



## Why Is Output Growth So Slow?

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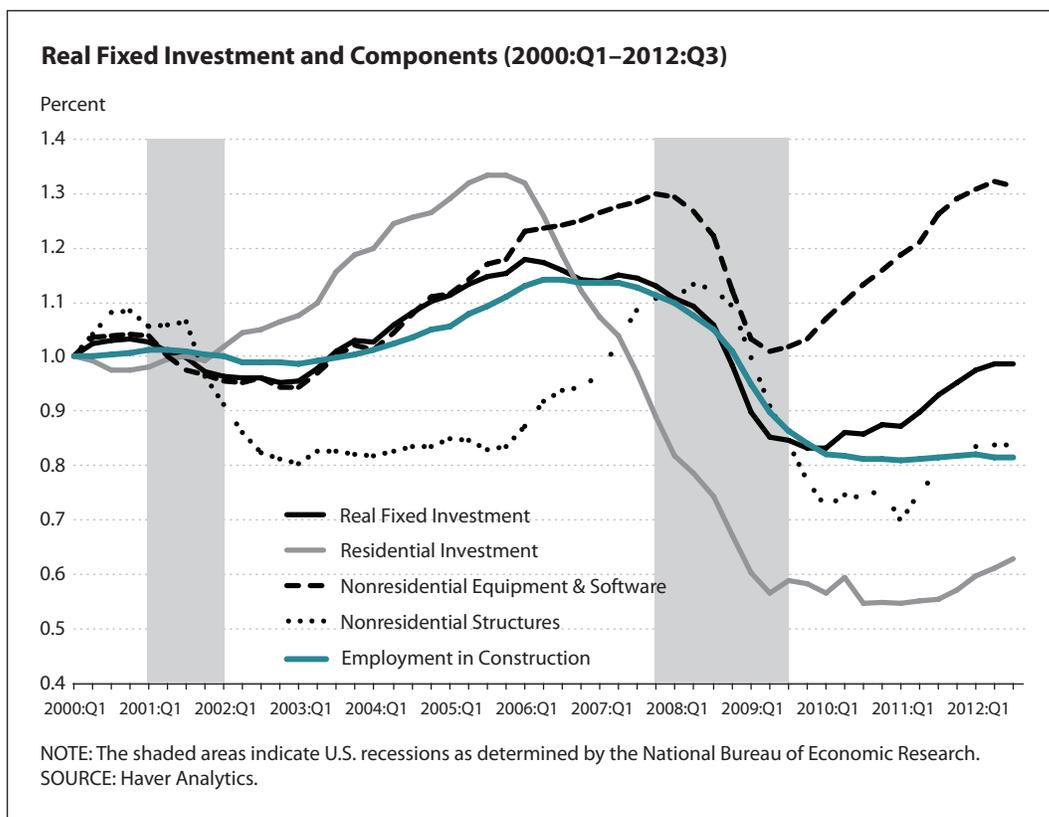
Given the relatively anemic recovery, a number of analysts have suggested that the economy's potential growth rate appears to have declined. For example, in a speech on November 21, 2012, Federal Reserve Chairman Ben Bernanke noted that "the fact that unemployment has declined in recent years despite economic growth at about 2 percent suggests that the growth rate of potential output must have recently been lower than the roughly 2½ percent rate that appeared to be in place before the crisis." Bernanke's inference stems from a statistical regularity called "Okun's law," which suggests that the unemployment rate will decline only if actual output grows at a faster rate than potential output. Okun's law provides no insight into why output growth is slow. This essay presents a possible explanation for the unusually tepid output growth and the slow rise in employment. This explanation implies that output growth is likely to remain relatively slow for some time.

It has long been recognized that both residential and nonresidential fixed investment are important for a strong recovery and continued rapid economic growth. Indeed, the Federal Open Market Committee's (FOMC) nonconventional policies—forward guidance, Operation Twist, and large-scale purchases of mortgage-backed securities and longer-term Treasury securities—are intended to increase residential and nonresidential fixed investment. Residential investment will be increased by providing credit directly to the mortgage market and

attempting to reduce long-term interest rates generally. Nonresidential investment will be increased by attempting to reduce long-term rates to encourage investment spending.

The chart shows real fixed investment and its components from 2000:Q1 through 2012:Q3. The variables are normalized to 1 at the beginning of the sample so they can be displayed on one chart. Fixed investment peaked during 2006:Q1, declined rapidly during the 2007-09 recession, reached a trough in 2010:Q1, and has since increased; it currently remains 13 percent below its pre-recession level and 16 percent below its 2006 peak.

Real fixed investment consists of residential investment and nonresidential investment, which has two subcategories: (i) structures and (ii) equipment and software. Nonresidential investment in equipment and software peaked at the



outset of the recession, reached its trough just before the end of the recession, and has since grown at an annual rate of 8.5 percent; it currently is about 1 percent above its pre-recession peak. This is not the case for either real residential fixed investment or nonresidential investment in structures. Nonresidential investment in structures peaked early in the recession and then declined sharply. It has increased somewhat since 2011:Q1 but remains 26 percent below its recession peak. Residential investment peaked in 2006:Q1—about the same time as the peak in residential home prices. It continued to decline throughout the recession and is currently 53 percent below its pre-recession peak and 14 percent below its level at the beginning of the recession.

### **The excess supply of commercial and residential real estate might explain why the historically low nominal and real interest rates have had relatively little effect on stimulating investment.**

The lack of investment in fixed capital not only is a factor contributing to the anemic economic recovery but also accounts for a significant part of the slow growth in employment. The chart also shows employment in construction, again normalized to 2000:Q1. Construction employment tended to mimic the behavior of real fixed investment until the end of the recession. Construction employment did not increase with real fixed investment during the current recovery because of the modest increase in residential investment and nonresidential investment in structures over the past 3½ years. The number of workers employed in construction in December 2012 was 1.9 million lower than at the beginning of the recession in December 2007. If these workers had returned to working in construction, the December 2012 unemployment rate would have been 6.6 percent rather than 7.8 percent.

The dearth of residential investment and nonresidential investment structures appears to be due to the real estate bubble, which resulted in an excess supply of residential and commercial real estate. If this is the case, then output growth will remain slow until the excess supply is significantly reduced or the gap in fixed investment is filled by other forms of capital investment (e.g., construction of oil refineries, new manufacturing facilities). The outlook for a significant increase in residential investment in the near term is particularly dim for two reasons. First, there is a large excess supply of residential housing. Second, a substantial amount of infrastructure investment associated with home construction (e.g., streets, utility lines) already exists; a considerable amount of development had taken place by the time the housing market collapsed. The slow growth in residential investment and nonresidential investment in structures suggests that employment growth will continue to be relatively slow.<sup>1</sup> Finally, the excess supply of commercial and residential real estate might also explain why the historically low nominal and real interest rates have had relatively little effect on stimulating investment. ■

#### **Note**

<sup>1</sup> See Sánchez, Juan M. and Thornton, Daniel L. “Why Is Employment Growth So Low?” Federal Reserve Bank of St. Louis *Economic Synopses*, 2011, No. 37, November 14, 2011; <http://research.stlouisfed.org/publications/es/11/ES1137.pdf>.