ECONOMIC PROJECTIONS AND THE BUDGET OUTLOOK

February 28, 2009

The economic projections underlying the Administration's budget have received considerable attention. Here we briefly address the projections and some of the issues that have been raised.

1. Comparison of the Administration Forecasts to Comparable Forecasts

The Administration's economic assumptions were largely completed in early January and finalized on February 3rd. Therefore, the appropriate comparison is to other forecasts completed at the same time. The key summary variable for budget purposes is the rate of real GDP growth. Below we show comparisons to three alternative forecasts:

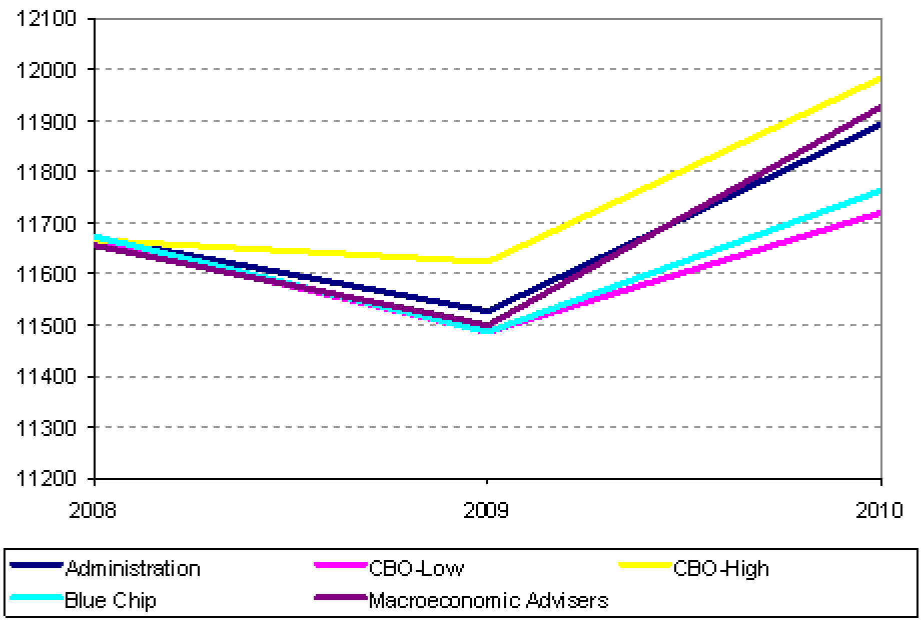
- **Blue Chip Consensus**
  This forecast is a summary of a number of private forecasts. It was released on January 10, 2009. The January survey only covered 2009 and 2010.
- **Congressional Budget Office**
  The CBO forecast is explicitly a pre-policy forecast. It was released on January 8, 2009.[1] The CBO also did an analysis of the American Recovery and Reinvestment Act of 2009 on February 11th.[2] This analysis gives a low and a high estimate of the effect of the Act on output. We use these to construct a low and a high estimate of the implicit CBO post-policy forecast, based on the January 8 baseline.[3]
- **Macroeconomic Advisers**
  Macroeconomic Advisers is a respected private forecaster reported in the Blue Chip Consensus. Their comparable forecast was released on December 24, 2009.

Table 1 shows the forecasted year-over-year growth rates for the four forecasts. Figure 1 shows the forecasted path of GDP (in chained 2000 dollars) from the four forecasts.

Table 1
Forecasted GDP Growth (Year/Year)

	2009	2010
Administration	-1.2%	3.2%
CBO (Average of Low and High)	-0.9	2.6
Blue Chip (Jan.)	-1.6	2.4
Macroeconomic Advisers (Dec.)	-1.3	3.7

Figure 1
Comparing Forecasts of Real GDP



The table and the chart show that the Administration's forecast was squarely in the mainstream of other forecasts. Moreover, it is likely that the Blue Chip and Macroeconomic Advisers forecasts assumed a smaller stimulus package than the one assumed by the Administration, and that these forecasts and CBO's did not fully reflect the Administration's plans for housing and the stabilization of the financial system. Thus, these forecasts would almost surely have been higher if they had been based on the same policy assumptions as the Administration's.

2. An Incorrect Comparison

Many observers have failed to appreciate a crucial footnote to the OMB table comparing the Administration's forecast to the other forecasts (Table S-8).[4] For the Blue Chip Consensus forecast, the table gives forecasted growth rates for real GDP for 2009 and 2010 from the February 10 release, but forecasts for 2011 and beyond from the October 2008 survey (because the Blue Chip only surveys longer run forecasts twice a year). In October 2008, it was not yet clear that the economy was in a recession, and there was virtually no evidence that it would be a severe recession. As a result, those Blue Chip estimates for growth in 2011 and beyond are essentially estimates of the normal long-run growth rate (which, at just under 3%, are roughly comparable with our estimates of long-run growth).

But, a key fact is that recessions are followed by rebounds. Indeed, if periods of lower-than-normal growth were not followed by periods of higher-than-normal growth, the unemployment rate would never return to normal.

Another key fact is that deeper recessions are typically followed by more rapid growth. Table 2 shows the peak-to-trough decline in real GDP in each of the last 10 recessions, along with the average growth rate (at annual rates) in the 8 quarters following each recession.

Table 2
Recession Depth and Strength of Recovery

Recession	Peak-to-Trough GDP Decline	Average Annual Growth Rate in Subsequent 8 Quarters
1949	-1.8%	8.1%
1953/54	-2.7	4.6
1957/58	-3.7	6.2
1960/61	-1.6	5.2
1970	-1.1	5.7
1974/75	-3.1	4.6
1980	-2.2	--
1981/82	-2.9	4.9
1990/91	-1.3	2.9
2001	-0.4	2.6

The table shows that the three largest postwar recessions (1957-58, 1974-75, and 1981-82) were all followed by rapid growth over the two years after the trough in GDP.

Figure 2

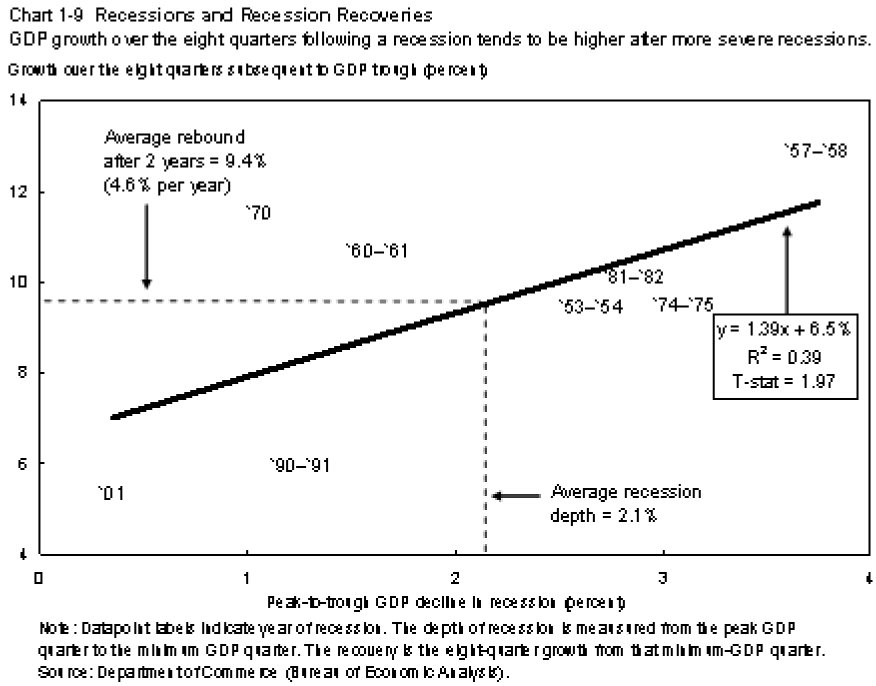


Figure 2, from the 2009 Economic Report of the President, is a scatter plot of real GDP growth over the eight quarters after the trough against the depth of the recession. (The 1949 recession is excluded because it was followed by the outbreak of the Korean War, resulting in exceptionally rapid growth. The 1980 recession is excluded because it was followed by another recession, resulting in unusually low growth.) The chart shows the clear tendency for deeper recessions to be followed by larger rebounds. Thus, it is very likely that this recession, which appears to be on track to be more severe than average, will be followed by a period when growth is well above its usual level.

3. A Conservative Alternative Forecast

To gauge the sensitivity of the budget estimates to the forecast, we have specified a conservative alternative forecast. This forecast makes the following assumptions:

- It replaces 2008Q4 with the most recently revised estimate of –6.2%.
- It assumes 2009Q1 growth will be –6.0%.
- It replaces the Administration's quarterly forecast with the February Blue Chip forecast for 2009Q2 through 2010Q4.
- It then uses the existing Administration forecast for 2011 on.

The final assumption is, indeed, a very conservative one. This alternative lowers GDP growth by more than a percentage point in each of 2009 and 2010, but then assumes no step up in the rebound after 2010Q4. As a result, it has unemployment remaining over 6% through the end of the forecast in 2019. This is highly implausible and would not be present in any reasonable forecast.

Even this very conservative alternative forecast has less impact on the budget projections than one might expect. The impact on the budget deficit is less than $40 billion in fiscal year 2009, less than $85 billion in fiscal year 2010, less than $110 billion in 2011, and rough $125 billion in 2012.

4. A Note on Long-run Growth Projections

The short-term forecasts are in fact less important to the budget projections than the long-term forecasts. Here, the Administration's forecasts are completely middle of the road. The forecast of long-term real GDP growth is 2.6% per year.

Some comparisons:

- The Federal Reserve's "central tendency" is 2.5%-2.7% for long-run growth.[5]
- The Blue Chip long-run forecast from last October shows growth settling down at 2.7%.
- Macroeconomic Advisers projects a somewhat time-varying path of the growth rate of potential output, but the average over the next decade is 2.5%.
- CBO projects average annual growth of potential output over the next decade of 2.3%. The unusually low CBO estimate reflects the large weight CBO puts on the fact that private investment is being depressed by the recession. Even if such an adjustment would be warranted in a normal recession, it does not appear appropriate in the current one, because of the focus of the American Recovery and Reinvestment Act on public investment.

---

[1] The Budget and Economic Outlook: Fiscal Years 2009 to 2019, January 8, 2009, available at http://cbo.gov/ftpdocs/99xx/doc9958/01-08-Outlook_Testimony.pdf.

[2] Estimated Macroeconomic Impacts of H.R. 1 as Passed by the House and by the Senate, February 11, 2009, available at, http://cbo.gov/ftpdocs/99xx/doc9987/Gregg_Year-by-Year_Stimulus.pdf

[3] As the CBO table on stimulus impacts shows fourth quarters only, we first interpolated the impacts by quarter before constructing the upper and lower bounds of the simulated CBO post-policy calendar-year forecast.

[4] A New Era of Responsibility: Renewing America's Promise. Available at http://www.whitehouse.gov/omb/assets/fy2010_new_era/Summary_Tables2.pdf.

[5] The FOMC members' forecasts are available at: http://www.federalreserve.gov/monetarypolicy/files/fomcminutes20090128.pdf