ACTUARIAL NOTE
Number 157
May 2015

SOCIAL SECURITY ADMINISTRATION
Office of the Chief Actuary
Baltimore, Maryland

A BRIEF COMPARISON OF BASIC FINANCIAL PROJECTIONS SINCE 2000

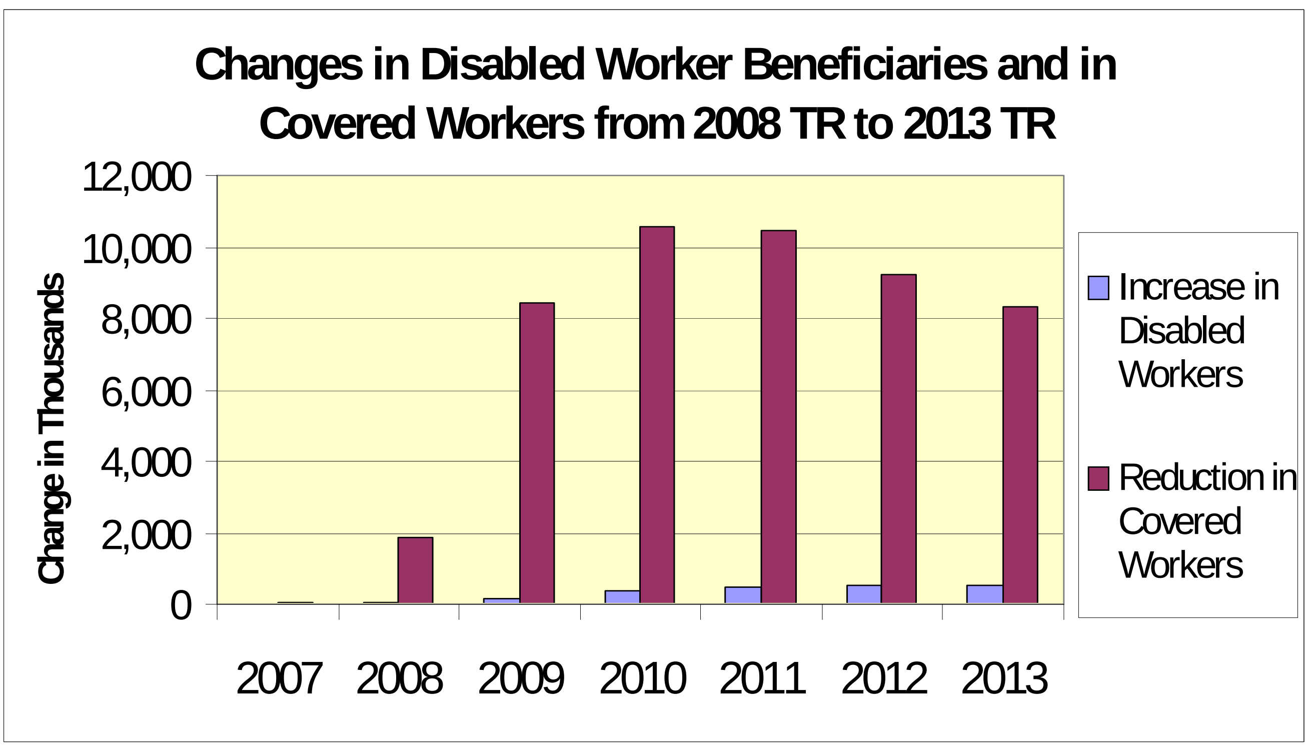
by Stephen Goss, Alice Wade, Karen Glenn, Robert Weathers, and J.Patrick Skirvin

Financial projections for all components of the federal budget in the near term are highly dependent on the growth in the economy. Revenue to all programs tends to mirror the trends in Gross Domestic Product (GDP) and employment. Social Security is no exception, with payroll tax revenue closely associated with the wage and self-employment income components of GDP. For example, an economic downturn reduces the number of workers covered by the Social Security Old-Age and Survivors (OASI) and Disability Insurance (DI) programs and their covered earnings, and reduces revenue to the OASI and DI Trust Funds. For benefits paid from the trust funds, deviations from expected GDP growth and the level of employment have the opposite effect. An economic downturn generally causes additional individuals without employment to seek retirement benefits and disability benefits earlier than they would have in a stronger economy.

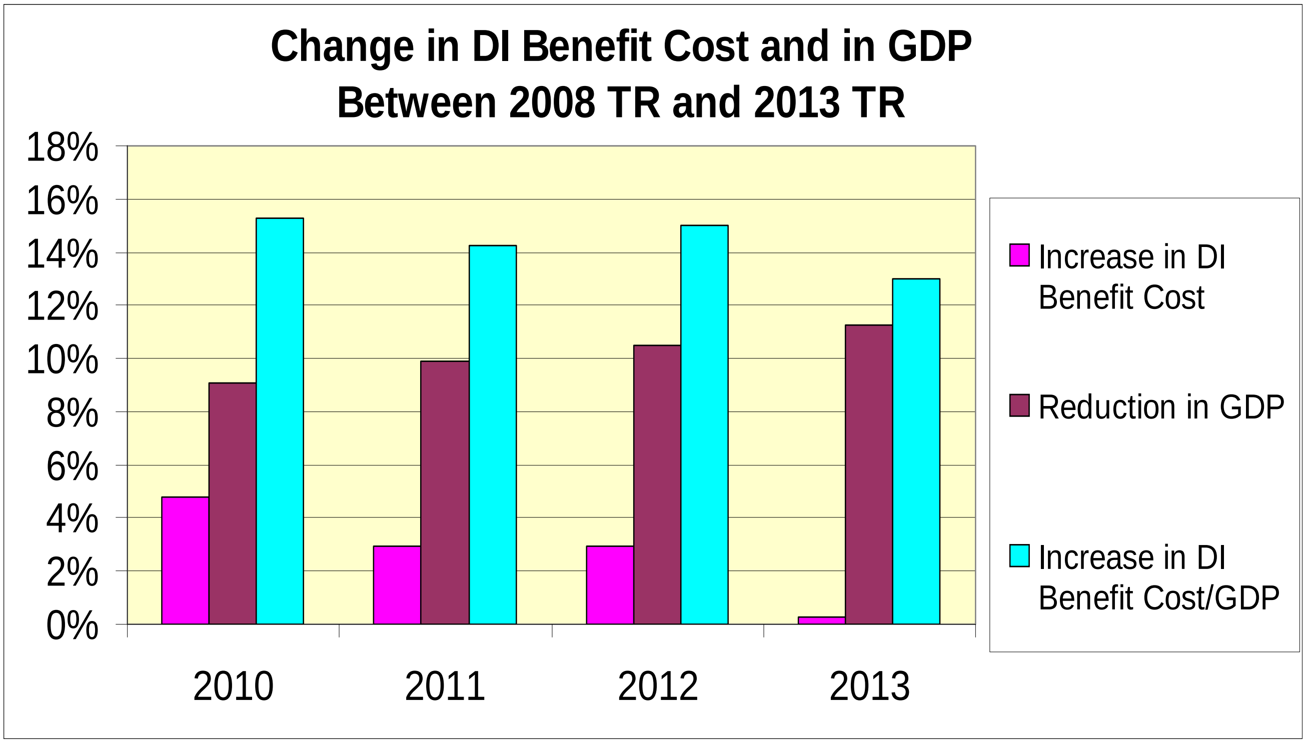
Experience Since 2007: A Case Study

The implications of the severe economic recession that began at the end of 2007 are now well known. The DI program has been under particular focus, as the recession has greatly diminished revenue and has somewhat increased the cost of the program on a temporary basis. These recession effects led to a change in the projected DI Trust Fund reserve depletion year from 2025 in the 2008 Trustees Report to 2016 currently.

The figure below illustrates dramatically the change in projected workers in OASDI covered employment versus the change in disabled worker beneficiaries as a result of the recession. Note that the impending recession was not anticipated for the 2008 Trustees Report, for which assumptions were set by the Trustees late in 2007. (See later section on the comparison of economic projections.) This figure was presented to the Senate Finance Committee in a hearing on July 24, 2014. The complete testimony by the Social Security Chief Actuary can be found at http://www.ssa.gov/oact/testimony/SenateFinance_20140724.pdf.



Also presented in the same testimony was the following figure, showing the components of the increase in the cost of the DI program due to the recent recession expressed as a percent of GDP. One component of the increase was increased DI benefit cost, and another component was GDP that was lower than had been projected prior to the recent recession.

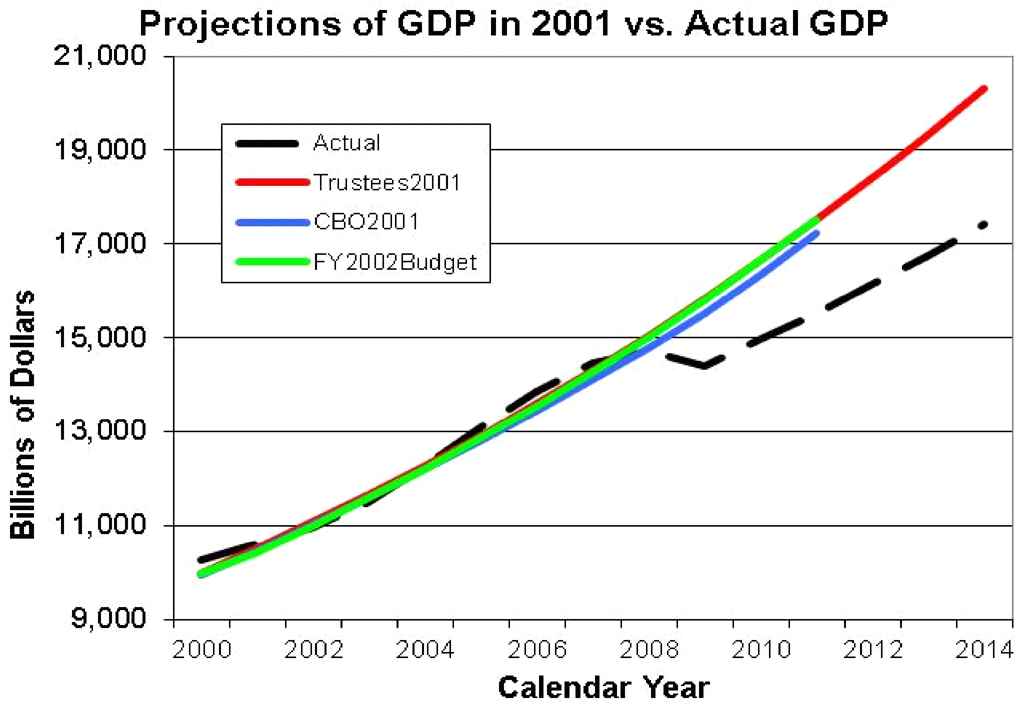


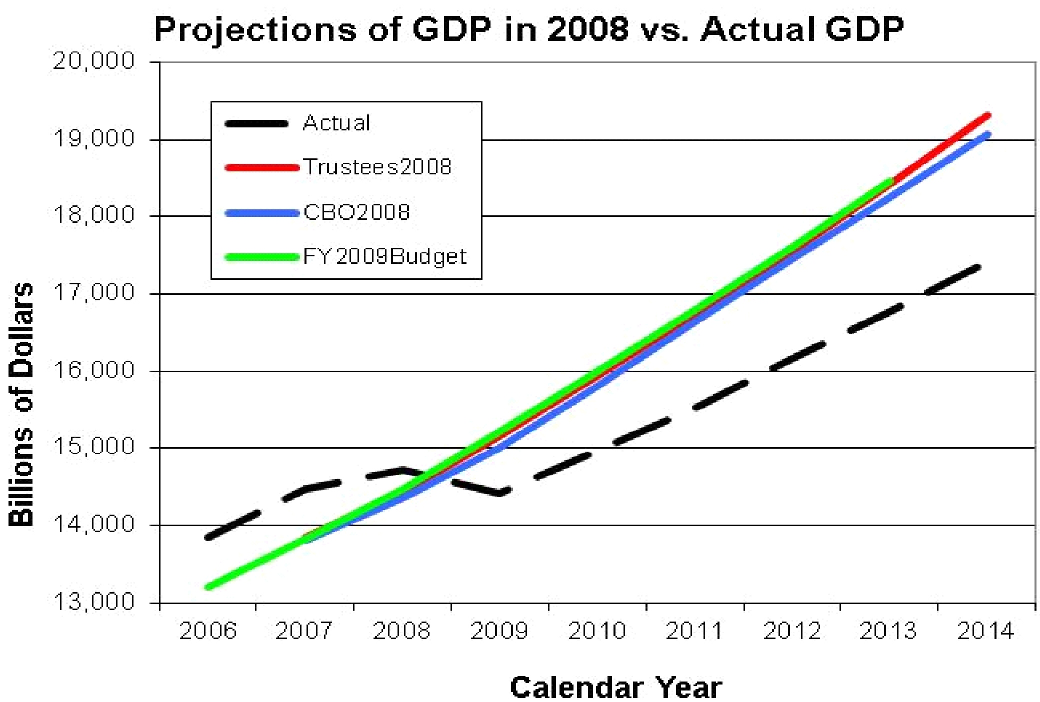
Effects on the financial status for the separate OASI program as well as for the combined OASDI program are similar as those discussed above for DI, because the principal near-term effect of the recent economic downturn was reduced tax revenue.

Comparison of Economic Projections since 2000 by the Trustees, the Congressional Budget Office (CBO), and the President's Budget

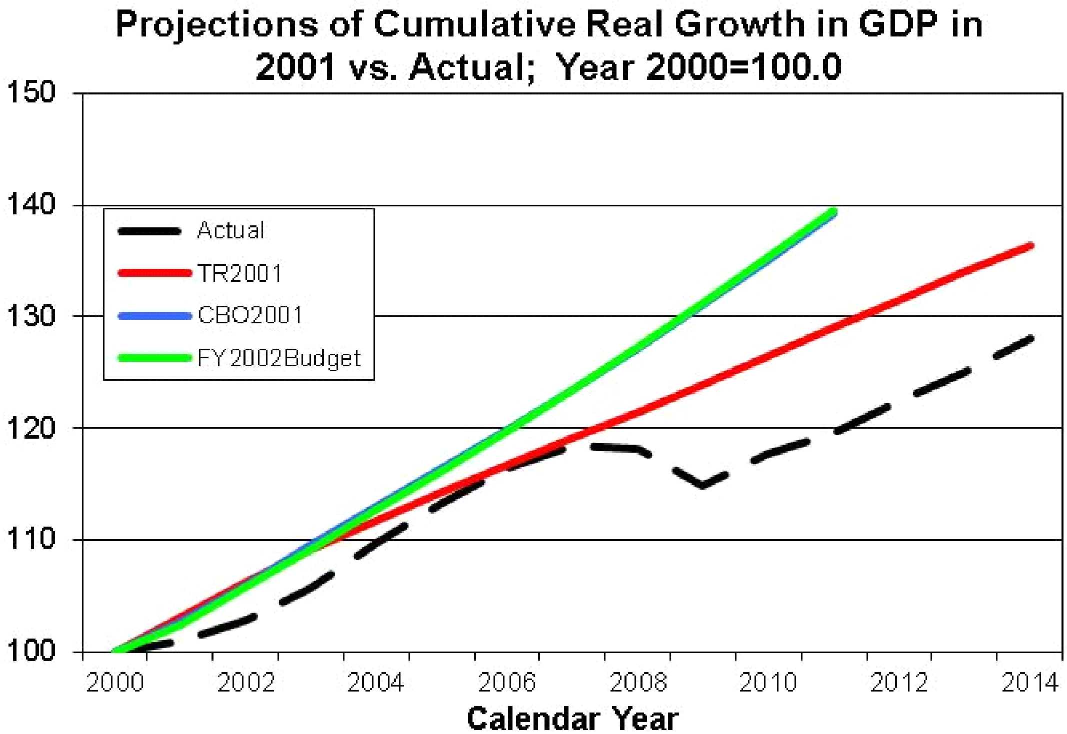
Among the many economic parameters that contribute to actual financial experience and projections for the Social Security Trust Funds and the federal budget, GDP growth is undoubtedly the most important and also the most commonly projected by others. Also informative is the civilian unemployment rate, as it indicates the relative position of the economy within economic cycles. Whenever there are unanticipated increases in the civilian unemployment rate, GDP and income to the trust funds and the federal budget will temporarily fall short of prior expectations, while at the same time benefit payments will temporarily exceed expectations.

The two figures below illustrate the degree to which GDP has fallen short of the projections released in 2001 and 2008 by the Trustees (2001 and 2008 Trustees Reports), CBO (January 2001 and January 2008 Budget Outlooks), and the President's Budgets (FY 2002 Budget released in February 2001 and FY 2009 Budget released in February 2008). Clearly, none of these entities (nor the vast majority of private forecasters) foresaw the coming recession either early in 2001 or even early in 2008.



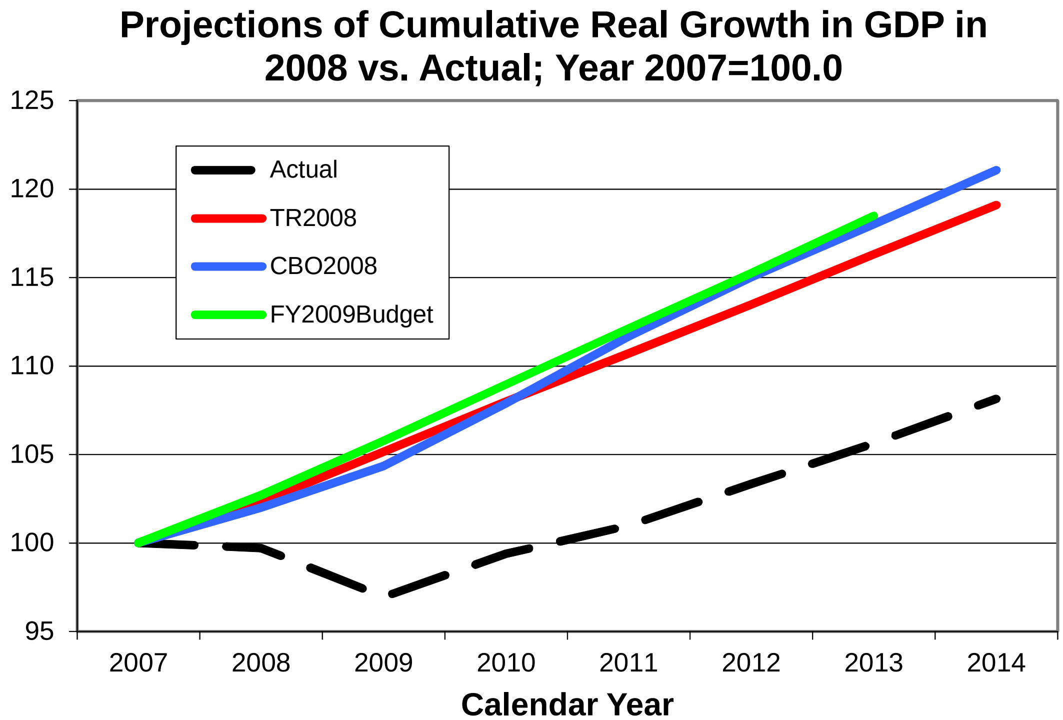


Further effects of the economic recession can be seen by comparing the cumulative real growth in GDP anticipated in 2001 and 2008 versus actual experience. Real growth in GDP is net of price inflation that approximates the increase in benefits for existing Social Security beneficiaries. A deviation from expected cumulative real GDP growth has strong effects on the near-term financial status of the Social Security Trust Funds.

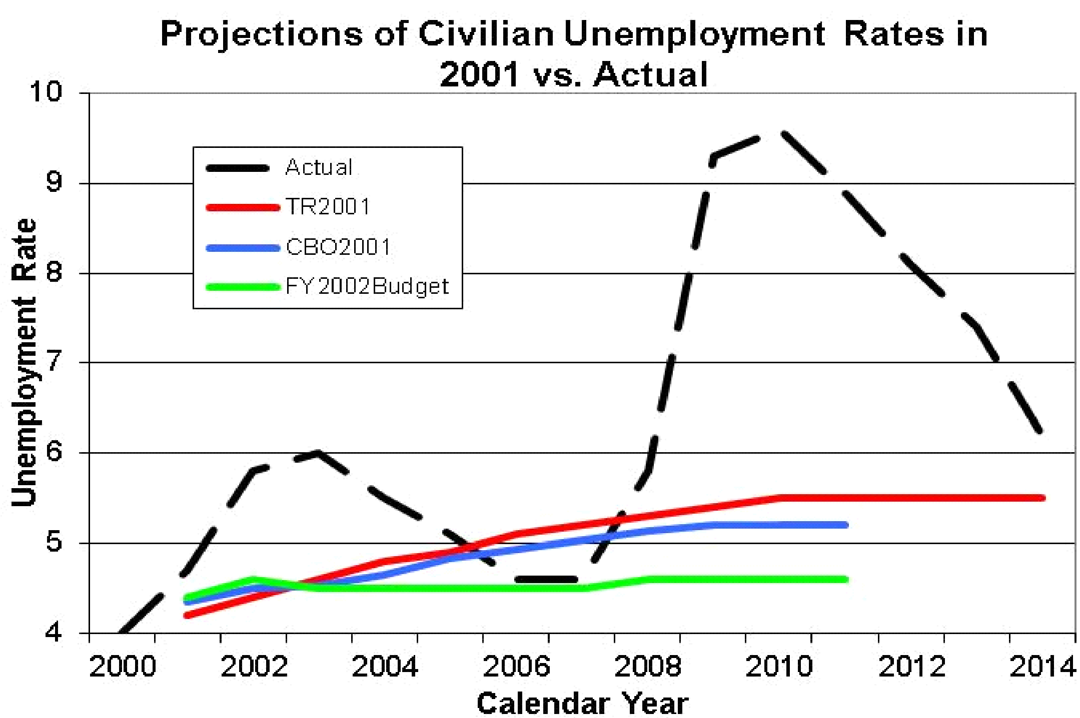


Projections of cumulative real GDP growth after 2000 made in 2001 were understandably overly optimistic, as the recent recession was not anticipated. While all three projections overstated actual real GDP growth, the Trustees' projections were closest to the actual path.

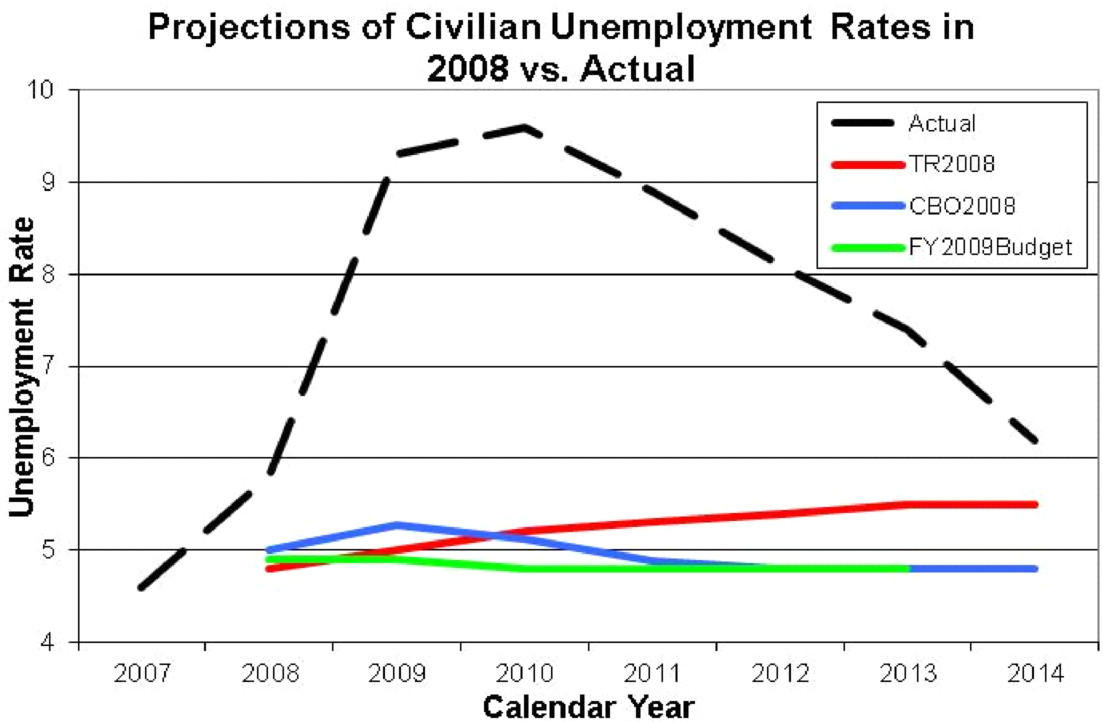
For projections released in 2008, all three entities again did not foresee the upcoming recession. The figure below shows the dramatic difference between the projected and actual real GDP growth Cumulative actual real growth in GDP is far below all of the 2008 projections. For the longer term, the primary question remains: will the level of real GDP return to the 2008-projected path, or will it remain lower due to recession-induced permanent structural reductions in the levels of capital, labor, and productivity? It is still too early to answer this question.



Unemployment rates for the civilian non-institutionalized population are important not only as an indicator of employment, but also as a key measure of temporary slack in the economy. The figures below illustrate the effect of the recent recession on projections made in 2001 and 2008 for the unemployment rate.



The Trustees projected slightly higher unemployment rates in 2001 than the other entities did, and thus were closer to actual values for most years, but all entities projected rates far lower than the actual experience.



Projections for as late as 2008 still failed to foresee the coming recession. The fact that the recession actually started late in 2007 was unknown to the Trustees, CBO, and the administration when they prepared projections to be released early in 2008.

Conclusion

Projections of near-term financial experience (projections through about 10 years) will always be challenging, because many aspects of the economy are unpredictable and volatile. Thus, any projection into the near-term future must be done with humility and a deep understanding of the uncertainties associated with such projections. Policymakers and analysts who have lived through unanticipated periods of boom and bust understand these uncertainties. Projections of trust fund and federal budget operations are based on underlying sets of well-publicized assumptions, and all should understand that these projections will not be accurate if the assumptions are not realized.