

## Midwest Turnaround

The years from 1978 to 1988 were difficult for the Midwestern states. Indiana and its four neighboring states, plus

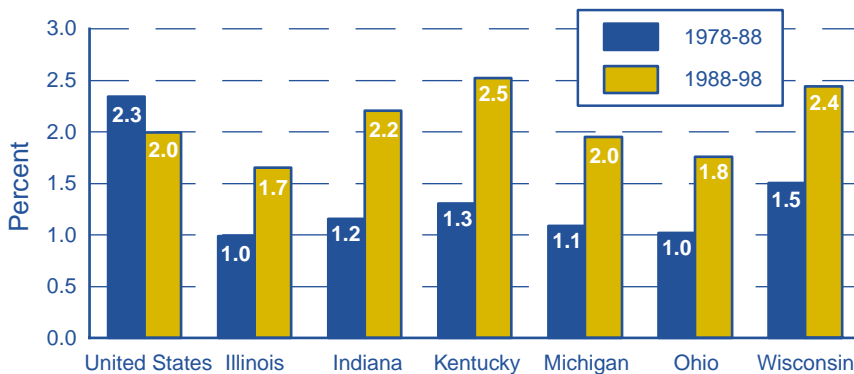
Wisconsin, added private sector jobs at an average annual rate of just 1.1% during those years, while the nation enjoyed a 2.3% annual increase. But the picture has changed. In the subsequent 10 years, 1988 to 1998, both the nation and this six-state region have seen jobs grow at a 2% average annual rate.

While every state in the region witnessed a bounce back in private sector employment growth (see Figure 1), the experience is far from uniform. Indiana, Kentucky and Wisconsin, the three smallest states of the region, have been the leaders in recovery, each topping the nation's 2% growth rate. The larger states (Illinois, Michigan and Ohio) have been lagging.

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Figure 1: Average Annual Percent Change in Employment, by State

Midwest outperformed the nation



Source: U.S. Bureau of Economic Analysis

### IN the Details

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the economy is surveyed over a three-year period to obtain employment levels by occupation. There are 75 industries from the Standard Industrial Classification system at the two-digit level, and more than 700 occupations. The next set of projections, through 2008, will be issued later this year and will use industry data at the three-digit SIC level for about 400 industries.

#### Industry/Occupation (I/O) Matrix

The next step is to create the industry/occupation matrix, which presents the occupational staffing patterns of each industry. It tabulates

employment cross-classified by industry and occupation.

#### Industry Projections

Projecting the growth and decline of individual industries is the third step in preparing the forecast. Changes in industry structure will affect the growth and decline of the occupations needed to staff those industries.

Statewide annual average employment projections are produced for each industry based on statistical analysis of data from DWD, BLS and the U.S. Census Bureau. In addition, qualitative information from local and state labor market analysts is used to adjust industry projections.

#### Occupational Employment Projections

The last step is to forecast employment demand by occupation within each industry using the I/O matrix. Statewide estimates are developed for the base year (1996) and projected to the year 2006. They take into account factors, developed by BLS, that estimate changes in industry staffing patterns brought about by new technology and changing business practices.

The projected estimates include annual net job openings caused by both new demand due to growth and replacement needs. Average net openings for each occupation are the sum of growth demand and

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The details of the turnaround for Indiana are shown in Table 1. From 1988 to 1998, the Hoosier state increased its relative standing in the nation in each major sector of the private economy, compared to the 1978–88 period. Except for transportation and public utilities (where mergers and buyouts moved corporate headquarters from Indiana), Indiana’s rank in the nation for employment growth rose in each sector and from 40th to 31st overall.

The same data appear even more dramatic when considered as shown in Figure 2. In most sectors, the nation’s employment growth slowed. In Indiana, services was the only sector that grew less rapidly in 1988–98, compared with 1978–88. And even here, Indiana outperformed the nation, which had a greater slowing in employment growth.

As is often the case, manufacturing made the big difference for Indiana. After experiencing a 1.5% average

annual decline in manufacturing in the 1978–88 period, the state rebounded with a 0.8% average annual growth in the next 10 years. The nation, however, saw manufacturing employment declines in both periods.

The surprise in these data, however, may be the finance, insurance and real

estate sector. Despite dramatic changes in the industry, Indiana moved from the 42nd-fastest-growing state between 1978 and 1988 to 18th place in the next 10 years. This jump of 24 places was the largest the state made between these two very different periods.

Figure 2: Differences in Average Annual Growth Rates, 1978–88 & 1988–98

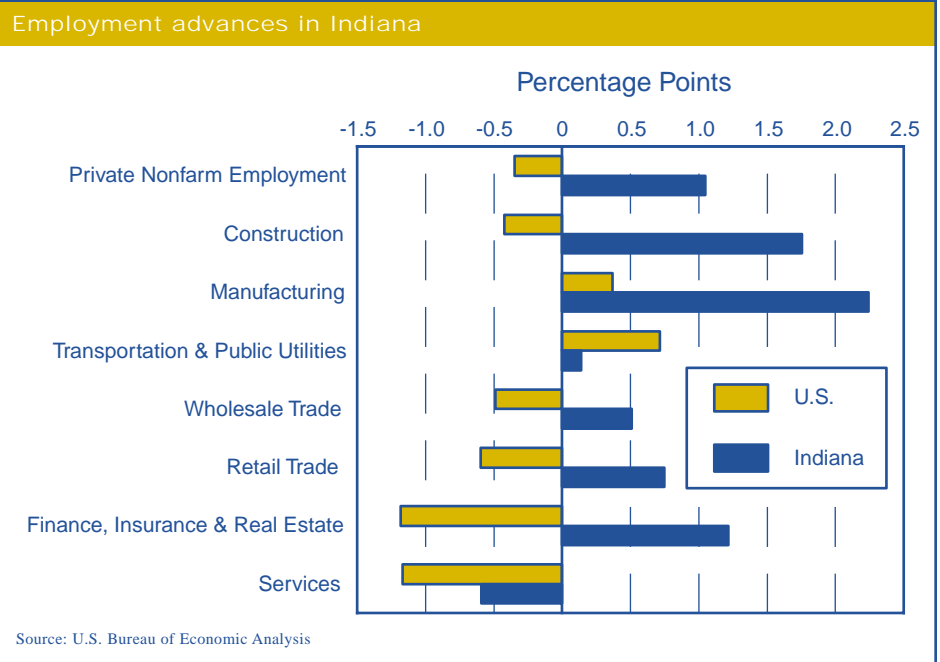


Table 1: Average Annual Percent Change in Employment

	United States		Indiana			
	1978–88	1988–98	1978–88	1988–98	Rank in Nation	
					1978–88	1988–98
Private Nonfarm Employment	2.3	2.0	1.2	2.2	40	31
Construction	2.5	2.1	1.4	3.1	24	23
Manufacturing	-0.5	-0.2	-1.5	0.8	41	23
Transportation and Public Utilities	1.4	2.1	1.4	1.5	29	32
Wholesale Trade	1.8	1.3	1.3	1.8	30	21
Retail Trade	2.5	1.9	1.6	2.3	32	25
Finance, Insurance, and Real Estate	2.6	1.4	0.9	2.1	42	18
Services	4.5	3.4	3.9	3.3	29	27

Source: U.S. Bureau of Economic Analysis