

Joint Center for Housing Studies of Harvard University



THE STATE OF THE
**NATION'S
HOUSING**
2008



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Executive Summary

Housing markets contracted for a second straight year in 2007. The national median single-family home price fell in nominal terms for the first time in 40 years of recordkeeping, leaving several million homeowners with properties worth less than their mortgages. With the economy softening and many home loans resetting to higher rates, an increasing number of owners had difficulty keeping current on their payments. Mortgage performance—especially on subprime loans with adjustable rates—eroded badly. Lenders responded by tightening underwriting standards and demanding a higher risk premium, accelerating the ongoing slide in sales and starts.

By early 2008, housing market problems had spread to the rest of the economy. The sharp drop in home building, the turmoil in the credit and stock markets, and the impact of falling home prices on borrowing and consumer spending all contributed to the slowdown. Mounting job losses in the first quarter of 2008 added to the misery, raising the risks of even sharper price declines and higher delinquencies ahead.

While deep construction cutbacks have begun to pare down the supply of unsold new homes, the numbers of vacant homes for sale or held off the market remain high. Reducing this excess will take some combination of additional declines in prices, a slowdown in foreclosures, further cuts in mortgage interest rates, and a pickup in job and income growth. Until the inventory of vacant homes is worked off, the pressure on prices will persist. Further price declines will not only increase the probability that mortgage defaults end in foreclosure, but also put a tighter squeeze on consumer spending.

Persistent Overhang

In the overheated markets of 2003–2005, house prices surged ahead of incomes and new construction outstripped sustainable long-term demand. But when the Federal Reserve started to raise interest rates in 2004, prices were climbing so rapidly that buyers still clamored to get in on the market. By late 2005, however, the combination of higher interest rates and higher home prices finally dragged down demand. Within the span of two years, sales and starts plummeted, prices fell, and home equity shrank (**Figure 1**).

In 2006 alone, existing home sales were off by 8 percent and new home sales by 18 percent. These declines accelerated in 2007 as falling home prices and the credit crunch deepened the crisis. With remarkable speed, the homeowner vacancy rate jumped from 2.0 percent in the last quarter of 2005 to 2.8 percent in the last quarter of 2007 as the number of vacant units for sale shot up by more than 600,000. Assuming the vacancy rate prevailing in 1999–2001 was close to equilibrium, the oversupply of vacant for-sale units at the end of last year was around 800,000 units, or 1.0 percent of the owner stock.

The inventory overhang was especially large in states that had either significant overheating or weakening economies (Figure 2). In addition, the number of vacant homes held off the market other than for seasonal or occasional use surged from 5.7 million units in 2005 to 6.2 million in 2007. Although the rental vacancy rate did not increase in 2006 and 2007, its climb earlier in the decade indicates that surpluses may exist in that market as well.

Despite production cuts rivaling those in the 1978–1982 downturn, the number of vacant for-sale homes on the market did not shrink in the first quarter of 2008. The weak economy, tight credit, and concerns over whether house prices had bottomed out continued to suppress demand and delay the absorption of excess units. Until this oversupply is reduced, housing markets will not mend.

Mortgage Market Meltdown

Mortgage markets have suffered mightily in the boom-bust housing cycle. During the boom, subprime mortgages and other products that helped buyers stretch their incomes were available as never before. In the hope of higher returns, lenders extended credit to borrowers previously unable to qualify for loans. Subprime mortgages rose from only 8 percent of originations in 2003 to 20 percent in 2005 and 2006, while the interest-only and payment-option share shot up from just 2 percent in 2003 to 20 percent in 2005.

Making matters worse, multiple risks were often layered onto individual loans. For example, large shares of subprime mortgages also had discounted initial rates that reset after two years, leaving borrowers vulnerable to payment shock. In addition, lenders eased underwriting standards, offering loans requiring little or no down-

payment or income documentation, and some engaged in behavior viewed as predatory. This meant that many loans were underwritten without a clear measure of the borrowers' ability to repay and without equity cushions as protection against defaults. Housing speculators were also readily able to get loans to buy investment properties, relying on soaring house price appreciation to flip the units and resell at a profit.

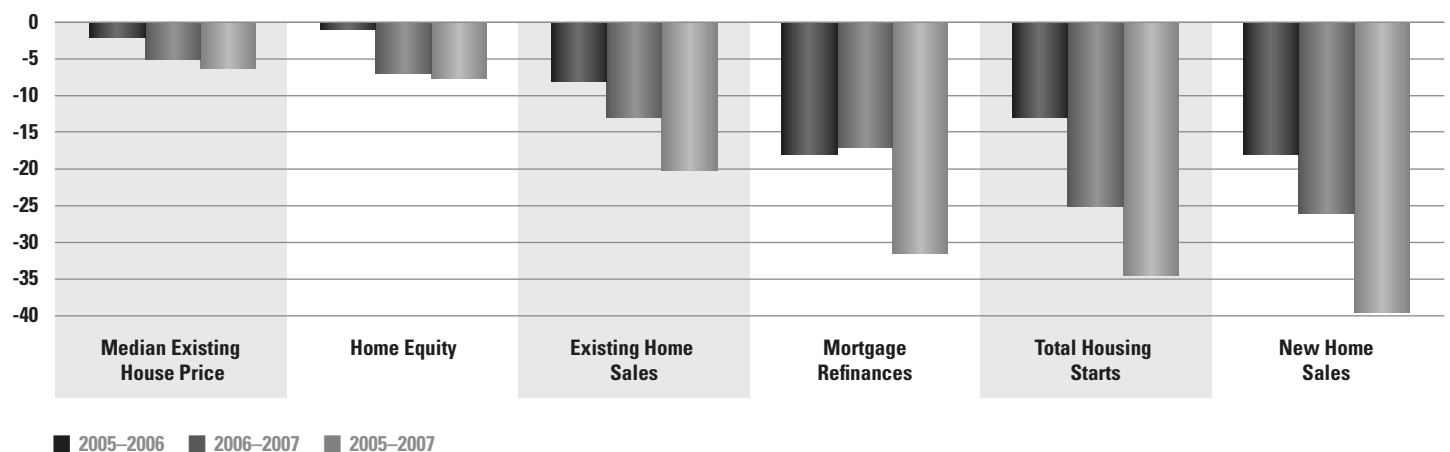
The layering of mortgage lending risks at the peak of the market had serious and far-reaching consequences. As the economy weakened and mortgage interest rates rose, the number of homeowners unable to keep current on their payments began to climb. With prices falling, many owners could not sell their homes to avoid foreclosure. Meanwhile, many housing speculators defaulted even before their interest rates reset. Indeed, the Mortgage Bankers Association reports that absentee owners accounted for almost one in five loans entering foreclosure in the third quarter of 2007.

As a result, serious delinquencies soared in late 2006 and throughout 2007. The swift deterioration, especially in subprime loan performance, caught many mortgage investors unaware. Demand for securities backed by subprime mortgages dried up so fast and so completely that investors were forced to sell them at a loss. Compounding the problems, several investment funds and mortgage companies had borrowed to purchase the securities with debt they had to roll over. When lenders were unwilling to provide more money as the debts came due, some companies were forced to default and lenders had to take many assets back onto their books. The sheer size of mortgage debt outstanding and the fear that the crisis would soon spread to consumer credit led to a freeze in credit markets and runs on investment banks and funds.

Figure 1

Housing Market Declines Are Steep and Accelerating

Percent Change



Notes: Changes in dollar values are adjusted for inflation by the CPI-U for All Items. New sales and median existing house prices include single-family units only.

Sources: US Census Bureau, New Residential Construction; National Association of Realtors®, Median Existing Single-Family Home Price; Freddie Mac; Federal Reserve Board, Flow of Funds Accounts.

Figure 2

In the Most Glutted Markets, Surpluses Exceed Two Percent of the Owner Stock



The full scope of credit market problems and the path to recovery remain clouded. Until credit markets return to normal, the economy will be in peril not only from the impact of falling home prices on loan performance and consumer spending, but also from the disruptions to corporate and consumer borrowing.

The String of Foreclosures

Estimates from the Mortgage Bankers Association drawn from about four-fifths of all loans suggest that the number of loans in foreclosure proceedings nearly doubled to almost one million by the end of 2007, while the number entering foreclosure topped 400,000 in the fourth quarter alone (**Figure 3**). The most rapid and dramatic increase was among riskier subprime loans. Indeed, foreclosure rates on adjustable subprime mortgages were over five times higher than those on adjustable prime loans.

Not all foreclosures end in families losing their homes. Of the prime loans it owns or insures, Freddie Mac estimates that less than half the homes with loans that enter foreclosure proceedings are ultimately sold. Nevertheless, hundreds of thousands of foreclosed homes have flooded into already bloated markets, with more to come. This will put more pressure on prices in places where foreclosures have reached a critical mass. In these communities, nearby homeowners will suffer drastic declines in home equity and local jurisdictions will face a drop in property tax collections.

The metropolitan areas at the greatest risk of widespread foreclosures are those with ailing economies, high shares of subprime

and so-called affordable loans, and large oversupplies of housing. Unfortunately, the majority of large metropolitan areas now fall into at least one of these three categories. The worst-hit locations are Midwestern metros with weak economies. Cleveland and Detroit, for example, both have subprime foreclosure rates above 20 percent. If economic distress spreads beyond the Midwest, other areas with high subprime shares will not be spared. Meanwhile, foreclosures within metro areas are especially high and rising in predominantly low-income and minority communities where subprime loans are concentrated.

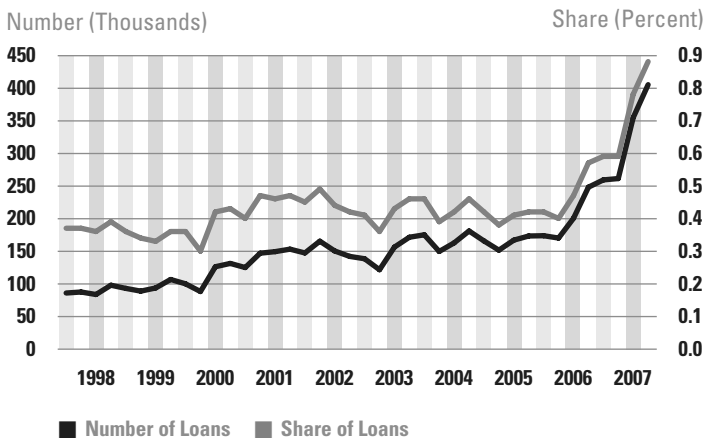
The scope of the foreclosure crisis has prompted responses from all levels of government. The federal government is scrambling to get lenders to make wholesale loan modifications, to help homeowners refinance with government-insured mortgages, to expand and promote credit counseling, and to provide state and local funding to deal with the problem. Several states have created programs to help at least some borrowers refinance their way to safety, and local governments are marshaling their own resources to cope with the rash of foreclosed homes in their communities.

Homeownership Cycles

Although subprime loans and new types of mortgages have been linked to a temporary increase in homeownership, the run-up in homeownership rates predates the proliferation of such loans. In fact, the largest homeownership gains occurred before 2001 when the subprime share was still small and price appreciation was only starting to take off.

Figure 3

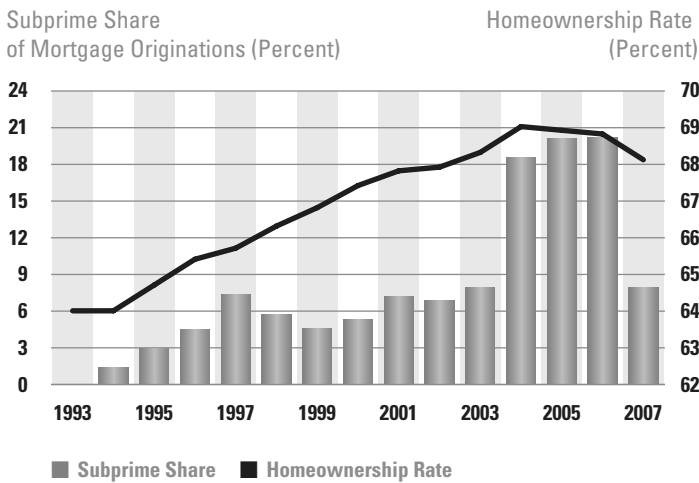
The Spike in Loans Entering Foreclosure Will Weigh Heavily on Markets



Source: Mortgage Bankers Association, National Delinquency Survey.

Figure 4

The National Homeownership Rate Peaked Before Subprime Lending Took Off



Note: Subprime share is of the dollar volume of all originations.
Sources: US Census Bureau, Housing Vacancy Survey; Inside Mortgage Finance, 2008 Mortgage Market Statistical Annual.

Several factors contributed to the surge in homeownership between 1994 and 2000. First, mortgage rates had started to decline in the 1980s and stood at much lower levels by the end of the 1991 recession. Second, the economy had entered a period of unusually vigorous and broad-based growth, with strong increases in incomes across the board. Third, home prices in some markets had fallen in the wake of the 1991 recession, improving affordability for many

buyers. Fourth, federal regulators had stepped up pressure on financial institutions to meet the mortgage needs of low-income communities and minority borrowers. And fifth, the prime mortgage market had begun to rely on automated underwriting and statistical models of loan performance, enabling lenders to relax downpayment and debt-to-income requirements while maintaining about the same expected default rates. Lenders were thus able to identify a broader range of borrowers that qualified for prime credit.

The expansion of mortgage credit in the 1990s was therefore accomplished with traditional products and without adding much to risk. The growth in mortgage credit after 2003, in contrast, came largely from gains in much riskier subprime, interest-only, and payment-option loans. These novel mortgage products provided only a temporary lift to homeownership. Indeed, the national homeownership rate peaked in 2004 and has since retreated below its 2003 level (Figure 4).

For the rate to fall below its 2000 level, the number of homeowners would have to dip by another million—a real possibility given the rising tide of foreclosures. Nevertheless, once the oversupply of housing is worked off and home prices start to recover, the use of automated underwriting tools, a return to more traditional mortgage products, and the strength of underlying demand should put the number of homeowners back on the rise.

Heightened Housing Challenges

At last measure in 2006, 39 million households were at least moderately cost burdened (paying more than 30 percent of income on housing) and nearly 18 million were severely cost burdened (paying more than 50 percent). From 2001 to 2006, the number of severely burdened households alone surged by almost four million. Because of the unprecedented run-up in house prices and lack of real income growth, over half of this increase was among homeowners.

The weight of high housing costs falls especially heavily on households in the bottom income quartile. Fully 47 percent of low-income households were severely cost burdened in 2006, compared with 11 percent of lower middle-income households and just 4 percent of upper middle-income households. On average, households with children in the bottom quartile of spenders with severe housing cost burdens have just \$257 a month left over for food, \$29 for clothing, and \$9 for healthcare. With food and energy costs climbing, these households will have less to spend on bare necessities.

Even households with one or more workers often spend more than half their incomes on housing (Figure 5). Four in ten low-income households with at least one full-time worker, and nearly six in ten households with one part-time worker, are saddled with severe housing cost burdens. The widening mismatch between housing costs and incomes reflects several forces—the growing number of low-wage and part-time jobs generated by the economy, the rising costs of operating and maintaining housing, and the upward pressure on construction and renovation costs created by local development restrictions. Indeed, in markets with the most stringent

regulations, house prices tend to rise faster and cost burdens tend to be greater than elsewhere.

With many former homeowners now turning to the rental market, the pressure on the limited supply of affordable rentals is mounting. Worse, losses of low-cost rental housing are alarmingly high. From 1995 to 2005, the supply of rentals affordable to households earning less than \$16,000 in constant 2005 dollars shrank by 17 percent. Unfortunately, these losses have continued in recent years even with the annual construction and preservation of about 135,000 rentals under the Low Income Housing Tax Credit program. These credits are sold to investors at a discount to compensate them for the risk of real estate investing. But like investors in other assets, tax credit investors are demanding higher returns in this riskier environment. As a result, tax credits will likely support fewer additional rentals this year and perhaps longer.

Meanwhile, only a quarter of eligible renter households receive housing subsidies, and the federal government does even less to relieve the cost burdens of low-income homeowners. While current interventions may mitigate the risk of massive mortgage defaults and foreclosures, any relief for cost-burdened homeowners is likely to be temporary at best.

Housing Demand Fundamentals

With many housing markets in a tailspin, the underpinnings of long-term demand have come into question. But unless the economy enters a sharp, prolonged recession that dampens immigration or

slows household formations, the current housing cycle in and of itself is unlikely to diminish the long-run growth of households.

The propensity for Americans to form households is driven largely by the age distribution of the population, slowly changing social norms, and the pace of immigration. In the decade ahead, the aging of the echo boomers into young adulthood, the longer life expectancies of the baby boomers, and projected annual immigration of 1.2 million all favor an increase in net household formations.

Meanwhile, the impacts of recent social trends are likely to be minimal. Although deferred first marriages, high divorce rates, and low remarriage rates will continue to make single-person households the fastest-growing household type, these trends have started to level off. Assuming that age-specific household formations remain about constant, changes in the number and age distribution of the adult population should lift household growth from 12.6 million in 1995–2005 to 14.4 million in 2010–2020.

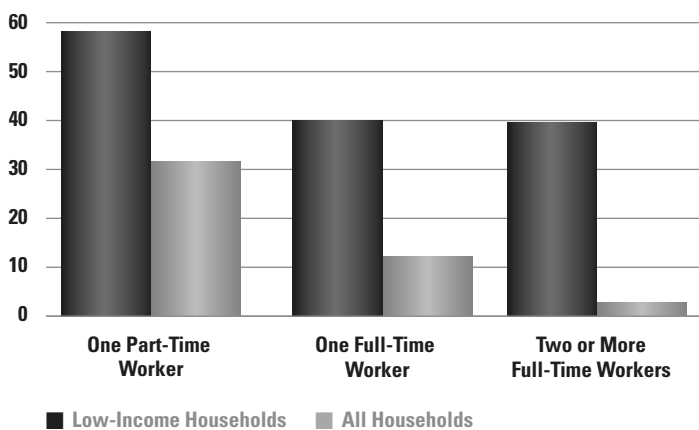
With their high levels of immigration and high rates of natural increase, Hispanics and Asians will contribute significantly to household growth. Minorities are expected to account for more than two-thirds of the net increase in households over the next decade, with the foreign born alone contributing at least one-third of the gains.

Because minorities have lower average incomes and wealth, some have argued that their growing presence in housing markets will be a drag on home prices and rents. But when the minority share of households increased from 20.2 percent in 1990 to 29.2 percent in 2007, rents and house prices still rose ahead of household incomes. While their low incomes may force them to spend less on non-housing items as housing costs rise, minority households will nevertheless provide broad demand support to housing markets in the years ahead.

Figure 5

Housing Costs Are Beyond the Reach of Many Working Households

Share of Households with Severe Cost Burdens (Percent)



Notes: Full-time is defined as working at least 35 hours per week for at least 38 weeks in the past 12 months. Low-income households are in the bottom fourth of all households sorted by pre-tax income. Severe cost burdens exceed 50% of total household income.

Source: JCHS tabulations of the 2006 American Community Survey.

The Rocky Road Ahead

With credit markets in such disarray, the for-sale housing inventory at record levels, and only small declines in interest rates, emerging from today's housing slump could take some time. Although demand fundamentals should support average annual completions of more than 1.9 million units over the next decade (including single-family and multifamily units plus manufactured homes), the housing market must first work off the one million or more excess units that were vacant and for sale or temporarily taken off the market at the beginning of 2008. This could trim underlying demand to an average of 1.8 million new units annually in the decade ahead.

If the economy slips into a severe recession, the prolonged contraction could drive down the sustainable level of housing demand by slowing the loss of older units, forcing more households to double up, and reducing sales of second homes. But in the case of a mild downturn, which most economists expect, the fundamentals of demand are likely to drive a strong rebound in housing once prices bottom out and the economy begins to recover.



Housing Markets

Housing markets entered 2008 showing no signs of recovery. Credit markets seized up in the wake of higher than expected losses on subprime mortgages, and lending standards tightened. In addition, mortgage interest rates edged down only slightly despite aggressive cuts by the Federal Reserve in 2007. Although the slowdown in home building last year was not enough to drive the economy immediately into recession, tight credit markets and the impact of falling home prices on consumer spending now threaten to bring growth to a halt.

The Unraveling Housing Market

The housing market bust that began in 2006 deepened in 2007 (**Figure 6**). During the expansion that started in the early 1990s, demand fundamentals kept household growth going strong, real incomes were up, and interest rates were favorable. But just prior to the 2001 recession, the Federal Reserve began to cut interest rates to avert deflation and a deeper contraction of the economy. Soon after, home sales began to take off ahead of production. By 2003, these conditions helped to create the tightest housing markets and the lowest interest rates in at least a generation.

A dramatic run-up in home prices ensued as buyers with access to low-cost mortgage credit competed in bidding wars. For the first time since records were kept, median prices across the nation increased multiple times faster than incomes for several years in a row (**Table A-1**). The relaxation of underwriting requirements and the advent of mortgage products that initially reduced borrowers' payments—together with the unprecedented availability of mortgage credit to speculators, investors, and homebuyers with past credit problems—helped to fuel the boom.

But even lax lending standards and innovative mortgage products could not keep housing markets going indefinitely. With interest rates on the rise starting in 2004, price appreciation showed signs of weakening in late 2005. Investors quickly exited markets and homebuyers lost their sense of urgency. But builders had ramped up to meet the higher level of demand from investors as well as buyers of first and second homes, pushing single-family starts from 1.3 million in 2001 to 1.7 million in 2005. Just as housing demand started to abate, record numbers of new single-family homes were coming on the market or were in the pipeline (**Table A-2**).

With excess supplies beginning to mount and the temporary lift from mortgage product innovations coming to an end, nominal house prices finally turned down on a year-over-year basis in the third quarter of 2006. Meanwhile, interest rates on some adjustable loans began to reset and mortgage performance deteriorated as poor risk management practices took their toll. Lenders responded by tightening credit in the second half of 2007, dragging the market down even more sharply and exacerbating the threat of a prolonged housing downturn.

Figure 6

The Housing Downturn Accelerated in 2007

Dollars in 2007 Values

	2006	2007	Percent Change	
			2005–06	2006–07
New Single-Family Sales (Thousands)	1,051	776	-18.1	-26.2
Existing Single-Family Sales (Millions)	5.7	4.9	-8.1	-13.0
Single-Family Starts (Thousands)	1,465	1,046	-14.6	-28.6
Multifamily Starts (Thousands)	336	309	-4.8	-7.9
Median Existing Single-Family Price (\$)	228,200	217,900	-1.8	-4.5
Home Equity (\$Trillions)	10.3	9.6	-1.1	-6.5
Mortgage Debt (\$Trillions)	10.1	10.5	7.7	3.7
Mortgage Refinancing (\$Trillions)	1.4	1.2	-17.7	-16.8
Residential Investment (\$Billions)	786.6	640.7	-3.6	-18.5
Improvements & Repairs (\$Billions)	234.7	226.4	2.8	-3.6

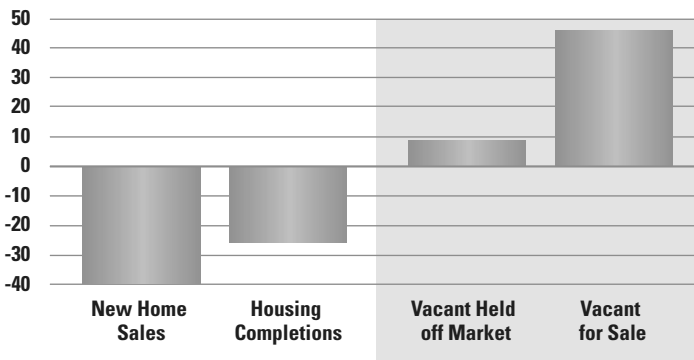
Notes: All values are adjusted to 2007 dollars using the CPI-U for All Items. Percent change is calculated with unrounded numbers.

Sources: US Census Bureau; National Association of Realtors®; Freddie Mac; Federal Reserve Board; Bureau of Economic Analysis.

Figure 7

With Demand Dropping off Faster than Production, the Number of Vacant Units Ballooned

Percent Change 2005–2007



Note: New home sales and housing completions include single-family units only.

Sources: US Census Bureau, New Residential Construction and Housing Vacancy Survey.

Lingering Oversupply

While drastic production cuts and deep price discounts in 2005–2007 helped to shrink the inventory of unsold new homes, the number of vacant homes for sale rose 46 percent over two years, to 2.12 million units (Figure 7). The number of unsold new single-family homes did retreat from a peak of more than 570,000 in mid-2006 to less than 500,000 in early 2008, but the precipitous drop in sales left the supply still high at 11 months—an excess not seen since

the late 1970s. Meanwhile, the months' supply of existing single-family homes rocketed to 10.7 months by April 2008.

With a supply of more than six months considered a buyer's market, homes for sale can languish for some time, inviting lowball offers that motivated sellers eventually accept. Since homeowners often resist selling at below-peak prices, adjustments in many markets have been larger on the new home than on the existing home side. Nonetheless, most current owners are unwilling to accept lower prices even if doing so enables them to buy new homes at more deeply discounted prices.

The homeowner vacancy rate continued to edge higher in the first quarter of 2008. Until the number of vacant for-sale units on the market, or held off the market for reasons other than seasonal or occasional use, falls enough to bring vacancy rates back down, house prices will remain under pressure. Working off the oversupply will require some combination of the following: housing starts fall even further, prices decline enough to bring out new bargain-seeking buyers, interest rates drop enough to improve affordability, job growth improves, consumer confidence returns, and mortgage credit again becomes more widely available.

Local Construction Downturns

Housing permits fell 24 percent nationwide in 2007, with single-family permits down 29 percent and multifamily permits down 9 percent for the year. This brings the total decline from the 2005 peak to 35 percent, including a 42 percent reduction in single-family permits. The downturn has been widespread, with permits declining in 94 of the 100 largest metropolitan areas over the two-year period. Smaller metropolitan areas have also been affected by the construction pullback, with 214 of 263 posting reductions in permits.

In some parts of the country, the drop in production last year was just the latest in a string of declines. Construction had already fallen for at least two years before 2007 in over a third of all metropolitan areas and in 16 states. The top five largest declines in metro area permitting in 2005–2007 occurred in Florida, led by Palm Coast with an 86 percent drop over two years (Figure 8). Not surprisingly then, Florida heads the list of states with the sharpest cutbacks at 64 percent, followed by Michigan at 61 percent and Minnesota at 51 percent (Table W-1).

The intensity of the retreat in demand took builders by surprise. Cancellations soared, coming closer to the time of delivery than ever before. Phoenix provides an extreme example. According to Hanley-Wood, cancellations as a share of gross home sales climbed from 2.8 percent in the fourth quarter of 2005 to 48 percent in the fourth quarter of 2007, just as gross sales dropped from about 10,600 to 7,400. Even in a relatively strong market like Seattle, however, the cancellation rate jumped from 1.2 percent to 12.6 percent over this period.

The shock to employment was significant. By the end of 2007, the nation had 232,000 fewer construction jobs than a year earlier.

Figure 8

Housing Permits in Many Metros Have Dropped Dramatically

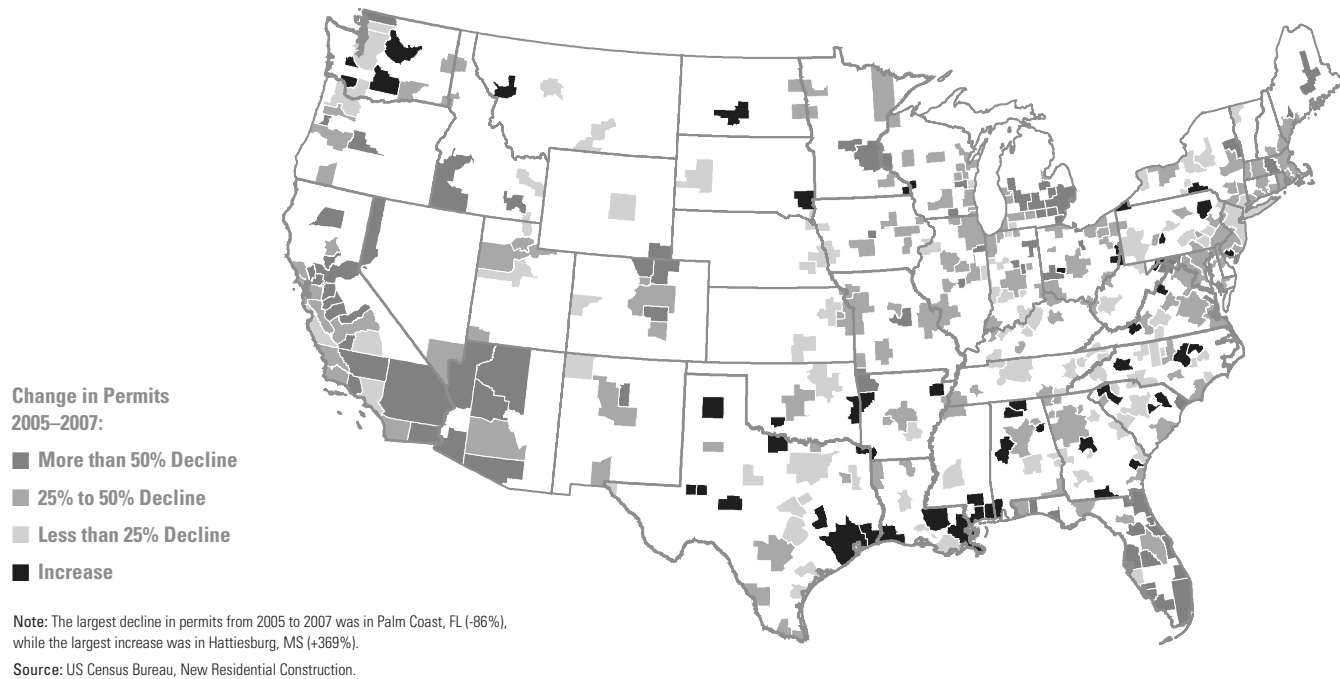
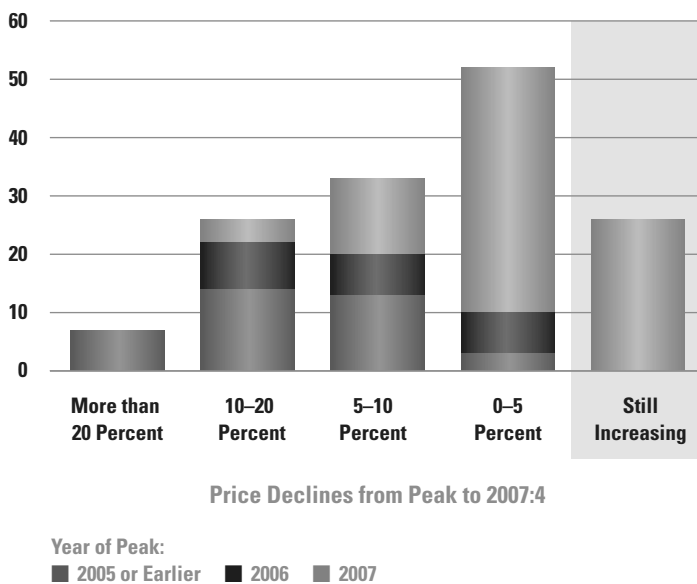


Figure 9

While a Handful Were Still Gaining, Most Metros Started to See Nominal Price Declines in 2007

Number of Metropolitan Areas



Notes: Peaks and declines are based on seasonally adjusted quarterly median single-family house prices. Still increasing means that nominal median house prices reached a new peak in the fourth quarter of 2007.
Sources: National Association of Realtors®, Moody's Economy.com.

These losses dragged down overall employment growth in many states, particularly those with previously booming markets such as Florida (74,000 construction jobs lost vs. 52,000 other jobs added) and Arizona (25,000 construction jobs lost vs. 23,000 other jobs added). California also lost 58,000 construction jobs, but more than offset this loss with gains in other sectors.

Only a few markets have so far weathered the storm better than the national numbers would suggest. At the state level, Mississippi and Wyoming issued more permits in 2007 than 2006. Among metros, just eight of the 100 largest saw increases last year, as even previously strong housing markets in the Carolinas, Texas, and Washington finally felt the pinch.

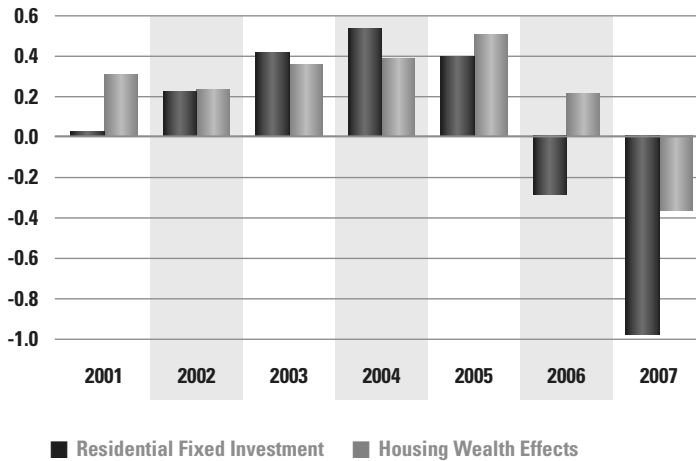
Falling House Prices

It is difficult to gauge with certainty how far home prices have fallen. Each of the three measures most commonly used to quantify house price trends paints a different picture of the magnitude of declines to date. The National Association of Realtors® (NAR) national median single-family home price—which is affected by the mix of homes sold—fell a modest 1.8 percent in nominal terms in 2007. When measured fourth quarter to fourth quarter, however, the decline was a much larger 6.1 percent. The S&P/Case Shiller® US National Home Price Index—based on repeat sales and therefore unaffected by the mix of homes sold—registered a hefty fourth-quarter to fourth-quarter nominal decline of 8.9 percent.

Figure 10

Declines in Both Housing Production and Housing Wealth Helped to Drag Down the Economy

Contribution to Change in Real GDP (Percentage points)



Note: Wealth effects include the impact of falling home prices on the marginal propensity of consumers to spend from their aggregate household wealth.

Sources: Moody's Economy.com; Bureau of Economic Analysis.

Meanwhile, the narrower purchase-only repeat sales index from the Office of Federal Housing Enterprise Oversight (OFHEO) eked out a 1.9 percent gain for the year despite posting a fourth-quarter to fourth-quarter nominal dip of 0.3 percent. The OFHEO index did, however, fall by a record 3.1 percent between the first quarters of 2007 and 2008 (Table W-2).

These national statistics obscure larger price drops in many metropolitan areas and mask how fast declines spread across the country. At the start of 2007, quarterly nominal NAR median sales prices were still rising in 85 of 144 metros. By the end of the year, however, prices were increasing in only 26 metros (Figure 9). Meanwhile, prices in 33 metros had declined by 10 percent or more from their peak to the fourth quarter of 2007 (Table W-3).

To wipe out past appreciation, home prices have to retreat the most in once-hot markets and the least in cold markets. For example, the 6.7 percent drop in the median house price in Indianapolis from the third-quarter 2005 peak to the fourth quarter of 2007 was enough to cancel out appreciation all the way back to 2000. In Sacramento, by contrast, the larger 21.8 percent drop in the median house price from its peak in the fourth quarter of 2005 to the end of 2007 only erased gains made since 2003. Among the 144 metropolitan areas with available data from NAR, fourth-quarter nominal house prices in 2007 fell back to 2006 levels in 12 metros, to 2005 levels in 35 metros, to 2004 levels in 19 metros, and to 2003 or earlier levels in 16 metros.

Once they begin, price declines usually take time to run their course. Of the 139 metros that saw their nominal OFHEO house price index values fall in the late 1980s and early 1990s, 18 took ten years or more to return to peak prices, another 56 took five to nine years, and 31 metros took three to four years. Among the 59 metros where prices fell more than five percent, the median time to make up for the lost appreciation was eight years. All but one of these metro areas took five or more years to recover.

Real price declines were even more dramatic and enduring. The real average annual OFHEO price index fell in 267 metropolitan areas in the late 1980s and early 1990s. The rebound to pre-decline levels took more than five years in 236 metros and more than ten years in 130. Indeed, real house price indices in 15 metros never returned to their previous peaks.

In previous cycles, employment losses and overbuilding played larger roles in how far metropolitan area prices fell. This time around, the extent of overheating is a much bigger factor in the magnitude of the declines. Still, job losses are likely to exacerbate housing market weakness, and overbuilt markets will suffer especially severe price corrections. In fact, prices are not expected to recover until excess inventory is absorbed, consumers are convinced that the bottom has been reached, and credit is less expensive and more available. Moreover, if the economy slides into a recession with significant employment losses, house prices are likely to take a further beating.

Impacts on the Economy

When house values increase and homeowners borrow against their equity, they typically spend more. When prices fall, the opposite is true. As a result, the sharp drop in prices has turned these housing wealth effects from an engine of growth to a drag on the economy. Real home equity fell 6.5 percent to \$9.6 trillion in 2007. The switch from home price appreciation to depreciation, plus the slowdown in home equity withdrawals, trimmed about one-half of a percentage point from real consumer spending and more than one-third of a percentage point from total economic growth.

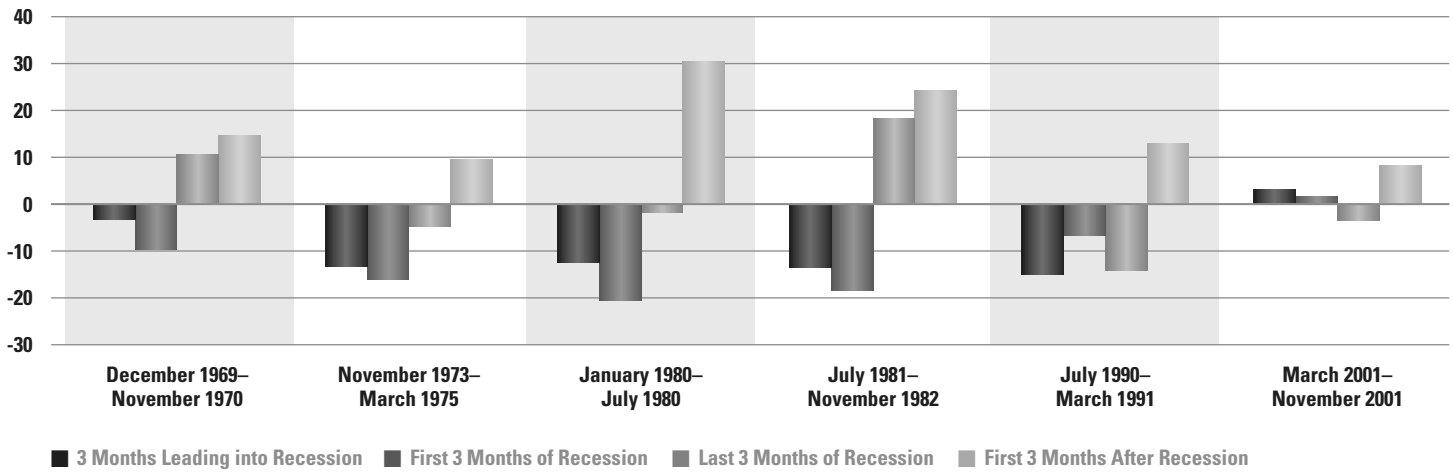
Moreover, the drop in residential investment shaved nearly one percentage point from growth (Figure 10). So far, home building has been responsible for nearly all the decline in residential fixed investment. Remodeling expenditures only started to weaken in 2007, largely as the result of falling home values. For housing to have a similar negative impact on economic growth in 2008, improvement spending would have to drop by an additional 3.8 percent and housing starts by another 450,000 or so to a level of 900,000, assuming the average cost of each new unit remains at 2007 levels.

Housing is having even wider impacts on the economy because of the subprime mortgage meltdown. As investors demand a higher return for assumed risk and limit credit to riskier borrowers, costs are rising for all types of mortgage, consumer, and corporate loans. Many would-be borrowers are now finding it impossible to get loans at any price.

Figure 11

Although Recessions Often Exacerbate Downturns, Housing Is Usually Quick to Recover

Quarterly Change in Housing Starts (Percent)



Notes: Dates shown mark the beginning and end of each recession. Quarterly data are derived from sums of monthly data, seasonally adjusted by Moody's Economy.com.
Source: US Census Bureau, New Residential Construction.

Housing Downturns in Perspective

The current housing slump is shaping up to be the worst in 50 years. This downturn rivals the first 30 months of the 1978–1982 cycle in terms of production and sales cutbacks, but eclipses that cycle in terms of price declines. The seasonally adjusted median single-family sales price peaked in October 2005, and then dropped by 12 percent in nominal terms and 18 percent in real terms over the following 30 months. By comparison, 30 months after real prices peaked in November 1989, the real median price was down just 4 percent and the nominal price was up 6 percent. Thirty months after the peak in May 1979, the real median price had fallen 8 percent and the nominal price had increased by 20 percent.

It is noteworthy that six of the last seven housing downturns preceded a recession—usually within two years. In the 1980s, however, housing was mired in a 54-month slump when the recession began and then bottomed out just 6 months into it. During these cycles, residential fixed investment was often the first to retreat, followed by spending on consumer durables, and then spending on nondurable goods. Once the recessions ended, housing starts usually rebounded strongly—although only after the new home inventory fell and new home sales began a vigorous recovery (**Figure 11**).

Turnarounds are often difficult to spot because false bottoms in sales and starts are common. Builders take their lead from consumers, ramping up production when sales increase and cutting back when they fall. Thus, only a sustained rebound in demand will bring the market back. If a recession takes hold, however, housing starts are likely to slide even further.

The Outlook

With vacant for-sale homes near a record-high share of the housing stock, this downturn may have a way to go. Mortgage interest rates have declined only slightly, contributing to the softness (**Table A-3**). In fact, after adjusting for points, real 30-year fixed mortgage interest rates were down marginally some 24 months after housing starts peaked. At the same point in previous cycles, real mortgage rates had fallen anywhere from 0.5 to 6.8 percentage points.

The dramatic drop in prices has also sidelined more buyers than in the past, and foreclosure rates are the highest they have been since recordkeeping began in 1974. All of these factors may make this downturn more protracted than usual, and credit market woes may slow the eventual rebound. Improvement spending will also come under increasing pressure because it is sensitive to both credit availability and house price appreciation.

Nevertheless, demographic fundamentals still point to increased housing demand over the next decade. But the excess inventory must be worked off before the demand for new homes rebounds. This in turn requires a return to stable-to-rising home prices, sustained job growth, and accessible credit. When that happens, and assuming immigration remains strong, the inventory overhang will start to thin, prices will firm even more, and average annual production, including manufactured housing, will likely head back toward 1.9 million units.



Demographic Drivers

It is still uncertain how far, and for how long, the housing crisis will drive down household growth. Regardless, given the solid underpinnings of long-term demand—including the recent strength of immigration and the aging of the echo-boom generation into young adulthood—household growth will pick up again once the economy recovers. But if the nation suffers a prolonged economic downturn that results in lower immigration and more doubling up, household growth in 2010–2020 may fall short of the 14.4 million level currently projected.

Household Growth Trends

After averaging 1.15 million per year in 1995–2000, household growth notched up to 1.37 million annually in 2000–2006. While some of this increase may be due to the unusually favorable home-buying conditions in the first half of the decade, much of it was expected as the echo boomers began to form independent households and immigration continued to climb.

When housing markets turned down in 2006 and then plummeted in 2007, the most consistent measure of households registered a slowdown in net growth (**Table W-4**). Estimates of last year's fall-off, however, were especially sharp and contain some anomalies that make their reliability questionable. In particular, net household growth fell nearly in half last year as the number of owner households swung from a gain of 800,000 in 2005–2006 to a loss of 200,000 in 2006–2007. If the dramatic plunge in 2007 were driven by the subprime mortgage crisis and rising foreclosures, the biggest decline in homeowners would likely be among minority households, who have a disproportionately large share of such loans. Instead, white households accounted for all of the reported decrease in homeowners while the number of minority owners increased by more than 250,000. And despite the large drop in homeowners, growth in the number of renters only rose from around 500,000 in 2005–2006 to 950,000 in 2006–2007. Moreover, though domestic in-migration increased in the South, the reported pace of household growth in the region—among both owners and renters—was down significantly last year. While this may indicate a sudden drop in immigration, it may also be the byproduct of a change in estimation methods in 2007 rather than a real decline.

Looking ahead, household growth should return to the path set by the changing age composition of the population, the strength of ongoing immigration, and social trends such as divorce and remarriage rates that influence the size of households. Indeed, if immigration remains near its current pace of 1.2 million per year, the combination of several years of high immigration, high divorce and low remarriage rates, and the aging of the echo boomers should push household growth to average more than 1.4 million per year in 2010–2020 (**Table W-11**). Even if immigration were to drop by about 30 percent, household growth should still exceed its 1995–2000 average annual level (**Figure 12**).

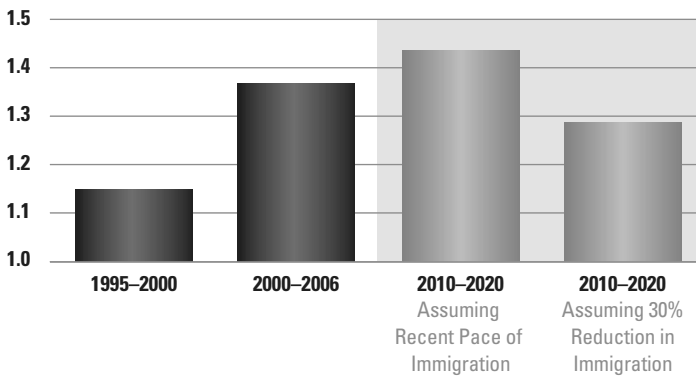
The Rise of Nontraditional Households

Married couples are a shrinking share of American households. Several trends have contributed to this shift, including higher labor-force participation rates for women, delayed marriage, high divorce rates, low remarriage rates, and greater acceptance of unmarried partners living together. The resulting growth in unmarried-partner, single-parent, and single-person households has increased the share of adults in all age groups heading independent households.

Figure 12

Even If Immigration Falls by About a Third, Household Growth Should Still Handily Top Late-1990s Levels

Average Annual Household Growth (Millions)



Notes: To adjust for rebenchmarking, household growth in 2002-2003 is assumed to be the same as the average annual growth in 2000-2006. The recent pace of immigration has been 1.2 million per year and a 30% reduction would be consistent with the Census Bureau's current population projections.

Sources: US Census Bureau, Housing Vacancy Survey; 2006 JCHS household projections.

Two trends in particular have lifted the number of nontraditional households (**Figure 13**). First, fewer marriages survive. Less than half of women married between 1975 and 1979 were still married 25 years later, compared with nearly 70 percent of those who married between 1955 and 1959. Indeed, more than half of all first marriages today are likely to end in divorce. And second, remarriage rates have reached historic lows.

In addition, more people defer their first marriage. For example, only 14 percent of women born between 1980 and 1984 had married by the age of 20, compared with fully 52 percent of women born between 1935 and 1939. The never-married share has also climbed sharply among women aged 35 to 44 (up from 5.3 percent in 1980 to 13.1 percent in 2000) and aged 45 to 54 (up from 4.1 percent to 7.4 percent).

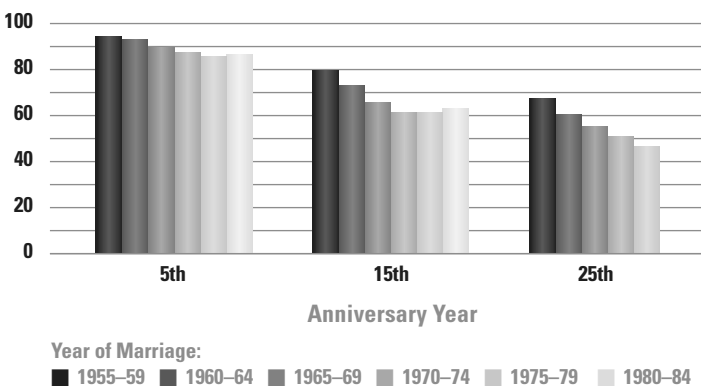
Another noteworthy change is that a larger share of each succeeding generation is choosing to live with a partner without marrying. This is true for households with and without children. According to new Joint Center household projections, unmarried partners will head 5.6 million households in 2020, up from 5.2 million in 2005. Of these households, 36 percent will include children under the age of 18.

As a result, more and more children are living outside of married-couple households. In 2007, fully 29 percent of heads of households with children were unmarried. Within this group, about 18 percent lived with partners and another 21 percent lived with other non-partner adults. Between 2010 and 2020, the number of unmarried householders with children is projected to increase from 11.0 million to 11.8 million.

Figure 13

Married Couples Are on the Decline as More Women Divorce ...

Share of Married Women Reaching Anniversaries (Percent)



Note: Shares are of women who reported ever having been married, regardless of whether they were married at the time of the survey.

Source: US Census Bureau, 2004 Survey of Income and Program Participation.

... and Fewer Women Remarry

Share of Married Women Who Have Married at Least Twice (Percent)

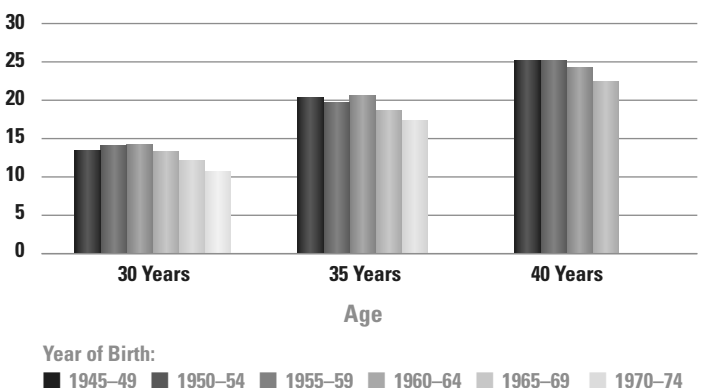
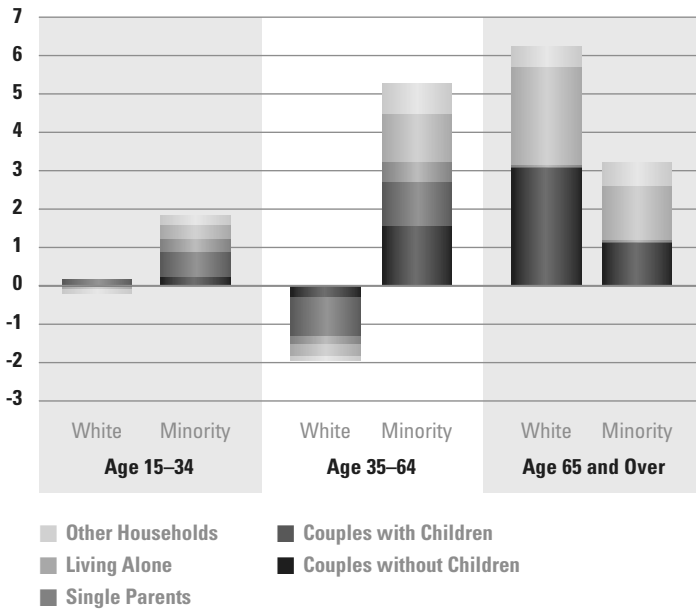


Figure 14

Minorities Will Lead Growth Across All Household Types and Age Groups Except Seniors

Projected Household Growth 2010–2020 (Millions)



Notes: Whites are non-Hispanic, and minorities are all householders other than non-Hispanic whites. Couples include married and unmarried partners.

Source: Revised JCHS household projections using partner household model.

Although households with one parent but other adults present are often included in the broad single-parent category, they have different characteristics. In particular, they have higher household incomes (Table W-5). Among 35 to 44 year-olds, the median income of single-parent households that include an unmarried partner (\$48,452) or other adults (\$39,000) was significantly higher than of single parents alone (\$28,928). In addition, single parents with partners had higher homeownership rates at younger ages (39 percent among 25 to 34 year-olds) than single parents with a non-partner adult present (36 percent) or single parents alone (24 percent). By middle age, however, homeownership rates for all three types of single-parent households tend to converge because older single parents are more likely to be divorced and to have kept their family homes.

In total, persons living alone are expected to account for 36 percent of household growth between 2010 and 2020. Although increasing numbers of people living alone will boost the demand for smaller units, the lift is likely to be modest given the nation’s strong appetite for large homes. In addition, three-quarters of the more than 5.3 million projected increase in single-person households will be among individuals aged 65 and older—a group that has shown a marked preference for remaining in their homes as they age. Seniors are more likely to remodel their current homes to improve

accessibility, safety, and convenience than to move to new, smaller units. The aging baby boomers, however, are already showing a propensity to buy second homes and will therefore continue to add to demand in this way.

Minority Household Gains

Thanks to higher rates of immigration and natural increase (excess of births over deaths), minorities contributed over 60 percent of household growth in 2000–2006. Minorities now account for 29 percent of all households, up from 17 percent in 1980 and 25 percent in 2000. If immigration continues at its current pace, the minority share is likely to reach about 35 percent by 2020, with Hispanic households leading the gain.

Minorities are younger on average than whites. As a result, minority household growth among 35 to 64 year-olds should remain strong in 2010–2020. In contrast, the number of white middle-aged households will start to decline after 2010 as the baby boomers begin to turn 65. The number and share of white households under age 35 will also fall after 2015 as the children of the baby-bust generation begin to reach household-forming ages.

White household growth in the next decade will be almost entirely among older couples without minor children and among older singles (usually widowed or divorced). Minority household growth will occur across a broader spectrum of household types (Figure 14). With their higher birth rates and lower average ages, minorities will continue to post a net increase in married-couple households with minor children. Even so, nontraditional households are gaining ground among minorities as well, with the shares headed by single parents or including multiple unmarried adults expected to increase. This reflects both changing social patterns and the tendency for immigrants to share housing to shoulder high cost burdens. Single-person households will be the fastest-growing segment among minorities. Indeed, the number of minorities living alone is projected to increase across all age groups, even outpacing the strong growth among white single-person households.

As the numbers and shares of minorities and immigrants grow, the demand for affordable housing will increase. This is not to say, however, that these groups are not contributing to the demand for higher-cost housing. Indeed, despite having lower average incomes and wealth, minority and foreign-born households constitute a significant and growing fraction of homeowners with high incomes—particularly in the West (Figure 15).

It should be noted that age distribution and family composition across minority groups differ in important ways. For example, the age distribution of black households is more like that of white households than of other minorities. Blacks also have a higher share of young single-parent, non-partner households than other minority groups. For their part, Hispanics typically have more children than Asians and blacks. Such demographic differences are obviously important in the housing markets where particular minority groups are overrepresented.

Figure 15

Foreign-Born and Minority Households Represent a Significant and Growing Share of High-Income Homeowners and Buyers

Share of High-Income Households (Percent)



Notes: High-income households are in the top fourth of all households nationally sorted by pre-tax income. Recent buyers purchased a home within the previous two years. Minorities are all householders other than non-Hispanic whites.
Source: JCHS tabulations of the 2001 and 2005 American Housing Surveys, using JCHS-adjusted weights for 2005.

Sources and Patterns of Population Growth

The movement of households to and within the United States profoundly shapes local housing demand. While rates of natural increase matter over the long term, foreign immigration and net domestic migration are more important in the short run because they directly add or subtract adults from the market. Domestic migration is even larger than international migration. But with the movement of international migrants already living in the United States counted as domestic migration, looking only at new arrivals understates the impact of immigration on a given area.

The South and West were the only regions to gain population through domestic in-migration between 2000 and 2007. During this period, most net domestic migrants (more than 3.2 million) settled in the South while only 391,000 moved to the West. But population shifts within the Western region were significant, with California losing over 1.2 million domestic migrants while Arizona gained 655,000, Nevada 365,000, Washington 155,000, Oregon 136,000, and Colorado 133,000.

International migration affects all regions of the country, but primarily the South and West. At the state level, the foreign born contribute to growth by either replacing population lost to net domestic out-migration or by adding to domestic in-migration (Table W-6). Indeed, the arrival of 1.8 million immigrants to California more than made up for the net loss of domestic out-migrants in 2000–2007. In Florida and Arizona, where net domestic migration was strong,

international migrants lifted population growth even more. And in Texas, the state with the highest total population growth over the period, 843,000 international migrants added to the net gain of 582,000 domestic migrants.

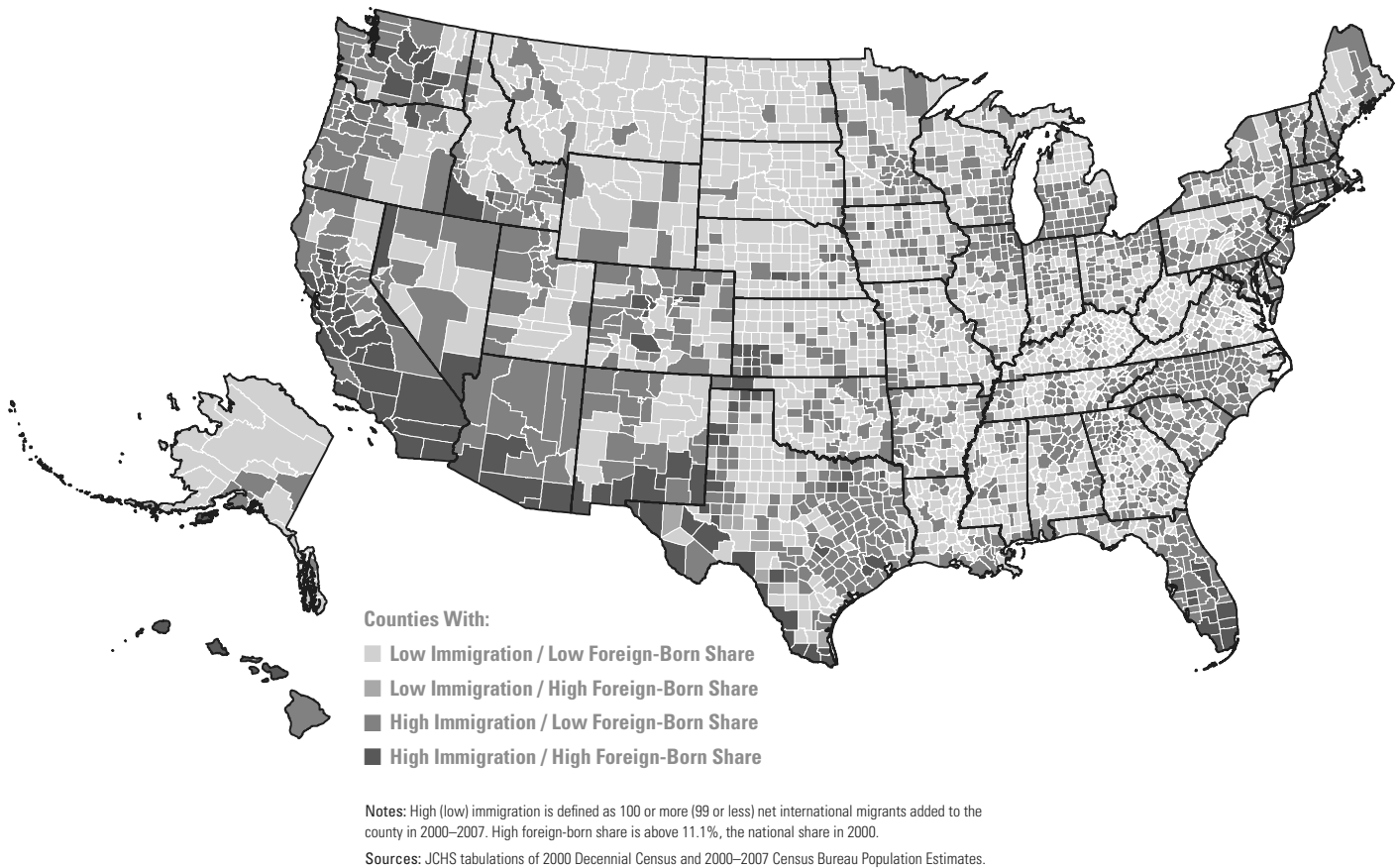
More and more, international migrants are settling in locations where the foreign-born share of the population is relatively low (Figure 16). In many cases, these are the outer suburbs of metropolitan areas that have traditionally served as immigrant gateways. But smaller cities and towns as well as rural counties are also becoming locations of choice. In many of these areas, domestic out-migration of young adults and the consequent decline in natural increase have left communities to depend upon foreign immigrants to fill jobs, buy houses, and keep up school enrollments.

With their economically competitive environments and desirable climates, the same locations in the South and West that have attracted both international and domestic migrants in recent years are expected to continue to do so. Foreign-born migrants are, however, increasingly likely to spread into more housing markets around the country where young domestic out-migrants have left a vacuum.

Recent Income and Wealth Trends

With the economy slumping, real incomes are again at risk of falling. After declines earlier in the decade, real median income

International Migrants Are Settling in a Mix of Urban and Outlying Areas



growth revived in 2005 and 2006, although only households in the top income quintile saw a net increase since 2000. Making matters worse, higher education no longer guarantees steady economic progress. Among whites and minorities in most age groups, households with at least college degrees have seen their real incomes drop since 2000 (**Figure 17**).

Over the longer term, however, education still remains the key to higher earnings. For example, the median earnings of college-educated male workers aged 35 to 54 rose from \$71,700 in 1986 to \$75,000 in 2006 in constant 2006 dollars, while those for same-age males who only completed high-school fell from \$48,000 to \$39,000. This earnings gap between workers with high school and college educations also exists between females as well as across racial and ethnic groups (**Table W-7**).

The widening disparity in returns to education plays a large part in the growth of income inequality. Households in the top income decile increased their share of aggregate household income from 32 percent in 1996 to 34 percent in 2006. In addition, their share of aggregate household net wealth rose from 52 percent in 1995

to 57 percent in 2004, with growth in home equity accounting for much of the increase.

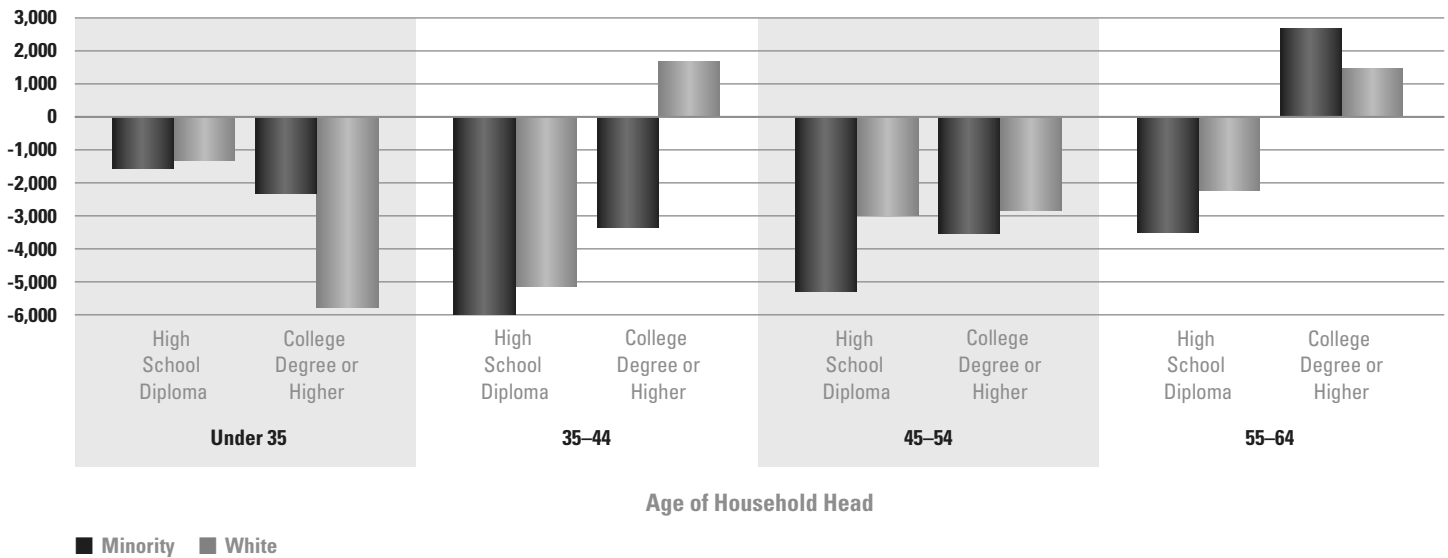
But many other households also benefited from soaring home prices during this period. Among homeowners that bought units between 1999 and 2005, fully 85 percent saw an increase in wealth, and the median net wealth for these new homeowners rocketed from just \$11,100 to \$88,000 in real terms. Among households that already owned homes, 75 percent also saw an increase in their wealth, and the median net wealth of these long-time owners nearly doubled from about \$152,400 to \$289,000. In stark contrast, only 50 percent of renters saw any uptick in wealth. Among those that did see gains, the increase in median net wealth was only from \$350 to \$9,000.

Nevertheless, the growth in homeownership and the escalation in house values did nothing to narrow the wealth gap between whites and minorities. Median wealth among minorities more than doubled from \$14,000 in 1999 to \$37,000 in 2005 in inflation-adjusted dollars. At the same time, though, median wealth among whites increased more in dollar terms, up 50 percent from \$105,000 to

Figure 17

Even Many College-Educated Households Have Seen Income Losses Since 2000

Change in Median Household Income 2000–2006 (2006 dollars)



Notes: Whites are non-Hispanic, and minorities are all householders other than non-Hispanic whites. Dollar values are adjusted for inflation by the CPI-U for All Items. Source: JCHS tabulations of March 2001 and 2007 Current Population Surveys.

\$158,000. As a result, the disparity in median wealth between whites and minorities widened from \$91,000 to \$121,000.

Unfortunately, the recent collapse of home prices has erased some of the gains in household wealth. In previous cycles, sales prices have taken many years to return to their nominal peaks, so owners must have staying power to make up for their lost equity. For those who lose their homes to foreclosure, however, there will be no chance to participate in the rebound when it comes. Given that minorities likely account for a disproportionate share of homeowners in foreclosure proceedings, the shakeout in the housing market is apt to widen the wealth gap even further.

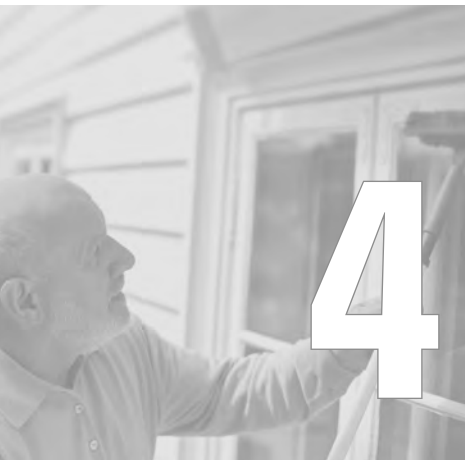
The Outlook

Once housing markets stabilize, household growth should return to levels consistent with long-term demographic trends. As the number of minority and foreign-born households grows, the housing industry will increasingly serve groups with lower homeownership rates, incomes, and wealth than native-born whites. Ethnic identification of some minorities and cultural preferences of recent immigrants will also challenge housing suppliers to tailor their marketing to a diverse population.

With unmarried-partner households increasing in number and share, the industry may also want to look past marital status to the hous-

ing preferences of this growing customer segment. Furthermore, the likely increase in the number of adult children living at home and of adults other than spouses or partners living together may create niche marketing opportunities for both the construction and remodeling industries.

While rising incomes and wealth have so far placed each generation on a path to higher housing consumption, the weak income performance earlier in this decade and the recent jump in energy costs have raised concerns that this upward trend may not continue. Adding to this risk is the very real prospect that some of the recent gains in household wealth—which came largely from rising homeownership rates and home price inflation—will erode. Housing demand will, however, pick up once the economy begins to recover, home prices reach bottom, and homeownership again becomes an attractive way to build wealth.



Homeownership

Falling home prices, stringent credit standards, and stubbornly high inventories of vacant homes roiled homeownership markets throughout 2007 and into 2008. Homeowners whose mortgage interest rates have reset or who have lost their jobs are especially hard hit. With home prices down, many of these owners cannot sell or refinance to get out of unmanageable loans. But even those able to pay their mortgages and under no pressure to sell are feeling the spillover effects from the foreclosure crisis on home prices and credit markets. The only silver lining is that lower prices and slightly lower mortgage interest rates are easing affordability for first-time buyers still able to qualify for loans.

Cycling Demand

Despite all the attention that subprime and so-called affordability loans have gotten for fueling the housing boom, the national homeownership rate had already peaked by the time these products took off in 2004. Indeed, the homeownership rate began to retreat in 2005 and 2006 and then dropped more sharply in 2007, to 67.8 percent in the fourth quarter. Thus, it appears that these mortgage innovations did less to lift homeownership than to enable homebuyers to chase prices higher, investors to borrow money to speculate, and owners to borrow against home equity.

What sparked the decade-long homeownership boom was instead the improved affordability brought by lower interest rates and flat home prices in the wake of the 1990–1991 recession. That downturn was quickly followed by the longest economic expansion since World War II and unusually strong, broad-based income growth. During this period, Congress and regulators also leaned on financial institutions to step up lending in low-income and minority neighborhoods. Equally important, widespread adoption of automated underwriting tools in the latter part of the 1990s allowed many more borrowers to qualify for prime loans while adding little to credit risk.

From 1994 to 2001, the national homeownership rate surged by 3.8 percentage points, and rose even more among minorities and younger households (**Figure 18**). Innovations in prime mortgage lending contributed to larger homeownership rate advances among blacks (up 5.9 points), Hispanics (up 6.1 points), and households under 35 years old (up 3.9 points). After the 2001 recession but before house prices and lending practices went wild, the national homeownership rate climbed another 1.2 percentage points to a peak of 69.0 percent. In the three years since, homeownership rates have fallen back for most groups, including a nearly 2.0-point drop among black households and a 1.4-point drop among young households (**Table A-5**).

Once the current turmoil passes, the full benefits of automated underwriting tools in the prime mortgage market will once again provide a favorable climate for homeownership growth. With more prudent underwriting and less risky products, subprime lending may well reassert itself as a viable business—although one unlikely to serve as many borrowers as it did at its peak when more reckless practices were tolerated.

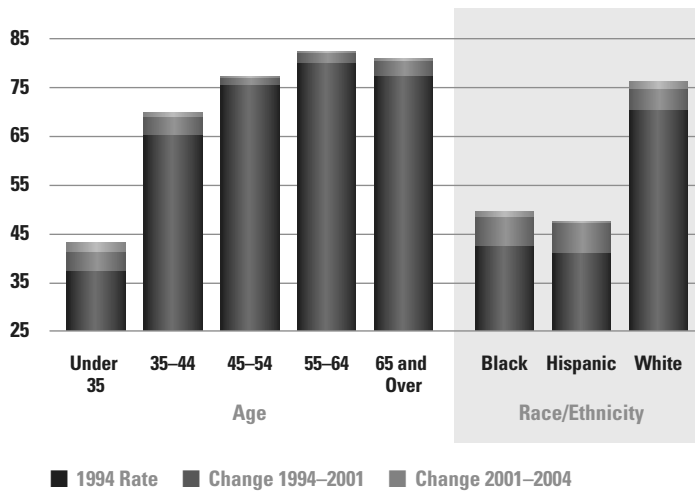
Lending Pullback

Mortgage originations plunged in 2007 as house prices fell, credit standards tightened, and mortgage interest rates stayed within a narrow range. According to Inside Mortgage Finance, total loan originations were down by 18 percent last year to \$2.43 billion, with purchase originations alone declining by 23 percent to \$1.17

Figure 18

Younger and Minority Households Saw the Largest Increases in Homeownership Rates

Homeownership Rate (Percent)



Notes: White and black householders are non-Hispanic. Hispanic householders can be of any race.
Source: US Census Bureau, Housing Vacancy Survey.

billion. The largest reductions were in loans designed to lower initial payments. By the end of 2007, the shares of loan originations with adjustable rates or with interest-only (deferring principal payments) or payment-option (requiring minimum payments even lower than accrued interest) features had all declined (Figure 19).

While poor loan performance and tighter underwriting standards were likely responsible for the drop in the shares of interest-only and payment-option originations, it was the narrower difference between discounted adjustable and fixed interest rates that brought down adjustable-rate loan originations starting in 2004. With the performance of subprime adjustable loans eroding in 2006-2007, total ARM originations declined even further as lenders reduced initial discounts on one-year adjustables from a peak of 2.3 percentage points early in the year to just 0.5 percentage point at the end.

The pullback in subprime adjustable lending has made it more difficult for distressed owners to avoid foreclosure by refinancing. This is particularly true in low-income and minority neighborhoods as well as in some Southern states where subprime lending was concentrated. Most subprime loans are considered high cost, with interest rates at least three percentage points above those on Treasuries of comparable maturities. In 2006, more than 40 percent of loans on one- to four-unit properties originated in low-income census tracts were high cost, as were 45 percent of such loans originated in low-income minority communities. By comparison, high-cost loans accounted for only 23 percent of originations in middle-income white areas and 15 percent in high-income white areas.

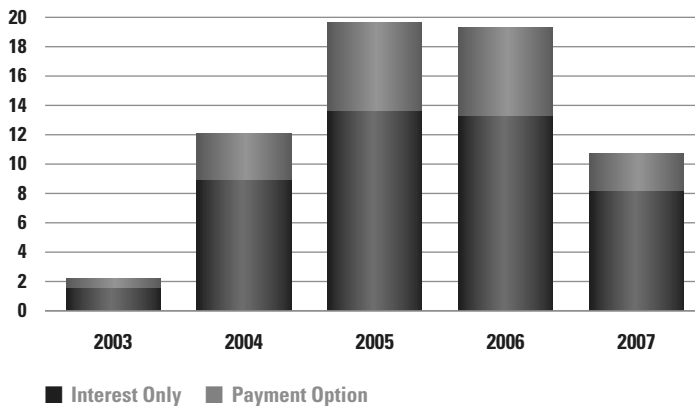
This does not mean, however, that the fallout from subprime loans is confined largely to low-income and minority neighborhoods. Fully

Figure 19

Loans with Affordability Features and Adjustable Rates Have Lost Significant Market Share

Share of Loan Originations (Percent)

Affordability Products



Notes: Loans with affordability features are interest-only or payment-option products. Shares are based on the number of originations of prime and subprime loans.
Sources: First American CoreLogic, LoanPerformance data; Federal Housing Finance Board, Monthly Interest Rate Survey.

Adjustable-Rate Loans

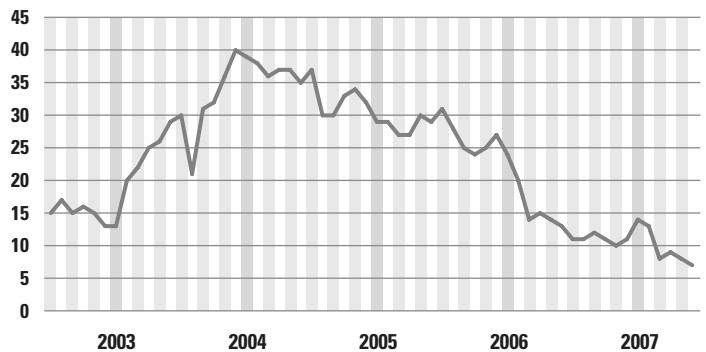
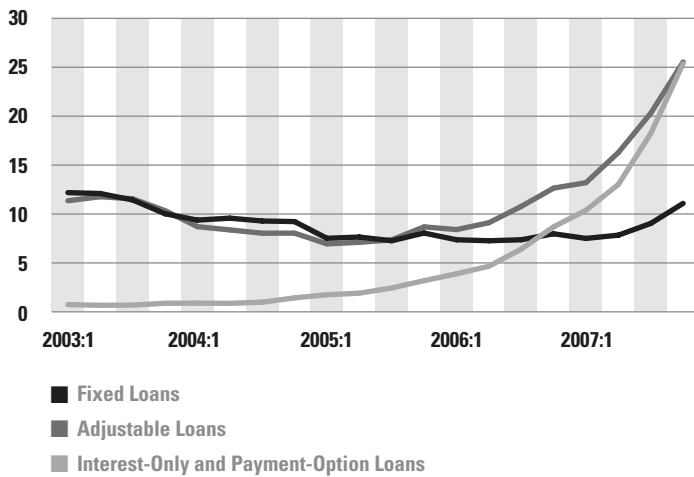


Figure 20

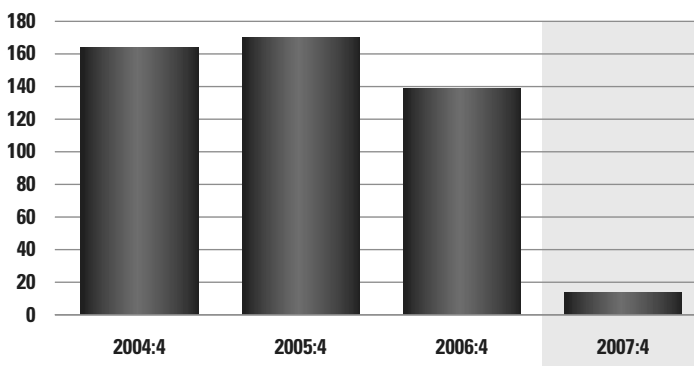
Skyrocketing Subprime Delinquencies ...

60+ Day Delinquency Rates (Percent)



... Caused the Collapse of Subprime Credit Originations

Subprime Mortgage Originations (Billions of 2007 dollars)



Notes: Subprime loans are defined by lenders and are primarily 2/28 ARMs. Interest-only and payment-option delinquency rates are averages of monthly data. Delinquency rates are the share of loans serviced that are at least 60 days past due or in foreclosure.

Sources: First American CoreLogic, LoanPerformance data; Mortgage Bankers Association, National Delinquency Survey; Inside Mortgage Finance, *2008 Mortgage Market Statistical Annual* adjusted for inflation by the CPI-U for All Items.

57 percent of high-cost loans in 2006 were originated outside such areas. While more diffuse, some of these markets are also seeing pockets of distressed properties.

The markets most exposed to the cutback in loans with interest-only and payment-option features are the country's most expensive. Indeed, a simple measure of affordability—the ratio of median home price to median income—alone accounts for almost 70 percent of the variation in the metro share of these products at the 2006 peak. Furthermore, the areas with the highest shares of these affordability products in 2006 saw the largest declines in 2007. For example, loans with affordability features accounted for more than

half of all loans originated in San Diego, San Jose, and Santa Cruz in 2006 but less than a third in 2007. States with high 2006 shares and large 2007 declines include Nevada (from 41 percent to 25 percent), Arizona (29 percent to 18 percent), Florida (25 percent to 13 percent), and Washington, DC (26 percent to 15 percent).

As they continued their exit from markets in 2007, housing investors also contributed to the drop in mortgage lending. First American CoreLogic's LoanPerformance data indicate that the investor share of all non-prime loan originations (including subprime, Alt-A, and non-conforming loans) peaked at 12.2 percent in the first quarter of 2006, before falling back to 8.7 percent in the third quarter of 2007 (Table W-8). The dollar volume of all non-prime investor loans plunged by two-thirds over this period, and of just subprime investor loans by a whopping seven-eighths. According to the Mortgage Bankers Association, loans to absentee owners also accounted for almost one in five loans entering foreclosure in that quarter. Shares in states with distressed economies (such as Ohio and Michigan) or with widespread speculation (such as Nevada and Colorado) were even higher.

Subprime Turmoil

While mortgage performance in general has been slipping since mid-2006, delinquencies in the subprime market are particularly high—especially among riskier adjustable-rate, interest-only, and payment-option mortgages (Figure 20). While each lender has its own rules of thumb to define subprime, these loans are made primarily to borrowers with past credit problems. Because of their abysmal performance, subprime loans fell from 20 percent of originations in 2005–2006 to just 3.1 percent in the fourth quarter of 2007 (Table A-6). The real dollar volume plummeted from \$139 billion in the fourth quarter of 2006 to \$14 billion at the end of last year. So far in 2008, the volume of subprime lending has likely dropped further.

The roots of the crisis lie in the unusually tight housing markets, historically low interest rates, and investor demand for high returns in the first half of this decade. This was also a period of unprecedented global economic growth, and capital was pouring into the United States. American homebuyers took advantage of the low interest rates these conditions produced to snap up properties. But with markets tight and multiple bidding situations common, home prices started to climb much faster than incomes. Even subprime loans, which predictably perform worse than prime loans, were seen as safe enough investments because home values were appreciating so quickly.

In their search for ever-higher returns, investors borrowed short-term money from banks to purchase securities backed by subprime mortgages. By leveraging their investments, they hoped to boost their profits but exposed themselves to refinance risk each time they had to roll over their debt. Meanwhile, the cash flows associated with mortgage payments were sliced up and in some cases pooled with nonresidential loans, obscuring how deterioration in loan performance would affect many bond issues.

At the same time, lenders enabled buyers to chase prices higher by offering products that lowered initial mortgage payments but exposed borrowers to the risk of payment shocks when their interest rates reset. Lenders also took on additional risk by requiring small downpayments, even though modest home price declines could wipe out an owner's equity. On top of this, lenders were all too willing to relax income-reporting requirements to draw self-employed and other hard-to-qualify borrowers into the market. These borrowers were willing to pay slightly higher interest rates or fees in return for not having to verify their incomes. With payment-option, low-downpayment, and no-income-verification loans readily available, housing investors had access to low-cost, highly leveraged capital as never before. Lenders layered risks on top of risks without considering the potential consequences for performance, while mortgage investors continued to buy up staggering volumes of these loans.

But by 2005, higher borrowing costs and skyrocketing home prices were slowing homebuyer demand in some markets. With the underlying indexes on adjustable-rate loans increasing by three percentage points, mortgage rates rose just as many subprime loans began to hit their reset dates. At that point, borrowers with these loans started to see their monthly mortgage costs go up.

In 2006 and 2007, the inventory of vacant homes for sale ballooned and prices fell, eliminating the protection afforded by strong appreciation and boosting the share of distressed borrowers. Making

matters worse, several metropolitan areas in the Midwest were in recession and tighter credit standards prevented borrowers from refinancing out of their troubles. Charges of unfair and deceptive practices were also leveled against many lenders. Defaults on subprime loans within six to eighteen months of origination—even before most resets hit—increased with each successive vintage from 2003 to 2007 (**Figure 21**).

The speed and severity of the erosion in subprime loan performance had disastrous impacts on credit availability and liquidity. Stung by losses and uncertain about how much worse performance would become, mortgage investors stopped buying new originations and tried to sell their positions in existing loans in a market with little demand. Once sought-after mortgage securities suddenly dropped sharply in value. Lenders lost confidence in some investment funds and mortgage companies, and demanded repayment of their short-term borrowings. With no other lenders stepping up, many investment funds collapsed and mortgage companies went under.

These troubles not only shuttered the subprime market but also badly crippled the prime and near-prime (Alt-A) markets. In particular, the interest-rate differential between prime mortgages that can and cannot be sold to Fannie Mae and Freddie Mac widened dramatically. In addition, loans requiring no documentation and very low downpayments all but disappeared by late 2007.

The Foreclosure Crisis

With borrowers defaulting in record numbers and lenders unable to restructure the loans, the number and share of homes entering foreclosure skyrocketed to their highest levels since recordkeeping began in 1974. According to Mortgage Bankers Association counts covering about 80 percent of loans, the number of loans in foreclosure more than doubled from an average of 455,000 annually in 2002–2006 to nearly 940,000 in the fourth quarter of 2007. Meanwhile, the share of loans in foreclosure jumped from less than 1.0 percent in the fourth quarter of 2005 to more than 2.0 percent by the end of last year, and the share entering foreclosure rose from 0.4 percent to 0.9 percent.

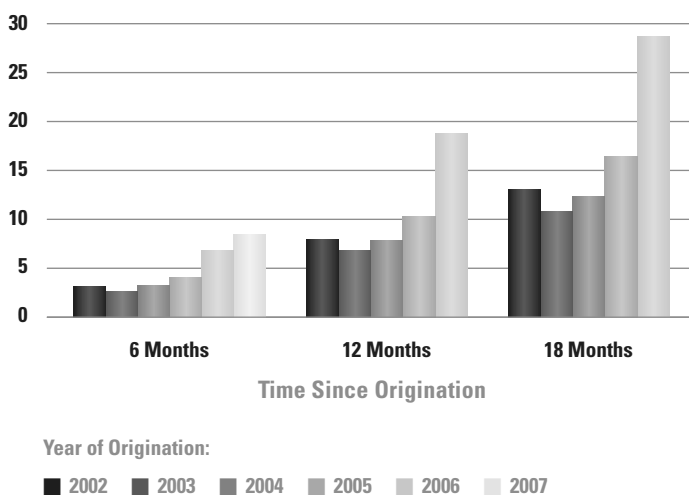
Subprime loans are largely the culprit. The foreclosure rate on subprime loans soared from 4.5 percent in the fourth quarter of 2006 to 8.7 percent a year later. Over the same period, the foreclosure rate for adjustable-rate subprime loans more than doubled from 5.6 percent to 13.4 percent, while that for fixed-rate subprime loans nudged up from 3.2 percent to 3.8 percent. Although the rate for prime loans also increased, it remained under 1.0 percent.

As troubling as the foreclosure crisis is on the national stage, conditions in the economically depressed Midwest are even worse. In the fourth quarter of 2007, Ohio had the country's highest foreclosure rate of 3.9 percent—equivalent to 1 in 25 loans—followed closely by Michigan and Indiana (**Table W-9**). In other states with high foreclosure rates, the main driver was not a faltering economy but rather high subprime loan shares or sharp price declines following heavy speculation.

Figure 21

Delinquency Rates on Recent Adjustable Subprime Loans Soared Even Before Resets

60+ Day Delinquency Rates (Percent)



Year of Origination:

■ 2002 ■ 2003 ■ 2004 ■ 2005 ■ 2006 ■ 2007

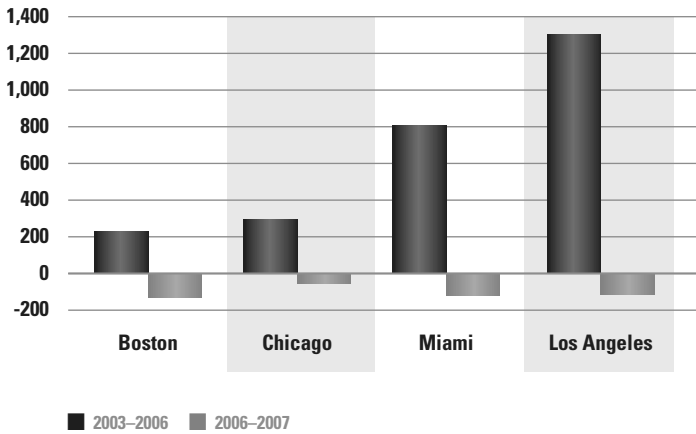
Notes: Subprime loans are defined by lenders and are primarily 2/28 ARMs. Delinquency rates are the share of loans serviced that are at least 60 days past due or in foreclosure.

Source: First American CoreLogic, LoanPerformance data.

Figure 22

Slightly Lower Mortgage Costs Did Little to Ease the Run-Up in Affordability Problems in Many Areas in 2007

Change in Monthly Mortgage Costs (2007 dollars)



Notes: Costs are based on a median-priced home purchased with a 10% downpayment and a 30-year fixed-rate mortgage. Prices are adjusted for inflation by the CPI-U for All Items.
Sources: National Association of Realtors®, Median Sales Price of Existing Single-Family Homes; Federal Housing Finance Board, Fixed Rate Contract Interest Rate for All Homes.

For households, the consequences of foreclosures go beyond wiping out equity and even losing the roof over their heads. The implications for their credit scores and long-term financial well-being can be disastrous. For lenders, foreclosures also mean significant losses. In 2002, TowerGroup estimated that the foreclosure process for a single property cost \$59,000 and took an average of 18 months. These costs are no doubt higher today in markets where lenders cannot sell the properties for enough to recoup their losses. Moreover, foreclosures impose economic and social costs on the neighborhood and larger community, depriving municipalities of tax revenue and driving down prices of nearby homes.

States were among the first to react to the mounting foreclosure crisis. Ohio introduced one of the more sweeping prevention strategies that included partnering with loan servicers to reach out to borrowers at risk, providing counseling, conducting loan workouts, and offering education on how to avoid such situations in the future. Massachusetts, Pennsylvania, and North Carolina have enacted similar programs, while other states have stepped up regulation of lenders and strengthened anti-predatory lending rules.

On the federal side, the Treasury Department and the Federal Reserve led efforts to persuade lenders to restructure loans and write down mortgage balances, to eliminate some credit market uncertainty by providing guidance on underwriting standards and enforcement of lending practices, and to recommend regulatory changes that will help prevent a recurrence of today's conditions. The Federal Housing Administration, Fannie Mae, and Freddie Mac

have also been tapped to help refinance mortgages. Congress is now looking at legislation to target predatory lending. Finally, community, lender, and government groups have created a handful of programs to help borrowers facing default and interest-rate resets.

Modest Affordability Relief

Even with widespread price declines, affordability for would-be homeowners has not improved significantly (Figure 22). Assuming a 10-percent downpayment and a 30-year fixed-rate loan, the real monthly mortgage costs for principal and interest on a median-priced single-family home bought in 2007 was only \$76 lower, and the downpayment \$1,000 lower, than on a home bought in 2006. In 45 of 138 NAR-covered metros, real mortgage costs were marginally lower for a house bought in 2007 than for one bought in 2005. In just 17 metros (primarily in the Midwest), costs were lower last year than in 2003 when interest rates were at their bottom.

At current interest rates, the national median price would have to fall another 12 percent from the end of 2007 to bring the monthly payments on a newly purchased median-priced home to 2003 levels. In 40 metros, prices would have to drop by more than 25 percent. Even if interest rates were to come down by a full percentage point, the national median home price would still have to decline by 2 percent—and by more than 25 percent in 18 metro areas—to reduce mortgage costs to 2003 levels. Of course, only first-time buyers still able to qualify for a loan can take full advantage of the improved affordability brought on by lower house prices. Most repeat buyers must sell their homes at discounts similar to those on the homes that they buy.

The Outlook

With subprime mortgage troubles hanging over the market, the near-term outlook for homeownership is grim. Late in 2007, First American CoreLogic estimated that interest rates on \$314 billion of subprime debt would reset this year. Fortunately, fully indexed rates on one-year adjustable loans have fallen by 3.0 percentage points since early 2007, which may spare some borrowers with resets from default. In addition, the federal government is working on a range of initiatives to blunt the impact of subprime interest-rate resets.

The wave of foreclosures will take months to process and the number of homes entering foreclosure could continue to rise even if the volume of loans with resets drops from last year's level. Job losses and falling home prices are now adding to foreclosure risks. Meanwhile, mortgage credit will remain tight and larger risk premiums will offset much of the decline in short-term rates.

While changes in the age and family composition of US households favor homeownership over the next five to ten years, market conditions will overwhelm any positive lift from these demographic drivers at least in the short term. How long homebuying will take to recover from the bust remains uncertain.



Rental Housing

Rental housing is reasserting its importance in US housing markets. With so much turmoil on the for-sale side, many households have reconsidered their financial choices and opted to rent rather than buy. Despite three years of increasing demand, however, apartment builders have trimmed multifamily rental construction in the face of stubbornly high vacancy rates. Whether the deepening homeownership downturn will result in tighter rental markets depends on how much of the excess supply of for-sale housing is converted to rentals and how quickly homebuying conditions improve.

Demand Comeback

Even at the peak of the homeownership boom, about a third of American households rented their housing. Many renters prefer the convenience and relative ease of moving that renting provides, or view renting as a safer financial choice. Others rent because they cannot qualify for a mortgage or afford homeownership. Not surprisingly, the majority of renter households are likely to have lower incomes and wealth or to be in life transitions—including the young, the foreign born, and divorced or separated individuals.

Over the long run, the share of households that rent is shaped by changes in the age distribution of adults, household composition, and racial/ethnic mix. In the short term, however, economic conditions and mortgage lending standards can be even more important drivers of tenure choice. From 1995 to 2005, long-term demographic trends slightly favored the rental market but price appreciation and low interest rates fueled a homebuying boom. Indeed, if the 1995 homeownership rates by age and race/ethnicity had held, the overall rate would have declined by 0.3 percentage point rather than surged by 4.2 percentage points.

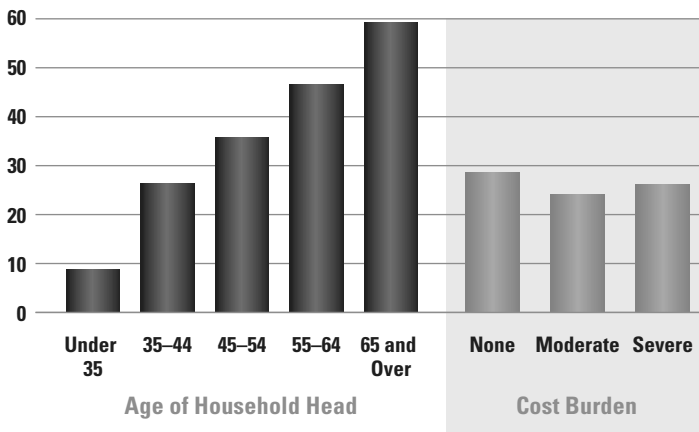
In late 2004, however, economic conditions started to tip back in favor of renting. As a result, the reported increase in the number of renter households was more than 2 million from 2004 to 2007. At first, the uptick was driven by how unaffordable homeownership had become, as well as by the release of pent-up rental demand in some regions where job and income growth had slowed after the 2001 recession. Black households led the revival of demand, followed later by gains among white and Hispanic renters. For reasons that are still unclear, growth in the number of Hispanic homeowners continued to outpace that of Hispanic renters.

More recently, the upheaval in housing and credit markets has made renting more attractive for a growing number and share of households. Although a rising tide of former owners who have lost their homes to foreclosure are now turning to rentals, it is primarily the impact of tighter credit standards and the uncertainty generated by falling home prices that is driving growth in demand. Over the longer term, though, homeowners who defaulted on their loans will provide an enduring lift to the number of renter households because they will likely need years to undo the damage to their credit scores.

Figure 23

Age, Not Affordability, Drives How Long Renters Stay in Their Homes

Share of Renters Living in the Same Units for Five Years or More (Percent)



Notes: Long-term renters lived in their units from 2000 to 2005. Moderate (severe) burdens are housing costs of 30–50% (over 50%) of household income.

Source: JCHS tabulations of the 2005 American Housing Survey, using JCHS-adjusted weights.

In addition, some former homeowners may even have problems qualifying for rentals. First Advantage SafeRent reports that the credit scores of applicants to large rental properties across the country—including public and subsidized housing—who had been delinquent on subprime loan payments were about 24 percent lower than those of typical applicants. Currently, about one-third of applicants with mortgage delinquencies are rejected at large rental properties. Unless managers of these large properties ease credit standards for new tenants, a considerable share of applicants that recently defaulted on mortgage loans will find their housing choices confined to mostly smaller rental properties.

Renter Mobility

With so much focus on failed owners who must now rent, it is easy to lose sight of the fact that many households rent by choice. Moreover, a sizable share stay in the same units for a considerable length of time. More than a quarter of renter households surveyed in 2005 reported they had lived in their units for five or more years.

Like owners who remain in the same homes for several years, longer-term tenants are apt to be older. In 2005, nearly 60 percent of senior renters and 46 percent of renters age 55 to 64 had lived in the same units for at least five years (Figure 23). Still, 26 percent of 35 to 44 year-old and 36 percent of 45 to 54 year-old renter households also reported long-term residency. Given the large share of long-term tenants that are at least 55 years old, these renters are

likely to be either married couples without children or singles. In fact, more than 45 percent of long-term renters live alone.

After accounting for age, however, long-term renters are no different from short-term renters in terms of housing cost burdens, income, and race/ethnicity. In fact, the likelihood that non-elderly households will remain in the same rental units for at least five years is nearly equal across these characteristics. One group of renters that does tend to move frequently, however, is single-parent households—an unfortunate pattern that is proven to disrupt children’s educational progress and undermine their general well-being.

Moving from one rental to another is far less costly than buying and selling a home. Households usually rent if they expect to relocate within a short time. Not surprisingly, then, nearly half of renter households in 2005 reported moving into their units within the prior two years, compared with about 14 percent of owner households. Among renters who recently moved into their units, about one in five were starting out as new households, two-thirds had come from other rentals, and one in seven had moved from units they had owned.

Switching to renting is in fact quite common among owners who move. Just under a quarter of owners who relocated in 2003–2005 rented their next homes. Of these, 24 percent had moved for job-related reasons and 34 percent because of a change in marital status or family situation. But even if the number of owners that shift back to renting were to double because of the mortgage mess, they would still make up little more than one-quarter of households that move into rentals in a typical year.

Mixed Metro Performance

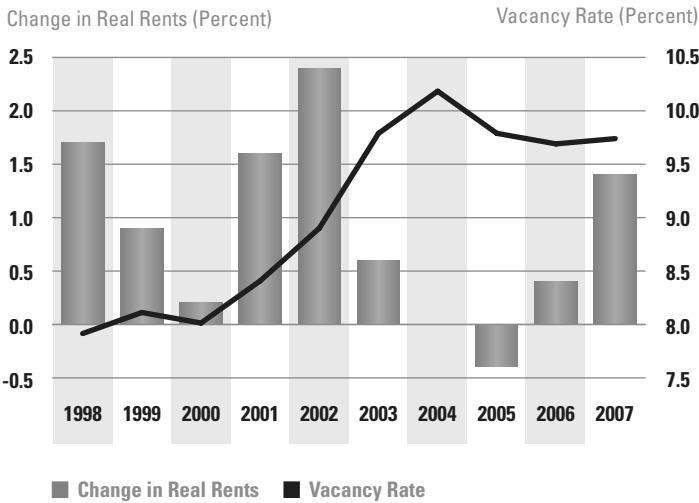
Despite firming demand, the national rental vacancy rate held at near-record levels in 2007. This indicates that additions to the stock from new construction and conversion of for-sale units to rentals matched growth in the number of renter households plus losses from the inventory. Nevertheless, the leveling off of vacancy rates after a period of increase was enough to lift nationally weighted real rents for the second year in a row (Figure 24).

At the metropolitan level, however, rental market conditions varied considerably. Changes in vacancy rates in the 75 metros covered by the Census Bureau ranged from a 4.5 percentage-point decline to a 5.0 percentage-point increase, with more metros reporting higher vacancies relative to 2006. Meanwhile, inflation-adjusted rents rose by as much as 5.3 percent in 9 of the 14 metros covered by the Consumer Price Index (CPI), and fell by less than 1.0 percentage point in the other 5. By this measure, the largest rent increases were in Miami, Seattle, and Los Angeles, while the modest declines were primarily in distressed metros such as Detroit and Cleveland (Table W-10).

The national median rent rose just 0.6 percent in real terms last year according to M|PF Yieldstar (which covers rental properties preferred by institutional investors), but by 1.4 percent as measured by

Figure 24

With Rental Vacancy Rates Leveling Off, National Average Rents Increased for the Second Year



Sources: US Census Bureau, Housing Vacancy Survey; Bureau of Labor Statistics, Rent of Primary Residence, adjusted for inflation by the CPI-U for All Items.

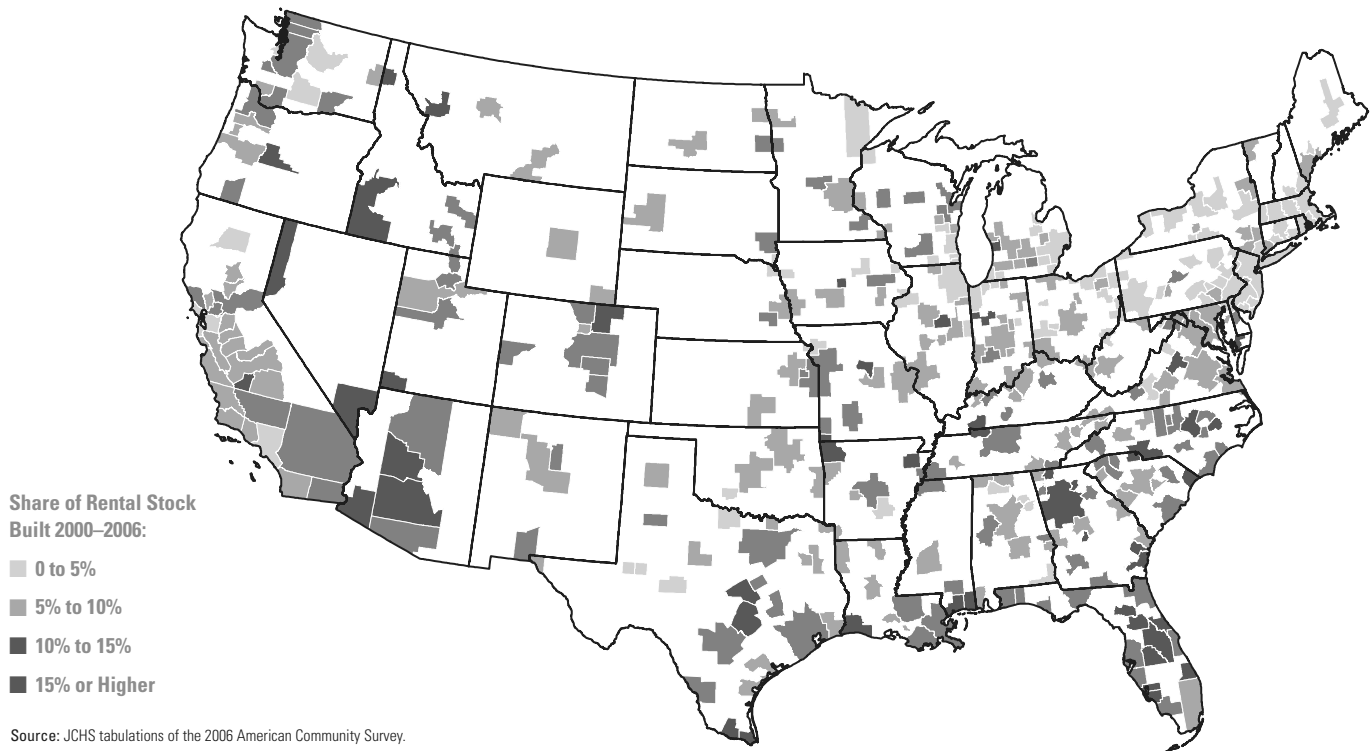
the broader CPI estimate. But like the CPI, MJPYieldstar reported a wide variation in real rent changes across the country, with 27 out of 57 metros posting a decline between the fourth quarters of 2006 and 2007. According to this measure, some of the largest declines were in Florida (excluding Miami), where conversions of excess multifamily for-sale housing to rentals have glutted the market. In contrast, real rents in the West, and especially in a handful of coastal California metros, were up by as much as 9 percent. With housing markets in California under increasing pressure, however, these rent increases could soon end.

The Rental Supply

With the national vacancy rate climbing from 2000 to 2004, falling back slightly in 2005, and then flattening over the last two years, construction of new rental units declined for the seventh consecutive year in 2007. Completions of for-rent units in multifamily structures fell to just 169,000, down 15 percent from 2006 and 38 percent from 2000. Even though completions of for-sale units also dropped, the rental share of all multifamily completions dipped below 60 percent for the first time in the 43-year history of recordkeeping.

Figure 25

Many Fast-Growing Metro Areas Have Added Substantially to Their Rental Stocks



On a national level, just nine percent of the rental housing stock was built between 2000 and 2006. In many fast-growing locations, however, newly constructed rentals represent a large share of the inventory (Figure 25). For example, more than 20 percent of renter-occupied units in Las Vegas, Austin, and Fort Myers were added during this period. In some smaller metropolitan areas, new construction accounted for an even greater share of the rental stock than of the owner stock.

While prompted by stronger rental demand in some areas, new construction in many others has replaced units permanently lost to abandonment, demolition, and disasters. This is especially true in slow-growing regions of the country where the housing stock is older. According to a Joint Center analysis of the 1995 and 2005 American Housing Surveys, center cities in the Northeast saw one rental unit permanently removed for every three built. In Midwestern center cities, the ratio was one unit lost for every two built. Even in a healthy construction market like the suburban West, where almost a half-million new rentals were built, two units were lost for every three added.

Some other net removals were due to the conversion of rental properties into condos by owners seeking to cash in on the home-buying frenzy. Real Capital Analytics reports that acquisitions of large multifamily rental properties (valued at \$5 million or more) intended for condo conversion removed more than 300,000 rental units in 2005 and 2006. These removals offset almost two-thirds of the multifamily rental units completed over this period. But when the pool of investors demanding these condos dried up, the bottom

dropped out of the for-sale market in 2007 and condo conversions plummeted. Meanwhile, some for-sale units reverted to rentals. As a result, existing units are now flowing on net into the rental market and will likely add to the stock in the near term.

The Aging Rental Stock

The nation faces the steady attrition of its oldest rental units. With one-fifth of the rental inventory built before 1940, older units outnumber those constructed since 2000 by about four to one. Unfortunately, losses of older rentals remain high, with 9 percent of pre-1940 units that existed in 1995 permanently removed from the stock by 2005—more than four times the rate of removals of units built in the 1980s.

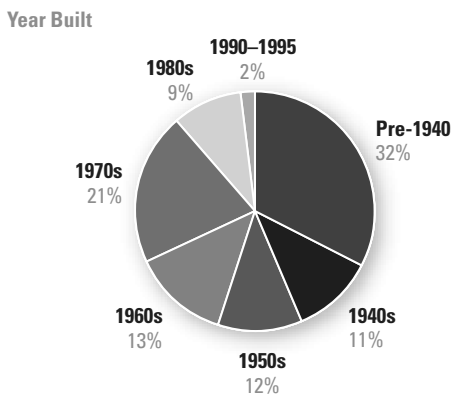
Because older units are generally smaller, have lower rents, and are located in center-city neighborhoods that are home to many low-income households, they play an important role in the affordable housing stock. In fact, a third of units renting for less than \$400 in 2005 were built before 1940, and another third were built between 1940 and 1970.

Loss rates of older affordable units are even higher than on just older units. About 14 percent of the low-cost rental stock built before 1940 and 10 percent of the low-cost stock built between 1940 and 1970 was permanently removed between 1995 and 2005 (Figure 26). The ongoing loss of these units is a significant public policy concern. Once removed, these modest rentals are difficult to replace with new units of similar size and cost. In particular, the

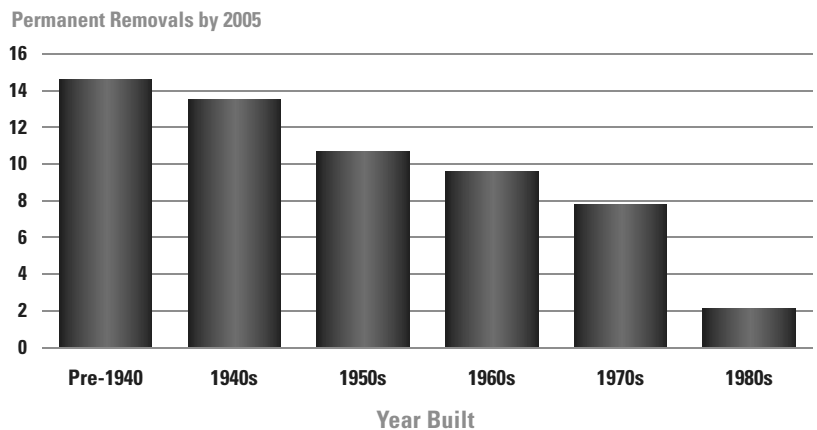
Figure 26

Older Units Make Up Much of the Affordable Rental Stock ...

Share of Units in 1995 with Rents Under \$400 (Percent)



... and Have Especially High Loss Rates



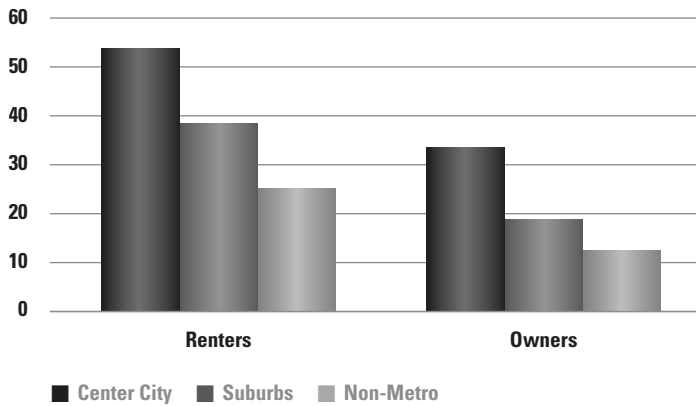
Notes: Permanent removals are defined as rental units in 1995 that were either destroyed or demolished by 2005. Rents are adjusted to 2005 dollars by the CPI-U for All Items.

Source: JCHS tabulations of the 1995 and 2005 American Housing Surveys, using JCHS-adjusted weights for 2005.

Figure 27

Minority Households Are More Likely to Live in Center Cities than in Non-Metro Areas

Minority Share of Households (Percent)



Notes: Minorities are householders other than non-Hispanic whites. Metro definitions are based on 1990 Office of Management and Budget boundaries.

Sources: JCHS tabulations of the 2005 American Housing Survey, using JCHS-adjusted weights.

median rent for units built before 1940 is only \$650—much lower than the \$825 for newly built units.

With one-quarter of unassisted low-income renters living in pre-1940 housing, further losses of older units will erode the already limited affordable supply. Although rehabilitating modest, older rental units is less expensive than replacing them, federal and state preservation programs often take a back seat to new construction and tenant-based support. At the same time, local land use regulations and building codes in many areas make it difficult or impossible to construct comparably modest housing in the places where it is being lost.

Older, lower-cost rentals are also being lost to rent inflation. The low-cost units that do remain in the stock are often in gentrifying areas. In fact, according to the US Department of Housing and Urban Development, 18 percent of all rentals that existed in 2003—but 22 percent of rentals built before 1940—had moved up to a higher rent range by 2005. Among remaining older, lowest-cost units—the only ones affordable to households with incomes below 30 percent of area medians—the rents in more than half shifted up to a higher range between 2003 and 2005. To keep these units in the affordable stock, government would have to ask owners to restrict rent increases and to compensate them for the loss of income they incur from holding rents to below-market levels.

Non-Metropolitan Trends

According to American Community Survey (ACS) estimates, 5 million renter households—or one out of every seven—lived

in non-metropolitan areas in 2006. Based on this source, only 14 percent of new rental construction since 2000 occurred in these areas. But when compared with the 1990 definitions of metropolitan boundaries from the American Housing Survey, it is clear that many were only recently reclassified from non-metro to metro. As a result, rental construction is much more highly concentrated in these outlying counties than the ACS would suggest. Indeed, using the 1990 metro definitions, the share of rentals built in non-metro areas in 2000–2005 was a much larger 33 percent.

Metro and non-metro rental properties differ in character. Some 38 percent of rentals in non-metropolitan areas are detached single-family homes, compared with just 17 percent in center cities. Even more striking, manufactured housing makes up 16 percent of non-metro rentals but just 1 percent of center-city rentals. Non-metropolitan areas also have higher shares of larger and less expensive rental properties.

The types of renters living in non-metro areas also differ from their urban counterparts. For example, minorities make up only a quarter of non-metropolitan renters but more than half of center-city renters (**Figure 27**). In part, this disparity reflects the smaller minority population in non-metro areas overall.

In addition, non-metro renters generally have less education, with 87 percent lacking college degrees compared with 77 percent of metro renters. While non-metro renters also tend to have lower incomes, the lower rents they pay mean that a smaller share of non-metro than metro renters are severely cost burdened. Non-metro renters—and especially low-income and minority renters—do, however, have a higher incidence of housing quality problems.

The Outlook

In the short run, rental markets will play a central role in the broader housing market adjustment to excess supplies and mounting foreclosures. Failed homeowners will come into the rental market with badly damaged credit records that may limit their options. For their part, discouraged home sellers may choose to rent out their vacant properties. The balance between the flow of for-sale units into the rental stock and the increase in rental demand from former homeowners will determine the course of rents in specific markets.

In the longer run, demand for rental housing will depend on both demographic trends and financial market conditions, including the cost and availability of mortgage credit. The growing share of minority households and the strong pace of immigration will support solid growth in renter households. While overall demographics slightly favor homeownership, homeowner demand will remain suppressed until credit standards are relaxed, mortgage interest rates fall further, and home price appreciation returns.



Housing Challenges

Even before the economy began to shed jobs early this year, growing numbers of households were feeling the affordability pinch. In 2006, 17.7 million households were paying more than half their incomes for housing, with the numbers and shares in nearly all age groups and family types—and at all levels of work—on the increase. Meanwhile, the homeless population is up to 744,000 on any given night, and is estimated to be between 2.3 million and 3.5 million over the course of a year.

While falling home prices in many areas may have brought some relief from affordability challenges in 2007, mortgage interest-rate resets and rising energy costs have saddled even more households with high housing costs. On top of the longstanding challenge of affordability, more and more households are losing their homes to foreclosure, putting even more pressure on already stressed housing markets.

To bring affordability back to its level in 2000 would take some combination of large price declines, interest-rate reductions, rent deflation, and unprecedented real income growth. But even at the start of the decade, housing costs were well out of reach for many of the nation's most vulnerable households, including low-wage workers and families with children. Distressingly, veterans are among the types of households with high housing cost burdens and, worse, a high incidence of homelessness.

Eroding Affordability

Affordability problems are edging up the income scale (**Figure 28**). While low-income renters make up the largest share of severely burdened households, a rising number of middle-income homeowners also face cost pressures. Between 2001 and 2006, the number of severely burdened renters in the bottom income quartile increased by 1.2 million, while the number of severely burdened homeowners in the two middle-income quartiles ballooned by 1.4 million (**Table A-7**). By 2006, middle-income homeowners were twice as likely as middle-income renters to pay more than half their incomes for housing.

Owners who recently moved are especially likely to be severely cost burdened. While this in part reflects their younger average age, the share of recent movers with severe burdens has climbed sharply since 2001, due in part to the run-up in house prices, the increase in interest rates after 2004, and the interest-rate resets on many adjustable loans originated in 2004 and 2005.

Tapping home equity through second mortgages has apparently led to higher housing cost burdens as well. In 2006, approximately 20 percent of all middle-income homeowners with second mortgages paid more than half their incomes for housing. This is nearly twice

the share among those with only a first mortgage. Among low-income homeowners, 90 percent of those with second mortgages are severely cost burdened compared with 70 percent of those with just a first mortgage.

For homeowners earning more than the median income, the likelihood of being housing cost burdened nearly doubled between 2001 and 2006. Some of this increase reflects the substitution of mortgage debt for unsecured consumer debt through either cash-out refinances or second mortgages. In the short run, this allows borrowers to reduce their monthly carrying costs on the same amount of debt. But consumer debt can be discharged in bank-

ruptcy without the lender's consent, while mortgage debt cannot. As a result, debt substitution exposes homeowners to even greater foreclosure risk.

Escalating energy costs have made matters worse. How these increases affect consumer spending depends on the specific circumstances of individual households, including their home heating and cooling needs, the energy efficiency of their homes, and the type of energy they use. But comparing recent growth in total outlays with spending on home energy, utilities, and gasoline conveys a general sense of this impact. Among households in the bottom income quintile, average spending on home energy and utilities rose twice as fast as total spending in 2004–2006, while spending on gasoline increased more than four times as fast. This is equivalent to a one-percentage point shift in spending from other uses to energy. The surge in energy prices since 2006 has no doubt diverted even more income to home utility and travel costs.

Local land use regulations are also contributing to the increase in housing cost burdens by skewing development toward more expensive homes and restricting the types and density of housing that can be built. One study concluded that land use restrictions slow building activity and inflate housing prices both during boom times and over the long term. House price appreciation in 2002–2005 averaged 45 percent in the most restrictive areas, compared with 24 percent in the least restrictive (Figure 29).

In addition, despite having higher average incomes as well as higher housing costs, the most restrictive metros have a greater incidence of severe housing cost burdens. In 2006, the aggregate share of severely cost-burdened renters was about three percentage points higher in these areas than in the least restrictive metros. The reason the gap is not larger is that severe burdens are concentrated among low-income households that have to stretch to afford housing even in the least restrictive metro areas.

The Burden on Children

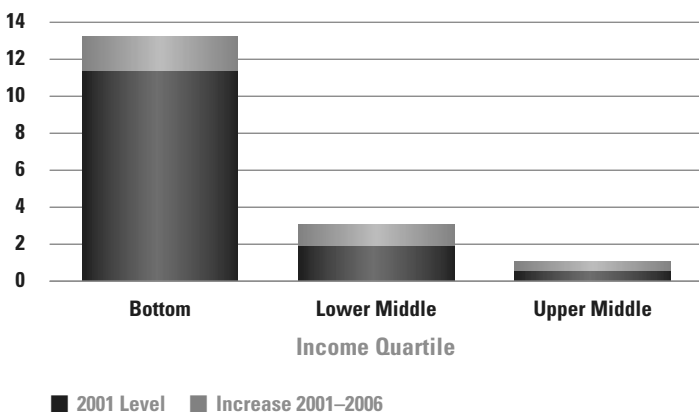
Sadly, 12.7 million children—more than one out of six—in the United States live in households paying more than half their incomes for housing. The 13.8 million children in low-income households—and particularly those headed by minorities and single parents—are especially likely to live in these circumstances (Figure 30).

For many of these vulnerable families, high housing outlays mean cutting other spending to the bone. In 2006, severely housing cost-burdened households with children in the bottom expenditure quartile had only \$548 per month on average for all other needs. As a result, these families spent 32 percent less on food, 56 percent less on clothes, and 79 percent less on healthcare than families with low housing outlays. Low-expenditure families with affordable housing, however, spent more than three times as much for transportation, suggesting that high housing outlays buy closer proximity to stores and employment. Still, the \$140 difference in transportation spending is only a fraction of the \$560 disparity in housing outlays between the two groups.

Figure 28

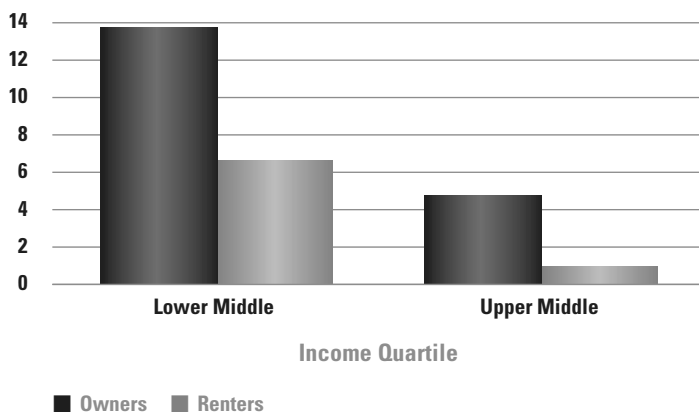
Severe Cost Burdens Affect Growing Numbers of Households ...

Households with Severe Cost Burdens (Millions)



... And Are Now More Common Among Middle-Income Owners than Middle-Income Renters

Share of Households with Severe Cost Burdens in 2006 (Percent)



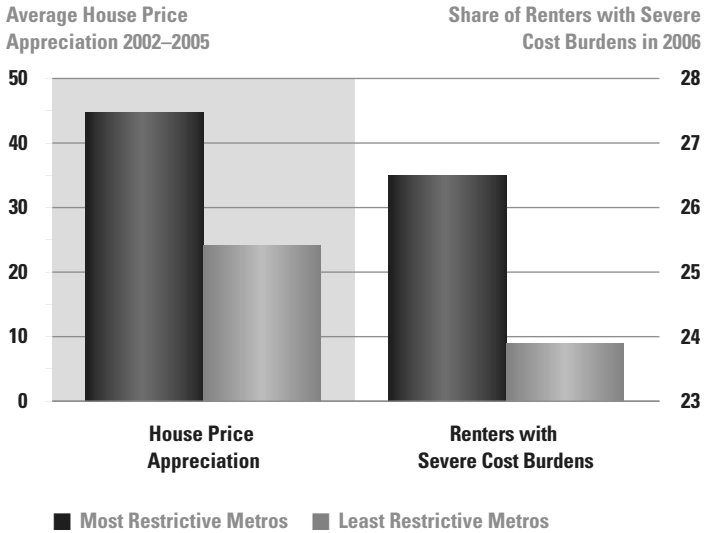
Notes: Income quartiles are equal fourths of all households sorted by pre-tax income. Severe cost burdens are housing costs exceeding 50% of total household income.

Sources: JCHS tabulations of the 2001 and 2006 American Community Surveys.

Figure 29

Restrictive Development Regulations Contribute to Renter Cost Burdens as Well as to Higher Home Prices

Percent



Notes: Most (least) restrictive metros are the top (bottom) third of metros ranked by the Wharton Residential Land Use Regulatory Index. Severe cost burdens are the aggregate shares of renters across metros spending 50% or more of income on housing.
Sources: Freddie Mac, Conventional Mortgage Home Price Index; 2006 American Community Survey.

As if this were not enough, households with children are more likely to face crowded or inadequate living conditions. Nearly one in five low-income families—and nearly one in four low-income minority families—reported living in structurally inadequate housing in 2005. What is more, this poor-quality housing is not necessarily affordable. Indeed, these families have a slightly higher incidence of severe cost burdens than otherwise similar families living in adequate units.

Inadequate housing conditions expose children to health and safety risks. In particular, homes built before 1970 may contain lead paint, while those built before 1940 may not meet current building codes. Some 46 percent of children in low-income households live in pre-1970 homes, and 16 percent live in pre-1940 units. By comparison, only 32 percent of children in high-income households live in pre-1970 housing and just 10 percent live in pre-1940 housing.

For some families, the cost of even poor-quality housing in distressed neighborhoods is simply too much. With nowhere to turn, many of these families end up in shelters or on the streets. Homelessness affects more than 600,000 families and more than 1.35 million children every year. It is estimated that families make up about half of the homeless population over the course of a year, and more than a third of the homeless are children.

Challenges of Disabled Veterans

Veterans with disabilities make up 29 percent of the 16.4 million veteran households, but 42 percent of the more than 1.5 million veterans with severe housing cost burdens. Low incomes are a key factor, with fully one in three working-age veteran householders with disabilities in the bottom income quartile, compared with just one in ten without disabilities. Even after controlling for income, however, the incidence of severe housing cost burdens is still slightly higher among younger veterans with disabilities than those without. This is in stark contrast to the experience of older disabled veterans and the disabled low-income population in general, who normally have lower cost burdens because they receive priority in the allocation of rental assistance.

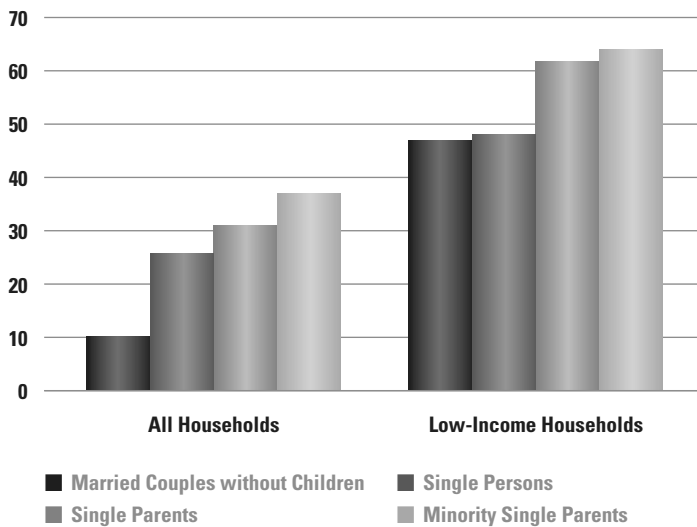
Veterans are also overrepresented among the homeless. While accounting for only 10 percent of all adults, veterans make up between 23 percent and 40 percent of homeless adults. A recent report by the US Department of Veterans Affairs estimates that about 194,000 veterans are homeless on any given night, and nearly 300,000 are homeless at some time in a given year. More than 95 percent of homeless veterans are male, and just under half are age 45 or older.

While homeless veterans are more likely than non-veterans to suffer from post-traumatic stress disorder, the National Alliance to End Homelessness (NAEH) and the National Survey of Homeless Assistance Providers and Clients attribute their homelessness to many of the same causes: lack of a support system and high rates of mental or physical illness and/or drug addiction. Nearly half of homeless veterans reported having a mental illness and about 10 percent

Figure 30

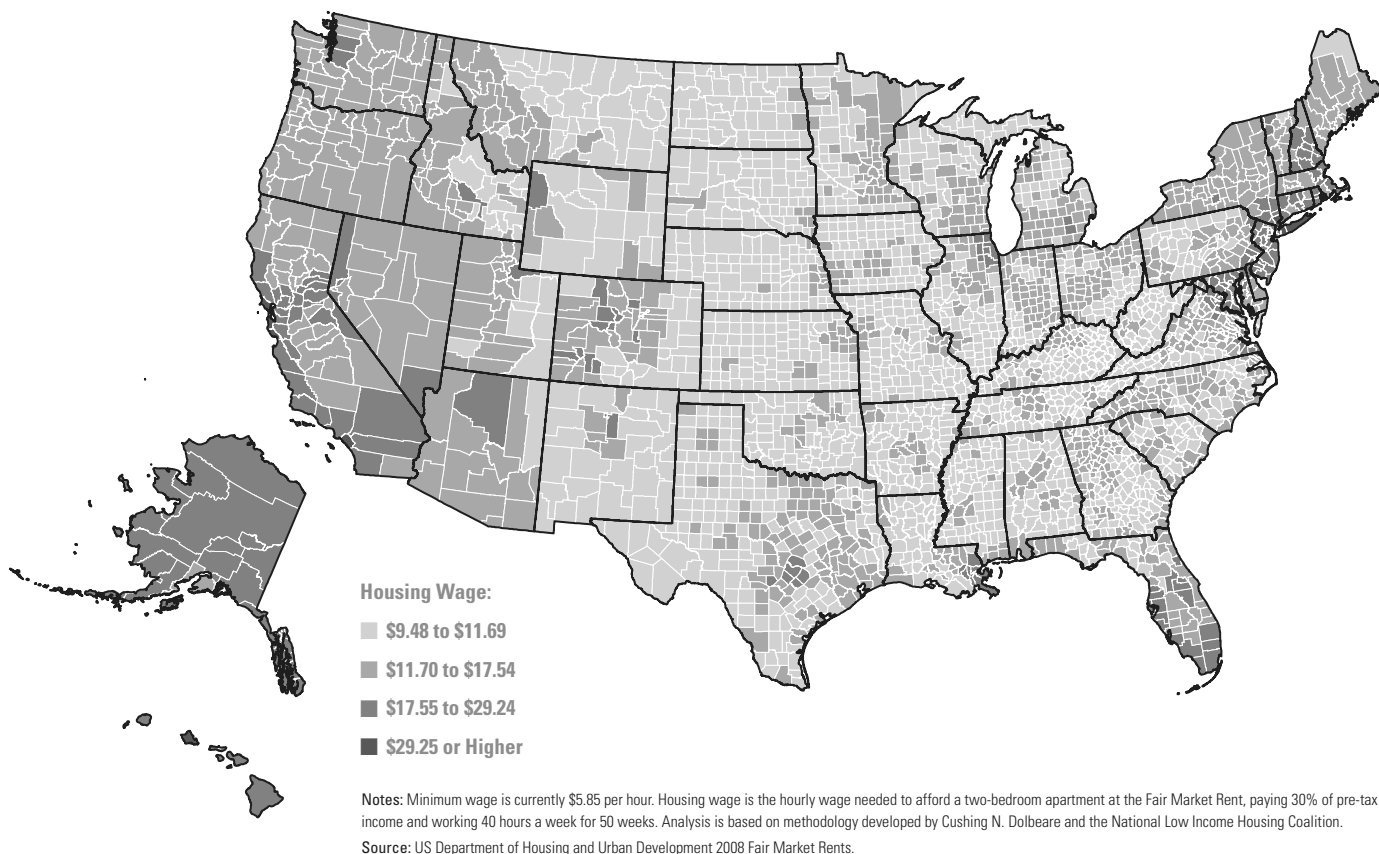
Single-Parent Families Are More Likely to Have Severe Affordability Problems

Share of Households with Severe Cost Burdens (Percent)



Notes: Low-income households are in the bottom fourth of all households sorted by pre-tax income. Minorities are all non-white householders, including Hispanics. Households with severe cost burdens spend more than 50% of income on housing.
Source: JCHS tabulations of the 2006 American Community Survey.

The Housing Wage Across the Country Exceeds the Federal Minimum Wage of \$5.85 per Hour



reported having a mental health problem in the past year. The shares reporting problems with drugs (40 percent) and alcohol (58 percent) are similar to those among other homeless adult males.

Tragically, veterans are a large share of the chronically homeless. According to NAEH estimates, veterans make up about 63,000 of the 170,000 Americans in this category. The chronically homeless often have complex medical conditions such as mental disability and/or an addiction, and cycle in and out of hospitals, shelters, jails and institutions. Several cities, including New York City and Portland, Oregon, have developed permanent supportive housing and prevention programs that have successfully reduced chronic homelessness while also saving public resources.

The Wage Deficit

High housing costs challenge many working Americans. More than a quarter of severely burdened households have at least one full-time worker and 64 percent at least one full- or part-time worker. Even households with two or more full-time workers are not exempt, making up fully 19 percent of the severely burdened.

The incidence of severe burdens among those earning multiples of the minimum wage is also exceedingly high. More than a third of households with incomes that are one to two times the full-time equivalent of the minimum wage have severe housing cost burdens. Even among the 15.3 million households earning two to three times the full-time minimum wage equivalent, fully 15 percent pay more than half their incomes for housing.

Nowhere in America does a full-time minimum-wage job cover the cost of a modest two-bedroom rental at 30 percent of income (**Figure 31**). In the least affordable areas of the country, the housing wage—the income necessary to afford the fair market rent on a modest apartment, working 40 hours a week for 50 weeks a year—is now five times the current federal minimum wage.

Government Assistance

Despite the alarming scope of affordability problems, housing assistance represents a small and shrinking share of the federal budget. From 1997 to 2007, housing assistance programs fell from 10 percent to 8 percent of the nation's dwindling domestic discretionary

outlays. And even though the number of households with severe burdens rose by more than 20 percent from 2001 to 2005, the share of renter households receiving assistance barely budged.

While the Low Income Housing Tax Credit program has succeeded in expanding the supply of affordable units, losses from the inventory remain exceedingly high. With the number of low-income renter households continuing to rise and the number of affordable and available units continuing to fall, the need grows ever larger. Today, there are only about 6 million rentals affordable to the nearly 9 million households with incomes below 30 percent of the median for their Census division (\$11,000 to \$18,000). But nearly half of these affordable units are either inhabited by higher-income households or stand vacant. As a result, about 9 million lowest-income households must compete for just 3 million affordable and available rental units (Figure 32).

Heavily targeted toward renter households, federal housing assistance currently does next to nothing for owners that have severe housing cost burdens and are at risk of losing their homes. While federal and state governments have intervened to blunt the impending wave of foreclosures, the relief is temporary and in many cases relies on the voluntary efforts of lenders, servicers, and investors. The largest-scale program uses federal housing

insurance to allow some homeowners to refinance their way out of trouble. As it is, however, many owners do not qualify for any of the forms of assistance being offered. Once the current storm passes, foreclosure rates may settle back down but the affordability problems of owners—and especially of former owners forced back into renting—will persist.

The Outlook

The weakness of the economy does not bode well for income growth in the short run. But even in the longer run, the housing cost pressures on working Americans are unlikely to lighten. Much of employment growth will continue to be in part-time and low-wage positions. This trend, together with the high operating costs of housing and the restrictions on building modest homes at higher densities, makes efforts to meet the nation’s affordability challenges an uphill battle.

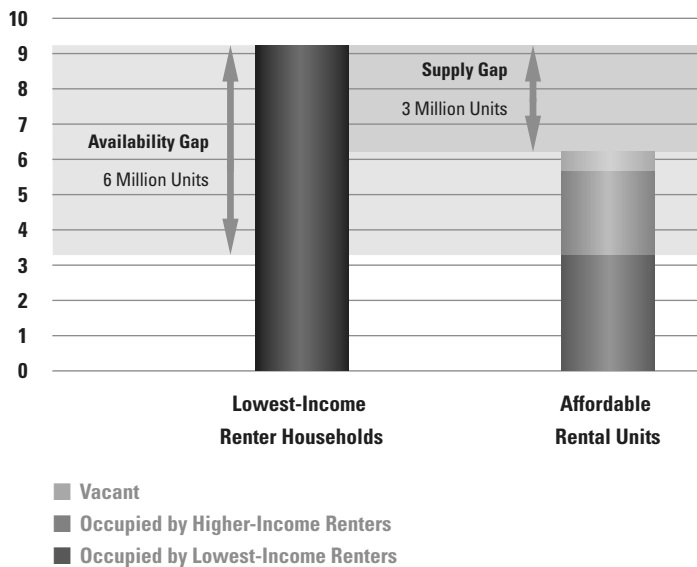
Thus far, there has been little national outcry about the fact that growing numbers of low- and middle-income families are spending half or more of their incomes on housing, and that so many children are living in unhealthy, unsafe conditions—or, worse yet, forced to make their way on the streets. The grim plight of many veterans has also failed to rally a groundswell of support to tackle these urgent issues.

Nevertheless, housing advocates continue to press for additional resources to assist more low-income households and to promote programs that add directly to—or at least stave off further losses from—the supply of affordable rentals. Joining their voices is a growing chorus of organizations intent on drawing attention to the insidious spread of affordability problems. These organizations hope to broaden the political base for housing programs and spark discussion about the need for workforce housing at the local, state, and federal levels. Another contingent, driven by concerns about the environment and the erosion of America’s economic competitiveness, is working to encourage smart growth and “green” building practices. Whether these efforts produce a coalition strong enough to attract resources or make meaningful changes to the nation’s housing programs remains to be seen.

Figure 32

Lowest-Income Renters Far Outnumber Affordable and Available Units

Millions



Notes: Lowest-income households earn less than 30% of the median household income in their Census division, unadjusted for family size. Affordable units have rents less than 30% of lowest incomes. Sources: JCHS tabulations of the 2006 American Community Survey.



Appendix Tables

- Table A-1** Income and Housing Costs, US Totals: 1975–2007
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- Table A-5** Homeownership Rates by Age, Race/Ethnicity, and Region: 1994–2007
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- Table A-7** Housing Cost-Burdened Households by Tenure and Income: 2001 and 2006

The following tables are available for download in Microsoft Excel format at www.jchs.harvard.edu.

- Table W-1** State Permitting Levels: 2001–2007
- Table W-2** House Price Changes in the 50 Largest Metros: 2006:4–2007:4
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- Table W-11** JCHS Household Projections: 2010–2020

Table A-1

Income and Housing Costs, US Totals: 1975–2007

2007 Dollars

Year	Monthly Income		Owner Costs				Renter Costs		Cost as Percent of Income			
	Owner	Renter	Home Price	Mortgage Rate (%)	Before-Tax Mortgage Payment	After-Tax Mortgage Payment	Contract Rent	Gross Rent	Owners		Renters	
									Before-Tax Mortgage Payment	After-Tax Mortgage Payment	Contract Rent	Gross Rent
1975	4,522	2,690	124,969	8.9	899	769	654	708	19.9	17.0	24.3	26.3
1976	4,661	2,697	127,387	8.9	912	784	654	710	19.6	16.8	24.2	26.3
1977	4,676	2,714	132,334	8.8	943	868	653	712	20.2	18.6	24.0	26.2
1978	4,726	2,750	140,372	9.4	1,050	934	651	711	22.2	19.8	23.7	25.9
1979	4,733	2,691	141,458	10.6	1,173	1,025	629	688	24.8	21.7	23.4	25.6
1980	4,444	2,551	134,913	12.5	1,292	1,100	605	666	29.1	24.7	23.7	26.1
1981	4,316	2,517	129,320	14.4	1,415	1,183	597	660	32.8	27.4	23.7	26.2
1982	4,323	2,542	125,505	14.7	1,404	1,189	607	675	32.5	27.5	23.9	26.5
1983	4,420	2,536	125,284	12.3	1,182	1,008	625	696	26.8	22.8	24.6	27.4
1984	4,536	2,614	125,019	12.0	1,157	991	632	703	25.5	21.8	24.2	26.9
1985	4,656	2,652	126,688	11.2	1,101	945	650	720	23.6	20.3	24.5	27.1
1986	4,821	2,683	133,038	9.8	1,032	891	677	745	21.4	18.5	25.2	27.8
1987	4,851	2,657	137,348	9.0	990	884	680	745	20.4	18.2	25.6	28.0
1988	4,878	2,737	140,093	9.0	1,013	927	678	741	20.8	19.0	24.8	27.1
1989	4,943	2,828	142,008	9.8	1,104	1,001	672	734	22.3	20.3	23.8	25.9
1990	4,798	2,739	139,186	9.7	1,075	978	664	724	22.4	20.4	24.3	26.4
1991	4,726	2,625	136,086	9.1	992	909	660	719	21.0	19.2	25.1	27.4
1992	4,690	2,553	135,689	7.8	882	821	657	716	18.8	17.5	25.7	28.0
1993	4,651	2,526	134,538	6.9	800	755	653	712	17.2	16.2	25.8	28.2
1994	4,697	2,510	134,549	7.3	831	785	652	710	17.7	16.7	26.0	28.3
1995	4,742	2,558	135,138	7.7	866	814	650	706	18.3	17.2	25.4	27.6
1996	4,822	2,580	136,600	7.6	866	813	648	704	18.0	16.9	25.1	27.3
1997	4,932	2,639	138,847	7.5	875	821	652	708	17.8	16.6	24.7	26.8
1998	5,079	2,691	143,920	7.0	859	809	662	717	16.9	15.9	24.6	26.6
1999	5,191	2,788	148,067	7.1	899	841	668	722	17.3	16.2	24.0	25.9
2000	5,138	2,805	153,283	7.9	999	922	670	724	19.4	17.9	23.9	25.8
2001	5,033	2,781	160,837	6.9	957	890	681	739	19.0	17.7	24.5	26.6
2002	5,004	2,677	168,951	6.4	955	892	696	751	19.1	17.8	26.0	28.1
2003	5,031	2,588	176,239	5.7	918	884	701	758	18.2	17.6	27.1	29.3
2004	4,994	2,551	189,753	5.7	989	944	701	759	19.8	18.9	27.5	29.7
2005	5,041	2,568	207,010	5.9	1,099	1,035	698	760	21.8	20.5	27.2	29.6
2006	5,115	2,639	218,485	6.5	1,246	1,155	701	766	24.4	22.6	26.5	29.0
2007	5,107	2,615	217,900	6.4	1,230	1,144	710	775	24.1	22.4	27.2	29.6

Notes and Sources: All dollar amounts are expressed in 2007 constant dollars using the Consumer Price Index (CPI-U) for All Items. Owner and renter median incomes through 2006 are from US Census Bureau, Current Population Survey (CPS) P60 published reports. Renters exclude those paying no cash rent. 2007 income is based on Moody's Economy.com estimate for all households, adjusted by the three-year average ratio of CPS owner and renter incomes to all household incomes. Home price is the 2007 median sales price of existing single-family homes determined by the National Association of Realtors®, indexed by the Freddie Mac Conventional Mortgage Home Price Index. Mortgage rates are from the Federal Housing Finance Board, Monthly Interest Rate Survey; 2007 and 2006 values are the average of monthly rates. Mortgage payments assume a 30-year mortgage with 10% down. After-tax mortgage payment equals mortgage payment less tax savings of homeownership. Tax savings are based on the excess of housing (mortgage interest and real-estate taxes) plus non-housing deductions over the standard deduction. Non-housing deductions are set at 5% of income through 1986, 4.25% from 1987 to 1993, and 3.5% from 1994 on. Contract rent equals median 2005 contract rent from the American Housing Survey, indexed by the CPI residential rent index with adjustments for depreciation in the stock before 1987. Gross rent is equal to contract rent plus fuel and utilities.

Housing Market Indicators: 1975–2007

Year	Permits ¹ (Thousands)		Starts ² (Thousands)			Size ³ (Median sq. ft.)		Sales Price of Single-Family Homes (2007 dollars)	
	Single-Family	Multifamily	Single-Family	Multifamily	Manufactured	Single-Family	Multifamily	New ⁴	Existing ⁵
1975	676	264	892	268	229	1,535	942	201,238	124,969
1976	894	403	1,162	375	250	1,590	894	206,633	127,387
1977	1,126	564	1,451	536	258	1,610	881	218,269	132,334
1978	1,183	618	1,433	587	280	1,655	863	232,173	140,372
1979	982	570	1,194	551	280	1,645	893	238,198	141,458
1980	710	480	852	440	234	1,595	915	231,272	134,913
1981	564	421	705	379	229	1,550	930	226,353	129,320
1982	546	454	663	400	234	1,520	925	218,294	125,505
1983	902	704	1,068	636	278	1,565	893	215,926	125,284
1984	922	759	1,084	665	288	1,605	871	215,477	125,019
1985	957	777	1,072	670	283	1,605	882	210,344	126,688
1986	1,078	692	1,179	626	256	1,660	876	214,551	133,038
1987	1,024	510	1,146	474	239	1,755	920	218,209	137,348
1988	994	462	1,081	407	224	1,810	940	217,408	140,093
1989	932	407	1,003	373	203	1,850	940	215,711	142,008
1990	794	317	895	298	195	1,905	955	208,776	139,186
1991	754	195	840	174	174	1,890	980	202,863	136,086
1992	911	184	1,030	170	212	1,920	985	199,728	135,689
1993	987	213	1,126	162	243	1,945	1,005	201,381	134,538
1994	1,069	303	1,198	259	291	1,940	1,015	207,923	134,549
1995	997	335	1,076	278	319	1,920	1,040	206,693	135,138
1996	1,070	356	1,161	316	338	1,950	1,030	206,073	136,600
1997	1,062	379	1,134	340	336	1,975	1,050	206,029	138,847
1998	1,188	425	1,271	346	374	2,000	1,020	207,979	143,920
1999	1,247	417	1,302	339	338	2,028	1,041	214,070	148,067
2000	1,198	394	1,231	338	281	2,057	1,039	215,075	153,283
2001	1,236	401	1,273	329	196	2,103	1,104	215,486	160,837
2002	1,333	415	1,359	346	174	2,114	1,070	221,663	168,951
2003	1,461	428	1,499	349	140	2,137	1,092	228,971	176,239
2004	1,613	457	1,611	345	124	2,140	1,105	240,667	189,753
2005	1,682	473	1,716	353	123	2,227	1,143	250,841	207,010
2006	1,378	461	1,465	336	111	2,248	1,172	254,423	218,485
2007	980	419	1,046	309	95	2,227	1,197	247,900	217,900

Note: All value series are adjusted to 2007 dollars by the CPI-U for All Items. All links are as of May 2008.

- Sources: 1. US Census Bureau, New Privately Owned Housing Units Authorized by Building Permits, www.census.gov/pub/const/bpenn.pdf.
2. US Census Bureau, New Privately Owned Housing Units Started, www.census.gov/const/startsan.pdf; Placements of New Manufactured Homes, www.census.gov/pub/const/mhs/mhstabplcmnt.pdf. Manufactured housing starts are defined as placements of new manufactured homes.
3. US Census Bureau, Characteristics of New Housing, www.census.gov/const/www/charindex.html.
4. New home price is the 2007 median price from US Census Bureau, Median and Average Sales Price of New One-Family Houses Sold, www.census.gov/const/uspriceann.pdf, indexed by the US Census Bureau, Price Indexes of New One-Family Houses Sold, www.census.gov/const/price_sold.pdf.
5. Existing home price is the 2007 median sales price of existing single-family homes determined by the National Association of Realtors®, indexed by annual averages of the quarterly Freddie Mac Conventional Mortgage Home Price Index.
6. US Census Bureau, Expenditures for Residential Improvements and Repairs by Property Type, www.census.gov/const/CS0/histtab2new.pdf.
7. US Census Bureau, Housing Vacancy Survey. Rates for 1976–1979 are annual averages of quarterly rates.
8. US Census Bureau, Annual Value of Private Construction Put in Place, www.census.gov/const/C30/private.pdf.
9. US Census Bureau, Houses Sold by Region, www.census.gov/const/soldann.pdf.
10. National Association of Realtors®, Existing Single-Family Home Sales.

Residential Upkeep and Improvement ⁶ (Millions of 2007 dollars)		Vacancy Rates ⁷ (Percent)		Value Put in Place ⁸ (Millions of 2007 dollars)			Home Sales (Thousands)	
Owner Occupied	Rental	For Sale	For Rent	Single-Family	Multifamily	Additions & Alterations	New ⁹	Existing ¹⁰
64,398	32,852	1.2	6.0	114,204	25,735	58,815	549	2,476
73,703	32,075	1.2	5.6	159,792	25,175	63,764	646	3,064
78,507	28,499	1.2	5.2	212,821	34,266	67,639	819	3,650
83,600	35,502	1.0	5.0	231,365	40,799	77,060	817	3,986
86,149	34,436	1.2	5.4	206,321	48,584	77,586	709	3,827
85,828	30,750	1.4	5.4	133,137	42,034	77,365	545	2,973
73,515	32,190	1.4	5.0	118,508	39,818	67,999	436	2,419
68,269	29,022	1.5	5.3	89,068	33,379	59,451	412	1,990
71,512	31,089	1.5	5.7	150,925	46,720	64,255	623	2,697
93,331	47,525	1.7	5.9	172,374	56,306	80,604	639	2,829
98,903	59,323	1.7	6.5	168,287	54,983	85,987	688	3,134
111,159	67,259	1.6	7.3	196,956	58,706	104,989	750	3,474
109,035	70,551	1.7	7.7	213,899	46,445	103,986	671	3,436
118,902	68,358	1.6	7.7	210,442	39,073	108,828	676	3,513
110,329	70,313	1.8	7.4	202,166	37,287	102,017	650	3,010
106,698	76,387	1.7	7.2	179,046	30,532	93,524	534	2,914
101,574	62,335	1.7	7.4	151,331	23,056	78,652	509	2,886
111,831	58,931	1.5	7.4	180,225	19,347	95,040	610	3,151
114,481	60,395	1.4	7.3	201,021	15,476	106,384	666	3,427
126,810	55,909	1.5	7.4	227,035	19,696	114,941	670	3,544
114,137	55,851	1.5	7.6	208,817	24,333	103,306	667	3,519
116,971	56,588	1.6	7.8	225,652	26,853	118,913	757	3,797
121,360	51,166	1.6	7.7	226,259	29,555	117,471	804	3,964
126,415	43,613	1.7	7.9	253,604	31,253	115,254	886	4,495
123,535	54,275	1.7	8.1	278,520	34,136	123,546	880	4,649
125,902	58,256	1.6	8.0	285,053	34,019	131,711	877	4,603
128,339	56,329	1.8	8.4	291,561	35,473	127,509	908	4,735
140,014	59,710	1.7	8.9	306,386	37,971	141,816	973	4,974
135,103	64,194	1.8	9.8	349,903	39,563	146,744	1,086	5,446
157,404	60,493	1.7	10.2	414,333	43,835	161,676	1,203	5,958
176,514	51,728	1.9	9.8	460,147	50,203	170,402	1,283	6,180
182,701	51,960	2.4	9.7	427,759	54,519	177,187	1,051	5,677
174,235	52,124	2.7	9.7	303,435	49,053	173,026	776	4,939

Terms on Conventional Single-Family Mortgages: 1980–2007

Annual Averages, All Homes

Year	Effective Interest Rate (%)	Term to Maturity (Years)	Mortgage Loan Amount (Thousands of 2007 dollars)	Purchase Price (Thousands of 2007 dollars)	Loan-to-Price Ratio (%)	Percent of Loans with:	
						Loan-to-Price Ratio Above 90%	Adjustable Rates
1980	12.8	27.2	130.1	184.7	72.9	10	na
1981	14.9	26.4	122.5	174.0	73.1	15	na
1982	15.3	25.6	118.2	168.4	72.9	21	41
1983	12.7	26.0	124.7	173.0	74.5	21	40
1984	12.5	26.8	128.7	172.8	77.0	27	62
1985	11.6	25.9	135.2	185.1	75.8	21	51
1986	10.2	25.6	150.0	209.2	74.1	11	30
1987	9.3	26.8	162.6	222.3	75.2	8	43
1988	9.3	27.7	170.7	230.6	76.0	8	58
1989	10.1	27.7	174.7	238.7	74.8	7	38
1990	10.1	27.0	165.0	226.2	74.7	8	28
1991	9.3	26.5	161.8	223.3	74.4	9	23
1992	8.1	25.4	160.6	216.3	76.6	14	20
1993	7.1	25.5	153.5	205.3	77.2	17	20
1994	7.5	27.1	153.7	198.6	79.9	25	39
1995	7.9	27.4	150.2	194.2	79.9	27	32
1996	7.7	26.9	156.8	204.9	79.0	25	27
1997	7.7	27.5	163.5	212.5	79.4	25	22
1998	7.1	27.8	167.6	220.5	78.9	25	12
1999	7.3	28.2	173.3	229.2	78.5	23	21
2000	8.0	28.7	178.5	239.4	77.8	22	24
2001	7.0	27.6	182.3	252.2	76.2	21	12
2002	6.5	27.3	188.3	266.4	75.1	21	17
2003	5.7	26.8	189.2	274.2	73.5	20	18
2004	5.7	27.9	203.6	287.5	74.9	18	35
2005	5.9	28.5	224.9	318.2	74.7	15	30
2006	6.6	29.0	228.6	315.0	76.5	19	22
2007	6.5	29.3	224.5	300.4	79.4	29	10

Notes: The effective interest rate includes the amortization of initial fees and charges. Loans with adjustable rates do not include hybrid products. na indicates data not available. Estimates for 2006 and 2007 are averages of monthly data. Dollar amounts are adjusted for inflation by the CPI-U for All Items.

Source: Federal Housing Finance Board, Monthly Interest Rate Survey.

Mortgage Refinance, Cash-Out, and Home Equity Loan Volumes: 1995–2007

Year	Percentage of Refinances Resulting in:		Median Statistics on Loan Terms and Property Valuation			Billions of 2007 Dollars		
	5% or Higher Loan Amount	Lower Loan Amount	Ratio of Old to New Rate	Age of Refinanced Loan (Years)	Appreciation of Refinanced Property (%)	Home Equity Cashed Out at Refinance	Total Refinance Originations	Home Equity Loans
1995	51.4	15.3	1.16	2.8	8.5	15.2	277	323
1996	57.2	11.5	1.17	3.2	11.0	22.9	386	347
1997	58.8	14.6	1.08	3.7	13.9	27.7	439	384
1998	46.2	17.0	1.16	3.5	10.0	50.8	1,105	394
1999	56.8	12.5	1.15	4.5	12.1	46.0	682	416
2000	77.9	8.7	0.94	4.3	23.8	31.6	375	491
2001	53.3	13.6	1.17	2.6	14.9	97.0	1,505	514
2002	46.9	17.9	1.20	3.0	13.4	128.1	2,192	577
2003	36.3	15.6	1.26	1.8	5.4	165.8	3,046	668
2004	46.8	15.0	1.19	2.1	9.5	156.9	1,658	849
2005	72.0	9.2	1.08	2.6	22.9	278.3	1,724	968
2006	85.8	5.5	0.94	3.2	31.0	327.0	1,419	1,089
2007	82.1	5.7	0.96	3.5	23.5	253.7	1,181	1,120

Notes: Dollar values are adjusted for inflation using the CPI-U for All Items. Home equity cashed out at refinance is the difference between the size of the mortgage after refinance and 105% of the balance outstanding on the original mortgage. Sources: Freddie Mac, Cash Out and Refinance data, and Economic and Housing Market Outlook, February 2008; Federal Reserve Board, Flow of Funds Table L.218.

Table A-5

Homeownership Rates by Age, Race/Ethnicity, and Region: 1994–2007

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
All Households	64.0	64.7	65.4	65.7	66.3	66.8	67.4	67.8	67.9	68.3	69.0	68.9	68.8	68.1
Age														
Under 35	37.3	38.6	39.1	38.7	39.3	39.7	40.8	41.2	41.3	42.2	43.1	43.0	42.6	41.7
35 to 44	64.5	65.2	65.5	66.1	66.9	67.2	67.9	68.2	68.6	68.3	69.2	69.3	68.9	67.8
45 to 54	75.2	75.2	75.6	75.8	75.7	76.0	76.5	76.7	76.3	76.6	77.2	76.6	76.2	75.4
55 to 64	79.3	79.5	80.0	80.1	80.9	81.0	80.3	81.3	81.1	81.4	81.7	81.2	80.9	80.6
65 to 74	80.4	80.9	81.9	82.0	82.1	82.9	82.8	82.5	82.7	82.3	83.3	82.8	82.7	82.0
75 and Over	73.5	74.6	75.3	75.8	76.2	77.1	77.7	78.1	78.4	78.7	78.8	78.4	79.1	78.7
Race/Ethnicity														
White	70.0	70.9	71.7	72.0	72.6	73.2	73.8	74.3	74.7	75.4	76.0	75.8	75.8	75.2
Hispanic	41.2	42.1	42.8	43.3	44.7	45.5	46.3	47.3	47.0	46.7	48.1	49.5	49.7	49.7
Black	42.5	42.9	44.5	45.4	46.1	46.7	47.6	48.4	48.2	48.8	49.7	48.8	48.4	47.8
Asian/Other	50.8	51.5	51.5	53.3	53.7	54.1	53.9	54.7	55.0	56.9	59.7	60.3	60.8	60.1
All Minority	43.2	43.7	44.9	45.8	46.8	47.4	48.1	49.0	48.9	49.5	51.0	51.3	51.3	50.9
Region														
Northeast	61.5	62.0	62.2	62.4	62.6	63.1	63.4	63.7	64.3	64.4	65.0	65.2	65.2	65.0
Midwest	67.7	69.2	70.6	70.5	71.1	71.7	72.6	73.1	73.1	73.2	73.8	73.1	72.7	71.9
South	65.6	66.7	67.5	68.0	68.6	69.1	69.6	69.8	69.7	70.1	70.9	70.8	70.5	70.1
West	59.4	59.2	59.2	59.6	60.5	60.9	61.7	62.6	62.5	63.4	64.2	64.4	64.7	63.5

Notes: White, black and Asian/other are non-Hispanic. Hispanic householders may be of any race. After 2002, Asian/other also includes householders of more than one race. Caution should be used in interpreting changes before and after 2002 because of rebenchmarking.

Source: US Census Bureau, Housing Vacancy Survey.

Table A-6

Mortgage Originations by Product: 2001–2007

	Prime			Non-Prime					Total
	Conventional/ Conforming	Jumbo	Total	Subprime	Alt-A	Home Equity	FHA/VA	Total	
Billions of 2007 Dollars									
2001	1,481	521	2,002	187	64	135	205	591	2,593
2002	1,966	658	2,624	230	77	190	203	701	3,324
2003	2,772	732	3,504	349	96	248	248	941	4,445
2004	1,328	565	1,893	593	209	362	148	1,311	3,204
2005	1,157	605	1,762	663	403	387	96	1,550	3,312
2006:1	243	106	349	144	108	105	20	376	725
2006:2	283	130	412	170	107	113	21	410	823
2006:3	248	132	379	165	94	116	23	397	776
2006:4	245	126	371	139	103	108	20	369	740
2007:1	273	100	373	93	98	97	19	307	680
2007:2	328	120	448	56	96	105	25	282	730
2007:3	286	83	369	28	54	93	26	201	570
2007:4	275	44	319	14	27	60	31	132	450
Share of Originations (Percent)									
2001	57.1	20.1	77.2	7.2	2.5	5.2	7.9	22.8	100
2002	59.1	19.8	78.9	6.9	2.3	5.7	6.1	21.1	100
2003	62.4	16.5	78.8	7.9	2.2	5.6	5.6	21.2	100
2004	41.4	17.6	59.1	18.5	6.5	11.3	4.6	40.9	100
2005	34.9	18.3	53.2	20.0	12.2	11.7	2.9	46.8	100
2006:1	33.5	14.6	48.1	19.9	14.9	14.5	2.7	51.9	100
2006:2	34.4	15.8	50.1	20.6	13.0	13.8	2.5	49.9	100
2006:3	31.9	17.0	48.9	21.2	12.1	15.0	2.9	51.1	100
2006:4	33.1	17.1	50.1	18.8	13.9	14.6	2.6	49.9	100
2007:1	40.1	14.7	54.9	13.7	14.4	14.3	2.8	45.1	100
2007:2	44.9	16.4	61.4	7.7	13.2	14.4	3.4	38.6	100
2007:3	50.2	14.6	64.7	4.9	9.5	16.3	4.6	35.3	100
2007:4	61.1	9.8	70.9	3.1	6.0	13.3	6.9	29.3	100

Note: Dollar values are adjusted for inflation by the CPI-U for All Items.

Source: Inside Mortgage Finance, 2008 Mortgage Market Statistical Annual.

Table A-7

Housing Cost-Burdened Households by Tenure and Income: 2001 and 2006

Thousands

Tenure and Income	2001				2006				Percent Change 2001–2006			
	No Burden	Moderate Burden	Severe Burden	Total	No Burden	Moderate Burden	Severe Burden	Total	No Burden	Moderate Burden	Severe Burden	Total
Owners												
Bottom Decile	771	709	2,506	3,986	653	672	2,714	4,039	-15.3	-5.2	8.3	1.3
Bottom Quintile	3,381	1,906	3,921	9,208	2,958	1,956	4,481	9,395	-12.5	2.6	14.3	2.0
Bottom Quartile	5,065	2,549	4,428	12,042	4,510	2,654	5,168	12,331	-11.0	4.1	16.7	2.4
Lower-Middle Quartile	10,695	3,630	1,456	15,781	10,389	4,358	2,346	17,092	-2.9	20.1	61.1	8.3
Upper-Middle Quartile	16,015	2,882	465	19,362	15,924	4,111	1,003	21,037	-0.6	42.6	115.9	8.7
Top Quartile	21,457	1,208	137	22,802	22,102	2,221	292	24,614	3.0	83.8	113.3	7.9
Total	53,231	10,270	6,485	69,986	52,924	13,343	8,808	75,075	-0.6	29.9	35.8	7.3
Renters												
Bottom Decile	1,309	789	4,559	6,657	1,335	792	4,996	7,122	2.0	0.4	9.6	7.0
Bottom Quintile	2,731	2,798	6,550	12,079	2,652	2,764	7,512	12,928	-2.9	-1.2	14.7	7.0
Bottom Quartile	3,705	3,962	6,901	14,567	3,527	3,966	8,079	15,573	-4.8	0.1	17.1	6.9
Lower-Middle Quartile	7,698	2,710	419	10,828	6,864	3,233	716	10,812	-10.8	19.3	70.6	-0.1
Upper-Middle Quartile	6,771	437	39	7,247	6,161	641	65	6,868	-9.0	46.8	65.9	-5.2
Top Quartile	3,735	71	2	3,807	3,217	72	1	3,290	-13.9	1.4	-51.8	-13.6
Total	21,908	7,180	7,361	36,449	19,769	7,912	8,861	36,542	-9.8	10.2	20.4	0.3
All Households												
Bottom Decile	2,080	1,498	7,065	10,643	1,988	1,464	7,710	11,162	-4.4	-2.3	9.1	4.9
Bottom Quintile	6,112	4,704	10,472	21,287	5,610	4,720	11,993	22,323	-8.2	0.4	14.5	4.9
Bottom Quartile	8,769	6,511	11,328	26,609	8,037	6,620	13,247	27,904	-8.4	1.7	16.9	4.9
Lower-Middle Quartile	18,393	6,340	1,876	26,609	17,252	7,591	3,061	27,904	-6.2	19.7	63.2	4.9
Upper-Middle Quartile	22,786	3,319	504	26,609	22,084	4,752	1,068	27,904	-3.1	43.2	111.9	4.9
Top Quartile	25,191	1,280	138	26,609	25,319	2,293	292	27,904	0.5	79.2	111.4	4.9
Total	75,140	17,450	13,846	106,436	72,692	21,256	17,669	111,617	-3.3	21.8	27.6	4.9

Notes: Income deciles/quintiles/quartiles are equal tenths/fifths/fourths of all households sorted by pre-tax income. Moderate (severe) burdens are defined as housing costs of 30–50% (more than 50%) of household income.

Source: JCHS tabulations of the 2001 and 2006 American Community Surveys.



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