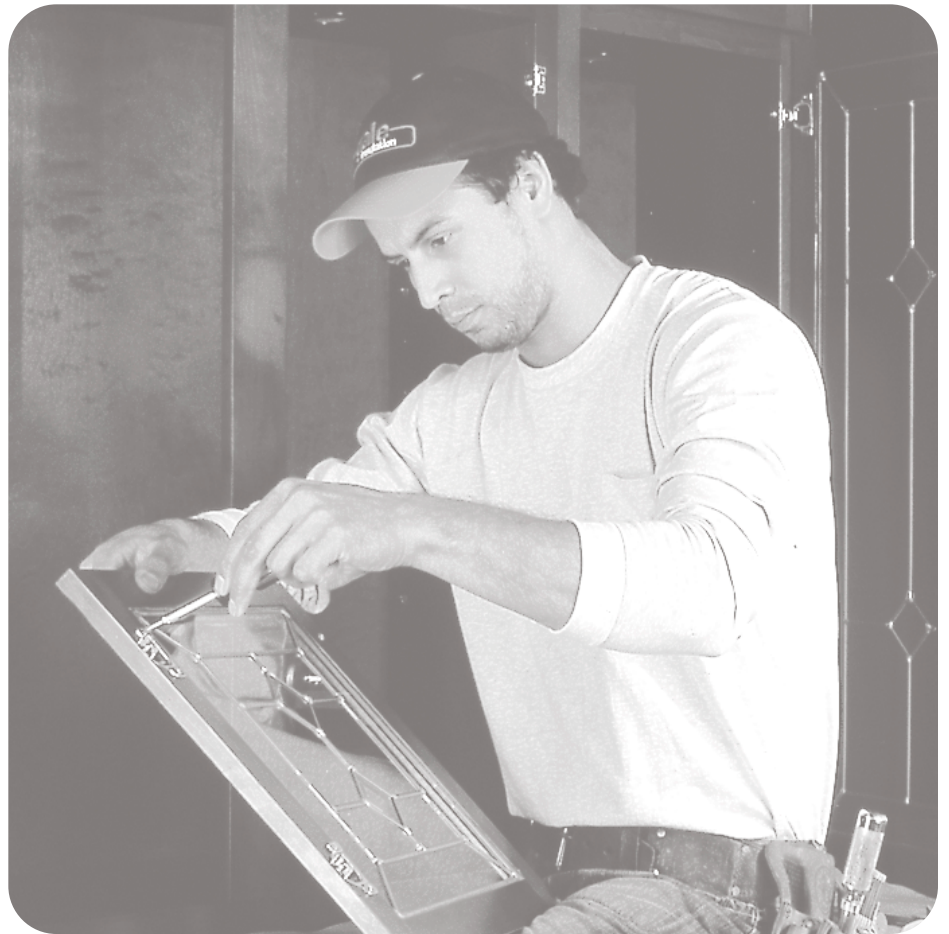


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The Changing Structure of the Home Remodeling Industry

Improving America's Housing 2005

**Harvard Design School
John F. Kennedy School of
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Introduction and Industry Overview

Even with the ups and downs of the broader economy, **growth in spending** on residential remodeling and repairs has been **remarkably steady**. In fact, the home improvement industry has not seen a major downturn since the early 1990s. **Remodeling** expenditures by homeowners and rental property owners totaled **\$233 billion** in 2003, accounting for 40 percent of all residential construction and improvement spending and more than 2 percent of the US economy.

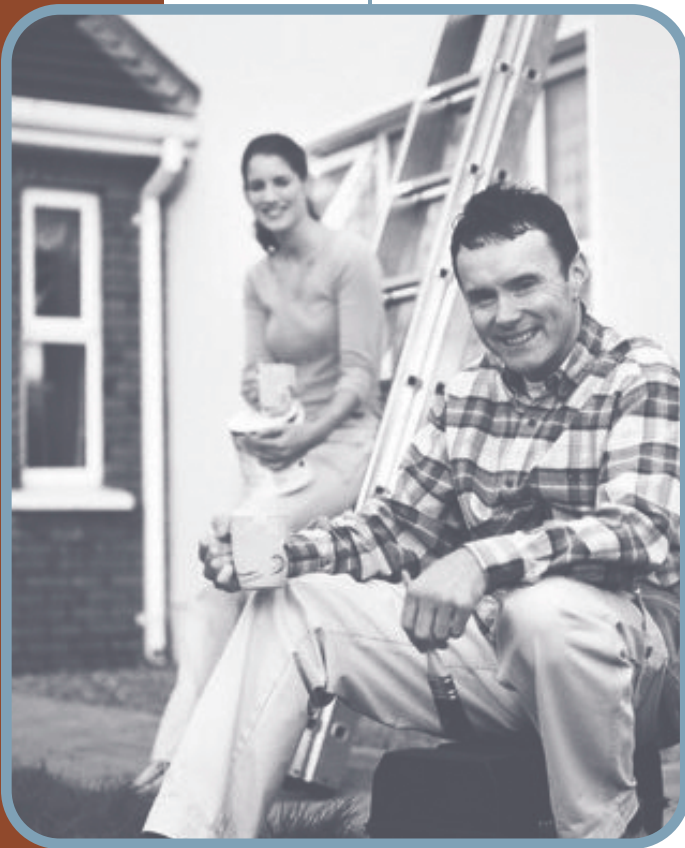


Despite this impressive performance, manufacturers and distributors of building products in the US have only recently come to view the remodeling industry as separate from home building. The targeting of professional remodeling contractors as a key market segment of the residential construction industry is also a fairly recent development. Moreover, it is only in the past five years that federal government agencies have reported labor categories for the remodeling industry or collected information on remodeling business establishments.

The remodeling industry has the baby boomers to thank for putting it on the economic map. Once that generation entered the housing market, expenditures for remodeling projects tripled between 1970 and 1980, and then jumped another 250 percent between 1980 and 1990. At that point, there was growing recognition that the home improvement industry had a major role to play in the economy—a fact borne out during the 2001 recession, when the strength of housing construction and home remodeling helped to prevent the downturn from being even deeper and more prolonged.

Most signs point to continued spending growth. Favorable home mortgage rates, together with the overall aging of the population, have pushed the homeownership rate to over 68 percent from under 64 percent in 1993. Most analysts expect the ownership rate to continue to rise over the coming decade. Since owner-occupants on average invest more on home improvements than renters, a higher homeownership rate should translate into even stronger remodeling and repair expenditures.

At the same time, the nation's inventory of homes numbers some 120 million units, with about 1.5 million homes added each year to this base. At an average age of 32 years and rising, the stock of homes is in constant need of maintenance and upgrading. Fortunately, significant increases in house prices over the past decade have given owners not only an incentive to protect their housing investments, but also the rapidly growing equity to finance those improvements.



Spending Breakdown

After factoring in both homeowner and rental property owner spending, the home improvement market has grown to nearly one-quarter trillion dollars (*Exhibit 1*). Homeowners contribute over 75 percent of all remodeling expenditures, with the vast majority devoted to “do-it-yourself” or “buy-it-yourself” projects and payments to professional contractors for improvements. Maintenance and repair expenditures, in contrast, represent just over 20 percent of homeowner spending.

Spending on rental properties makes up the other 25 percent of total maintenance and improvement dollars. While more volatile than homeowner spending, remodeling expenditures by rental property owners have generally been on the upswing in recent years. This trend may reflect the relative weakness of multifamily construction over the past decade and the increased importance of an aging inventory in meeting rental housing demand.

Homeowners undertake remodeling projects to modernize or otherwise improve the livability of their homes. Indeed, nearly 45 percent of homeowner spending involves changes to interior space (such as kitchen remodels, bathroom additions and remodels, and room additions) and other structural alterations. These project categories have been among the fastest-growing segments of the owner improvement market, with expenditures approaching \$60 billion in 2003 (*Exhibit 2*).

Replacements to exteriors (including roofing, siding, windows and doors) and interiors (such as flooring, wall finishes, and ceilings) represent about 28 percent of spending. Replacing or upgrading systems and equipment—from electrical systems to built-in appliances—accounts for another 11 percent of home improvement dollars. The remaining 18 percent of homeowner spending goes toward general improvements to the property, such as driveways and retaining walls.

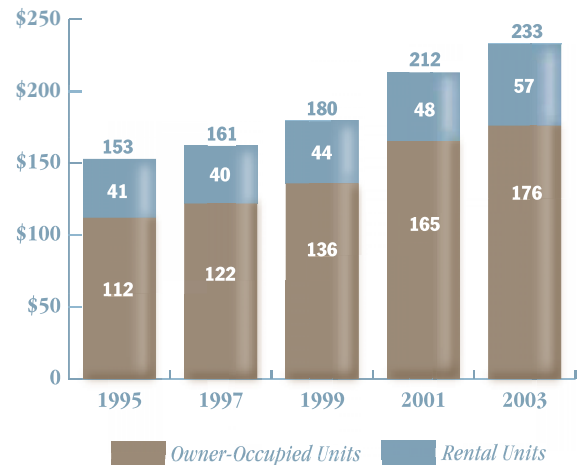
Regional Trends

Home improvement activity has been heavily concentrated in the Northeast and Midwest. Given the older housing stock, generally higher household incomes, and scarcity of land for development in prime locations, households in these regions

EXHIBIT 1

THE REMODELING MARKET APPROACHES ONE-QUARTER TRILLION DOLLARS

Billions of dollars

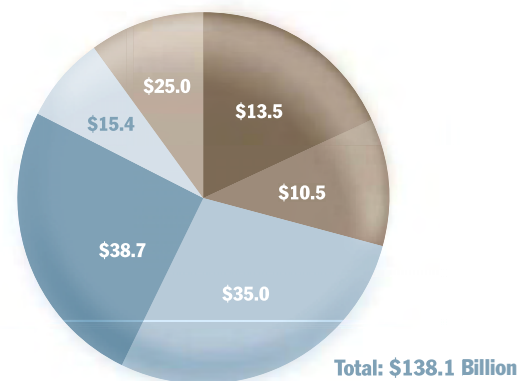


Sources: JCHS tabulations of 1995-2003 American Housing Survey (AHS) and the US Department of Commerce Survey of Expenditures for Residential Improvements and Repairs.

EXHIBIT 2

REMODELS AND ADDITIONS LEAD HOMEOWNER IMPROVEMENT SPENDING

Billions of dollars



Source: Table A-1.

have traditionally contributed a disproportionately high share of spending.

Even so, growing shares of homes in the Sunbelt are now old enough to require upgrades and improvements. As more metropolitan areas in these regions are developed to the point that older homes nearer economic centers are in more demand than newer homes at the urban fringe, improvement spending is becoming a larger share of housing investment.

In 2003, the value of remodeling permits in the South and West increased at a double-digit pace, but only about half that rate in the Northeast and Midwest (*Table A-6*). These regional trends are mirrored at the metropolitan level. Of the top 25 markets for homeowner improvements, the areas experiencing the most growth in 2003 are primarily in the Sunbelt states (*Exhibit 3*).

Improving the Housing Stock

Over the past decade, homeowner expenditures on improvements have averaged about 10 percent of the 1995 value of

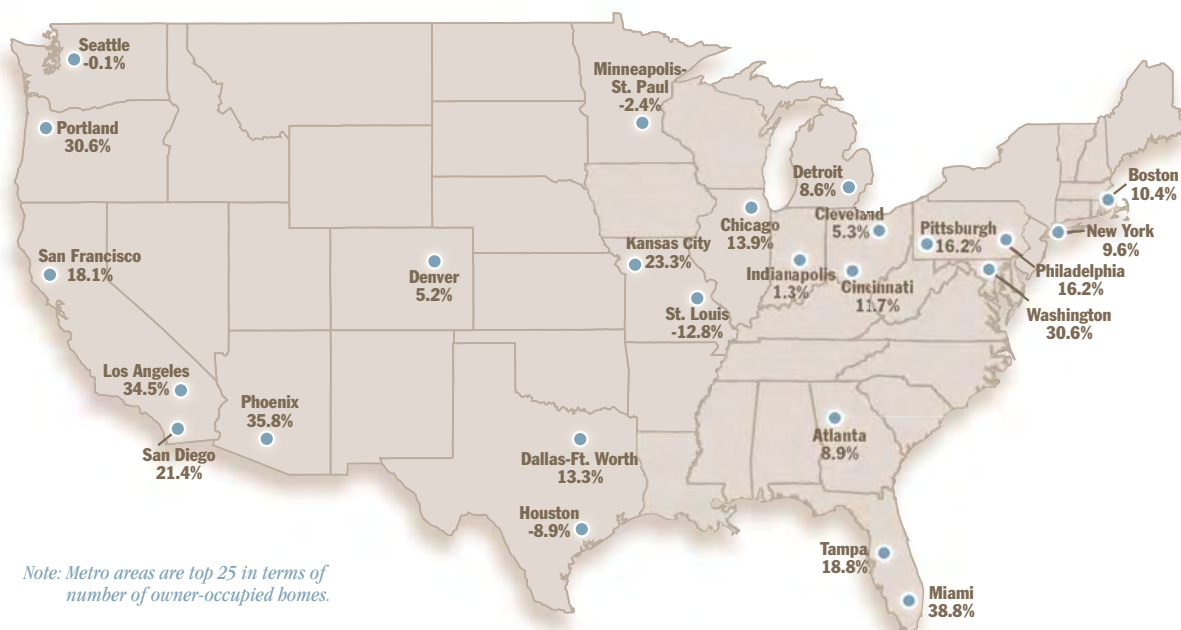
homes. Spending levels do, however, vary considerably (*Exhibit 4*). The majority of owners reported spending less than 10 percent of home value—only enough to offset physical depreciation, estimated to be about one percent annually. At the same time, a little over 45 percent of owners reported making major or significant upgrades that likely improved the overall quality of their homes. (For purposes of this discussion, a significant upgrade is one where spending exceeds 10 percent of the home's 1995 value.) Indeed, nearly 7 percent of owners made outlays exceeding 50 percent of their homes' initial market value.

This divergence in spending patterns reflects the fact that owners often undertake home improvements in clusters. It may be that once owners begin to focus on a particular project, other upgrades become either necessary or desirable. Regardless, homes and systems that have not been upgraded for an extended period of time are often the targets of substantial makeovers when they turn over to new owners.

EXHIBIT 3

MANY OF THE FASTEST-GROWING REMODELING MARKETS ARE LOCATED IN THE SUNBELT

Annual percentage change in permit values, 2003



Note: Metro areas are top 25 in terms of number of owner-occupied homes.

Source: Table A-6.

Industry Fragmentation and Specialization

Despite decade-long growth in home improvement spending and rapid consolidation within related industries, the remodeling contractor base that serves this market is still highly fragmented. While the top 10 US home builders doubled their mid-1990s market share to over 20 percent of all homes sold in 2003, the top 10 remodeling firms that year captured just 1 percent of homeowner payments to contractors. Even aggregating the billings for the top 500 remodeling contractors nationally puts the share at less than 4 percent of total contractor revenue (*Exhibit 5*).

While largely untouched by consolidation, remodelers have begun to move toward specialization. Only about a quarter of the top 100 remodeling contracting businesses in the country are full-service operations that perform a broad range of projects and incorporate specialty trade contractors. The largest share of top 100 firms consists instead of specialty remodelers—businesses that generally concentrate on window, siding, or roofing replacements, or deck or patio additions.

Another major remodeler segment, representing 10 percent of the top 100 firms, is made up of design/build contractors. These firms offer design services for their projects and typically specialize in high-end additions or major remodels. The remaining top 100 firms fall into the insurance repair, handyman, or franchise categories—all of which, though small, have seen significant growth over the past decade.

Looking Ahead

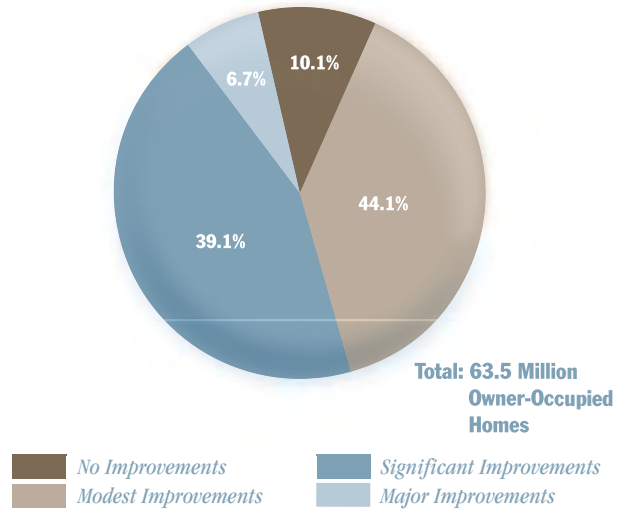
The US home improvement industry is poised for continued expansion. To realize this growth, however, contractors will have to respond strategically to several emerging trends—the increasing importance of the high-end market, the evolving structure of the industry, and the changing demographic environment.

Earlier in this decade, much of the growth in home improvement spending was prompted by a unique combination of rapidly rising house prices, historically low financing costs, and limited investment alternatives. These forces encouraged many homeowners to refinance their mortgages and to use the savings—as well as cashed-out equity—to reinvest in their homes by making high-end improvements. Continued low

EXHIBIT 4

ALMOST 30 MILLION HOMES WERE SIGNIFICANTLY UPGRADED OVER THE PAST DECADE

1994-2003 expenditures as percent of 1995 home value



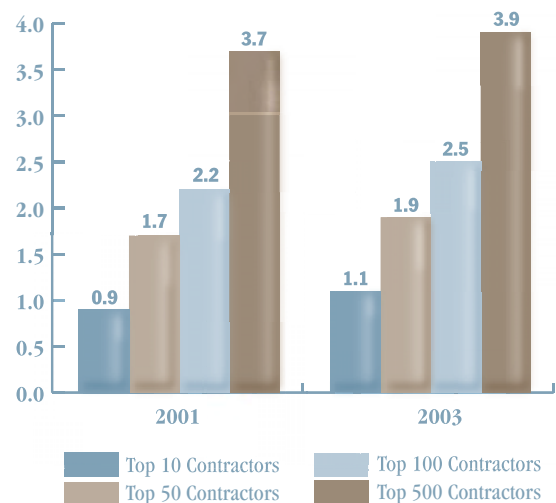
Notes: Major improvements defined as expenditures greater than 50% of home value, significant improvements as 10-50% of home value, and modest improvements as less than 10% of home value. No improvements defined as expenditures of less than \$1,000. Estimates adjusted for non-reporting of home improvement expenditures.

Source: JCHS tabulations of 1995-2003 AHS.

EXHIBIT 5

THE REMODELING CONTRACTING INDUSTRY REMAINS FRAGMENTED

Percent of total market



Sources: Qualified Remodeler Magazine, Replacement Contractor Magazine, and JCHS tabulations of 2001 and 2003 AHS.



financing costs, growth of high-income households, and rising house values have all helped to keep the market for high-end projects growing.

For several decades, the baby boomers have been the backbone of the remodeling market. This generation, now in their 40s and 50s, is aging beyond the prime remodeling years. Coming behind them are the members of so-called Generation X, who are fewer in number and more unknown in terms of their home improvement behavior. Complicating the outlook is the fact that minority and immigrant households—groups with potentially different home improvement goals—make up a large share of this generation. The challenge to the industry is thus to keep the aging baby boomers involved in making home improvements while at the same time finding ways to appeal to younger, more diverse homeowners.

Although the home improvement industry is emerging as one of the major forces in the economy, its organizational structure is locked in the past. This is particularly true of remodeling contractors, who largely lack the efficiencies gained through consolidation. With the home builder industry rapidly consolidating, building product suppliers are beginning to focus more on that industry segment. To achieve its growth potential, the remodeling segment must therefore ensure that manufacturers and distributors of home improvement products, as well as firms providing financing to this industry, continue to serve its contractor base.

The key threats to continued growth, however, are a sharp drop in home prices or a spike in mortgage interest rates. A rapid home price decline could prevent homeowners from tapping their equity to fund high-end home improvement projects. And even if home prices do not fall, rising interest rates could dampen the pace of home sales, thereby reducing the home improvement spending generated by housing turnover.

Nevertheless, income growth at the high end of the distribution has kept pace with rising home prices in most metropolitan areas, leaving room for continued strong spending gains. Without an unexpectedly large runup in mortgage rates or an unanticipated shock to the economy, the remodeling sector should be able to sustain the three percent annual inflation-adjusted growth it has averaged since 1995.

Emergence of the High-end Market

Strong growth in household income and wealth, along with equally strong increases in the number of homeowners, has fueled a decade-long rise in home improvement spending. At the same time, though, income growth has become **increasingly concentrated** at the upper end of the distribution. As a result, **affluent** homeowners are driving the remodeling market with their demand for such high-end **improvements** as room additions and kitchen and bath remodels.



Increasing Concentration of Income

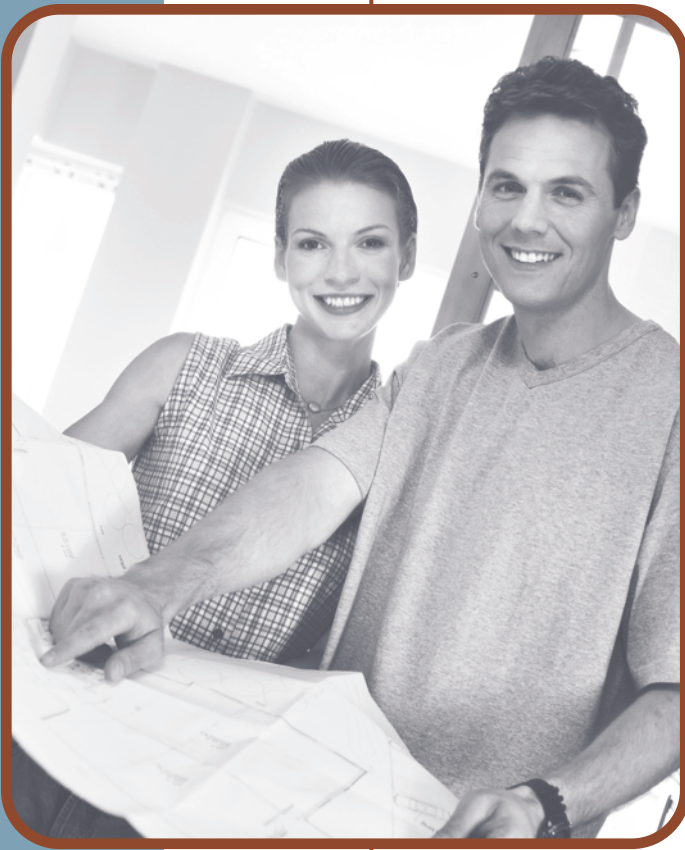
Continuing a long-term trend, the incomes of the top 20 percent of US households are now 15 times those of the bottom 20 percent. Average inflation-adjusted incomes at the high end advanced steadily from \$90,000 in 1975 to \$152,000 in 2000, before retreating to \$147,000 during the recession (*Exhibit 6*). In stark contrast, incomes of households at the low end of the distribution have held near \$10,000 for nearly three decades, with modest advances during strong economic expansions later offset during slowdowns.

This disparity persists despite the housing market boom. Between 1993 and 2003, the number of homeowners increased by more than 10 million, lifting the national homeownership rate from 63.7 percent to an all-time record of 68.3 percent. But even as millions of African Americans, Hispanics and other historically underrepresented groups were able to buy homes, the gap between the highest- and lowest-income households remains largely unchanged. Today, some 90 percent of households in the highest-income quintile own homes, compared with just 49 percent of those in the lowest-income quintile.

While representing just one in four homeowners, top-income households were responsible for some \$69 billion in expenditures—more than half of all improvement spending in 2003. With average per household outlays of \$3,600, highest-income homeowners spent three times more on remodeling projects than the median-income household, and four times more than the lowest-income households. Households in the highest-income quintile also accounted for 28 percent of all home purchases and initiated over 30 percent of all improvement projects.

Contribution of Rising Home Equity

Thanks to continued rapid price appreciation, construction of bigger and better homes, and substantial upgrading of existing homes, the nation's 75 million homeowners have built equity at astonishing rates. In 2004, inflation-adjusted home prices were up nearly 8 percent. Since 1995, house prices have jumped more than 70 percent—lifting total home equity some \$4 trillion to more than \$9 trillion today.



Aggregate home equity has moved up steadily for the past 40 years with only brief, shallow dips (*Exhibit 7*). By comparison, the value of stocks as a share of household assets has been much more volatile, soaring throughout much of the 1990s before dropping off sharply. In addition to being more stable than stock holdings, home equity is more evenly distributed. For most of the two-thirds of American households that are owners, equity in their homes is by far their most important asset. In fact, fully two-thirds of all owners have more home equity than stock wealth.

The rapid accumulation of home equity has become one of the major drivers of consumer spending in general, and of home improvement spending in particular. According to Federal Reserve Board analyses, about 20 percent of all consumer expenditures is linked to changes in household wealth. In the aftermath of the recent stock market crash, it appears that households tie their spending more to changes in housing wealth than in other forms of wealth, such as stocks and bonds. Indeed, housing-related wealth effects were responsible for approximately one-third of personal consumption growth from 2001 to 2003. Absent this housing wealth-related push in consumer spending, the recent recession would have been longer and more severe.

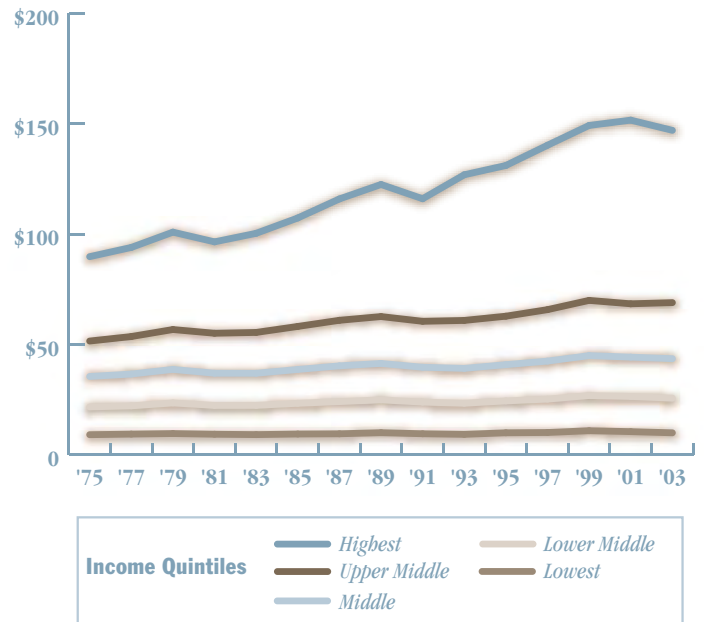
Home price appreciation alone generated about half of housing's contribution to spending gains over the past three years. The Joint Center for Housing Studies and Macroeconomic Advisors estimate that households spend on average 5.5 cents out of every dollar increase in home value. This additional spending starts within a year of when the home price goes up—much more quickly than after gains in stock wealth, which households apparently view as less secure.

The other half of spending growth attributable to housing wealth effects was prompted by the surge in cash-out refinances and realized capital gains from rising home sales. According to Freddie Mac, homeowners cashed out about \$333 billion in home equity between 2001 and 2003—nearly triple the level in the previous three-year period. Estimates from the Federal Reserve Board indicate that approximately one-third of the proceeds from cash-out refinances from January 2001 to June 2002 went to home improvement spending.

EXHIBIT 6

INCOME DISPARITIES HAVE WIDENED OVER THE LAST QUARTER-CENTURY

Thousands of 2003 dollars

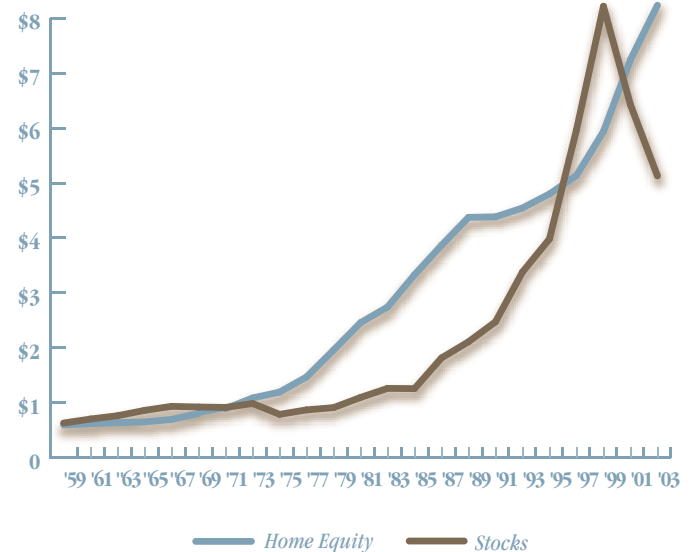


Source: US Census Bureau, Current Population Survey.

EXHIBIT 7

HOME EQUITY STABILIZES HOUSEHOLD WEALTH

Trillions of 2003 dollars



Source: Federal Reserve Board, Flow of Funds Accounts.

Sources of High-end Demand

From 1995 to 2003, the number of homeowners with inflation-adjusted incomes above \$120,000 soared by 50 percent, to 9.9 million. With rapid gains in high-income homeowners and significant increases in improvement expenditures per household, homeowners with incomes over \$120,000 spent more than \$43 billion on remodeling in 2003—fully 31 percent of the \$138.1 billion total spent on improvement projects (*Exhibit 8*).

Overall, owners with incomes in excess of \$120,000 nearly doubled their home improvement spending from 1995 to 2003. Although accounting for just 30 percent of the growth in total households, this high-income segment was responsible for 61 percent of the inflation-adjusted increase in home improvement spending (*Table A-3*). By comparison, households with incomes under \$80,000 accounted for 41 percent of the growth in the number of households, but only 3 percent of the increase in homeowner improvement spending.

Closely linked to the strong spending by high-income households is the dramatic increase in improvement spending by owners of high-value homes. As recently as 1995, homes valued at \$400,000 or more in 2003 dollars accounted for less than 4 percent (2.4 million units) of the owner-occupied inventory and for just 8 percent of total homeowner expendi-

tures. With the rapid appreciation of the existing stock, together with the increasing size and quality of newly constructed homes, the number of high-value homes is approaching 8 million (11 percent of the inventory).

Indeed, owners of high-value homes fueled over 90 percent of the growth in improvement spending between 1995 and 2003. With per household expenditures up from \$3,600 to \$5,000 on average over this period, these owners have increased their total spending from just \$8 billion to more than \$40 billion.

Focus on Additions and Interior Upgrades

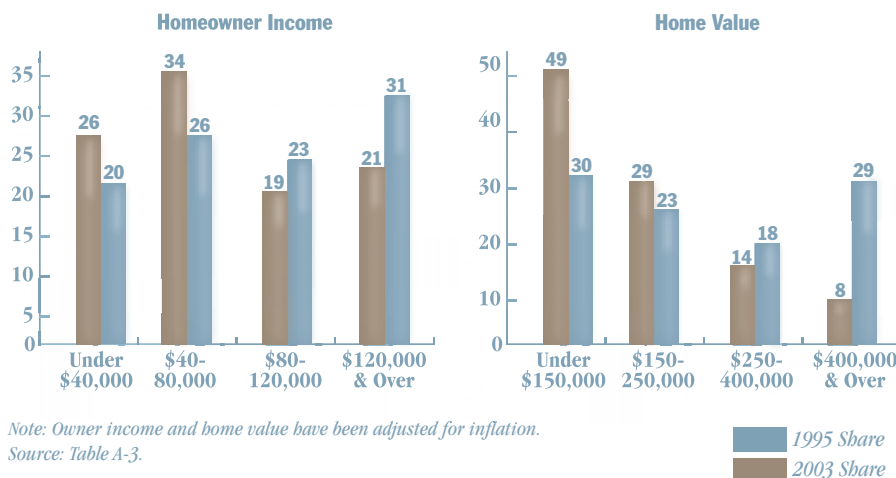
While the strong high-end market has lifted all segments of the remodeling industry, companies that perform interior upgrades and room additions have particularly benefited. High-value homes represent just 11 percent of the total owner-occupied housing inventory, but their owners completed over 800,000 room additions in 2002-3—contributing 43 percent of total expenditures in this category (*Exhibit 9*). Similarly, owners of high-value homes accounted for one-third of total spending on kitchen and bath remodels.

The popularity of these major home improvements undoubtedly reflects a mix of investment and consumption motives. In addition to adding more living space and amenities, these types

EXHIBIT 8

REMODELING EXPENDITURES ARE INCREASINGLY FOCUSED AT THE UPPER END OF THE MARKET

Percent of total spending



of upgrades typically enhance a home's resale price, especially in the hottest housing markets. According to *Remodeling* magazine's 2004 cost vs. value report, homeowners recover some 83 percent of their expenditures for room additions in the form of higher home values.

Whether a particular improvement has a high payback depends on many factors, including the age, location and characteristics of the home—especially relative to newly built homes in the area. An existing high-value home may have the advantage of a desirable location, but may lack the amenities found in new houses, such as multiple bathrooms and more generous interior spaces. As a result, an older home that is upgraded to current standards not only yields consumption benefits to the owner, but may also significantly increase its sales price.

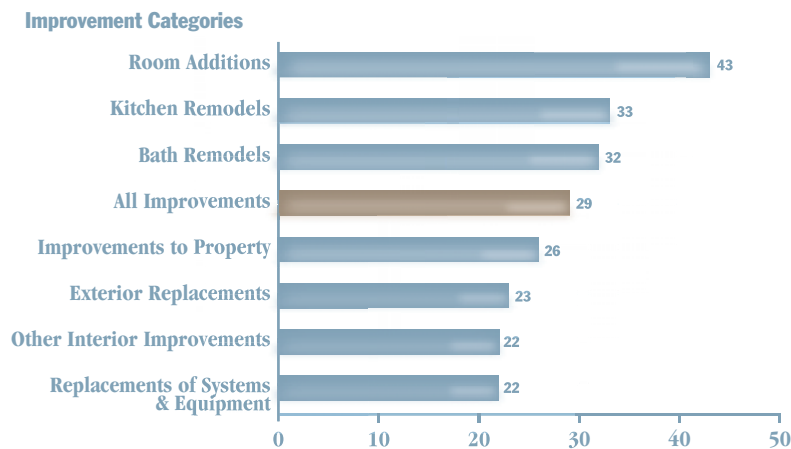
In addition to expenditures on major additions and interior upgrades, owners of high-value homes spend nearly twice as much on routine improvement projects as do owners with homes valued at \$400,000 or less. In 2003, owners of high-value homes spent on average \$400 annually for replacements of systems and equipment, while owners of lower-value homes spent just \$200. These owners apparently see investing in basic replacements as an important way to protect the growing equity in their homes.



EXHIBIT 9

INTERIOR UPGRADES ARE CONCENTRATED IN HIGH-VALUE HOMES

Expenditures by owners of homes valued at \$400,000 and over, as share of total



Source: JCHS tabulations of 2003 AHS.

The D-I-Y Share

Given the size and complexity of their projects, owners of high-value homes look to professional contractors to perform the vast majority of the work. Of the more than \$40 billion worth of improvements to high-value homes in 2003, professional contractors captured \$34.1 billion (*Exhibit 10*). The do-it-yourself share of spending in the high-end segment is thus only 15 percent, compared with one-third among owners with homes valued at less than \$100,000.

The American Housing Survey estimates that D-I-Y expenditures in 2003 totaled \$37.1 billion (27 percent of the market). It is important to note, however, that the survey understates this category of expenditures because homeowners are not asked to factor in the value of their time when reporting costs. Given that 42 percent of all home improvements have a D-I-Y component, do-it-yourself activity is more important to the market than these dollar figures suggest.

Surprisingly, of all projects completed by owners with incomes above \$120,000, some 28 percent had a D-I-Y component. Affluent households undertake D-I-Y improvements that cover the gamut from basic replacements to room additions. Indeed, home centers and other consumer-oriented building product outlets now afford households more ways to become involved in project design and product selection by providing project classes and equipment rentals. Overall, the nation's 10 million highest-income homeowners spend an average of \$800 each year on D-I-Y projects—some 90 percent more than owners with lower incomes.

EXHIBIT 10

OWNERS OF HIGH-VALUE HOMES HAVE LIFTED BOTH THE PROFESSIONAL AND D-I-Y MARKETS

Home Value	2003 Expenditures			
	Homeowners (Millions)	D-I-Y (\$ Billions)	PRO (\$ Billions)	Total (\$ Billions)
Under \$100,000	25.5	8.2	14.6	22.8
\$100-150,000	14.8	5.5	12.7	18.2
\$150-200,000	10.4	5.8	11.5	17.3
\$200-250,000	6.6	5.6	9.9	15.5
\$250-400,000	9.5	5.8	18.3	24.1
\$400,000 & Over	8.0	6.2	34.0	40.2
Total	74.8	37.1	101.0	138.1

Sources: Tables A-4 and A-5.

The Trend Toward Specialization

At the same time that demand has shifted to the high end, the supply side of the remodeling industry has also undergone **substantial restructuring**. Market pressures promoting greater **efficiencies** in the industry have encouraged suppliers of residential contractors to target **narrower customer segments** and to realign their businesses accordingly. Most remodeling contractors, however, have remained small firms that serve a broad customer base and provide a wide range of home improvement services. The industry-wide trend toward specialization thus presents **new challenges** to residential remodeling contractors.



Fragmentation among Remodeling Contractors

For an industry exhibiting strong, steady growth—and with much of that growth coming from larger projects—remodeling is remarkable in that small firms still dominate the installation side of the business. The available statistics (from 1997) reveal that less than 10 percent of remodeling contractors with payrolls reported annual revenue of \$1 million or more, while almost 30 percent reported receipts of less than \$100,000. Average revenue for self-employed remodelers was much lower. More recent industry estimates prepared by *Qualified Remodeler* and *Replacement Contractor* magazines suggest little change, with the top 500 contractors collectively capturing less than a 4 percent market share.

Remaining small of course has its advantages. Residential building and remodeling have historically been among the most cyclical markets in the US economy. Remodeling contractors that expand during the upswings run the risk of being overstaffed during subsequent downturns, often leading to poor performance or even outright failure. Resisting expansion during growth periods has helped the survivors keep labor costs and overhead at manageable levels in the case of a slowdown.

Remodeling is also a localized business. Building codes and their enforcement, as well as characteristics of homes and preferred remodeling projects, vary from community to community. To expand their operations, remodeling contractors must either broaden their project mix or branch out into new locations. Both options can take a remodeling business beyond its core competence and familiar geographic area.

Still, small contractors are increasingly out of step in an industry that is becoming more and more specialized. Homeowners are looking for more upscale improvements, often involving complexities that require skilled project management. Manufacturers are responding to this demand by rapidly introducing a host of new product offerings. For their part, product distributors have begun to market to narrower customer segments and tailor their services and inventory mix accordingly. These changes leave small remodeling contractors alone as generalists in an environment that is rapidly moving toward specialization.



Spending on Larger Projects

Home improvements encompass a broad range of activities that protect and enhance the value of the housing stock. Anything from a simple faucet replacement to a whole-house remodeling project falls under this rubric. It is not surprising, then, that homeowners undertake about 50 million home improvement projects a year and reported almost a half-billion projects over the past decade (*Exhibit 11*).

In nearly six out of ten of these projects, homeowners hired professional remodeling contractors to do the work. A majority of improvements involve replacements of systems, major equipment, or other products on the exterior or interior of the home. Most are handled by specialty contractors such as plumbers, electricians, and roofing or siding contractors.

Much of the recent growth in remodeling, however, has come from major upgrades such as kitchen or bath remodels as well as room additions and other interior alterations that require the coordination of multiple specialty contractors. While accounting for less than 20 percent of all professional remodeling jobs, these projects capture over 40 percent of total homeowner expenditures. Moreover, the number of owners undertaking major kitchen remodels (costing \$10,000 or more) or major bath remodels (costing \$5,000 or more) increased by almost 75 percent from 750,000 in 1995 to 1.3 million in 2003 (*Table A-1*).

In fact, households spending at least \$10,000 generated over half of all 2003 outlays, compared with less than 40 percent in 1995. More significantly, almost a third of the total came from households spending \$25,000 on home improvement projects—a share that has essentially doubled over the decade (*Exhibit 12*). These larger projects generally require the coordination of multiple trades, more attention to supplier scheduling, and more sophisticated project management—requirements that often strain the capabilities of a small remodeling company or self-employed contractor.

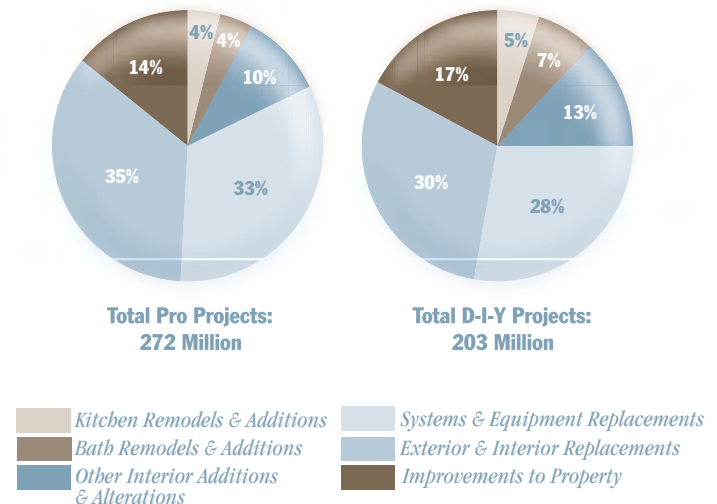
Changes in Building Product Distribution

While remodeling contractors remain mostly small independent businesses, the world in which they operate is rapidly

EXHIBIT 11

HOMEOWNERS COMPLETED ALMOST 500 MILLION IMPROVEMENT PROJECTS OVER THE PAST DECADE

Percent of all improvement projects, 1994–2003

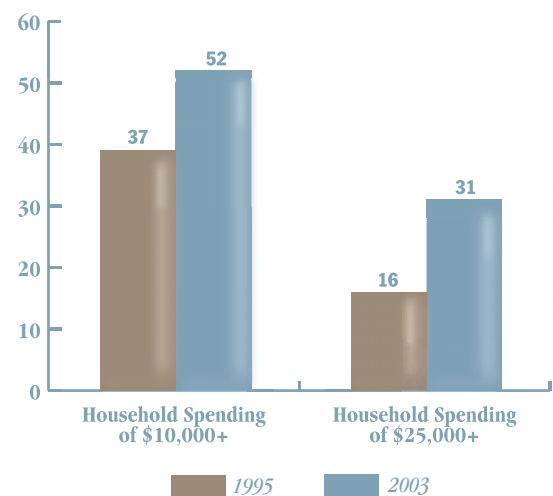


Source: JCHS tabulations of 1995–2003 AHS.

EXHIBIT 12

LARGE PROJECTS CAPTURE A GROWING MARKET SHARE

Percent of total improvement spending



Note: Household spending levels have been adjusted for inflation.
Source: Table A-3.

consolidating. In particular, distributors of home improvement products—an industry with annual sales of about \$325 billion—are in the midst of a major consolidation process.

Historically, home improvement products have been distributed through two parallel supply chains. Lumber and building material dealers, specialty distributors, and other pro dealers have traditionally supplied the professional building trades, while retail home centers and warehouse home improvement stores focus on do-it-yourselfers. Over the past two decades, these homeowner-oriented establishments have undergone tremendous consolidation as two national chains—Home Depot and Lowe’s—have come to dominate the retail sales channel.

Consolidation among pro dealers is just beginning. While growing primarily through acquisitions, many pro dealers are narrowly targeting their customer base. Consolidation among home builders has provided pro dealers the opportunity to achieve scale economies through a few key accounts. As recently as 1997, single-family home builders accounted for less than two-thirds of pro dealer sales. By 2002, these builders accounted for almost three-quarters of sales, with particularly sharp increases among the larger firms. Indeed, single-family builders buying materials for 500 or more homes a year alone generated almost 20 percent of total pro dealer sales that year (*Exhibit 13*).

With sales shifting toward larger regional and national home builders, pro dealers are paying less attention to remodeling contractors. Between 1997 and 2002, the pro dealer share of sales to the remodeling contractor segment shrank from almost 24 percent to 18 percent. Home center and warehouse retailers have picked up this business, growing their share of remodeling contractor sales from under 11 percent to over 14 percent during this period.

Shifting Business Strategies

As their customer base changes, building product distributors must make a strategic shift in how they do business. To attract or retain a particular customer segment, they may have to offer different services, adjust the number of products they stock,



and rethink how quickly they can turn that inventory. In addition, distributors may need to change market expectations about their performance in terms of gross margins, growth rates, or even profitability.

Pro dealers serving larger home builders have already made some of these shifts by offering prefabrication and installation services. With national builders focusing on land assembly and the sales and marketing of homes, they often look to their suppliers for offsite production of wall panels, floor panels and roof trusses, and as well as for installation of the products they sell. As a result, dealers that serve large builders generated about 82 percent of their 2002 revenue from product sales, about 15 percent from sales of preassembled components, and 3 percent from on-site installation. Expanding the share of revenue from services—which potentially have higher margins than products—may eventually improve profitability for these dealers.

In the meantime, building product retailers have begun to offer remodeling contractors the types of services previously provided only by pro dealers. For example, most major retailers now provide such value-added services as helping customers resolve product disputes, advising on project design and

material selection, estimating materials needed for projects, and ensuring next-day delivery to a job site.

Customer mix also drives inventory policies. Because larger home builders often target a fairly narrow segment of buyers at a given location, they do not require pro dealers to carry a deep product line in any particular category. With their much broader customer base, however, remodeling contractors typically need a wider array of products. For example, pro dealers that target remodeling contractors carried over five times as many unique siding products (stock keeping units or SKUs) as those focusing on larger home builders, and over three times as many SKUs as those targeting small builders (*Exhibit 14*). As a result, pro dealers that serve remodeling contractors achieve about half as many inventory turns a year as competitors serving large builders, and they rely more heavily on special orders for products they do not regularly stock.

While having to carry more inventory has its costs, dealers that primarily serve remodeling contractors offset some of this disadvantage with the bigger markups paid by this segment. Larger pro dealers report that their average gross margin on sales to remodeling contractors was 24 percent in 2002, compared with 16.5 percent on sales to larger home builders. Moreover,

EXHIBIT 13

PRO DEALERS ARE SHIFTING TOWARD LARGER HOME BUILDERS, LEAVING RETAILERS TO SERVE REMODELING CONTRACTORS

Share of building product sales

Market Segments	Pro Dealers		Retailers	
	1997	2002	1997	2002
Home Builders				
Large (500+ units)	11.4	19.4	0.3	1.0
Midsize (25-499 units)	24.1	31.8	1.7	1.7
Small (1-25 units)	28.3	21.3	2.7	2.0
Multifamily Builders	6.3	6.0	3.7	3.8
Remodeling Contractors	23.6	18.0	10.6	14.1
Homeowners	6.3	3.5	81.0	77.4

*Notes: Pro dealers defined as having 70% or more of sales to building trades.
Retailers defined as having 70% or more of sales to consumers.
Source: Harvard University Building Products Distribution Study.*

EXHIBIT 14

LARGE PRO DEALERS ARE TAILORING THEIR BUSINESSES TO BETTER SERVE DISTINCT CUSTOMER SEGMENTS

Averages by dealer focus, weighted by sales volume, 2002

Product Line: Siding	Dealer Focus		
	Large Home Builders (500+ units)	Small Home Builders (1-25 units)	Remodeling Contractors
Number of SKUs	85	158	500
Number of Inventory Turns per Year	10.6	7.5	5.7
Percent Special Orders	7	12	13

*Notes: Dealer focus defined as sales of 50% or more to a specified customer group.
Source: Harvard University Building Products Distribution Study.*

gross margins on sales to their remodeling customers had increased almost two percentage points since 1997, compared with less than one point on sales to larger builders.

Evolving Distribution Channels

Distributors have responded to consolidation within home building and the proliferation of new products by focusing increasingly on specific customer segments. Among the many distribution strategies that dealers have evolved, none appears to be inherently more successful than another. According to the Harvard Building Products Distribution Study, net operating profits reported by dealers are very similar regardless of the business strategy followed.

With the growing trend toward specialization, the home improvement supply options for smaller remodeling contractors are becoming more limited. From a dual supply chain for much of the last 40 years, the residential construction sector is developing not only a third channel, but also potentially a fourth. The new distribution channel results from pro dealers targeting either high-volume/low-margin large builders or low-volume/high-margin remodeling contractors and custom builders. On the horizon is a limited system of manufacturer-direct sales to large customers that can accept and inventory

products themselves. This “no-step” distribution system is already being implemented on a limited basis (*Exhibit 15*).

This evolution of the supply chain makes remodeling contractors less attractive to many pro dealers as a primary customer base. They do not generate the sales volume of large national builders and they require services that distributors often find costly to provide. As a result, Home Depot, Lowe’s, and other retail-oriented building supply distributors are likely to serve a growing share of the remodeling contractor industry.

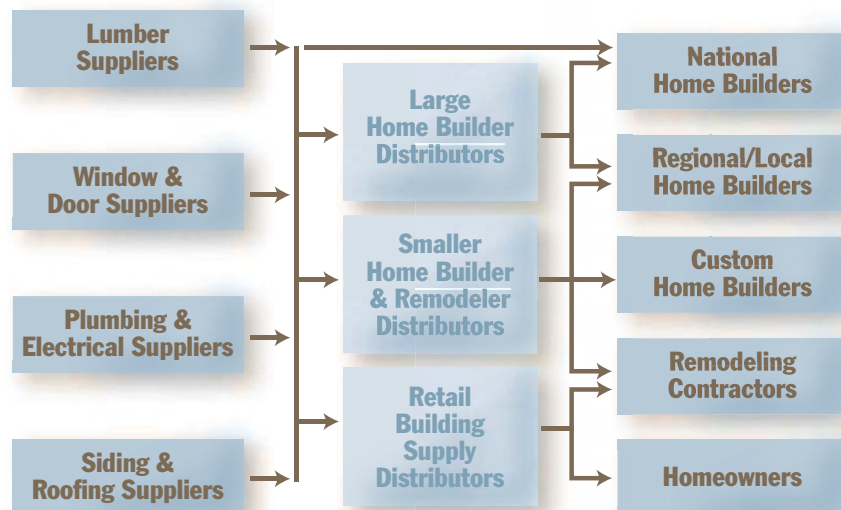
Unfortunately for small contractors, this is a decidedly mixed blessing. Most major retailers provide fewer services to contractors than do pro dealers. They also stock leaner product lines within a given product category. While switching to more retail-oriented distributors may yield some cost savings given the superior purchasing power of these companies, smaller remodeling contractors may also lose access to the full range of value-added services and product mix they have relied upon in the past. Moreover, retail building supply distributors themselves increasingly compete with some home improvement contractors through their installed sales programs.

Exactly how remodeling contractors respond to these changes remains to be seen. What does appear certain is that small firms must confront an increasingly competitive and consolidated building materials distribution system. Remodeling contractors that are able to adapt to this demanding market environment do, however, stand to profit from the strong growth in high-end projects.

EXHIBIT 15

BUILDING PRODUCT DISTRIBUTORS ARE BECOMING MORE SPECIALIZED

Evolving supply channels



Source: Harvard University Building Products Distribution Study.

The Changing Demographic Environment

The mainstay of the remodeling market for decades, the **baby boomers** are still the primary source of home improvement spending even as they move closer to retirement. Coming up on their heels are the members of **Generation X**, who have already established themselves as a key segment of the homeowner and remodeling markets. Within this group are a growing number of **minority and foreign-born** households who are altering the mix of demand for home improvement activity.



EXHIBIT 16

BABY BOOMERS STILL DOMINATE THE REMODELING MARKET

Share of total improvement spending

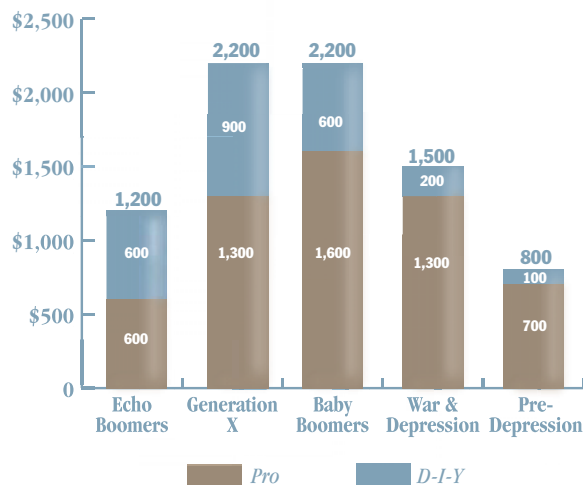
	1995	1997	1999	2001	2003
Echo-Boom Generation (Born 1975 & later)	—	—	1%	2%	3%
Generation X (Born 1965-1974)	5%	9%	13%	15%	20%
Baby-Boom Generation (Born 1946-1964)	53%	54%	51%	54%	52%
War & Depression Generation (Born 1929-1945)	28%	27%	26%	22%	20%
Pre-Depression Generation (Born before 1929)	14%	10%	9%	7%	5%

Source: JCHS tabulations of 1995-2003 AHS.

EXHIBIT 17

D-I-Y ACTIVITY IS STRONGEST AMONG YOUNGER GENERATIONS

Average expenditures, 2003



Sources: Tables A-4 and A-5.

Baby Boomers Still Active

For more than three decades, the baby-boom generation has dominated every aspect of the US housing market, from rentals, to starter homes, to tradeup homes and remodeling. Even as the older members of this generation approach retirement, they remain active in the housing market—buying both primary and vacation homes at a record pace. While some have decided to move back to the city, many more baby boomers are buying homes at the metropolitan fringe or in remote recreation and retirement communities.

Now well into their 50s, the older baby boomers have children—the echo boomers—who are ready to form households of their own. As a result, married couples without minor children living at home have emerged as one of the fastest-growing household types. In addition, with divorce rates up and remarriage rates down, the number of baby boomers living alone is also increasing steadily.

But even as they age and their households shrink, the baby boomers do not appear to be in a rush to downsize their homes or stop making extensive home improvements. Indeed, six in ten baby boomers completed a home improvement project in 2002-3, raising their total inflation-adjusted spending from \$17 billion in 1995 to \$72 billion. Even today, three decades after first appearing on the housing scene, baby boomers still account for more than half of all remodeling expenditures and more than 60 percent of all spending for room additions (*Exhibit 16*).

Generation X—A New Market Force

While the baby boomers still drive the market, members of Generation X are beginning to make their mark on the home improvement industry. Born between 1964 and 1975, native-born Gen Xers have been joined by millions of foreign-born households of the same age to create a growing source of demand for home remodeling. Indeed, from 1995 to 2003, the number of Gen Xers owning homes nearly tripled to 12.4 million, while their total remodeling expenditures increased more than five-fold to \$28 billion.

With a homeownership rate just below 60 percent, the Gen Xers have yet to have their full impact on the market. Even better-educated than the baby boomers, some 3.7 million Gen X homeowners (30 percent) already earn incomes in the top quintile. These highest-income Gen Xers have joined with affluent baby boomers and seniors to fuel growth in the high-end remodeling market.

As they move into their peak earning years, the Gen Xers will no doubt generate further increases in aggregate home improvement spending. Indeed, with household outlays averaging \$2,200 in 2003, Gen X homeowners already rival the baby boomers in their spending.

The two generations do, however, allocate their remodeling dollars differently. In 2003, Gen X homeowners spent \$900 on average for do-it-yourself projects—50 percent more than the baby boomers. While D-I-Y accounts for fully 41 percent of Gen X home improvement spending, the D-I-Y share among baby boomers is just 26 percent. Meanwhile, the average baby-boomer household outspends the average Gen X household by over \$300 a year (or nearly 25 percent) for professional contracting services (*Exhibit 17*).

These differences reflect the tendency for D-I-Y activity to fall off once a household reaches the age of 45. Older homeowners—especially the growing number that are empty-nesters or living alone—have less need for additional space than younger households. At the same time, older households have the income and wealth to afford professional remodeling and repair services. As a result, households counted as part of the Depression and World War II generation only spent \$200 on D-I-Y projects—noticeably less than the Gen Xers. Even so, this older generation matches Gen Xer spending of \$1,300 on professional improvements (*Table A-4*). Households with heads born before 1929 also direct some 88 percent of their modest home improvement spending to pro contractors.

The types and sizes of remodeling projects completed by the various generations also differ considerably. Compared with baby boomers, Gen Xers have somewhat lower incomes and hold less home equity. As a result, their remodeling projects



tend to be smaller and less costly. Overall, though, a Gen X homeowner is more apt to undertake a home improvement project than a baby-boomer homeowner. For example, Gen Xers are nearly 23 percent more likely to complete a kitchen or bath remodel, and 10 percent more likely to make other interior improvements.

Although the share of baby boomers undertaking projects is lower, the amount they spend is higher. On a per project basis, baby boomers spend 61 percent more on kitchen remodels, 23 percent more on bathroom remodels, and 8 percent more on other interior improvements than the Gen Xers.

The Contribution of Immigration

More than one in ten households is now headed by someone born abroad. The foreign-born shares among younger households are even higher. Of the 12 million households with a foreign-born head in 2000, 3.4 million arrived in the US during the 1990s—contributing almost a third of household growth over the decade.

Immigration is an especially important factor in the growth of Hispanic and Asian households. Two-thirds of Asian and just over half of Hispanic householders now living in the US were born elsewhere, compared with just seven percent of black and five percent of white householders.

Because immigrants come from so many different countries, it is difficult to generalize about their preferences and the resources they bring to bear on housing markets. Even so, some patterns are becoming clearer. In particular, most foreign-born residents eventually become citizens, move into the economic mainstream, and purchase homes.

Usually in the US longer than non-citizens, naturalized Americans are closing the homeownership gap with the native-born. In fact, homeownership rates for older foreign-born citizens lag those of native-born Americans by less than 10 percentage points. By comparison, homeownership rates among non-citizens aged 25 and older are more than 30 percentage points lower than those of native-born Americans of comparable ages.

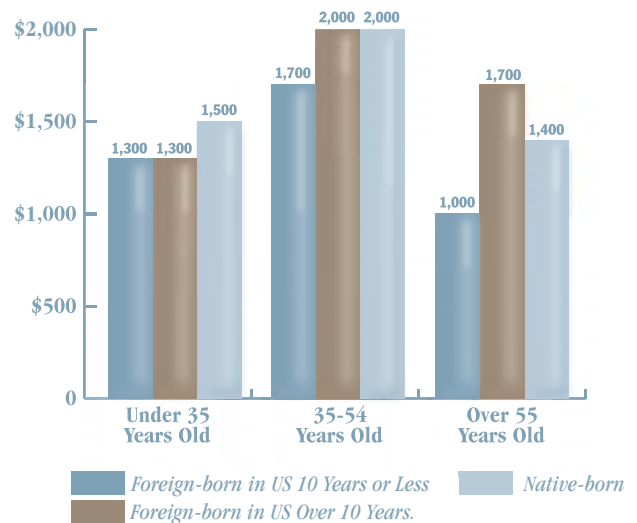
While the American Housing Survey has only recently provided statistics on households with foreign-born heads, it is evident that immigrants are a significant source of housing demand. In 2003, for example, foreign-born households purchased about 8 percent of all new homes and 11 percent of existing homes sold.

With the number of foreign-born homeowners now totaling 6 million and growing, their remodeling activity is also on the rise. In fact, the home improvement spending of foreign-born owners topped \$10 billion for the first time in 2003. Although their incomes on average lag those of their native-born counterparts, over time their remodeling expenditures approach—and sometimes exceed—those of their native-born counterparts. For example, foreign-born homeowners aged 35 to 54 who have lived in the US for ten years or more spent an average of \$2,000 on home improvements in 2003—equal to the annual spending by native-born homeowners in the same age group (*Exhibit 18*).

EXHIBIT 18

AS IMMIGRANTS SETTLE IN, THEIR IMPROVEMENT SPENDING RIVALS THAT OF NATIVE-BORN HOUSEHOLDS

Average expenditures, 2003 dollars



Source: JCHS tabulations of 2001 and 2003 AHS.

The Minority Market

Largely as a result of immigration, minorities make up a growing share of US households. From about 17 percent in 1980, the minority share climbed to 26 percent in 2000 and is likely to reach 34 percent by 2020. Minorities are also projected to contribute at least two-thirds of household growth over the coming decades.

Little wonder, then, that minorities are increasingly important to all segments of the housing market. After accounting for only 14 percent of homeowners in 1991, the minority share increased to 19 percent in 2003 (*Exhibit 19*). Today, minority households account for 35 percent of all first-time buyers and 16 percent of tradeup buyers.

These ownership gains have in turn bolstered home improvement markets. Led by dramatic increases among Hispanics, the surge in minority remodeling expenditures is nothing short of spectacular. Up 54 percent since 1995, aggregate improvement spending by minority homeowners reached \$19.6 billion in 2003—just under 15 percent of total owner spending.

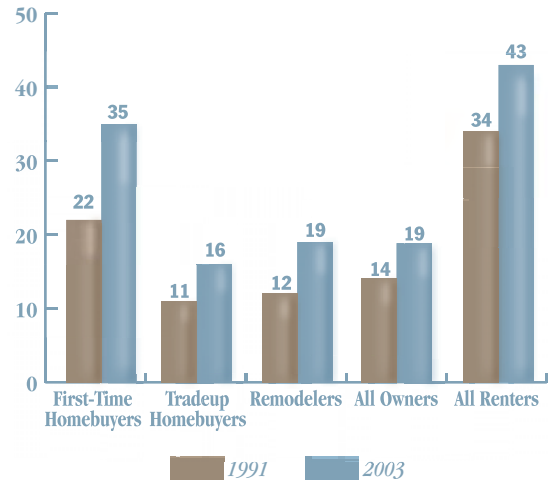
An important factor in this impressive growth is the turnover of older housing from whites to minorities. Between 1991 and 2001, about two million homes built before 1985 switched to minority ownership. These older homes require more maintenance and repair than newer houses, suggesting that minority remodeling expenditures are set to continue their rise.

Of the more than \$7 billion increase in minority remodeling expenditures between 1995 and 2003, Hispanic homeowners were responsible for more than half. Despite lower average incomes, Hispanics have increased their per household expenditures at rates comparable to those of white households. When combined with the 63 percent increase in the number of homeowners, total remodeling expenditures among Hispanics were up a whopping 85 percent from 1995 to 2003. While growth of spending per household was more modest, Asian-Americans also increased their total home improvement spending 66 percent over the same period (*Exhibit 20*).

EXHIBIT 19

MINORITY PARTICIPATION IN HOUSING MARKETS IS UP ACROSS THE BOARD

Minority market share

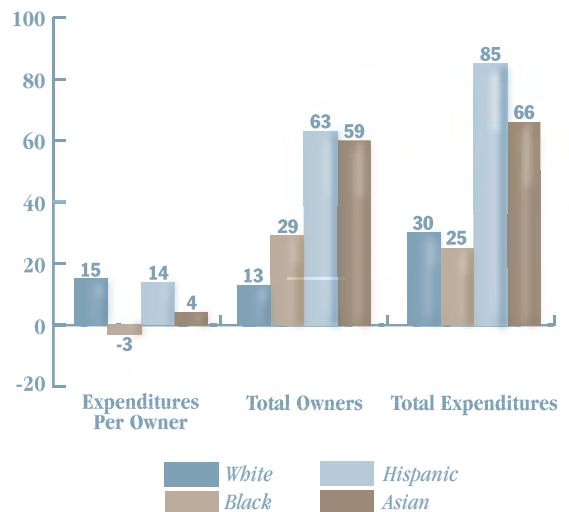


Source: JCHS tabulations of 1991 and 2003 AHS.

EXHIBIT 20

HISPANICS ARE LEADING THE SURGE IN IMPROVEMENT EXPENDITURES

Percent change, 1995-2003



Source: Table A-3.



The spending patterns of these two groups differ markedly. In particular, Hispanic homeowners are 16 percent more likely than Asian-American homeowners to undertake a remodeling project, but spend some 28 percent less on average on each project they complete. This gap may reflect the fact that Hispanic homeowners are more active do-it-yourselfers than Asian-Americans. On average, Hispanics spent 38 percent of their remodeling dollars on D-I-Y improvements in 2003, while Asian-Americans spent just 27 percent on such projects (*Table A-5*).

In the future, it is unclear whether the types of remodeling projects undertaken by foreign-born and minority homeowners will mirror those of their native-born counterparts. As they move up the economic ladder, however, these new homeowners are likely to match the overall spending levels of other owners.

Prospects for Future Growth

Now in its 12th year, the current **housing boom** has been longer and more broadly based than any expansion on record. The question now is when the pace of housing and remodeling activity will slow. Among the **potential threats** to further spending gains are an unexpectedly rapid rise in interest rates and/or an unexpectedly sharp drop in home sales, home price appreciation, or household wealth. Despite these risks, the accelerating pace of household growth, the continued strength of baby-boomer spending, and the **emerging demand** among Generation X and the foreign-born are likely to keep the remodeling industry thriving in the decade ahead.



Risk of Rising Mortgage Rates

After a sharp drop in the late 1980s and early 1990s, spending on residential improvements and repairs climbed steadily to set a new record of \$233 billion in 2003 (*Exhibit 21*).

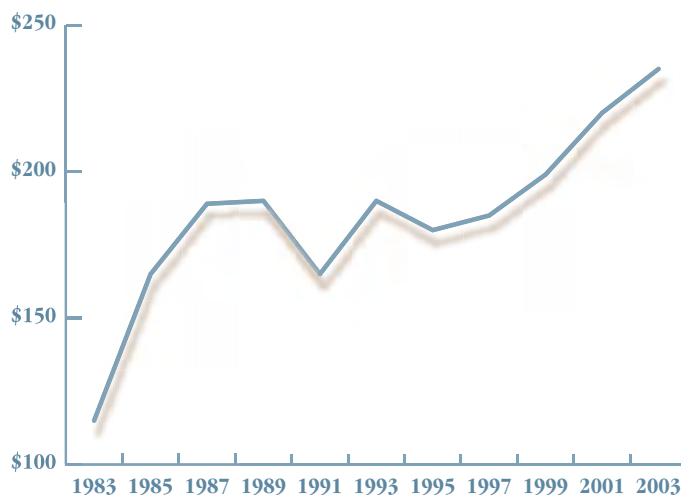
Undoubtedly as the economy strengthens, rising mortgage interest rates will put pressure on home sales, new construction, and house price appreciation. Since owners often make improvements immediately after purchasing new homes, a slowdown in sales implies a slowdown in remodeling expenditures. Moreover, rising interest rates make refinancing less attractive and may deter homeowners from cashing out equity to pay for remodeling and repair projects.

While mortgage rates may indeed move up in the near term, the best available evidence indicates that home sales will continue to hold at near-record levels until at least 2006. According to the latest estimates of the National Association of Realtors (NAR), sales of new and existing homes hit a record 7.7 million in 2004—an increase of 7.4 percent from 2003. Projecting a modest 50 basis-point increase in 30-year fixed-rate mortgages over the coming year, the NAR expects home

EXHIBIT 21

THE REMODELING INDUSTRY IS POISED FOR GROWTH IN THE YEARS AHEAD

Total industry size, billions of 2003 dollars



Note: Data before 1995 have been benchmarked to AHS levels.

Sources: JCHS tabulations of 1995-2003 AHS and the US Department of Commerce Survey of Expenditures for Residential Improvements and Repairs.

sales to decline to just under 7.4 million in 2005. Even so, this would still represent the second-highest annual home sales rate on record.

Moreover, even if the pace of home sales slows even further, it is easy to overstate the impact on remodeling activity. While recent homebuyers do in fact spend more on improvements than families that have lived in their homes for several years, it is longer-term occupants that dominate overall home improvement spending. For example, households living in their homes for more than two years accounted for some 86 percent of total remodeling expenditures in 2003 (*Exhibit 22*).

Now that the economy is on the rebound and home prices are rising, household income and wealth are also headed up. With home equity once again the most significant component of their wealth, homeowners are likely to be even more willing to spend money to protect the value of their most important asset. While rising mortgage interest rates may deter households from moving and/or prepaying an existing low-rate loan, homeowners can still use equity loans or lines of credit to finance remodeling projects. Finally, the proliferation of mutual funds and other flexible investment instruments has helped homeowners diversify and manage their wealth holdings. Higher-income households therefore have numerous options beyond home equity to fund their remodeling activities.

Risk of House Price Inflation

Rapid home price appreciation and the resulting surge in home equity have been key drivers of high-end improvement spending. Little wonder many analysts fear that this presumed housing price bubble will collapse, taking the remodeling industry with it.

Home prices have moved up sharply in metropolitan areas across the country, with coastal cities such as Boston, New York, and San Francisco registering double-digit increases in each of the past three years. In part, these increases reflect the higher-quality construction, extensive amenities, and larger

average size of newly built homes. The primary culprit, however, is the rapid runup of land prices—particularly in metro areas where developable land is in short supply and zoning and land use restrictions are especially stringent.

Indeed, a recent analysis by the Joint Center for Housing Studies revealed that land price appreciation was responsible for nearly three-quarters of the total inflation-adjusted increase in new home prices during the 1990s, with higher home building costs accounting for just one-quarter. In areas with the fastest home price inflation, rising land prices contributed as much as 90 percent of the total increase.

The increase in building costs was so modest because home builders were able to use more efficient construction techniques to offset rising labor or material costs. Limiting the impact of zoning and other restrictions on land prices is much more difficult, especially when developers cannot build at higher densities. Without a sudden relaxation of land use restrictions, home prices are therefore likely to continue their ascent, especially in highly desirable neighborhoods with little remaining developable land.

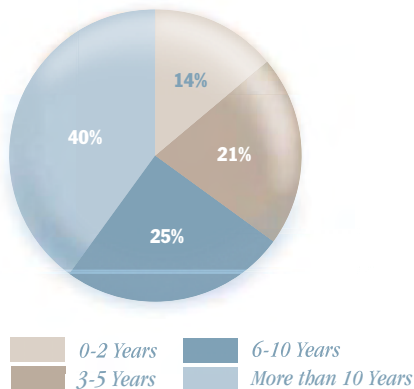
The question remains whether home price inflation will ultimately stifle demand and precipitate a steep drop in housing market activity. Some experts argue that just as high price/earnings ratios can signal a major stock market correction, a faster increase in median home prices relative to median household income points to a sharp housing market correction. Rapidly declining house prices would in turn erode home equity along with consumer confidence, sending the home sales and remodeling markets into a tailspin.

But comparing the stock market and the housing market is misleading at best. Because people live as well as invest in their homes, many owners stay put when prices first show signs of softening. This reduces the number of houses on the market and helps bring supply and demand back into balance, forestalling faster and sharper price declines. In addition, with income inequality on the rise, median income has become an increasingly poor proxy for the relative purchasing power of potential homebuyers. Instead, households with incomes at the high end of the distribution now set the pace for purchases of consumer electronics, autos, and many other big-ticket items.

EXHIBIT 22

RECENT MOVERS ACCOUNT FOR A MODEST SHARE OF HOME IMPROVEMENT EXPENDITURES DESPITE HIGHER AVERAGE SPENDING LEVELS

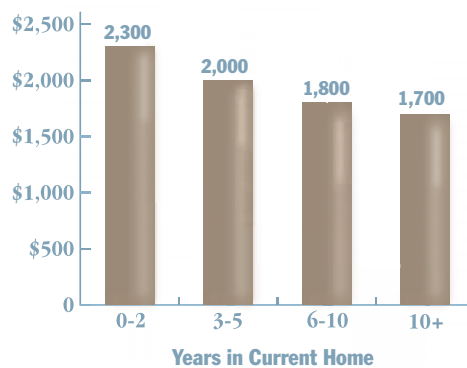
Percent of total expenditures, by years in current home, 2003



Total: \$138.1 Billion

Source: JCHS tabulations of 2003 AHS.

Average expenditure per household, 2003



As a result, it is important to separate the housing affordability problems of lower- and moderate-income families from the situation of higher-income homebuyers. For families of modest means, the runup in house prices has added substantially to their cost burdens. In fact, the growing mismatch between home prices and incomes among these households poses significant public policy concerns.

For high-income households, though, rapid home price appreciation has added little to cost burdens (*Exhibit 23*). Households with incomes in the highest quintile who purchased homes in 2003 faced a sales price/income ratio of just 2.1 to 1, little changed from the 1.9 to 1 ratio recorded in the 1995 period. Meanwhile, given the drop in mortgage rates, the ratio of annual housing costs to income for this group of recent homebuyers actually declined. With income growth at the high end of the distribution thus keeping pace with home price inflation, a sharp fall-off in demand is unlikely in the near future.

EXHIBIT 23

HIGH-END INCOME GROWTH HAS KEPT PACE WITH RAPID HOME PRICE INFLATION

Income Quintiles	Ratio of House Value to Income		Annual Housing Cost as a Percent of Income	
	1993	2003	1993	2003
Lowest	5.0	10.6	38	55
Lower Middle	2.4	3.5	26	31
Middle	2.3	2.7	23	25
Upper Middle	2.0	2.3	20	20
Highest	1.9	2.1	17	16

Note: Sample limited to recent movers, defined as households that have moved into their homes in the past two years. Source: JCHS tabulations of 1993 and 2003 AHS.

Risk of Aging Homeowners

For the past decade, affluent baby boomers have been the mainstay of the rapidly growing high-end home improvement market. With good reason, many view the aging of this generation with concern. Given the sheer size of this group, changes in baby-boomer spending patterns will inevitably continue to influence housing markets for decades to come.

At the moment, however, there is every reason to believe the boomers' love affair with home improvements has not yet run its course. Both older (born between 1946 and 1954) and younger (born between 1955 and 1964) baby boomers, along with the emerging Gen Xers, are spending more at each stage of the life cycle than the generation before them. Consider, for example, how the older baby boomers have outspent the generation born during the Depression and war years (*Exhibit 24*). Similarly, younger baby boomers who are now in their 40s are already outspending the older boomers at that same age.

Moreover, even though they are only in their 30s and relative newcomers to the home remodeling scene, Gen Xers are now spending more than the younger baby boomers did when they were in their 30s. While there is no guarantee these patterns will hold, the accelerating pace of spending over the generations does suggest that the home improvement market is set to prosper in the years ahead.

Longer-Term Prospects

Early in the 1990s, there were dire predictions of a housing market crash when the baby-bust generation entered the prime homebuying years. These forecasts proved to be overly pessimistic, in large measure because they failed to consider the profound effects that increased immigration and rising wealth and income would have on housing market dynamics.

Thanks to strong immigration, 1.3 million net new households have formed each year on average since the start of the decade. Because the vast majority of immigrants are young adults, the impact has been most pronounced on the composition of Generation X. Today, households headed by foreign-

born individuals make up one in nine Gen Xers, compared with only one in twenty seniors. Immigrants have also added to the ranks of the younger baby boomers, thereby lifting the number of households who will be in their 50s in 2015.

Overall, Joint Center projections suggest the number of households will increase by at least 12 million from 2005 to 2015—almost 10 percent more than recorded in the 1990s. The number of homeowners is also expected to grow by at least 11 million, with minorities accounting for 46 percent of that gain (*Exhibit 25*).

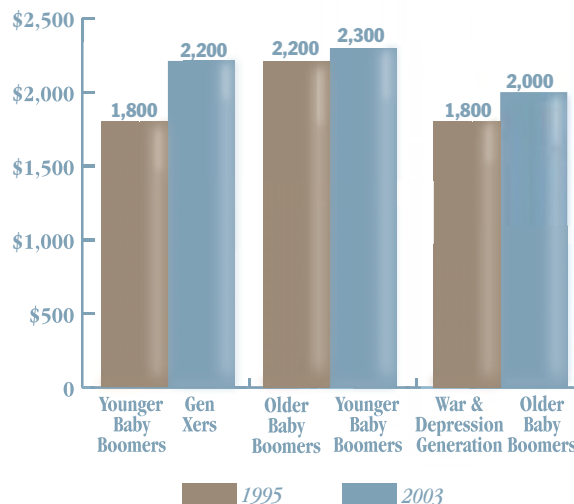
These numbers are probably conservative given that immigration has been running some 40 percent ahead of Census Bureau projections so far this decade. If this pace continues, the number of households formed between 2005 and 2015 could be as much as 1.0-1.5 million higher than the Joint Center currently estimates. The number of homeowners added could thus top 12 million.

With strong growth in the number of homeowners and in household income, the prospects for residential improvement and repair spending seem bright. It would take an unexpectedly large drop in home prices, a precipitous escalation in mortgage interest rates, or some other unanticipated shock to the economy to keep real growth in home improvement expenditures far below the three percent annual rate averaged over the past ten years. Indeed, American homeowners are likely to keep setting new records in residential repair and remodeling activity.

EXHIBIT 24

EACH GENERATION IS OUTSPENDING ITS PREDECESSOR ON HOME IMPROVEMENT

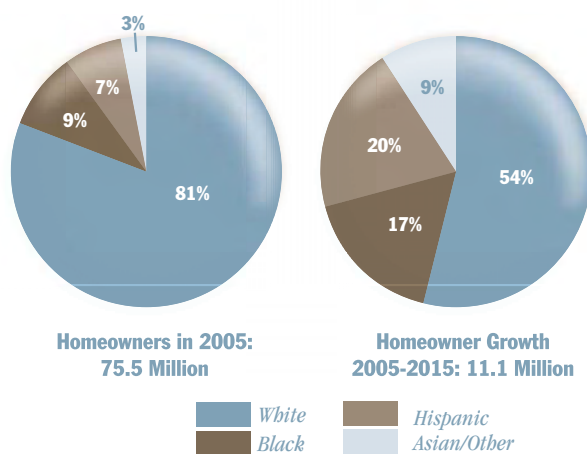
Average expenditures in 2003 dollars



Source: JCHS tabulations of 1995 and 2003 AHS.

EXHIBIT 25

OVER THE COMING DECADE, MINORITIES WILL ACCOUNT FOR NEARLY HALF OF THE INCREASE IN HOMEOWNERS



Source: JCHS projections.

Appendix

Table A-1. Total Homeowner Improvement Expenditures: 1994–2003

Table A-2. Professional and Do-It-Yourself Home Improvement Expenditures: 2003

Table A-3. Total Improvement Expenditures by Homeowner Characteristics: 1995 and 2003

Table A-4. Professional Expenditures by Homeowner Characteristics: 1995 and 2003

Table A-5. Do-It-Yourself Expenditures by Homeowner Characteristics: 1995 and 2003

Table A-6. Changes in Home Improvement Activity by Region and Metropolitan Area: 2002-3

Table A-1. Total Homeowner Improvement Expenditures: 1994-2003

	2003			Annual Averages, 1994-2003		
	Homeowners Reporting Projects (000s)	Average (\$)	Total Expenditures (\$ Millions)	Homeowners Reporting Projects (000s)	Average (2003 dollars)	Total Expenditures (2003 Dollars, Millions)
Kitchen Remodels						
Minor	1,414	2,073	2,931	1,181	2,147	2,536
Major	578	16,391	9,472	31	16,380	5,217
Bath Remodels						
Minor	1,640	1,107	1,816	1,431	1,298	1,857
Major	699	8,399	5,873	392	8,433	3,304
Room Additions & Alterations						
Kitchen	39	30,423	1,185	135	11,202	1,516
Bath	422	6,665	2,811	371	9,940	3,692
Bedroom	669	16,556	11,080	487	9,037	4,402
Other Room	1,459	9,809	14,310	1,084	8,004	8,677
Other Interior Improvements						
Add/Replace Deck/Porch	920	3,311	3,047	867	2,684	2,327
Disaster Repairs	475	10,426	4,956	530	7,987	4,236
Other	682	2,334	1,592	786	1,926	1,514
Replacements to Systems & Equipment						
Plumbing/Pipes	1,415	858	1,214	1,174	652	766
Electrical System	2,085	776	1,617	1,720	699	1,203
Plumbing Fixtures	3,436	557	1,913	2,158	503	1,087
HVAC	3,003	2,684	8,061	2,225	2,851	6,342
Appliances/Major Equipment	5,542	469	2,597	4,210	433	1,824
Interior & Exterior Replacements						
Roofing	2,983	3,815	11,380	2,441	3,402	8,303
Siding	1,132	4,587	5,190	945	4,377	4,137
Window/Door	3,988	1,987	7,923	3,309	1,633	5,404
Insulation	1,193	515	614	1,056	566	598
Flooring/Paneling/Ceiling	7,500	1,808	13,560	4,467	1,571	7,015
Improvements to Property						
Add/Replace Garage/Carport	220	10,702	2,358	168	6,358	1,065
Other	6,021	3,759	22,634	5,395	2,952	15,928
Total*	20,024	6,898	138,135	15,550	5,977	92,950

* Numbers do not add to total because homeowners may report projects in more than one category.

Notes: Household totals were estimated using American Housing Survey (AHS) and American Community Survey (ACS) data. Major remodels are defined as professional home improvements of more than \$10,000 for kitchen projects and more than \$5,000 for bath projects, and D-I-Y improvements of more than \$4,000 for kitchen projects and \$2,000 for bath projects. Job categories are aggregations of the detailed projects reported in the AHS. Annual averages are adjusted for inflation. The average number of households between 1994 and 2003 was 68.9 million.

Source: JCHS tabulations of the 1995-2003 AHS.

Table A-2. Professional and Do-It-Yourself Home Improvement Expenditures: 2003

	Professional			Do-It-Yourself		
	Homeowners Reporting Projects (000s)	Average (\$)	Total Expenditures (\$ Millions)	Homeowners Reporting Projects (000s)	Average (\$)	Total Expenditures (\$ Millions)
Kitchen Remodels						
Minor	695	2,983	2,072	719	1,195	859
Major	256	22,844	5,840	322	11,272	3,632
Bath Remodels						
Minor	659	1,712	1,128	981	701	687
Major	317	12,272	3,891	382	5,186	1,982
Room Additions and Alterations						
Kitchen	27	42,519	1,142	12	3,605	44
Bath	204	10,360	2,112	219	3,193	699
Bedroom	269	27,028	7,260	408	9,369	3,820
Other Room	620	16,541	10,257	863	4,697	4,053
Other Interior Improvements						
Add/Replace Deck/Porch	382	5,130	1,959	544	2,000	1,088
Disaster Repairs	366	11,726	4,286	110	6,097	669
Other	442	2,797	1,238	274	1,291	354
Replacements to Systems and Equipment						
Plumbing/Pipes	778	1,228	956	637	406	258
Electrical System	1,244	937	1,165	841	537	452
Plumbing Fixtures	1,474	769	1,134	1,962	397	779
HVAC	2,500	2,825	7,062	557	1,794	999
Appliances/Major Equipment	3,382	523	1,768	2,368	350	829
Interior and Exterior Replacements						
Roofing	2,230	4,222	9,413	754	2,610	1,967
Siding	751	5,428	4,076	381	2,927	1,114
Window/Door	2,246	2,632	5,913	1,742	1,154	2,010
Insulation	516	568	293	677	474	321
Flooring/Paneling/Ceiling	4,718	2,155	10,166	3,396	999	3,395
Improvements to Property						
Add/Replace Garage/Carport	119	9,342	1,110	102	12,293	1,248
Other	3,320	5,065	16,816	3,091	1,883	5,819
Total*	14,125	7,155	101,055	10,595	3,500	37,079

* Numbers do not add to totals because homeowners may report projects in more than one category.

Notes: Household totals were estimated using AHS and ACS data. Major remodels are defined as professional home improvements of more than \$10,000 for kitchen projects and more than \$5,000 for bath projects, and D-I-Y improvements of more than \$4,000 for kitchen projects and \$2,000 for bath projects. Job categories are aggregations of the detailed projects reported in the AHS.

Source: JCHS tabulations of 2003 AHS.

Table A-3. Total Improvement Expenditures by Homeowner Characteristics: 1995 and 2003

	2003			1995		
	No. of Homeowners (000s)	Homeowners Reporting Projects (000s)	Total Expenditures (\$ Millions)	No. of Homeowners (000s)	Homeowners Reporting Projects (000s)	Total Expenditures (2003 Dollars, Millions)
Total	74,772	20,024	138,135	63,530	18,886	103,885
Income (2003 dollars)						
Under \$40,000	28,650	6,656	27,188	27,200	7,159	26,675
\$40-80,000	24,045	6,677	35,435	20,864	6,639	34,930
\$80-120,000	12,019	3,636	32,370	8,780	2,931	19,922
\$120,000 and Over	9,946	3,028	43,030	6,607	2,136	22,286
Home Value (2003 dollars)						
Under \$100,000	25,500	6,513	22,781	28,705	8,368	30,279
\$100-150,000	14,788	3,997	18,244	13,600	4,152	20,561
\$150-200,000	10,363	2,905	17,328	9,260	2,814	18,361
\$200-250,000	6,585	1,824	15,434	4,892	1,463	11,925
\$250-400,000	9,512	2,600	24,116	4,711	1,426	14,149
\$400,000 and Over	8,023	2,186	40,232	2,361	662	8,610
Age of Household Head						
Under 35	10,629	3,036	18,939	9,559	3,027	13,446
35-44	16,156	4,690	39,066	14,743	4,725	30,659
45-54	17,378	4,824	36,817	13,442	4,246	27,999
55-64	12,726	3,472	24,078	9,490	2,820	14,566
65 and Over	17,882	4,002	19,235	16,295	4,067	17,216
Race						
White	60,398	16,252	118,231	53,615	16,205	90,974
Black	6,483	1,637	7,217	5,032	1,343	5,789
Hispanic	5,279	1,498	8,217	3,244	914	4,434
Asian and Other	2,611	636	4,470	1,638	424	2,688
Spending Level (2003 dollars)						
Under \$2,500	13,885	13,885	21,903	13,423	13,423	22,758
\$2,500-5,000	3,033	3,033	20,807	2,882	2,882	20,372
\$5,000-10,000	1,716	1,716	23,126	1,621	1,621	22,535
\$10-25,000	989	989	29,120	750	750	22,049
\$25,000 and Over	401	401	43,178	210	210	16,171
No Spending	54,748			44,644		
Generation						
Echo (1975 and later)	3,780	1,004	4,241	78	20	34
Gen X (1965-74)	12,418	3,671	27,817	4,434	1,367	5,333
Baby Boom (1946-64)	32,530	9,145	71,928	27,176	8,743	54,577
Pre-War (1929-45)	17,275	4,401	27,182	17,467	5,238	29,369
Pre-Depression (Before 1929)	8,770	1,802	6,968	14,375	3,518	14,572

Notes: Income data exclude households not reporting income. Expenditures for 1995 are adjusted for inflation.

Source: JCHS tabulations of 1995 and 2003 AHS.

Table A-4. Professional Expenditures by Homeowner Characteristics: 1995 and 2003

	2003			1995		
	No. of Homeowners (000s)	Homeowners Reporting Projects (000s)	Total Expenditures (\$ Millions)	No. of Homeowners (000s)	Homeowners Reporting Projects (000s)	Total Expenditures (2003 Dollars, Millions)
Total	74,772	14,125	101,055	63,530	13,657	78,414
Income (2003 dollars)						
Under \$40,000	28,650	4,640	20,288	27,200	5,245	20,752
\$40-80,000	24,045	4,463	24,390	20,864	4,516	24,289
\$80-120,000	12,019	2,588	21,609	8,780	2,167	14,709
\$120,000 and Over	9,946	2,417	34,669	6,607	1,712	18,606
Home Value (2003 dollars)						
Under \$100,000	25,500	4,115	14,623	28,705	5,710	21,259
\$100-150,000	14,788	2,785	12,699	13,600	2,988	15,085
\$150-200,000	10,363	2,118	11,503	9,260	2,086	13,225
\$200-250,000	6,585	1,305	9,862	4,892	1,136	9,511
\$250-400,000	9,512	1,998	18,318	4,711	1,165	11,648
\$400,000 and Over	8,023	1,805	34,051	2,361	571	7,687
Age of Household Head						
Under 35	10,629	1,899	10,012	9,559	1,785	7,922
35-44	16,156	3,106	26,555	14,743	3,152	22,058
45-54	17,378	3,317	28,267	13,442	3,062	21,285
55-64	12,726	2,571	19,689	9,490	2,203	11,580
65 and Over	17,882	3,232	16,533	16,295	3,454	15,568
Race						
White	60,398	11,482	86,940	53,615	11,726	68,635
Black	6,483	1,240	5,776	5,032	1,057	4,744
Hispanic	5,279	953	5,078	3,244	559	2,935
Asian and Other	2,611	449	3,261	1,638	315	2,100
Spending Level (2003 dollars)						
Under \$2,500	8,790	8,790	14,151	8,747	8,747	15,570
\$2,500-5,000	2,607	2,607	15,174	2,551	2,551	15,170
\$5,000-10,000	1,488	1,488	16,750	1,471	1,471	17,108
\$10-25,000	884	884	22,166	683	683	16,935
\$25,000 and Over	357	357	32,815	205	205	13,630
No Spending	60,647			49,873		
Generation						
Echo (1975 and later)	3,780	618	2,150	78	6	18
Gen X (1965-74)	12,418	2,357	16,363	4,434	793	3,016
Baby Boom (1946-64)	32,530	6,271	53,511	27,176	5,870	39,194
Pre-War (1929-45)	17,275	3,377	22,981	17,467	3,964	22,907
Pre-Depression (Before 1929)	8,770	1,502	6,050	14,375	3,024	13,280

Notes: Income data exclude households not reporting income. Expenditures for 1995 are adjusted for inflation.

Source: JCHS tabulations of 1995 and 2003 AHS.

Table A-5. Do-It-Yourself Expenditures by Homeowner Characteristics: 1995 and 2003

	2003			1995		Total Expenditures (2003 Dollars, Millions)
	No. of Homeowners (000s)	Homeowners Reporting Projects (000s)	Total Expenditures (\$ Millions)	No. of Homeowners (000s)	Homeowners Reporting Projects (000s)	
Total	74,772	10,595	37,079	63,530	10,307	25,471
Income (2003 dollars)						
Under \$40,000	28,650	3,186	6,900	27,200	3,390	5,923
\$40-80,000	24,045	3,908	11,045	20,864	4,145	10,641
\$80-120,000	12,019	2,075	10,761	8,780	1,739	5,213
\$120,000 and Over	9,946	1,411	8,361	6,607	1,024	3,680
Home Value (2003 dollars)						
Under \$100,000	25,500	3,796	8,158	28,705	4,805	9,020
\$100-150,000	14,788	2,181	5,545	13,600	2,348	5,477
\$150-200,000	10,363	1,534	5,825	9,260	1,545	5,136
\$200-250,000	6,585	960	5,572	4,892	725	2,414
\$250-400,000	9,512	1,286	5,798	4,711	654	2,502
\$400,000 and Over	8,023	837	6,181	2,361	231	923
Age of Household Head						
Under 35	10,629	2,066	8,927	9,559	2,267	5,524
35-44	16,156	2,936	12,512	14,743	3,083	8,600
45-54	17,378	2,667	8,550	13,442	2,419	6,714
55-64	12,726	1,636	4,389	9,490	1,326	2,985
65 and Over	17,882	1,290	2,702	16,295	1,211	1,647
Race						
White	60,398	8,659	31,291	53,615	8,892	22,339
Black	6,483	687	1,441	5,032	600	1,045
Hispanic	5,279	919	3,139	3,244	604	1,499
Asian and Other	2,611	330	1,209	1,638	211	588
Spending Level (2003 dollars)						
Under \$2,500	7,518	7,518	7,752	7,308	7,308	7,188
\$2,500-5,000	1,522	1,522	5,633	1,584	1,584	5,202
\$5,000-10,000	879	879	6,376	899	899	5,427
\$10-25,000	503	503	6,954	417	417	5,113
\$25,000 and Over	173	173	10,364	99	99	2,541
No Spending	64,177			53,222		
Generation						
Echo (1975 and later)	3,780	705	2,091	78	16	16
Gen X (1965-74)	12,418	2,413	11,453	4,434	1,025	2,318
Baby Boom (1946-64)	32,530	5,183	18,417	27,176	5,660	15,383
Pre-War (1929-45)	17,275	1,814	4,201	17,467	2,620	6,462
Pre-Depression (Before 1929)	8,770	480	917	14,375	986	1,292

Notes: Income data exclude households not reporting income. Expenditures for 1995 are adjusted for inflation.

Source: JCHS tabulations of 1995 and 2003 AHS.

Table A-6. Changes in Home Improvement Activity by Region and Metropolitan Area: 2002-3

Percent Change in Permit Values		Percent Change in Permit Values	
Northeast		9.2	
Albany, NY	36.9	New York, NY	9.6
Providence, RI	31.8	Hartford, CT	8.1
Scranton, PA	26.8	Buffalo, NY	-0.5
Philadelphia, PA	16.2	Harrisburg, PA	-1.3
Pittsburgh, PA	16.2	Syracuse, NY	-10.7
Rochester, NY	16.0	Allentown, PA	-11.5
Boston, MA	10.4		
Midwest		4.6	
Youngstown, OH	24.0	Toledo, OH	-0.3
Kansas City, MO	23.3	Dayton, OH	-0.9
Chicago, IL	13.9	Minneapolis, MN	-2.4
Cincinnati, OH	11.7	Columbus, OH	-4.7
Detroit, MI	8.6	Grand Rapids, MI	-6.1
Cleveland, OH	5.3	St. Louis, MO	-12.8
Indianapolis, IN	1.3	Omaha, NE	-46.9
Milwaukee, WI	0.0		
West		16.1	
Fresno, CA	53.4	San Diego, CA	21.4
Honolulu, HI	41.3	San Francisco, CA	18.1
Phoenix, AZ	35.8	Sacramento, CA	10.7
Los Angeles, CA	34.5	Denver, CO	5.2
Portland, OR	30.6	Seattle, WA	-0.1
Las Vegas, NV	26.3	Salt Lake City, UT	-12.6
Albuquerque, NM	25.5	Tucson, AZ	-35.3
South		10.9	
Raleigh, NC	71.9	Atlanta, GA	8.9
Birmingham, AL	70.3	Mobile, AL	7.2
Memphis, TN	69.1	Sarasota, FL	7.0
San Antonio, TX	52.3	Oklahoma City, OK	5.8
Miami, FL	38.8	Tulsa, OK	4.6
Daytona Beach, FL	35.5	West Palm Beach, FL	-0.5
Washington DC	30.6	Jacksonville, FL	-1.1
Little Rock, AR	28.3	Orlando, FL	-3.0
Melbourne, FL	25.6	Austin, TX	-6.5
Nashville, TN	23.2	Houston, TX	-8.9
New Orleans, LA	19.8	Charlotte, SC	-20.0
Tampa, FL	18.8	Richmond, VA	-23.3
Greenville, SC	16.0	Johnson City, TN	-30.1
Norfolk, VA	13.8	Greensboro, NC	-31.4
Dallas, TX	13.3	Louisville, KY	-40.0
Knoxville, TN	10.3	Baton Rouge, LA	-43.9

Notes: Metropolitan areas are top 75 in terms of number of owner-occupied homes in 2003. Geography based on 1999 Office of Management and Budget definitions of Metropolitan Statistical Areas and Consolidated Metropolitan Statistical Areas. Regional totals include data from other metropolitan and non-metropolitan areas.

Source: JCHS tabulations of the US Census Bureau's "Residential Building Permits Survey: Additions, Alterations, and Renovations Place Level Files." For further information, see Joint Center for Housing Studies, "Using Additions and Alterations Permits to Estimate Remodeling Activity in Metropolitan Areas," Research Note NO4-3, October 2004.

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