

R E G I O N A L economic

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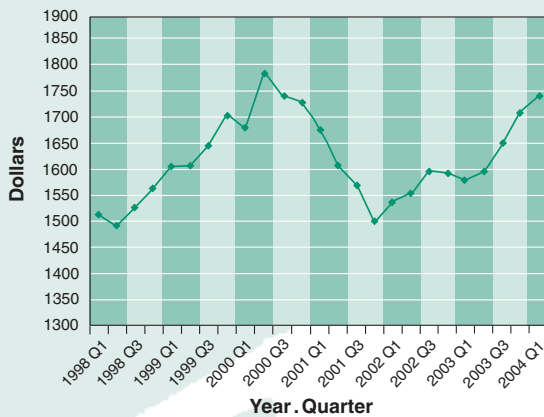
R E P O R T
Spring 2004

THE REGIONAL ECONOMY TODAY

By Thomas L. Traynor, Professor of Economics, Wright State University

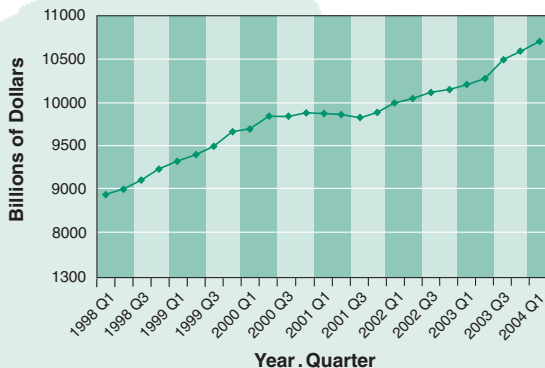
Since the performance of the local economy tends to follow that of the national economy, a quick review of the U.S. economy is in order. Many indicators of national economic performance have shown marked improvement over the past year. Gross Domestic Product (GDP) has grown at annualized rates of 8.1 percent, 4.1 percent, and 4.2 percent (preliminary) over

Figure 1
U.S. Investment in Billions of Real Dollars (2000 Dollars)



Source: Bureau of Economic Analysis

Figure 2
U.S. GDP in Billions of Real Dollars (2000 Dollars)



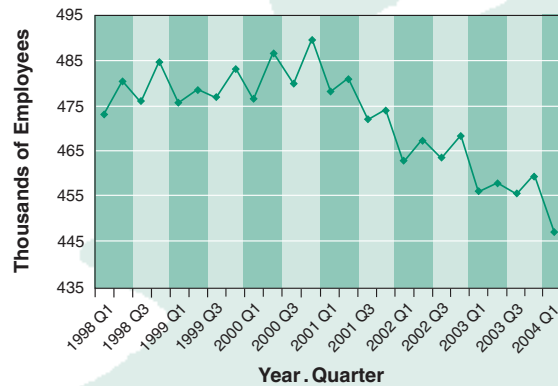
Source: Bureau of Economic Analysis

“Total employment for the region continued to decline in recent months, falling below 450,000 for the first time since 1994.”

the past three quarters. Capital spending by the U.S. business sector, the sector most responsible for the recent economic downturn, has risen significantly since the middle of last year. This, along with increased federal government spending, explains most of the increase in the GDP growth rate over the past year.

Total U.S. employment has risen for the seventh consecutive month, and more importantly, has risen by

Figure 3
Total Nonagricultural Employment - Dayton MSA Thousands of Employees



Source: Bureau of Economic Analysis

an average of 216,000 for the first four months of the year. The Conference Board’s Index of Leading Economic Indicators, which is designed to project GDP growth eight to 11 months in the future, has continued

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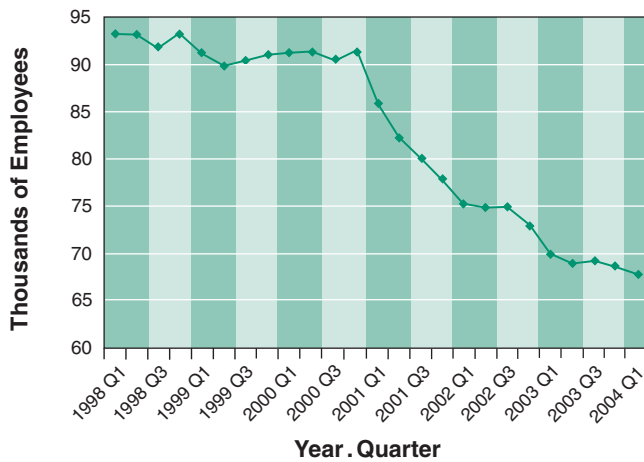
Questions or comments regarding the *Report* should be directed to Professor Thomas L. Traynor, Wright State University, Department of Economics, 3640 Colonel Glenn Hwy., Dayton, OH 45435-0001, or via E-mail to: thomas.traynor@wright.edu.

The *Wright State University Regional Economic Report* is underwritten by a Strategic Initiative Grant from the Raj Soin College of Business, Wright State University, Berkwood Farmer, Dean.

to rise in most recent months, indicating that economic growth should continue through the end of the year.

The economic performance of the Dayton Metropolitan Statistical Area (MSA) continues to be disappointing. Total employment for the region continued to decline in recent months, falling below 450,000 for the first time since 1994. This is a 6.5 percent decline in local payroll employment (from 478,000) since the same quarter in 2001. A particularly disappointing recent trend has been average hourly manufacturing wages which fell to \$18.35 in March, a \$2.36 decline from one year earlier. This reverses the gain in wages to hourly manufacturing workers that occurred from 2002 to 2003. Moreover, average weekly hours worked in the manufacturing industry remained relatively unchanged, an indicator that the region will not experience significant gains in manufacturing employment in the coming months.

Figure 4
Total Manufacturing Employment - Dayton MSA
 Thousands of Payroll Employees



Source: Bureau of Labor Statistics

Although data regarding recent wages and hours for non-manufacturing industries is not available yet, the local manufacturing industry is an important indicator of the region's economic health. Local manufacturing firms provide a larger flow of income from outside the Dayton area than any other industry. Hourly manufacturing jobs in the region pay an average of \$2.34 above the national manufacturing average, and \$5.83 above the region's service sector average. In addition, hourly manufacturing jobs often provide better benefits packages than hourly non-manufacturing jobs. The income generated by manufacturing employment is then spent locally, helping the industries that dependent on local customers.

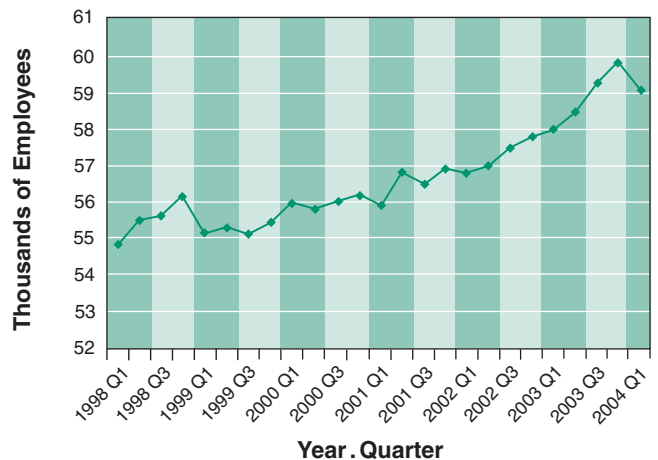
When all is said and done, manufacturing jobs typically have a more significant impact on the local economy than jobs in other industries. Thus, the decline in local manufacturing employment from a peak of

“The decline in local manufacturing employment...has been a significant drag on the local economy.”

93,200 in 1998, to 86,300 in 2001, and to 67,800 this year (27 percent overall) has been a significant drag on the local economy. This has an impact on local industries such as retail, and construction, as well as local government. This decline, after accelerating during 2001 and 2002, has been slowing in recent months.

Aside from manufacturing, the region's weakest performing industries over the past three years in terms of employment continues to be construction (down 10 percent), wholesale trade (down 18 percent), retail trade (down 12 percent), and transportation-warehousing-utilities (down 18 percent). As has been mentioned in previous editions of this newsletter, although an economic turnaround will slow the rate of employment decline in the manufacturing industry,

Figure 5
Total Health Services Employment - Dayton MSA
 Thousands of Payroll Employees



Source: Bureau of Labor Statistics

and may even bring about an increase in employment, continued technological improvements (which reduce the labor needed to produce goods), and increased competition from the global marketplace will continue to have a negative impact on employment in these industries in the long-run.

On the positive side, the finance and insurance industry has experienced 15 percent job growth in the past three years, and the health services industry continued to be a steady source of employment growth (up six percent). Overall, a simple statistical model that I have developed indicates that the performance of the national economy tends, on average, to influence the Dayton area labor market with a six month lag. The region has now gone nine months without a turnaround in employment totals. Hopefully, they will be forthcoming over the spring and summer this year.

INDUSTRY EMPLOYMENT FORECASTS

The forecasts presented in this issue are the result of individual term projects conducted by students in the M.S. in Social and Applied Economics program at Wright State University. The students in the course were each assigned an industry for which they developed an econometric model that would produce a proficient forecast. Eight of these were chosen based on their relative importance to the local economy, either as major employment sectors or as key components to the region's economic base.

The Dayton Metropolitan Statistical Area (Clark, Greene, Miami, and Montgomery Counties) will continue to feel the effects of the sluggish U.S. economy. The econometric model used to develop the forecasts for the *Report* predicts only a modest increase in total employment for the region, much of which is not expected until late in the year.

Total Employment—Total employment in the Dayton MSA is expected to rise for the second and third quarters of 2004, then accelerate during the fourth quarter of 2004, in part due to improved economic conditions and in part due to seasonal factors.

Manufacturing Industry—The manufacturing industry forecast projects a continued slow decline in the region's manufacturing employment throughout the remainder of 2004.

Transportation Equipment Manufacturing—Employment in the transportation equipment manufacturing industry is expected to experience a moderate rebound this year. The point forecast projects an increase of 1,000 jobs by the end of the year.

Trade, Transportation, and Utilities—Employment in the trade, transportation and utilities industry is expected to rise by roughly 3,000 employees in the second quarter of 2004 and remain unchanged through the third quarter of 2004. Due to expected improvements in the economy and seasonal (temporary) demand, fourth quarter employment is expected to rise significantly, by over 6,000 jobs.

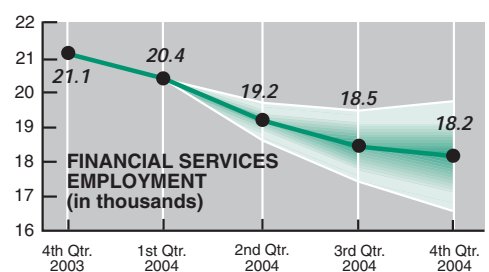
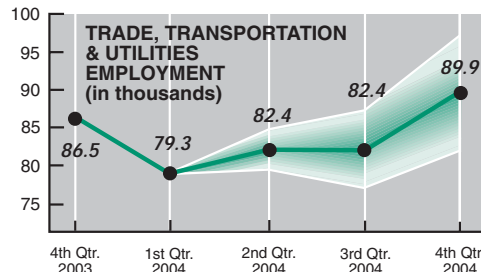
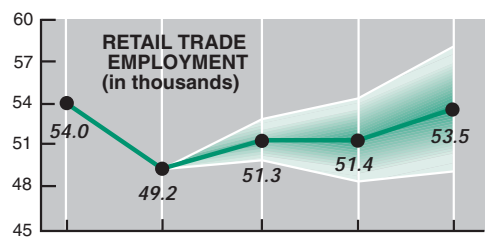
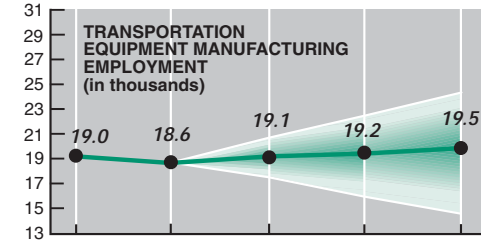
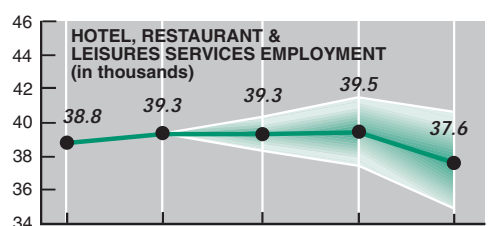
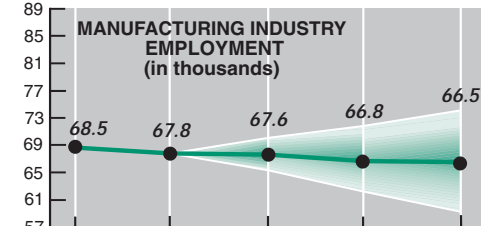
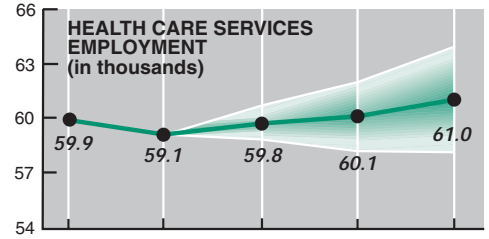
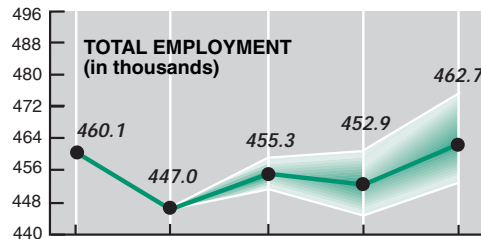
Health Care Services—Dayton-area health care services employment is expected to continue rising steadily throughout the remainder of the year.

Hotel, Restaurant, and Leisure Services—Employment in the hotel, restaurant, and leisure services industry is projected to remain relatively unchanged in the second and third quarters of 2004, before a seasonal decline in the fourth quarter of 2004.

Retail Trade—Local retail trade employment is expected to rise in the second quarter of 2004 and remain unchanged through the third quarter of 2004, before experiencing the usual seasonal boost at the end of the year.

Financial Services—Dayton area financial services employment is forecasted to decline steadily through 2004, by more than 2,000 jobs, after rising significantly over the three previous years.

The students involved in the production of these forecasts are: Adam Bellin, Gayatri Deshpande, Paul Johnson, Jon Kneer, Amanda Kyle, Michael Kubiak, Lin Liu, Jiamin Qi, Nick Ruszkowski, and Chandima Wingsinghe.



REGIONAL economic REPORT



The *Report* is published biannually and provides articles and forecasts pertinent to the Dayton Metropolitan Area's economy. The *Report* is sent to friends of Wright State University and is available at no cost to any interested parties. To be added to the mailing list, please call (937) 775-3070.

The cone shaped portion of the graphs represent the 90 percent margins of error for the forecasts. This means that the true future values of each industry's employment level should be within these ranges nine out of 10 times. Also the shading from dark to light represents that fact that the margins of error follow the bell curve, in that employment levels near point forecasts (the black line) are more likely to occur than employment levels near the outer limits of the confidence intervals (the white lines).



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