The housing market finally appears to be pulling out of its prolonged downturn. House prices have steadily trended up in most metropolitan markets across the country, replenishing some of the household wealth lost during the crash. Housing starts also climbed almost 30 percent in 2012, while existing home sales surpassed the 4.0 million mark for the first time since 2007.

Following these trends, the Joint Center for Housing Studies estimates that spending on home improvements increased about 9 percent in 2012. This comes as welcome news after the severest downturn in recent memory. While known to be highly cyclical, residential fixed investment (including home building as well as improvement spending) fell from a 5.2 percent average share of gross domestic product (GDP) during the 20 years prior to the Great Recession to only a 2.8 percent share between 2008 and 2012.

Along with pent-up demand for new homes, this decline suggests the need for renewed investment in the existing housing stock. Indeed, the retreat in improvement spending has had a measurable impact on the quality of the nation’s owner-occupied housing: after several decades of decline, the number of inadequate homes increased by 7 percent between 2007 and 2011 to 2.4 million units. As Joint Center analysis has found, inadequate homes are significantly more likely to be converted to rental units or nonresidential uses, to become vacant, or to be permanently lost from the inventory.

With the US economy and housing market now recovering, investment in the nation’s housing inventory is also picking up. Lenders and new owners are rehabilitating millions of foreclosed properties. Older homeowners are retrofitting their homes to accommodate their future needs. Households in general are increasing their investments in environmentally sustainable improvements. And with the huge echo-boom population moving into the homebuying market over the coming decade, the remodeling industry can look to an even more promising future.
RECENT TRENDS IN HOME IMPROVEMENT ACTIVITY

Spending on home improvements and repairs totaled $275 billion in 2011 according to Joint Center estimates, down 4 percent from 2009 levels and some 16 percent below the market peak in 2007 (Figure 1). Even so, these expenditures represented 1.8 percent of GDP in 2011, exceeding the amount spent on single- and multifamily home construction. In fact, spending on improvement and repair projects in 2011 surpassed purchases of clothing, furniture and home furnishings, and electronics and appliances—and equaled about half of spending at grocery stores.

Fully 82 percent of home improvement and repair spending was on owner-occupied homes, with the remainder on rental units. About three-quarters of total expenditures went to improvements, including replacements, upgrades, remodels, additions, structural alterations, and other activities that increase the value of the housing stock. The other quarter was spent on more routine maintenance and repair projects that help to preserve the current quality of homes.

Maintenance and repair spending tends to be more stable than improvement expenditures, given that homeowners and rental property owners are more likely to perform basic upkeep even when they are unwilling or unable to upgrade their properties. During the 2007 to 2011 downturn, spending on maintenance and repairs thus increased about 6 percent, while spending on improvements dropped by 22 percent.

Still, homeowner improvements are by far the larger market, accounting for almost two-thirds of industry spending even in such a down year. More than a quarter of this spending was discretionary—that is, for projects like kitchen and bath remodels, room additions, and structural alterations that can be deferred when economic circumstances require. More than 40 percent of expenditures were for replacements (such as roofing, siding, windows, and doors) and systems upgrades (including plumbing, electrical, and HVAC). Almost 12 percent was for interior upgrades to flooring, paneling, ceilings, and insulation. The remaining 22 percent was for other property improvements such as garages, driveways, fencing, patios, and disaster repairs.

CHANGES IN SPENDING PATTERNS

Not only has the pace of improvement spending slowed in recent years, but its composition has also shifted. Near the peak of the market in 2007, discretionary projects accounted for some 37 percent of homeowner expenditures. That share stood at just over 26 percent in 2011. At the same time, the share of spending on replacement projects and systems upgrades climbed from 30 percent to 40 percent, while shares of spending in the other home improvement categories were largely unchanged.

Spending on discretionary home improvements—particularly upper-end projects by high-spending households—drives the overall remodeling market more than the number of households undertaking projects. Indeed, essentially the same share of owners (57 percent) reported improvement projects during the upturn in 2006–07 as during the downturn in 2010–11. What marks the difference between these periods is the activity of a small group of high-spending households. In 2006–07, over 650,000 owners spent at least $100,000 on home improvements, while another 3.5 million spent between $25,000 and $100,000. Together, these homeowners accounted for almost 60 percent of all expenditures over this two-year period. By comparison, fewer than 3.0 million owners reported spending more than $25,000 on improvements in 2010–11, contributing less than 46 percent of the total.

The share of upper-end discretionary improvement projects tends to rise and fall with the health of the broader economy. Spending on replacements and systems upgrades, in contrast, is much less volatile—increasing less during upturns but declining less during downturns. The recent cycle was somewhat unusual, however, in that the share of spending on replacement projects and systems upgrades jumped 10 percentage points
between 2007 and 2011, with the dollar amount up by almost $2 billion or nearly 3 percent. Much of this surge reflects growing demand for energy-efficient upgrades, driven in part by the availability of state and federal tax credits.

With the decline in spending on discretionary projects, home improvement expenditures per owner in 2011 stood well below levels averaged over the previous decade. In fact, per-owner spending fell from about 25 percent above the decade average in 2007 to about 10 percent below that level in 2011 (Figure 2).

**THE SHRINKING DO-IT-YOURSELF MARKET**

Do-it-yourself (DIY) home improvement projects were another casualty of the housing downturn. Until recently, almost a quarter of home improvement spending was by owners who install the products themselves. On a project basis, the DIY share is closer to 40 percent because expenditures generally cover only the cost of the products and materials, while expenditures on professionally installed projects include labor costs as well as contractor overhead and profit.

While the DIY share is thought to be countercyclical (increasing when the home improvement market is weak and decreasing when it is strong), the opposite occurred during this cycle. The DIY share of spending peaked at just under 26 percent in 2003 and fell steadily through 2011 to less than 18 percent (Figure 3).

This decline in part reflects the recent financial plight of younger homeowners, traditionally the most active age group in the DIY market. Owners under age 35 historically have devoted about 35 percent of their home improvement dollars to DIY projects—about 10 percentage points more than the overall owner population. But with their homeownership rates falling during the housing downturn, with the home equity shrinking among those that did own, and with their higher share of DIY activity, younger households have contributed a smaller portion of overall improvement spending in recent years.

By and large, older households—with their traditionally lower share of DIY activity—were less affected by the housing bust. The homeownership rate for households age 65 and over actually inched up after 2007, while that for households age 55–64 fell less than among younger age groups. Older owners also lost a smaller share of their home equity than younger owners. Coupled with the growth in the numbers of owners in these age ranges, the share of home improvement spending among owners age 55 and over thus increased more than seven percentage points (38.1 percent to 45.5 percent) between 2007 and 2011.

**GEOGRAPHIC DISTRIBUTION OF SPENDING**

In another departure from historical trends, regional spending patterns underwent a shift during the recent housing cycle. In the past, upper-income households living in higher-valued homes in the Northeast and Midwest have reported the highest levels of, and strongest growth in, home improvement spending. But during the recent housing boom, strong demand in major Sunbelt markets drove up prices, stimulating growth in improvement expenditures. During the downturn, house prices dropped sharply in these overbuilt areas, lifting foreclosure rates and dampening improvement spending. The
result was a particularly severe spending cycle in the South and West (Figure 4).

At the metropolitan area level, the locus of the strongest home improvement activity has also changed. During the 1990s, the top 10 markets for average per-owner spending were heavily concentrated along the East Coast (Boston, New York, Philadelphia, and Washington, DC) and the West Coast (Seattle, Portland, San Francisco, and Los Angeles), with just Minneapolis and Salt Lake City—ranked in the last two slots—representing the interior regions of the country. Since then, however, metros posting the strongest growth in per owner spending are more heavily concentrated in the rapidly growing areas of the Sunbelt. Over the past two decades, Atlanta, Dallas, Houston, and Washington, DC, have thus recorded the strongest growth in inflation-adjusted improvement expenditures, while Chicago, Philadelphia, and Los Angeles have registered declines.

NEAR-TERM CHALLENGES TO GROWTH

In the short term, owners looking to make home improvements face several challenges. Near the top of the list is the loss of home equity resulting from the unprecedented plunge in house prices during the housing crash. After several years of strong house price appreciation, homeowners nationwide had almost $13 trillion in equity in 2006, or almost $170,000 per owner on average. By 2011, however, aggregate home equity had dropped by half to $6.5 trillion, or $87,000 per owner.

Since home equity is a major source of wealth for most owners, sharply lower house values make owners feel less wealthy and therefore less likely to spend in general and on improvements in particular. And with less equity available and

### Sunbelt Markets Saw Stronger Spending Increases During the Upturn and Steeper Declines During the Downturn

Average Annual Per-Owner Improvement Expenditures (2011 dollars)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>2,980</td>
<td>3,550</td>
<td>2,880</td>
<td>19</td>
<td>-19</td>
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<tr>
<td>Midwest</td>
<td>2,250</td>
<td>2,720</td>
<td>2,230</td>
<td>20</td>
<td>-18</td>
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<tr>
<td>South</td>
<td>1,870</td>
<td>2,870</td>
<td>2,150</td>
<td>53</td>
<td>-25</td>
</tr>
<tr>
<td>West</td>
<td>2,690</td>
<td>4,440</td>
<td>2,510</td>
<td>65</td>
<td>-43</td>
</tr>
<tr>
<td>US Total</td>
<td>2,330</td>
<td>3,280</td>
<td>2,370</td>
<td>41</td>
<td>-28</td>
</tr>
</tbody>
</table>

Note: Regions are as defined by the US Census Bureau.
Source: JCHS tabulations of the 2001–11 AHS.

### Owners with Greater Equity in Their Homes Generally Spend More on Improvements

Average Annual Per-Owner Improvement Spending in 2011 (Dollars)

<table>
<thead>
<tr>
<th>Equity as a Share of Home Value</th>
<th>Discretionary</th>
<th>Replacement</th>
<th>Other</th>
<th>Owners Providing Mortgage Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 or Less</td>
<td>2,030</td>
<td>530</td>
<td>940</td>
<td>1,220</td>
</tr>
<tr>
<td>1–19%</td>
<td>2,070</td>
<td>410</td>
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<td>20–49%</td>
<td>1,480</td>
<td>1,040</td>
<td>570</td>
<td>750</td>
</tr>
<tr>
<td>50–99%</td>
<td>1,620</td>
<td>1,180</td>
<td>570</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>2,080</td>
<td>1,090</td>
<td>570</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Discretionary projects include kitchen and bath remodeling, room additions, other major interior improvements and outside attachments. Replacements include systems and equipment, exterior and interior. Other includes disaster repairs and other property improvements.
Source: JCHS tabulations of the 2011 AHS.
credit still tight, households are finding it more difficult to get financing for projects. In 2011, owners with under 20 percent equity in their homes spent about 22 percent less on average on home improvements and about 30 percent less on discretionary projects than owners with at least 20 percent equity (Figure 5). In fact, owners with some but less than 20 percent equity spent about the same as those with zero or negative equity in that year. Owners without mortgages—primarily older owners—also spent about the same as owners with less than 20 percent equity.

In addition to its direct impact on home equity, the direction of house prices can also influence decisions to undertake an improvement project. Indeed, research has shown that the “return” on home improvement expenditures tends to be lower during periods when home prices are weak. In their annual Cost vs. Value reports, *Remodeling* magazine and the National Association of Realtors® estimated that near the peak of the housing market in 2005, improvement projects on average returned almost 87 percent of the cost in terms of higher home values. This ratio then fell each year through 2011 as home prices dropped, with improvements yielding less than 58 percent of the project cost. Their latest report, however, indicates that the return on improvements increased to nearly 61 percent in 2012, tracking the emerging recovery in house prices.

How rapidly growth proceeds depends on many critical factors: international political and financial events; the ability of Congress and the Administration to effectively manage fiscal policy; and continued improvement in private sector business conditions, leading to job and income growth for US households. The availability of credit to homeowners for improvement projects is also uncertain. And within the extremely fragmented home improvement industry, there is concern that shortages of skilled labor could create bottlenecks in remodeling activity.

Despite these unknowns, some niche markets are already laying a firm foundation for renewed growth in home improvement spending. In particular, the upgrading of more than 4.2 million distressed homes sold between 2009 and 2012 has already generated a burst of expenditures. The 2.9 million homes currently in, or at serious risk of, foreclosure thus represent pent-up demand for future investment. Given the strong growth in the number of renter households since the housing crash, owners of rental housing are likely to upgrade their properties in the coming years. Environmentally sustainable projects are also a growth market, not only because of the recent volatility of home energy costs but also because of increasing interest in broader green objectives, including healthy home environments.

Finally, the US Census Bureau projects that, led by the baby boomers, the population age 65 and over will increase by 15.5 million—nearly 40 percent—between 2010 and 2020. The near-term growth in this older population will underpin strong demand for retrofits to existing homes to enable these households to age in place. Meanwhile, members of the large baby-bust generation are entering their peak remodeling years and will support market growth this coming decade. Longer term, the aging of the enormous echo-boom generation holds the potential for even stronger growth in the home improvement market in the 2020s and beyond.