in April, the goods-producing sector registered a gain of 700 jobs, whereas the service sector posted a loss of 100 jobs. Manufacturing, which accounts for 42% of nonfarm jobs, posted a gain of 900 new jobs—4.5% higher than in 1993.

Kokomo is celebrating the booming housing sector as well. The value of 387 permits issued during January-May totaled \$35.1 million. Residential construction permits accounted for 86% of all permits issued during the first four months of the year. The number of permits issued to build single-family homes totaled 131 during January-April 1993, just 20 permits short of the peak reached during the same period in 1978. To put it differently, permits for single-family homes were issued at a rapid clip of almost 30 a month (one per day). The home-building sector, long dominated by local builders, is now seeing more competition. The boom in the single-family home construction sector has drawn builders from Indianapolis, Marion, and Lafayette.

Unlike the residential sector, the nonresidential sector remained inactive. Among the major nonresidential projects that got under way during the first five months of 1994 were hospital expansion, a compost building, a chemical storage complex, a restaurant, and business-office expansions.

The local real estate market remained busy during first quarter 1994. According to the Center for Real Estate Studies at Bloomington, Kokomo realtors sold 207 homes valued at \$52 million. The period of January-March was the third best first-quarter performance since 1987.

As the economy enters the second half of 1994, what do I see? As I peer at the economic horizon, I see clear skies—no dark clouds, no hazy atmosphere, no wisp of smoke. The glitter of good economic news will remain. Economic changes registered during the early months of 1994 have made me revise my winter IBR forecast upward. The payroll number will cross

the 50,000 mark, average unemployment should remain at or below 5.5%, and the average factory work week will remain at 45.5 hours. The labor force will continue to swell.

The boom will continue in the residential sector of the housing market as well. Just about 300 single-family building permits will be issued for 1994. Total building permits issued should reach 875. The number of houses sold will cross the 1,150 mark.

In a nutshell, the spectacular performance of economic fireworks will dazzle economic skies for the rest of the sesquicentennial year.

## Louisville/Jeffersonville/ New Albany

#### **Fay Ross Greckel**

Professor of Economics, Indiana University Southeast

The Louisville metropolitan area economy has been moving ahead rather well in the past two or three quarters. The 1990 census data resulted in a change in the official boundaries of the Louisville MSA. (Com-

muting patterns, among other factors, determine MSA boundaries.) So the Louisville MSA now consists of four Indiana counties (Clark, Floyd, Harrison, and Scott) and three Kentucky counties (Jefferson, Bullitt, and Oldham)—with Clark, Floyd, and Jefferson accounting for much of the population and employment.

With the decade nearly half over, employment data are finally being revised to be consistent with the new MSA definition. On this new basis, total nonagricultural employment topped 500,000 during fourth quarter 1993 (see Figure 1). The seven-county economy has grown by more than 10,000 jobs in the past 12 months. Although most of the net job growth has been in various nonmanufacturing sectors, manufacturing employment has also expanded, with durable goods production gaining about 1,000 jobs. Some of this expansion is attributable to the Ford heavy truck plant, where output in April was more than double that of April 1993.

When the Indiana portion of the MSA is considered by itself, both manufacturing and nonmanufacturing employment also appear to have increased, although the nonmanufacturing gains are more modest than in the Kentucky portion of the MSA (see Figure 2). Unfortunately, the nonmanufacturing (or "service producing") job statistics reported by the Indiana state office contain a serious error, and until that problem can be resolved it will be difficult to get an accurate picture of employment trends in this sector.

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

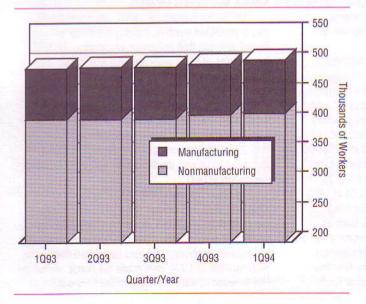


Figure 2
Clark/Floyd/Harrison Counties Employment Data (Seasonally Adjusted)

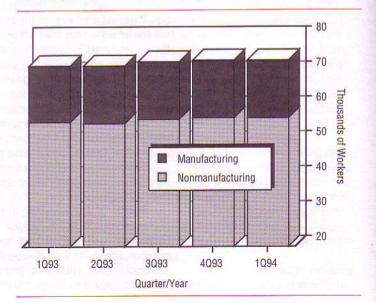


Figure 3
Residential Building Permits: Jefferson County, Kentucky

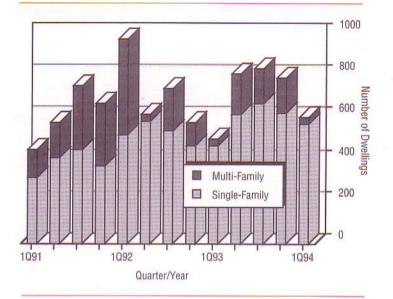
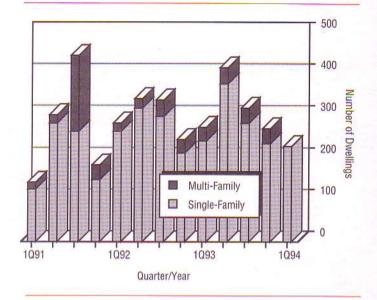


Figure 4
Residential Building Permits: Clark/Floyd/Harrison Counties, Indiana



The unemployment rate reported for the Louis-ville area in April was 4.1%, a full percentage point below the rate reported a year ago—and well below the 5.1% reported for Indiana and 6.2% for the United States in April. (None of these rates is seasonally adjusted.) The improved employment situation is reflected in the decreased need for emergency food supplies from Dare To Care. First-quarter emergency food distributions were down about 4% from first quarter 1993, despite the severe weather experienced here this winter.

The improved employment situation has boosted income and consumer optimism. That, combined with mortgage refinancing—which has left more discretionary money in many bank accounts each month—and an aging motor vehicle stock have boosted auto purchases. New car sales in Jefferson County were 10.8% higher than a year ago; sales of new light trucks were 5.8% higher. New car dealerships in Clark and Floyd counties reported a 2.5% gain in car sales and a 5.7% increase in sales of light trucks.

Money has also been flowing into the housing market during the past several quarters. Demand for new single-family homes has kept most builders and subcontractors extremely busy. This has been especially true in the southern Indiana counties, where the market for more expensive homes has been very strong. First-quarter building permits, shown in Figures 3 and 4, do not indicate the current strength of

this sector, largely because the severe winter delayed many projects.

Sales of existing homes are also continuing at a strong pace, with not much dampening evident as yet from the 1% or so increase in interest rates. By historical standards, current rates are still attractive. However, mortgage refinancing has declined rather sharply—partly because so many homeowners have already done this and partly because the higher interest rates reduce the advantage of doing this now.

Banks report strong demand for commercial loans to finance expansion and new building. There are also indications of an increased interest on the part of outside firms to locate their plants and offices in the Indiana portion of the MSA, especially Floyd and Clark counties. The long-awaited, soon-to-occur opening of the I-265 spur east to the Clark Maritime Center will add to this attraction.

The rest of 1994 looks very positive for the area economy, with the current pace of moderately strong activity continuing. The Louisville area has succeeded in maintaining moderate growth for several years now, avoiding the boom-and-bust pattern of other areas, and most sectors seem strong. If interest rates rise significantly or if the prophesied slowdown in national economic growth occurs in the second half and is of some depth, then the economy here will likely be somewhat restrained. But it should continue to outperform that of the nation.