

# Construction employment peaks before the recession and falls sharply throughout it

*Job losses in residential construction began well before the 2007–09 recession, and employment in both residential and nonresidential construction declined rapidly during the recession*

Adam Hadi

Construction employment fell by 1.5 million<sup>1</sup> during the December 2007–June 2009 recession,<sup>2</sup> bringing employment in the industry to the lowest level since March 1998. The losses during the recession represented a 19.8-percent decline in construction employment, the largest percent decline of any nonfarm industry supersector. The majority of the losses came during the last 9 months of the recession, when employment declined by 1 million. (See chart 1.) Job losses averaged 49,000 per month between December 2007 and September 2008 and then accelerated to an average of 115,000 per month through June 2009. Those construction firms which engaged primarily in residential construction activities started losing jobs more than a year before the recession started, and those firms which conducted primarily nonresidential and heavy construction projects did not start losing jobs until the onset of recession.

## Losses in residential construction

In 2005, demand for residential construction peaked and the U.S. housing market started experiencing the beginnings of an unprecedented downturn. Deep employment losses in residential building construction and among residential specialty trade

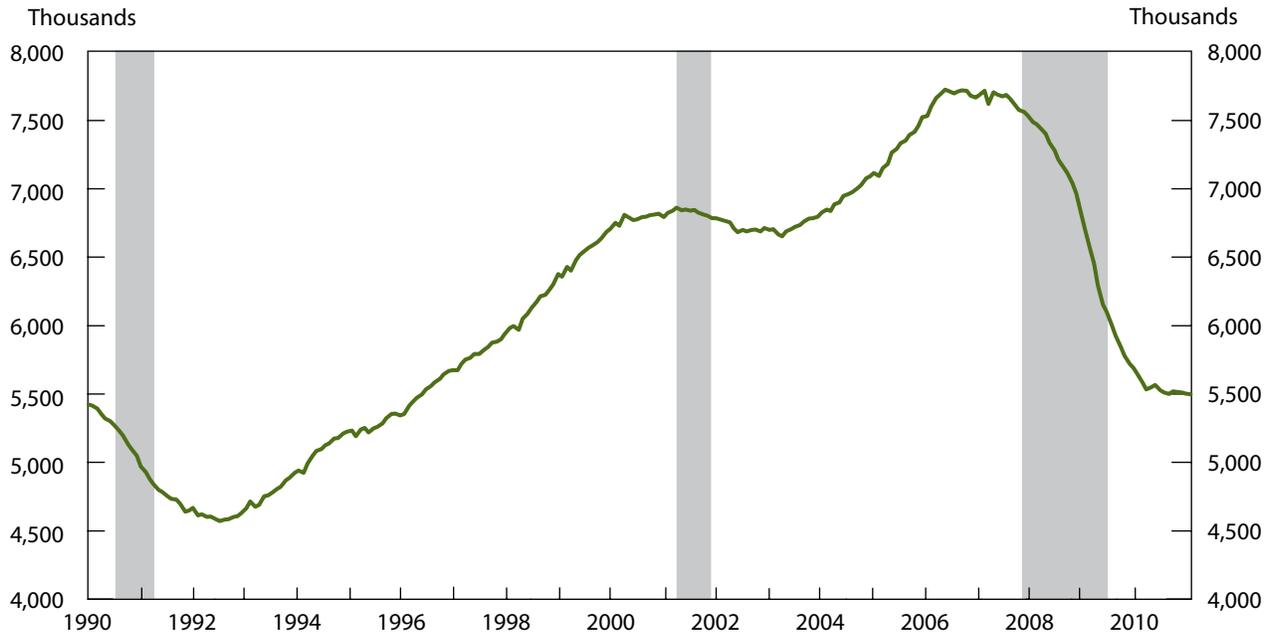
contractors started in 2006, worsened during the recession, and continued at a slower pace after the recession ended in June 2009. (Residential building construction and residential specialty trade contractors are analyzed together as “residential construction” in this article.)

Residential construction employment peaked in April 2006 at 3.5 million jobs, following approximately 5 years of rapid growth. This expansionary period roughly coincided with a housing bubble in the United States during which home prices rose greatly, peaking in April 2006 as employment in residential construction did.<sup>3</sup> New home sales,<sup>4</sup> housing starts,<sup>5</sup> and the Housing Market Index<sup>6</sup> all peaked between mid-2005 and early 2006. (See chart 2.) Employment in residential construction dropped rapidly during the second half of 2006 as the housing market worsened. Delinquencies in mortgage payments began to rise, particularly for nontraditional loans, and by the beginning of the recession in December 2007, residential construction employment had fallen by 390,000, or 11 percent. Other housing indicators also plummeted from their prerecession peaks.

After the recession began, job losses in residential construction accelerated, and employment fell by 830,000, or 27 percent,

Adam Hadi is an economist in the Division of Current Employment Statistics in the Office of Employment and Unemployment Statistics at the Bureau of Labor Statistics. Email: [hadi.adam@bls.gov](mailto:hadi.adam@bls.gov)

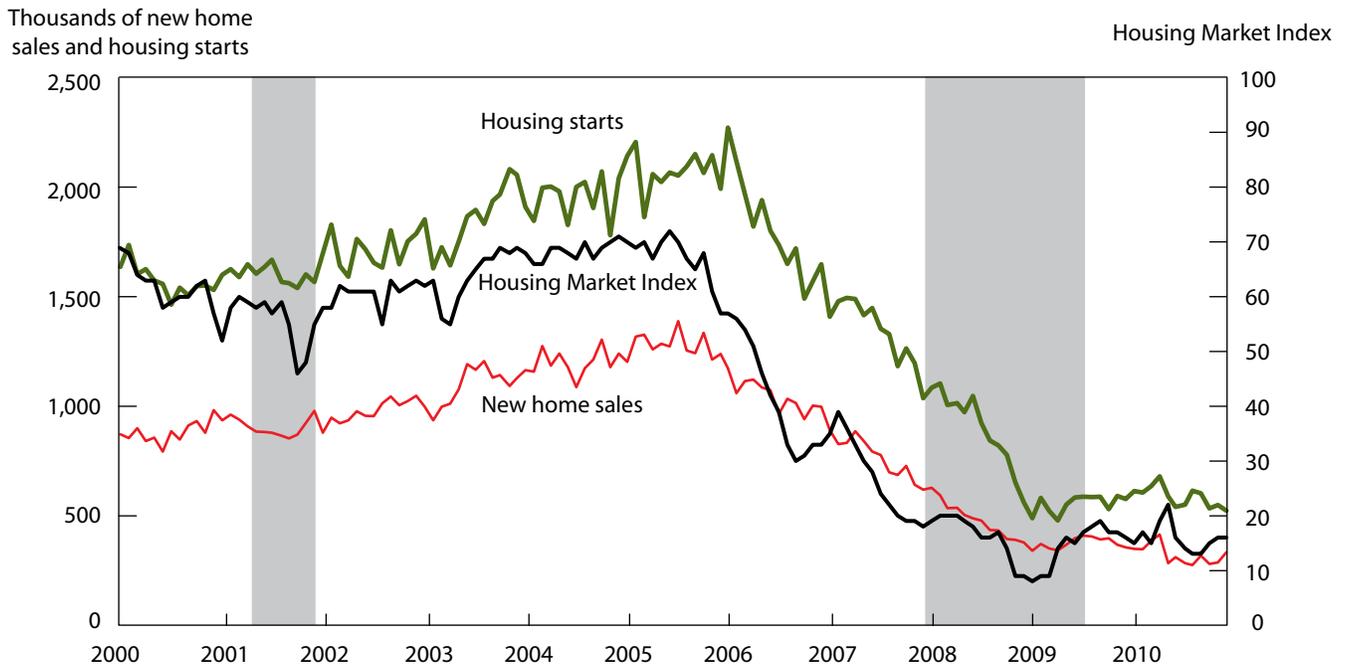
**Chart 1. Construction employment, 1990–2010, monthly data, seasonally adjusted**



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research.

SOURCE: U.S. Bureau of Labor Statistics.

**Chart 2. New home sales, housing starts, and the Housing Market Index, 2000–10, monthly data, seasonally adjusted**



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research.

SOURCES: New home sales and housing starts data are from the U.S. Census Bureau, and Housing Market Index data are from the National Association of Home Builders.

from the start of the recession through June 2009. New home sales, housing starts, and the Housing Market Index also fell further, to record lows. Job losses eventually spread beyond new home construction to other areas of housing as spending on remodeling and home improvement projects fell. As home values declined, homeowners were less willing to invest in home renovation projects because the perceived return on investment and the ability to tap home equity both declined while the value of new loans and leases in bank credit from commercial banks decreased substantially. During the recession, residential construction accounted for over half of the losses in construction as a whole. Residential specialty trade contractors, with losses of 567,000, was the primary driver of job losses within residential construction.

Sensitive to housing’s role in the economy, Federal policymakers enacted a series of policy initiatives to stabilize the housing market, including tax credits and expanded support for the housing mortgage market. The Housing and Economic Recovery Act of 2008 provided for a tax credit of up to \$7,500 for first-time homebuyers. In 2009, the credit was expanded and the deadline was extended for new home purchases.<sup>7</sup> It appears that these acts helped

slow residential construction job losses substantially.

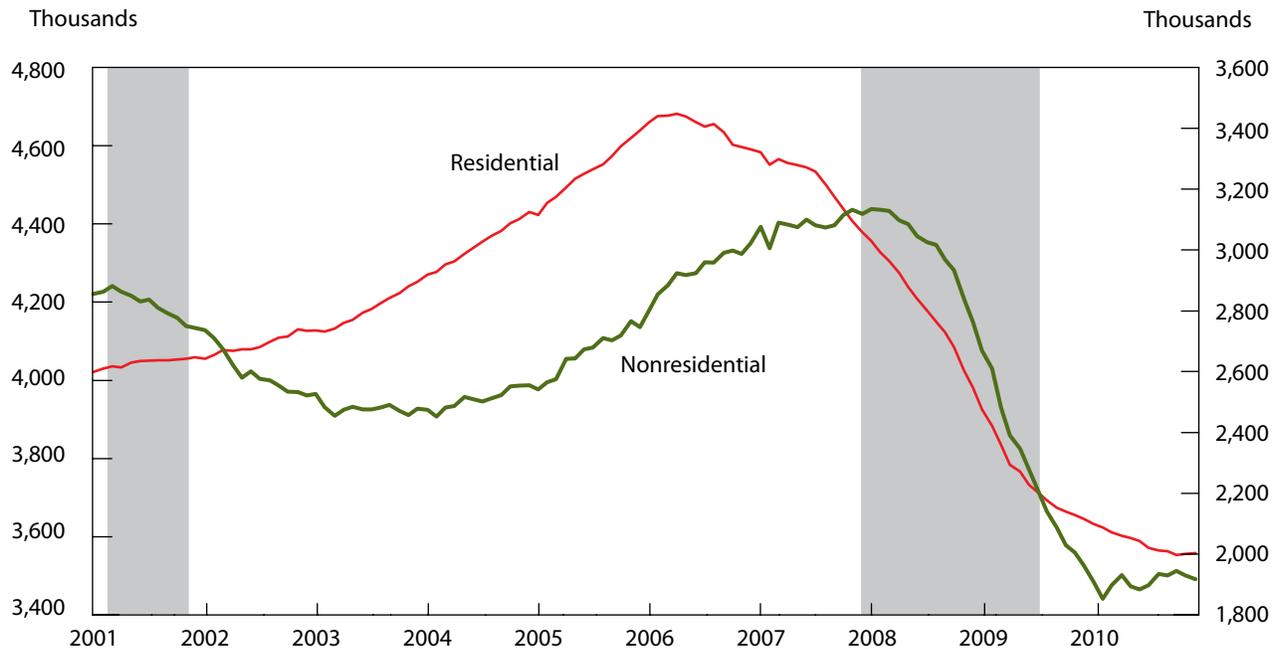
As of December 2010, residential construction had yet to recover the jobs lost during the downturn. Losses slowed significantly in the second half of 2009 (by an average of 19,000 jobs per month), and employment edged down in 2010 (by an average of 9,000 jobs per month). A number of other construction indicators also remained at historically low levels in 2010.

### Losses in nonresidential construction

Soon after the recession started, employment losses began in the nonresidential components of construction as well. (See chart 3.) Since an employment trough in November 2003, nonresidential construction—which consists of nonresidential building construction, heavy and civil engineering construction, and nonresidential specialty trade contractors—had added jobs at a rapid pace until the employment level flattened just prior to the recession.

Significant job losses began in the second quarter of 2008 and accelerated rapidly; overall, there was a 14.8-percent decrease in employment during the recession. Nonresi-

**Chart 3. Residential and nonresidential construction employment, monthly data, seasonally adjusted, 2001–10**



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research.

SOURCE: U.S. Bureau of Labor Statistics.

dential specialty trade contractors was the primary driver of losses within nonresidential construction during the recession, accounting for 377,000 of the 654,000 jobs lost.

Nonresidential construction is highly dependent on the broader economy and government spending. As the economy contracted, there was less demand for offices, factories, and retail facilities; troubles in financial markets also resulted in less funding for new projects. Furthermore, the Federal Government, State governments, and local governments experienced declining tax revenues, which led to reductions in government spending on civil works projects and affected employment in heavy and civil engineering construction.

In early 2009, the America Recovery and Reinvestment Act of 2009 provided increased spending for infrastructure projects, such as highways and bridges, but even after the recession ended in June 2009, heavy job losses continued in nonresidential construction. The industry lost an additional 330,000 jobs in the 8 months following the

end of the recession. Employment has since stabilized and grew by 50,000 between February 2010 and December 2010.

## Construction employment during recessions

Construction is a cyclical industry that tends to go through periodic robust expansions and pronounced contractions. However, even in the volatile history of the construction industry, the 2007–09 recession stands out. Employment losses easily exceeded the declines observed during past recessions. Before 2007–09, the worst employment losses in construction during a recession occurred during the November 1973–March 1975 recession, when employment fell by 604,000. This represented a 14.3-percent drop in construction employment, compared with a 19.8-percent decrease during the 2007–09 recession. The job losses in construction during the latest recession represented 19.8 percent of total nonfarm employment losses. □

## Notes

<sup>1</sup> The data on employment used in this article are from the Current Employment Statistics (CES) survey, which is a monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. For more information on the CES program's methods, see "Technical Notes to Establishment Survey Data Published in Employment and Earnings," <http://www.bls.gov/web/cestn2.htm> (visited Apr. 5, 2011). CES data are available at <http://www.bls.gov/ces> (visited Apr. 5, 2011). The CES data used in this article are seasonally adjusted unless otherwise noted.

<sup>2</sup> Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991. For a complete list of business cycle dates, consult the NBER webpage at <http://www.nber.org/cycles/cyclesmain.html> (visited Nov. 2, 2010).

<sup>3</sup> S&P/Case-Shiller Home Price index data are courtesy of Standard

& Poor's and can be found at <http://www.standardandpoors.com/indices/sp-case-shiller-home-price-indices/en/us/?indexId=spusa-cashpidff--p-us----> (visited Apr. 6, 2011).

<sup>4</sup> Data on new home sales are published by the U.S. Census Bureau and are available at <http://www.census.gov/const/www/newresalesindex.html> (visited Apr. 6, 2011).

<sup>5</sup> Data on new residential construction (housing starts) are published by the U.S. Census Bureau and are available at <http://www.census.gov/const/www/newresconstindex.html> (visited Apr. 6, 2011).

<sup>6</sup> Data on the Housing Market Index are published by the National Association of Home Builders and are available at [http://www.nahb.org/reference\\_list.aspx?sectionID=134](http://www.nahb.org/reference_list.aspx?sectionID=134) (visited Apr. 6, 2011).

<sup>7</sup> Taxpayers had to have a binding contract to purchase a home before May 1, 2010, and must have closed on the home before July 1, 2010. For more information, see <http://www.irs.gov/newsroom/article/0,,id=204671,00.html> (visited Dec. 22, 2010).