AMERICAN ACTION FORUM

The U.S. Housing Market: Metrics of Recovery & Links to Economic Growth

Douglas Holtz-Eakin & Andrew Winkler l June 2012

Introduction

For roughly six years home prices have fallen steadily in markets around the country. However, in the past few months there has been speculation that there are signs of hope. There is evidence that local markets around the country are finally improving, but others still face further declines in home prices.

A broader housing recovery will require improved macroeconomic conditions. Nationally, unemployment is far too high and GDP growth is far too tenuous to sustain a full recovery in housing. Many states, and more importantly individual metro areas, have seen employment rise. Yet for some, like hard hit Nevada, the unemployment rate remains high. For individuals pursing homeownership, a secure job and growing wages are a necessity. Housing market stabilization and recovery, from this point forward, will vary greatly depending on locality. The outlook for the housing market on the national level remains uncertain without greater job and wage growth.

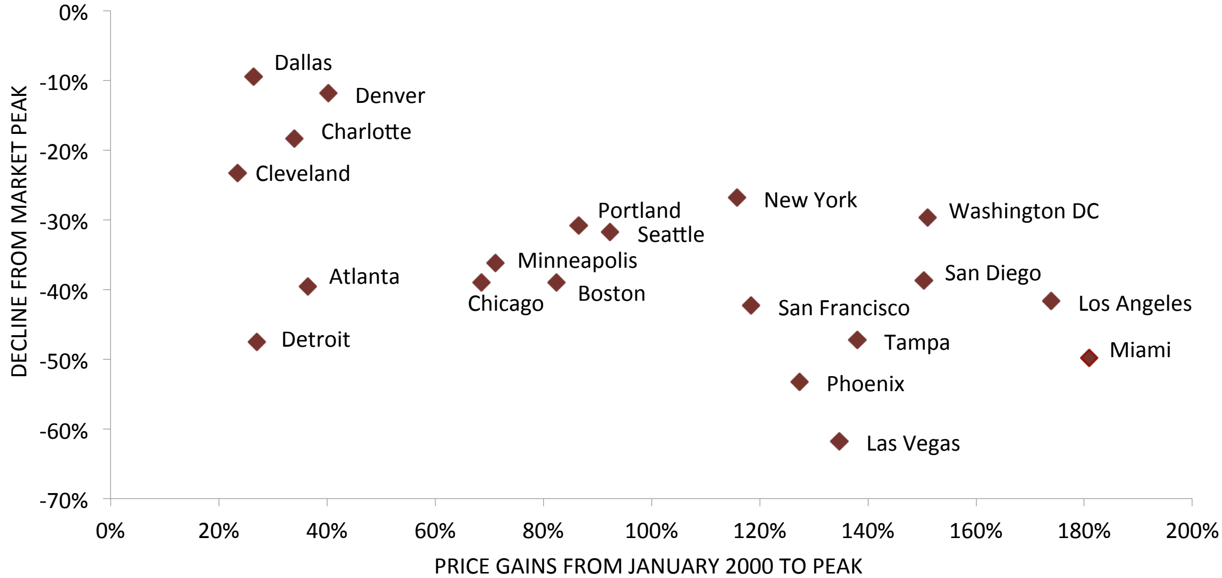
Though individual housing markets face disparate impediments to recovery and have charted different paths through the bubble and bust, there are some common metrics to gauge improved market conditions nationally. The first portion of this paper will focus on those metrics: prices, sales, inventory, and construction. The second portion of the paper will focus on the links between the housing market and larger economy.

Key Takeaways

- A broader housing recovery will require improved macroeconomic conditions. Progress so far depends largely on locality.
- Employment and housing permits, unlike house prices, have improved in a majority of metro areas around the country according to the AAF Recovery Indices.
- More than any other metric, a pick-up in construction will ultimately signal the recovery of the U.S. housing market. Residential construction spending is up 6.2% from the beginning of the year, but still far below pre-housing crisis levels.
- A recovery in housing will not come without stronger job numbers; the U.S. has added an average of only 56,000 nonfarm payroll jobs since the end of the recession three years ago.

Metrics of Recovery

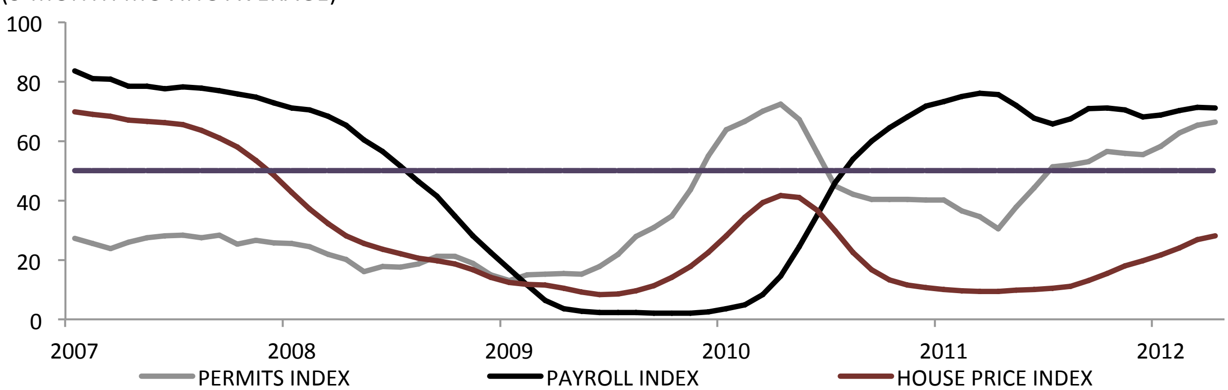
FIGURE 1. CITY SCATTERPLOT: HOME PRICES
(NOT SEASONALLY ADJUSTED)



Source: S&P/Case-Shiller

As shown in Figure 1, the severity of the bubble and bust that characterized the housing crisis varied greatly by city. While house prices have fallen about 53 percent in Phoenix over the past six years, other major cities like Dallas have faced much smaller declines. Growth preceding the housing crisis also varied dramatically depending on the city; between January 2000 and the peak of the market, house prices rose 23 percent in Cleveland while prices in Miami rose by 180 percent.

FIGURE 2. AAF RECOVERY INDICES
(3-MONTH MOVING AVERAGE)

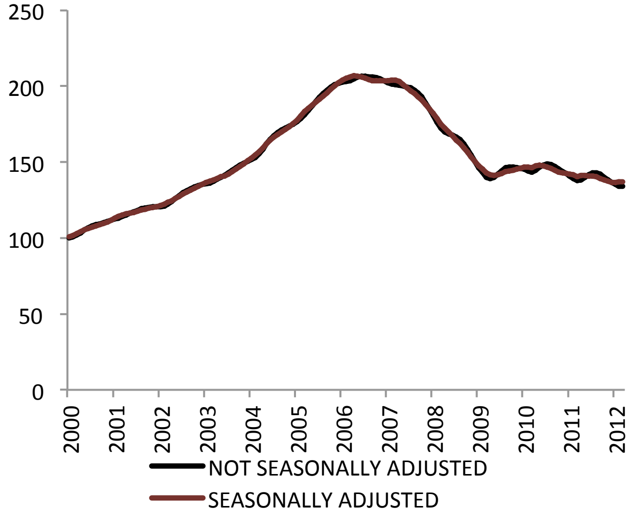


Sources: U.S. Census Bureau; Bureau of Labor Statistics; Freddie Mac

Figure 2 displays the American Action Forum recovery indices, which measure the degree to which recovery is widely dispersed across the country. Specifically, these are diffusion indices of the dispersion of the recovery amongst 360 metro areas across the country. Each index is based on a different indicator that affects the recovery of the overall housing market—housing permits, house prices, and nonfarm payroll employment. When an index stands above 50, the indicator has been improving in the past year in a majority of metro areas; below 50 and that indicator has declined.

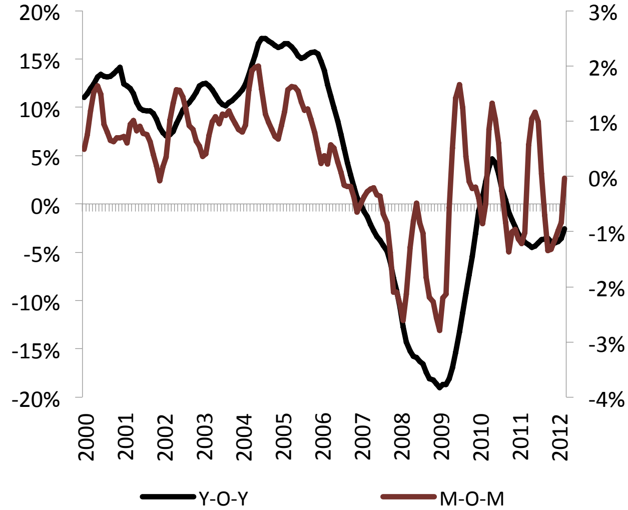
The most recent data shows that while the majority of metro areas have improved permit activity and increasing employment, as evidenced by the diffusion index in Figure 2, house prices in most cities are still declining. The price index on the whole is, however, on the rise since the beginning of 2012. As markets around the country begin to hit bottom, we can expect this index to fall into alignment with payroll and permits on the path to recovery.

FIGURE 3. HOME PRICE INDICES
(20-CITY COMPOSITE)



Source: S&P/Case-Shiller

FIGURE 4. HOUSE PRICE INDEX BY % CHANGE
(NOT SEASONALLY ADJUSTED)



Source: S&P/Case-Shiller

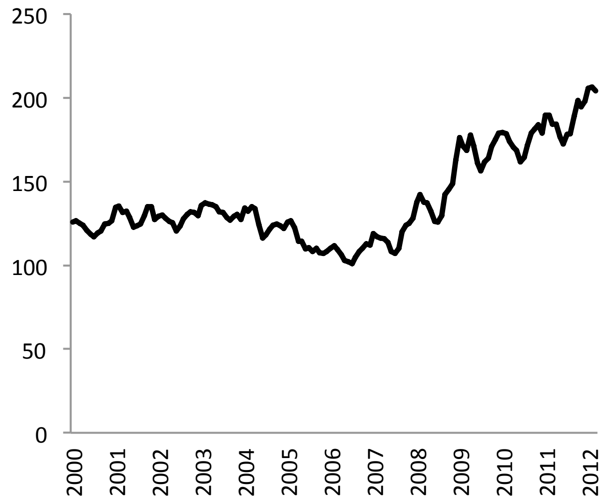
Meanwhile, it is true that the pace of falling prices has largely slowed and may finally be turning the corner (see Figures 3 and 4). Home prices nationally declined by 2 percent in the first quarter. Yet, from February to March 2012, the S&P/Case-Shiller 20-City Index remained statistically unchanged. This does give the market some hope of price stabilization.

CoreLogic recently reported that shadow inventory, the number of distressed properties held off the market, has fallen to 1.5 million units.[1] States with a foreclosure process that does not include judicial review, like Arizona, California, and Nevada, have already begun to see house prices stabilize and start to improve. Clearing distressed properties from the market will neutralize the depressing effect those properties have on overall prices. Because foreclosures may rise in the next few months with the resolution of the national mortgage settlement, some downward pressure on house prices may continue to exist. Clearing the market of these properties as quickly as possible will benefit the recovery in the long run. Firming and improving prices around the country will help signal the broader recovery, yet prices may continue to fluctuate based on a number of factors—especially inventory and job growth.

The possibility of improving prices is, however, aided by high affordability. According to an index of housing affordability by the National Association of Realtors (NAR), it is now more affordable to purchase a home than any time in the last decade (see Figure 4). As the Joint Center for Housing Studies at Harvard recently noted, in many markets homeownership has become more affordable than renting.[2] Average interest rates for fixed rate 15- and 30-year mortgages, seen in Figure 5, are additionally near record lows at just below 4 percent. While diminishing inventory may certainly push prices back up, the low prices and low interest rates of the current market should positively impact sales.

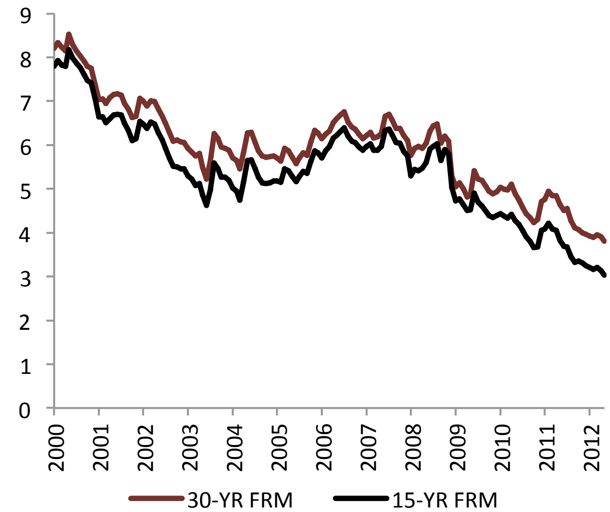
Low interest rates will additionally encourage borrowers looking to refinance and prevent further foreclosures. The Federal Housing Finance Agency reported at the beginning of June 2012 that Home Affordable Refinance Program (HARP) refinancing levels nearly doubled in the first quarter after program changes were made in January. The FHFA also reported that more borrowers with high loan-to-value (LTV) ratios, deeply underwater borrowers, are finally being reached due to the changes made to HARP.

FIGURE 5. HOUSING AFFORDABILITY INDEX
(COMPOSITE)



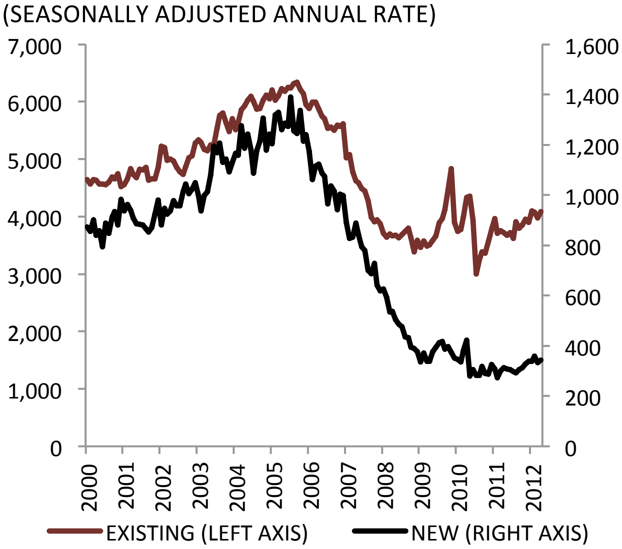
Source: National Association of Realtors

FIGURE 6. AVERAGE FIXED RATE MORTGAGES
(% INTEREST RATE)



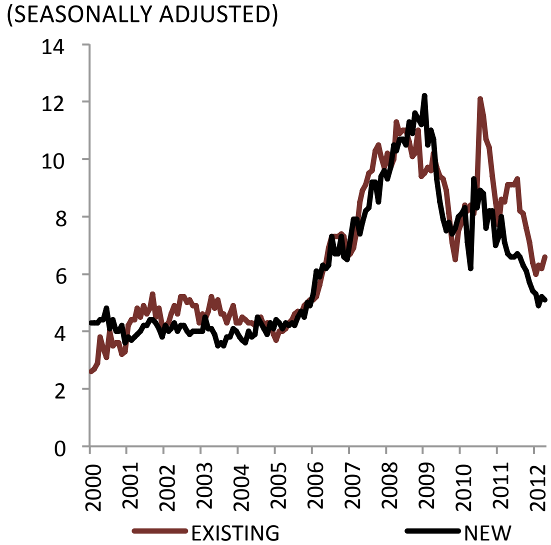
Source: Freddie Mac

FIGURE 7. HOME SALES IN THOUSANDS
(SEASONALLY ADJUSTED ANNUAL RATE)



Source: U.S. Census Bureau; NAR

FIGURE 8. MONTH'S SUPPLY OF HOMES
(SEASONALLY ADJUSTED)



Source: U.S. Census Bureau; NAR

With increased employment, albeit at a slow pace, and increased affordability, home sales have begun to steady at very low levels (see Figure 6). Existing home sales fell by more than 50 percent from their highest level in September 2005 to their lowest level in July 2010. Since July 2010, existing home sales of single family homes have increased by about 35 percent. Comparatively, new home sales fell 80.4 percent from their highest level, hitting their lowest point of the last decade in February 2011. Since then, new home sales have risen 25.7 percent. While sales have shown obvious improvement in the last year, they are still relatively depressed, especially new home sales.

The supply of new and existing homes for sale has also fallen dramatically since the onset of the housing crisis. The combination of growing demand and falling inventories will likely boost new home construction and the housing market more generally. In April, the supply of existing homes stood at 6.6 months, while the supply of new homes stood at 5.1 months (see Figure 7). Between 6 and 7 month's inventory is generally considered to be ideal. As inventory continues to deplete, there should be some pickup in construction. Though it will take more significant job and wage growth to lift construction and sales from relatively low levels.

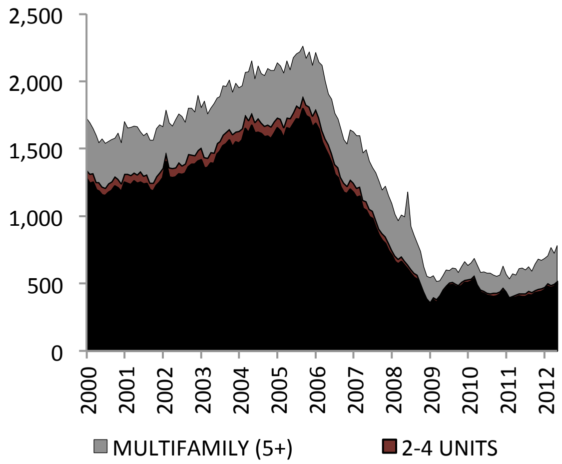
More than anything else, a pick-up in construction will ultimately signal the recovery of the U.S. housing market. While prices have been leveling and have started improving in many cities across the country, construction of new single family homes has not; it has yet to mimic the kind of growth seen in the multifamily housing sector. While both single family and multifamily housing permits and starts both increased in the past year, the percentage increases in multifamily permits and starts have far outpaced those for new single family homes (see Figures 8 and 9). Multifamily construction spending, though, is still relatively small when compared to single family construction spending (see Figure 11). A summary of how construction indicators have changed in the boom and bust of the housing market can be found in Table 1.

Table 1. Residential Construction Indicators

	April 2012	M-O-M % Change	Y-O-Y % Change	Peak to Trough % Change	% Change Since Trough
Housing Starts (Thousands of Units)	717	2.6%	30.6%	-77.8%	50.0%
Single Family	492	2.3%	19.7%	-80.5%	39.9%
Multifamily	217	4.3%	75.0%	-87.5%	309.4%
Housing Permits (Thousands of Units)	715	-7.0%	27.0%	-77.3%	39.4%
Single Family	475	1.9%	20.3%	-81.3%	41.0%
2-4 Units	23	4.6%	9.5%	-85.2%	53.3%
Multifamily (5+)	217	-22.8%	47.6%	-83.9%	149.4%
Fixed Residential Investment (Quarterly) [Billions of Chained $]	349.6	4.51%	8.9%	-59.0%	8.9%
Residential Construction Spending (Millions of $)	262,328	2.6%	6.2%	-65.9%	12.6%
Private	256,085	2.8%	7.5%	-66.7%	13.7%
New Single Family	119,424	1.7%	13.1%	-80.6%	31.0%
New Multifamily	18,004	4.1%	31.4%	-77.0%	41.9%
Public	6,243	-6.8%	-28.7%	N/A*	N/A*

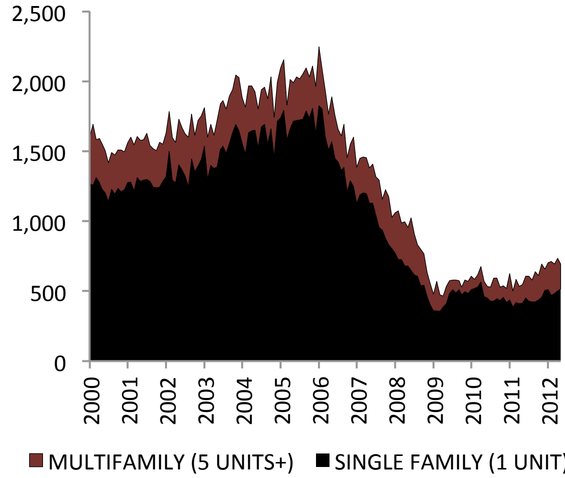
Source: U.S. Census Bureau; Bureau of Economic Analysis * See Figure 10

FIGURE 9. HOUSING PERMITS IN THOUSANDS
(SEASONALLY ADJUSTED ANNUAL RATE)



Source: U.S. Census Bureau

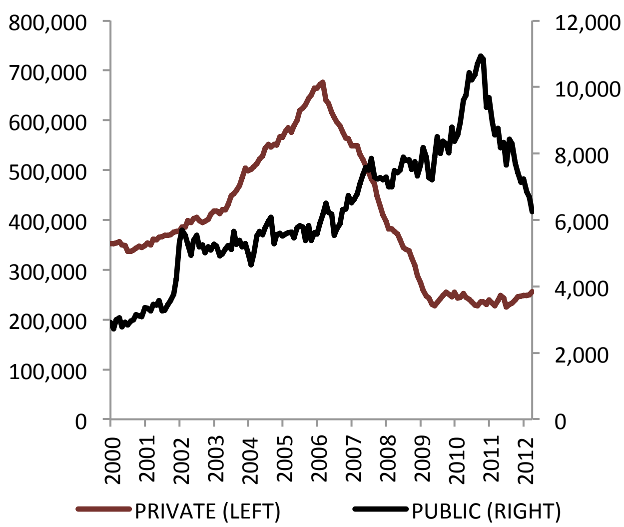
FIGURE 10. HOUSING STARTS IN THOUSANDS
(SEASONALLY ADJUSTED ANNUAL RATE)



Source: U.S. Census Bureau

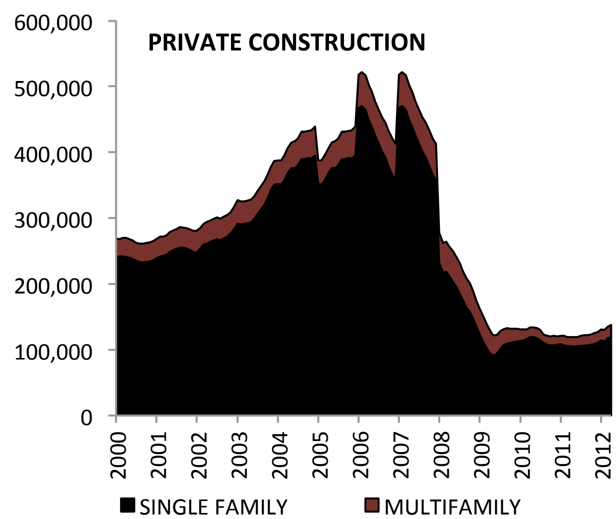
Because of the numerous links between the residential construction sector and the overall economic recovery, construction indicators are among the most important metrics to be used when evaluating the housing recovery. The construction of owner-occupied, single family homes is today a mere fraction of its pre-bubble level. The resurgence of residential construction spending will not come until the excess of distressed properties clears the market and people have the disposable incomes to pursue homeownership.

FIGURE 11. RESIDENTIAL CONSTRUCTION
(SEASONALLY ADJUSTED ANNUAL RATE)
MILLIONS OF DOLLARS



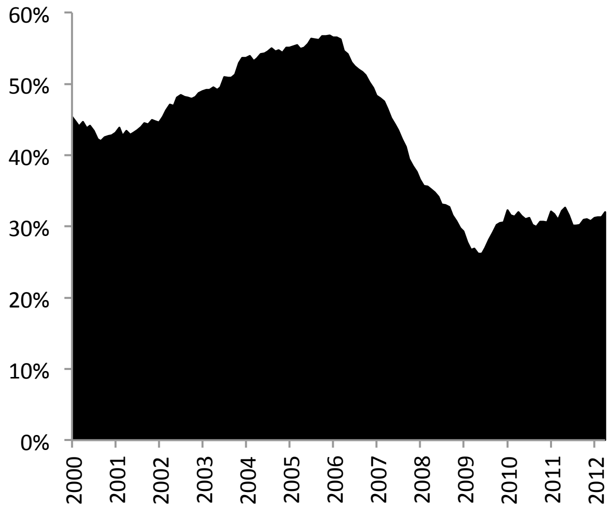
Source: U.S. Census Bureau

FIGURE 12. RESIDENTIAL CONSTRUCTION
(SEASONALLY ADJUSTED ANNUAL RATE)
MILLIONS OF DOLLARS



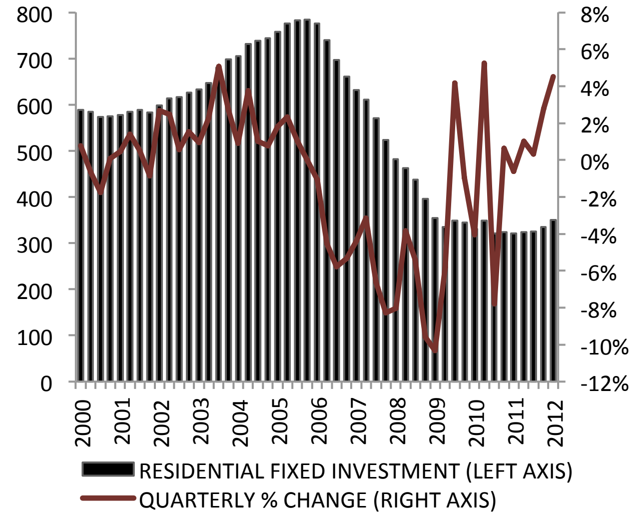
Source: U.S. Census Bureau

FIGURE 13. RESIDENTIAL CONSTRUCTION
(SEASONALLY ADJUSTED ANNUAL RATE)
% OF ALL CONSTRUCTION SPENDING



Source: U.S. Census Bureau

FIGURE 14. RESIDENTIAL FIXED INVESTMENT
(SEASONALLY ADJUSTED ANNUAL RATE)
BILLIONS OF CHAINED 2005 DOLLARS



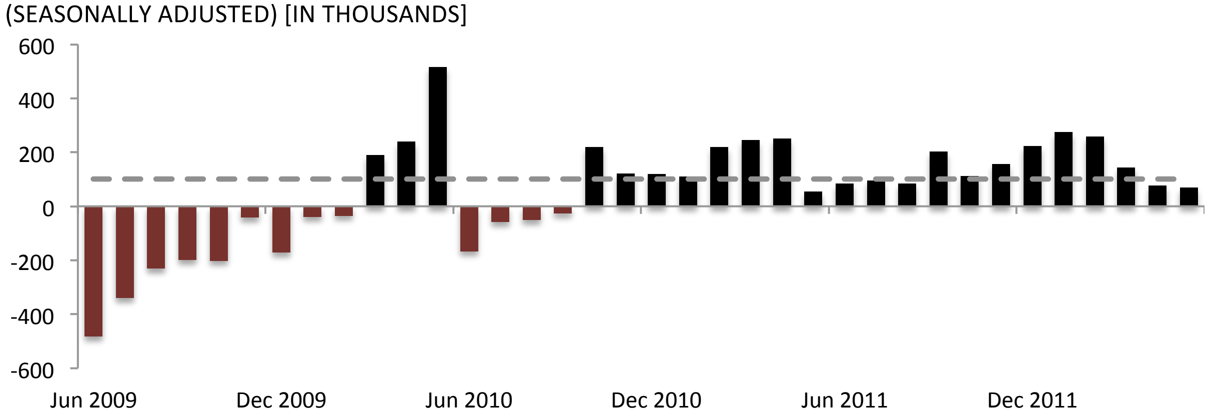
Source: Bureau of Economic Analysis

Links to Economic Growth

The housing recovery is strongly linked to the overall performance of the economy. First and foremost, a recovery in housing will not come without stronger job numbers. Higher incomes will help move individuals pushed into the rental market during the past few years instead into homeownership. Growth in jobs and wages gives people the disposable incomes necessary to pursue homeownership. Ultimately that pursuit of homeownership will translate into new construction, which has implications across sectors of the economy, including raw materials and appliances.

The overall economic recovery, not unlike the recovery in housing, has been tepid. Growth in nonfarm payroll employment has averaged only 56,000 jobs added monthly since the official end of the recession in June 2009 (see Figure 14). Perhaps as importantly as the marginal job growth, wage growth has been largely stagnant.

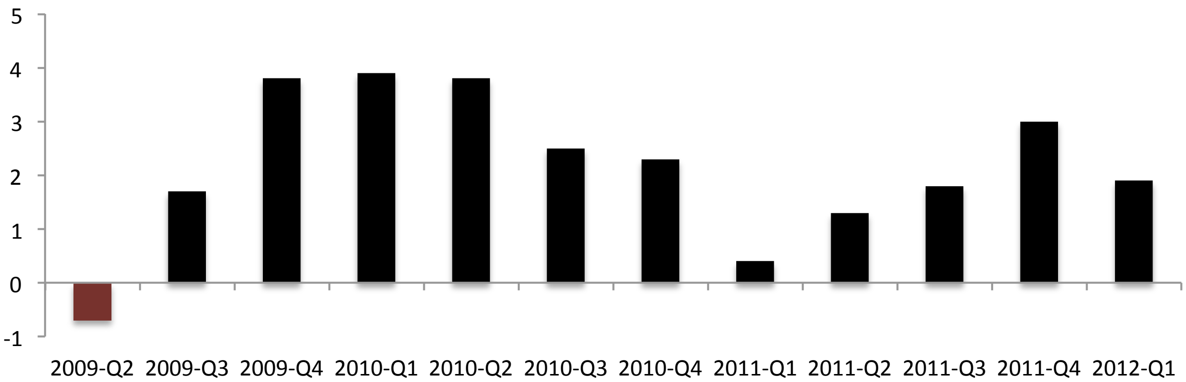
FIGURE 15. MONTHLY CHANGE IN NONFARM PAYROLL SINCE RECESSION TROUGH
(SEASONALLY ADJUSTED) [IN THOUSANDS]



Source: Bureau of Labor Statistics

Similarly, quarterly growth in real GDP has averaged only 2.1 percent over the past three years (see Figure 14). Recent slowdowns in both GDP and job growth have sparked fears of a double-dip recession, which would almost certainly undermine the recovery of the housing sector and put millions of underwater borrowers in jeopardy of losing their homes.

FIGURE 16. QUARTERLY CHANGE IN REAL GDP SINCE RECESSION TROUGH
(SEASONALLY ADJUSTED ANNUAL RATE) [PERCENTAGE POINTS]



Source: Bureau of Economic Analysis

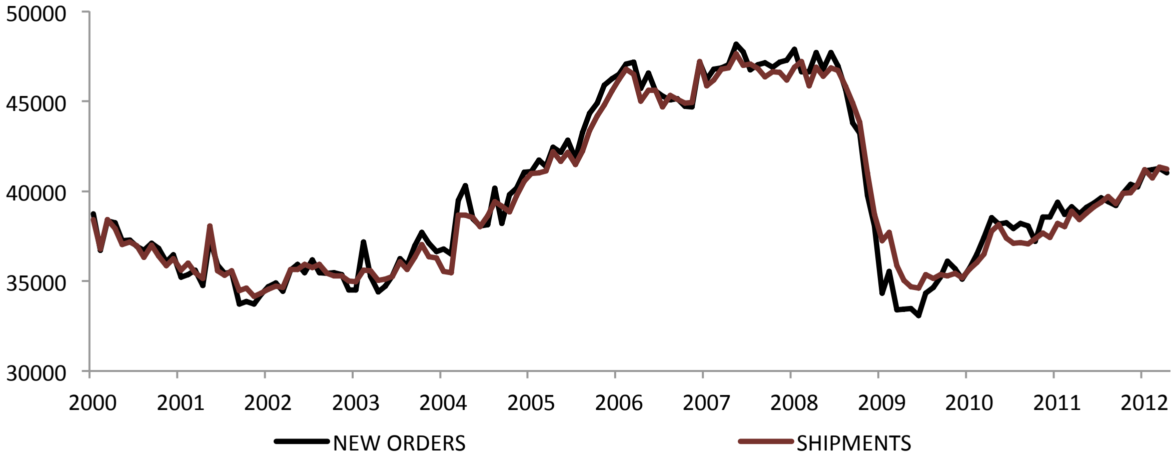
Real estate and construction have consistently added to the country's GDP, shown in Table 2. New construction has considerable value to the overall economy throughout a number of sectors that have suffered in the economic recession. At the height of the housing boom in 2006, more than 1.8 million people were employed in the residential and nonresidential construction sectors. Today there are almost 600,000 fewer construction workers. Since construction employment hit its lowest point in May 2011, that number has increased by only 1.3 percent.

Table 2. Real Value Added to GDP *(Billions of Chained 2005 Dollars)*

	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Construction	612.5	594	561.1	524	456.2	441.8	440.5
Y-O-Y % Change	-1.1%	-3.0%	-5.5%	-6.6%	-12.9%	-3.2%	-0.3%
Durable Goods	878.3	936.8	971.9	956.8	814.6	953.2	1028.1
Y-O-Y % Change	7.5%	6.7%	3.7%	-1.6%	-14.9%	17.0%	7.9%
Real Estate & Rental & Leasing	1579.4	1619.5	1685.1	1732.7	1699.2	1624.8	1582.5
Y-O-Y % Change	4.0%	2.5%	4.1%	2.8%	-1.9%	-4.4%	-2.6%

Source: Bureau of Economic Analysis

FIGURE 17. CONSTRUCTION MATERIALS & SUPPLIES
(MILLIONS OF DOLLARS)



Source: U.S. Census Bureau

Because of the direct linkages between income growth and the ability to pursue homeownership, job growth and sustained economic growth must be the priority of any policy to aid the housing recovery. Furthermore, many states known for being hit particularly hard by the housing crisis, like Nevada and California, have unemployment rates higher than the national average and generally slow economic growth, as shown in Table 2. Arizona though, which has also had a high rate of foreclosures, has an unemployment rate close to parity with the national average and has already seen house prices start to increase in the last few months. For high foreclosure states, it will be a combination clearing distressed properties from the market and boosting economic growth that will have the greatest effect on their recovery.

Table 3. High Foreclosure States & Economic Indicators

	Number of Mortgages per Completed Foreclosure (Past Year)	Unemployment Rate (%)	Average Growth in Real GDP (2009-2011) [%]
Nevada	14	11.6	0.5
Arizona	19	8.2	1.3
Michigan	23	8.5	3.6
Georgia	25	8.9	2.2
Florida	32	8.6	0.7
California	38	10.8	1.8
Ohio	53	7.3	1.9
Illinois	80	8.6	2.2

Source: CoreLogic; Bureau of Labor Statistics; Bureau of Economic Analysis

Concluding Comments

The best policies on a national level to encourage the recovery of the U.S. housing market are those that focus on economic growth across the country. While there has been considerable hope for market stabilization in the past few months, those positive indicators are jeopardized by any potential slowdown in the economic recovery, now three years since the trough of the "Great

Recession.” A recovery in housing will accelerate recovery in the overall economy, yet neither can happen without sustained job growth.

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[1] CoreLogic, “Shadow Inventory,” (June 14, 2012); http://www.corelogic.com/about-us/researchtrends/shadow-inventory.aspx

[2] Joint Center for Housing Studies of Harvard University, “The State of the Nation’s Housing 2012” (June 14, 2012); http://www.jchs.harvard.edu/research/publications/state-nation%E2%80%99s-housing-2012