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May 3, 2006

Memorandum

To: Honorable John Morgan, Comptroller of the Treasury

Honorable David Goetz, Commissioner of Finance and Administration

Honorable Dale Sims, Treasurer

Honorable Riley Darnell, Secretary of State

From: Kevin Krushenski, Senior Legislative Research Analyst

Susan Mattson, Senior Legislative Research Analyst

Date: 5/3/2006

Re: Economic Report to the Governor

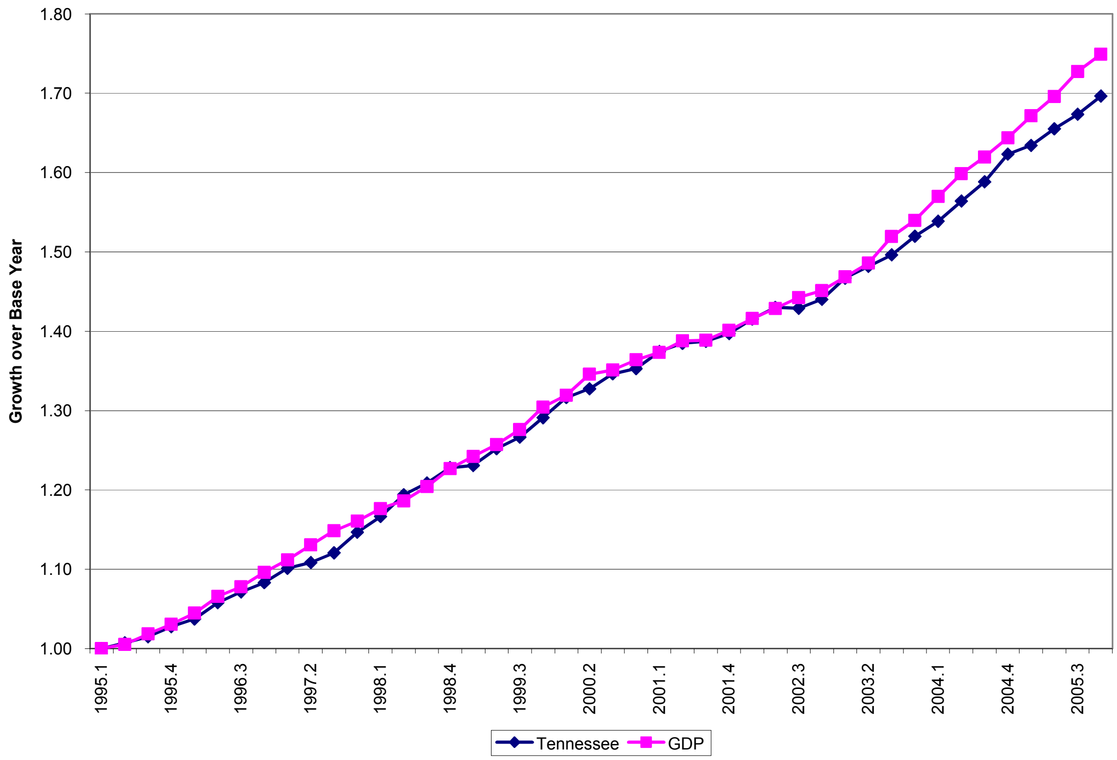
As required by TCA §9-4-5202, the State Funding Board (the Board) shall secure estimates of economic growth from the Tennessee econometric model published by The University of Tennessee's Center for Business and Economic Research (CBER) in its annual *Economic Report to the Governor* each year. The Report provides an overview of the current estimates of economic growth statistics, such as nominal personal income growth and employment growth. TCA §9-4-5202 also prescribes the Board to comment on the "reasonableness" of CBER's estimate of nominal personal income growth in Tennessee. The Comptroller's Office of Research assists the Board by evaluating current economic conditions and trends via outside forecasts.

Overall Conclusion: Based upon a review of various economic forecasts and other trends in the world economy, CBER's projections of 5.54 percent nominal personal income growth for 2006 appear reasonable.

Forecast Comparisons

Historically, growth in Tennessee personal income has closely followed growth in United States gross domestic product (GDP). Exhibit 1 shows the relationship between relative growth in Tennessee personal income as it compares to the relative growth in U.S. GDP over the past decade.

Exhibit 1: Relative Growth of Selected Economic Indicators



Source: United States Bureau of Economic Analysis, www.bea.gov, accessed 4/10/06

Because the relationship between the indicators is very close and the fact that very few other agencies produce estimates of growth in Tennessee Personal Income, for the purposes of this commentary we will compare the GDP estimates produced by CBER with the GDP estimates produced by other economic forecasting agencies.

The U.S. economy experienced solid real GDP growth in 2005 of 3.5 percent despite catastrophic natural disasters.[1] This is in line with last year's CBER projection of 3.6 percent. Projections by leading forecasting agencies for this year vary considerably. As Exhibit 2 shows, on average, economists forecast 3.4 percent real GDP growth for the U.S., which is the same as CBER's forecast of 3.4 percent. Economists are wary of the sustainability of current quarterly GPD growth and project a slowing in the growth rate of economic output throughout 2006.[2] Real residential investment, which contributed greatly to economic growth the past few years, showed signs of tapering off at the end of the 4th quarter of 2005 and going forward as interest rates continue to increase and that the net personal savings amount for 2005 was less than zero for the first time since 1933. These economic occurrences and other possible macroeconomic contributions will be discussed later in the commentary.

Exhibit 2: Forecast Comparison: 2006 Real GDP Growth

Agency	Rate	Forecast Date
Fannie Mae	3.8%	Apr-06
Wachovia	3.5%	Apr-06
Philadelphia FBR	3.2%	Feb-06
Northern Trust	3.1%	Apr-06
CBER	**3.4%**	**Jan-06**
Forecast Average	3.4%	

Source: Fannie Mae, Wachovia, Federal Reserve Bank of Philadelphia, and Northern Trust

Potential Macroeconomic Influences

Job Growth and Unemployment

A major economic concern remains the continued modest pace of job growth. Many economists are projecting job gains in many sectors for 2006. In the most recent release of the employment data, non-farm payroll employment increased by 211,000 in March, but the unemployment rate remained unchanged at 4.7 percent.[3] Exhibit 3 below shows the erratic growth in U.S. payrolls over the past three years.

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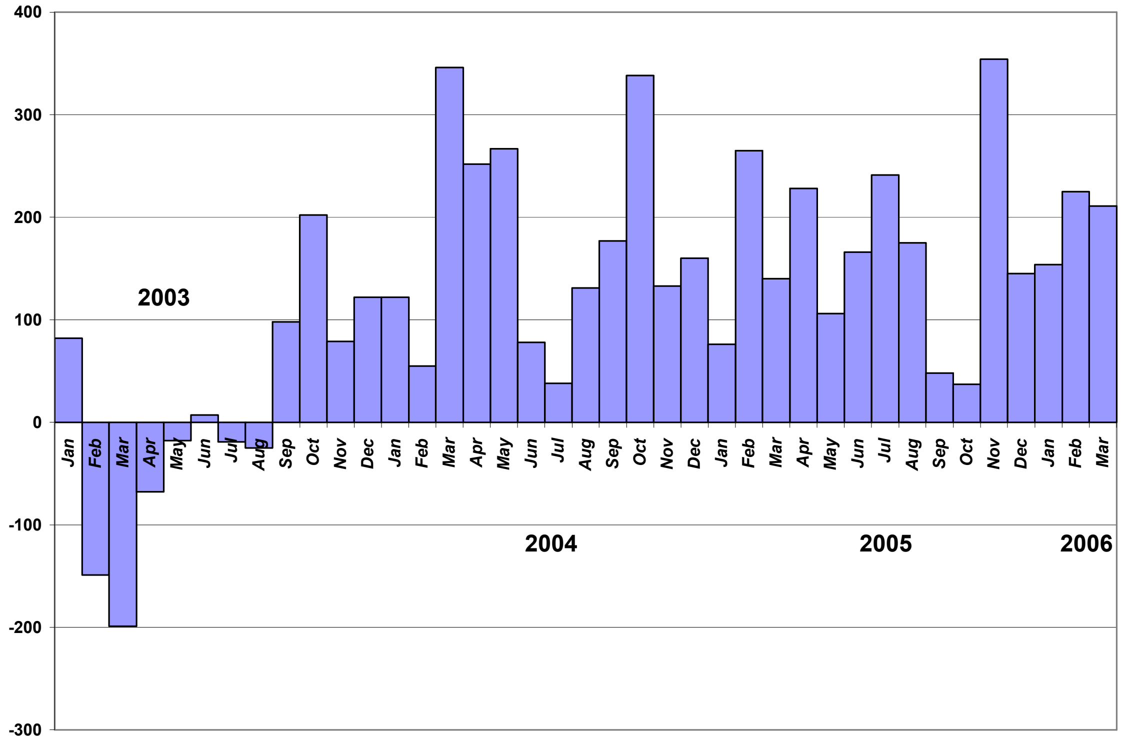
[1] "Gross Domestic Product: First Quarter 2006," Bureau of Economic Analysis, U.S. Department of Commerce, April 28, 2006

[2] "The Livingston Survey", The Federal Reserve Bank of Philadelphia, Research Department, December 8, 2005

[3] U.S. Department of Labor, Bureau of Labor Statistics, "Employment Situation Summary," April 7, 2006

Exhibit 3: Non-farm Aggregate Payroll Changes
(in thousands)

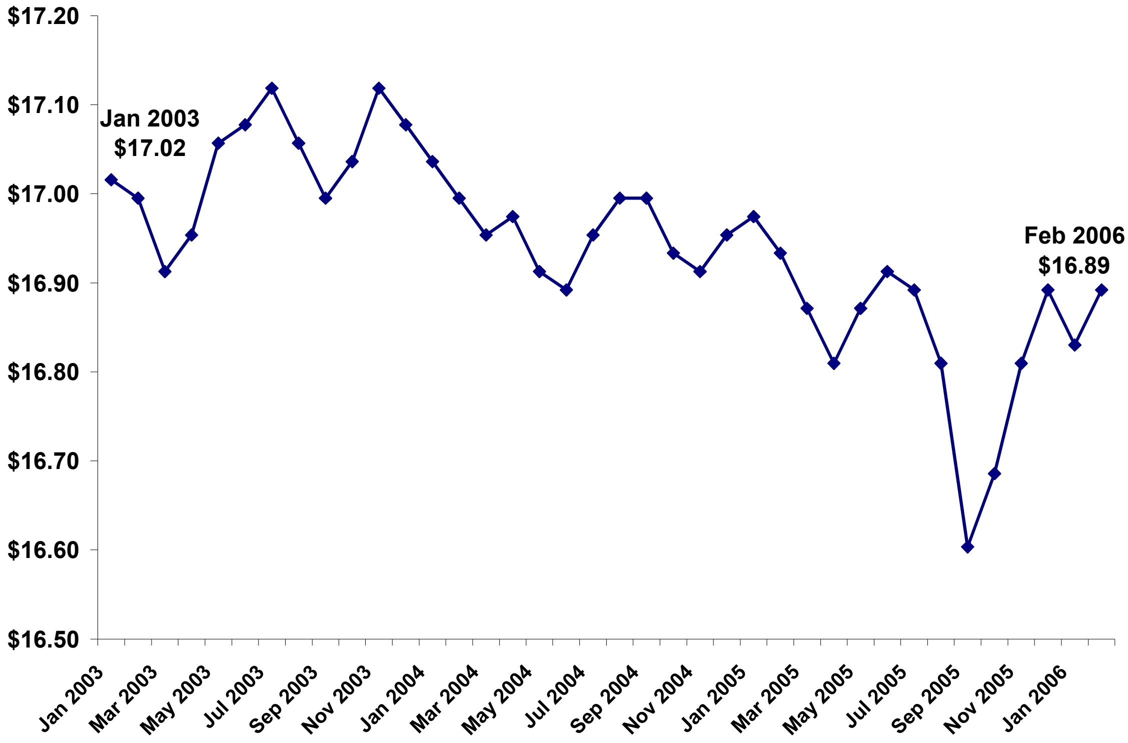


Source: U.S. Bureau of Labor Statistics, Employment, Hours and Earnings from the Current Employment Statistics Survey, accessed 4/10/2006

In March of 2006, 85 percent of CEOs participating in the Business Roundtable's CEO Economic Outlook Survey projected that employment will either remain the same or increase in the next six months. This is a substantial increase from last year. Forecasters projected the labor market to continue to add jobs over 2006, as well.[4] Of course, certain macroeconomic changes may impact this projected job growth. Despite favorable gains in aggregate employment numbers, employees noticed a reduction in real purchasing power. As Exhibit 4 shows, hourly wages, when adjusted for inflation, decreased throughout the past three years.

[4] "Survey of Professional Forecasters", The Federal Reserve Bank of Philadelphia, Economic Research, February 13, 2006

Exhibit 4: Real Hourly Wages for Non-Supervisory Employees



Source: U.S. Bureau of Labor Statistics, Employment, Hours and Earnings from the Current Employment Statistics Survey, accessed 4/10/2006

Inverted Yield Curve

A relatively unknown macroeconomic influence that economists harbor mixed opinions about is the yield curve. Simply, the yield curve is upward sloped since long-term interest rates are higher than short-term interest rates. In late December of 2005, interest rates on two-year Treasury notes rose higher than rates on 10-year notes creating what is known as a yield curve inversion.[5]

While economists may argue whether or not the inversion of the yield curve leads to slower economic growth and that its forecasting abilities of economic growth somewhat diminished since the 1980's, research suggests that it is still a very strong predictor of an impending recession.[6]

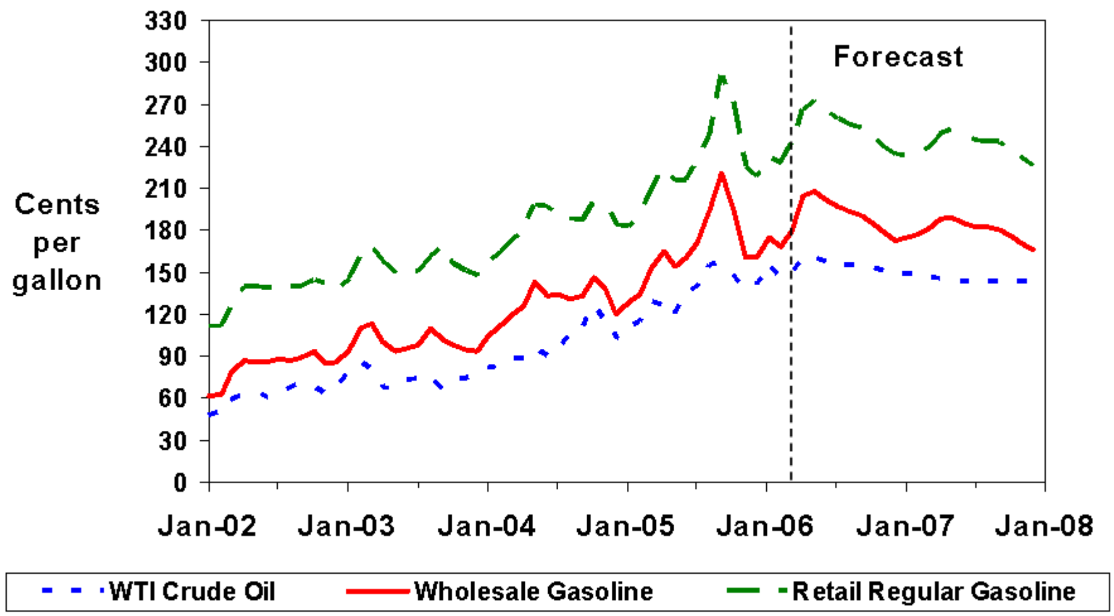
Oil Prices

Oil prices continued to be affected by increasing global demand and other international political matters. As stated last year, Middle Eastern issues continue to contribute significantly to increasing oil prices, but Hurricane Katrina seriously impacted the ability of the United States to extract crude oil and produce gasoline. Concurrent with oil price increases, retail gas prices increased and are expected to continue this trend. As Exhibit 5

[5] Gross, Daniel, "The World Isn't Flat, but Its Yield Curve May Be," New York Times, January 8, 2006.
[6] "What does the Yield Curve Tell us About GDP Growth?" Ang, Andrew, et. al., November, 2002, p.2

shows, this trend in oil and retail gasoline prices is not expected to subside anytime soon with projections higher than current levels.

Exhibit 5: Gasoline Price Outlook for 2006



Source: U.S. Department of Energy, Energy Information Administration, Short-Term Energy and Summer Fuels Outlook, April 2006

The Energy Information Administration (EIA) anticipates summer gas prices to top out near an all time high of $2.62 in nominal prices.[7] Anecdotal evidence suggests that gasoline prices already exceeded EIA's prediction in many cities. Also as stated last year, oil and gas price shocks such as these have a direct effect on economic growth since rising oil prices mean reduced supply of oil which is an important input to business production.[8] While the continued gas price inflation appears to spark outrage among consumers and concern among economists, practical evidence suggests current levels have not impacted demand.

Business Investment and Inflation

Most economists expect business investment to pick up this year through increasing capital spending regardless of inflation concerns. However, inflation is becoming a real concern. The Fed raised short-term borrowing rates to 4.75 percent recently, but the new chairman hinted that they may temporarily slow rate increases. This declaration drew mixed reviews from economists with some feeling the Fed may be soft on inflation and

[7] "Short-Term Energy and Summer Fuels Outlook," U.S. Department of Energy, Energy Information Administration, April 2006
[8] Stephen P.A. Brown, et al, "Business Cycles: The Role of Energy Prices," Working Paper 03-04, Federal Reserve Bank of Dallas – Research Department, 2003, p. 2

others relieved because they felt the Fed was inclined to push rates too high and stifle growth.[9]

The CEO Economic Outlook Survey found that 50 percent of CEOs anticipate increasing capital spending this year which is down from the 60 percent level of last year. However, as stated previously, CEO's predict the employment picture to remain strong.[10] In the past year, Tennessee made headlines when the state attracted the corporate headquarters relocation of Nissan, U.S.A. to the metropolitan Nashville area. The Tennessee Department of Economic and Community Development reported that the move would create 1,300 new jobs at an average salary of $80,000 per year. This relocation could therefore attract over $100 million in personal income to Tennessee as well as any other economic activity that may result from such a substantial investment.

Nissan was not the only employer to announce job expansion in Tennessee. As stated in last year's analysis, a vast majority of respondents to the CEO Economic Survey said they would not downsize their U.S. employment and that trend held for Tennessee as the state gained over 44,000 new jobs in 2005.

Summary

After robust economic growth the past two years, the economy appears poised to return to more moderate growth levels. Policy makers should continue to be aware of sustained high oil and gasoline prices, and inflation when coupled with the real reduction in employee purchasing power. The combination of these and the unsustainable trend that consumers spent more than they earned in 2005 may impede potential growth as well as consumption based tax revenues. Based upon this review, CBER's projection of 5.54 percent nominal personal income growth for 2006 appears reasonable.

[9] "Risky Business in 2006?" http://money.cnn.com, December 29, 2005, and "Fed might pause rate raises," Redding: Business News, http://www.redding.com, April 28, 2006

[10] "U.S. Chief Executives Predict Sustained Strong Economy Over Next Six Months; Project Strongest Employment Picture since Survey Began in 2002," March CEO Economic Outlook Survey Results, www.businessroundtable.org