





The Recovery of Housing and the End of the Slow Recovery?

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Paper prepared for the Shadow Open Market Committee Meeting.

September 20, 2013

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The recovery from the financial crisis of 2007-2008 has now been proceeding for 16 quarters. The recent recovery is slower than every preceding recession with a financial crisis in U.S. history. Many have argued that the reason this recovery has been so sluggish is that it reflects the severity of the financial crisis (eg Reinhart and Rogoff 2009). Yet this goes against the record of U.S. business cycles in the past century and a half. According to Milton Friedman (1969) "A large contraction tends to be followed by a large business expansion." Friedman explained this tendency for a rapid bounce back from a deep recession by his plucking model. He imagined the U.S. economy as a string attached to an upward sloping board, with the board representing the underlying growth rate. A recession was a downward pluck on the string; a recovery was when the string bounced back. The greater the pluck, the faster the bounce back to trend.

Bordo and Haubrich (2012) revisited the issue whether business cycles with financial crises are different from the general pattern. Our analysis of 27 U.S. business cycles from 1880 to the present not only confirms Friedman's plucking model but also shows that deep recessions associated with financial crises recover at a faster pace than deep recessions without them. We find that the recent recession is different from the historical average seen in a shallow recovery after a deep recession. This we argue can be largely attributed to the unprecedented housing bust, a proximate measure of which is the collapse of residential investment which until recently was far below its historical pattern during recessions.

However in the past several quarters housing has roared back from its slump and its recovery may augur the conversion of the slow recovery. To a more normal pace. If this is indeed the case then the Fed should seriously consider ending its expansionary policy stance sooner rather than later and should focus on its exit strategy.

1. Financial Recessions are Not Different

Joe Haubrich and I measured the depth of a contraction by the percentage drop in quarterly real gross domestic product from peak to trough. We measured the strength of the recovery as the percentage change in quarterly GDP over the duration (the same number of quarters) as the recession. We then demarcated recoveries from recessions associated with financial crises from those which did not have them. We found that recessions that were tied to financial crises and were 1% deeper than average have historically led to growth that is 1.5% stronger than average. Figure 1 illustrates this. It compares regressions of recovery strength against contraction amplitude distinguishing between recessions with financial crises and those without them. As can be seen the relationship is positive for recoveries from financial recessions and negative for those that are not.

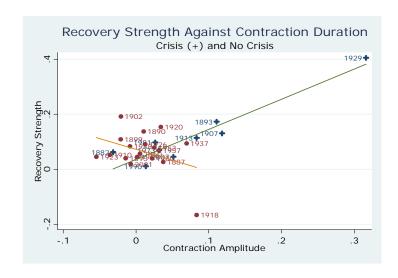
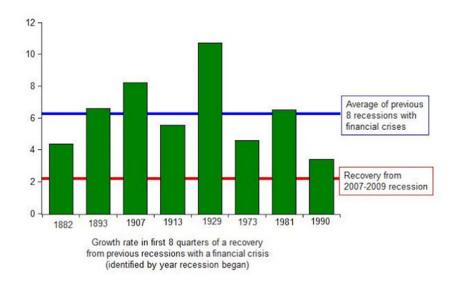


Figure 1. Recovery Strength and Contraction Amplitude

Another way to look at this is in Figure 2 which highlights the remarkable result that the recovery from the recent recession is considerably below the average of the previous 8 recessions with financial crises. Moreover the pattern holds up even when we account for various measures of financial stress such as the quality spread between US Treasury bonds and Baa corporate bonds and when we account for bank lending.

Figure 2. Crises and Recoveries



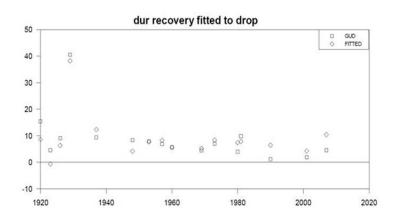
2. Housing and the Recovery

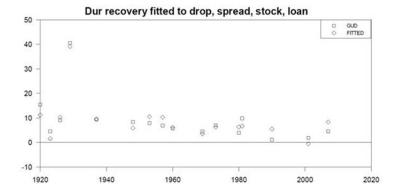
Housing has been important in many cycles and there is considerable evidence that household investment leads the business cycle (Leamer 2007). The obvious question is to what extent the problems in the housing market can account for the slow recovery. We ask the counterfactual question: what would the current recovery look like if it followed the historical pattern based on the depth of the contraction? We then determine if the effects of the financial crisis or problems in the housing market can account for the difference between the recent weak recovery and its historical pattern. We compare actual with fitted values in a regression of real GDP growth in the recovery against contraction depth. We then add a measure of financial distress, the risk spread—the Baa less Long –Term Treasury Composite and compare fitted with actual values. Finally we add in Residential Investment as our measure of the housing market and compare actual to fitted values.

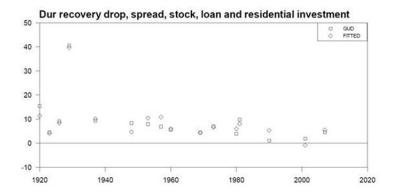
Figure 3 shows the results. The top panel compares the actual change in real GDP for the duration of the recovery until the fourth quarter of 2011 (when our regressions end) with the fitted value from the regression against contraction depth. As can be seen, the most recent cycle stands out as a particularly weak recovery given the size of the recession. The middle panel shows how much of the

shortfall we attribute to problems in the financial sector. As can be seen for the recent recession the gap persists. Finally in the bottom panel, we show the effect of adding in Residential Investment. It is not a large component of national expenditure but it is closely linked to the purchase of consumer durables and other housing sensitive sectors which together give it a bigger bang. The improvement (reduction in the gap) is particularly noticeable in the recent recovery. Thus the role of housing stands out as a marker in the sluggishness of the recent recovery.

Figure 3. Duration of the Recovery, Actual versus Predicted







3. The Very Recent Recovery in Housing: What Does it Tell Us?

The housing market has turned up quite sharply in the past 3 to 4 quarters. Its turnaround likely reflects the operation of normal market forces aided by low policy interest rates and the Federal Reserve's LSAP policies. See Figure 4, Existing Single Family Home Sales, Figure 5, The Monthly Home Price Index, and Figure 6, Residential Investment. Will the dramatic turnaround in housing turn the weak recovery into something more like a normal recovery?

Thousands of dollars, NSA Millions of units, SAAR 240 6.5 6.0 220 5.5 200 Sales 5.0 180 4.5 160 4.0 140 3.5 120 100 2008 2010 2012 1998 2000 2002 2004 2006

Figure 4. Existing Single Family Home Sales

Figure 5. The Monthly Home Price Index

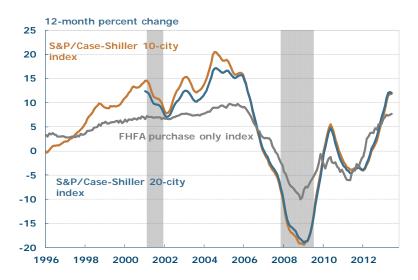
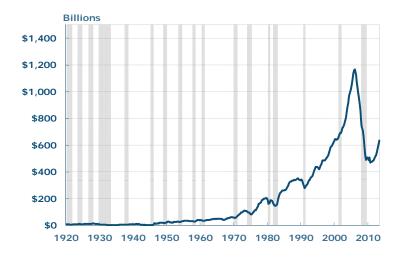


Figure 6. Residential Investment



We have too few observations to influence much the regression results which are based on data until late 2011 but one way to look at this issue is to use the method developed by Leamer (2007) to predict the likelihood that the housing decline of 2006 would lead to a recession. Following Leamer, we calculated the abnormal contribution of Residential Investment to Real GDP growth. As can be seen in Figure 7, the steep upward sloping lines for Residential Investment which show that the sector has contributed more than normal to growth, represent strong predictions of recovery from earlier recessions. The line for the recent several quarters is also positively sloped and steep but the

abnormal contribution is still considerably less than in most earlier recoveries. However, if the recovery pattern in Residential Investment from the last few quarters continues to follow its trajectory then the current recovery should soon return to a more normal pace.

Figure 7. Residential Investment: Cumulative Abnormal Contribution to GDP growth

Policy Lessons

The turnaround in the housing sector in the past year should be a key factor to restore the pace of this recovery back towards that of the recoveries from previous recessions. However this prediction holds constant other headwinds that may continue to prolong the sluggishness. Chief among these is uncertainty in the U.S. over fiscal and regulatory policy and the new health care system. There is also ongoing uncertainty on developments in the rest of the world including: the euro crisis, slow growth in China and other emerging economies and turbulence in the Middle East. Another headwind is uncertainty over the Fed's exit strategy. The debate over the tapering of bond purchases under QE3 and the opaqueness of the Fed's Forward Guidance can only be detrimental to the recovery. The Fed should seriously take into account the evidence on the turnaround of the housing sector as an

historically strong and significant predictor of the economy's return to health. It may signal the need to accelerate the exit strategy.

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