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Does a Mild Recession Imply a Weak Recovery?

Kevin L. Kliesen and Daniel L. Thornton

Some analysts have suggested that there is a statistically reliable relationship between the severity of a recession and the strength of the subsequent recovery. Specifically, the suggestion is that severe recessions are followed by robust recoveries and that mild recessions are followed by relatively weak recoveries. Because the 2001 recession appears to have been the mildest during the post-WWII period, can we expect a below-average recovery?

One frequently cited example that appears to support this proposition is the 1990-91 experience. That recession was very mild, and it was followed by a relatively weak and protracted recovery. The unemployment rate, for instance, peaked more than a year after the official end of the recession (March 1991). Similarly, the rather severe 1981-82 recession was followed by a robust recovery. While interesting, these examples do not constitute a significant regularity that tends to hold for all recessions and recoveries.

To investigate this proposition, we analyzed data on post-WWII recessions and recoveries. According to the National Bureau of Economic Research (NBER), there have been ten postwar recessions, including the 2001 recession. One of these, the 1980 recession, was immediately followed by another, the so-called 1981-82 "double dip" recession. Because the recovery period following the 1980 recession was relatively short, we eliminated it from our analysis.

We measured the severity of each recession by the decline in output, measured both by real GDP and industrial production (IP), from the NBER date of the business cycle peak to the date of the trough. Likewise, the strength of the recovery is measured by the growth in output, using the same two measures, during the year following the NBER-dated business cycle trough.

A scatter plot of these data for the eight postwar recessions prior to 2001 is presented in the accompanying figure. The "lines of best fit" for both output measures indicate that there is a positive relationship between the severity of the recession (horizontal axis) and the strength of the recovery (vertical axis) as hypothesized.

Using either measure, the correlation between severity of recession and strength of recovery is not statistically significant, although the relationship is somewhat stronger using IP.[1] Hence, while there is a positive correlation between the severity of the recession and the strength of the recovery, this relationship alone is not strong enough that knowledge of the depth of the recession is useful for predicting the strength of the subsequent recovery. Consequently, the mildness of this recession would appear to provide little if any guidance about the strength of the recovery. ■

[1] To further test the robustness of our finding, we used the length of the recovery phase of the cycle as a proxy for the strength of the recovery. The recovery phase of the business cycle can be defined as the period from the cycle trough to the point when output surpasses its previous peak level. The more robust the recovery, the shorter the recovery phase. Consistent with the results presented above, we found no statistically significant negative relationship between the severity of the recession, measured by the peak-to-trough drop in IP or real GDP and the length of the recovery phase, i.e., the strength of the recovery.

Severity of Recession and Strength of Recovery