

**MARKET  
INSIGHTS**

# Housing: A time to buy

By Dr. David Kelly and David Lebovitz

*J.P. Morgan*



The greatest struggle facing many financial advisors is overcoming investor emotion.

The **Market Insights** program is designed to provide our financial advisor partners with a way to address the markets and the economy based on logic rather than emotion, enabling their clients to make rational investment decisions. To learn more, visit us at [www.jpmorganfunds.com/mi](http://www.jpmorganfunds.com/mi).

**Dr. David Kelly, CFA**  
Managing Director  
Chief Market Strategist  
J.P. Morgan Funds

Dr. David Kelly is the Chief Market Strategist for J.P. Morgan Funds. With more than 20 years of experience, David provides valuable insight and perspective on the markets to thousands of financial advisors and their clients.

Throughout his career, David has developed a unique ability to explain complex economic and market issues in a language that financial advisors can use to communicate to their clients. He is a keynote speaker at many national investment conferences. David is also a frequent guest on CNBC and other financial news outlets and is widely quoted in the financial press.

**David M. Lebovitz**  
Market Analyst  
J.P. Morgan Funds

David M. Lebovitz is a Market Analyst on the J.P. Morgan Funds U.S. Market Strategy Team. In this role, David is responsible for supporting the team's Market Strategists in delivering timely market and economic insight to clients across the country. Since joining the team, David has primarily focused on enhancing the group's fixed income research efforts.

# Foreword

## Table of contents

<b>Housing: A time to buy</b>	
<i>Foreword</i>	<i>p. 2</i>
<i>Collapse and consequences</i>	<i>p. 3</i>
<i>Measures of value</i>	<i>p. 4</i>
<i>Supply, demand and inventories</i>	<i>p. 7</i>
<i>Housing market attitudes</i>	<i>p. 10</i>
<i>The implications of a housing rebound</i>	<i>p. 12</i>

With the debt crisis in Europe still unresolved and economic growth in the U.S. sluggish, the capital markets continue to exhibit elevated volatility. However, this does not mean that no investment opportunities exist. Although the U.S. housing market remains extremely depressed, we believe that given current valuations and demographic dynamics, now may be the time to consider an investment in housing.

Few financial manias in history have had as devastating an economic impact as the American real estate bubble of the 2000s. From soaring boom to dismal and continuing bust, it has shipwrecked the financial plans of millions of American families, led to an absolute collapse in the construction industry and, through the magic of modern financial leverage, led to the biggest global recession since World War II. A few years ago, most Americans believed that there was no better long-term investment than owning your own home. Today, many regard home ownership as a financial ball and chain.

But while the change in attitudes has been dramatic, so has the change in the numbers themselves. Years of falling prices and falling mortgage rates have made home buying more affordable than it has been in decades. Moreover, home prices look downright cheap, not only from the perspective of mortgage rates and income, but also relative to the cost of renting or the cost of constructing a new home.

Meanwhile, continued population growth, combined with lender and borrower caution, has increased pent-up demand. While the inventory of homes both on the market and in foreclosure remains high, minimal home building over the past three years is gradually eating into this stockpile, a process that could quickly accelerate with any pickup in demand.

Home prices play a crucial role in determining household wealth and shaping consumer confidence. In addition, any revival in home building could provide a much-needed boost to overall economic growth and employment. However, beyond the implications for the macroeconomy and financial markets, the numbers on housing have an important message for American families today, and particularly younger families setting out on life's great adventure: Five years ago, at the peak of the home-buying euphoria, it was emphatically a time to rent. Today, when home ownership is depreciated more than ever before, the numbers tell us it is a time to buy.

# Housing: A time to buy

## **Collapse and consequences**

The sad saga of the U.S. housing crash is now so well known that it seems almost cruel to rehash the details. Many observers at the time realized that too many houses were being built, home prices were rising too quickly and lending standards were being dangerously compromised in fueling the bubble. While there is much more to the story, the bottom line is that by January 2006, U.S. housing starts reached a peak of just under 2.3 million units annualized, about 50% higher than the average level of starts over the past 50 years, while the price of the average, existing single-family home was up 47% in just five years. Something had to give, and it did – in a big way.

Since then, the collapse in housing has been of historic proportions, amplified by the financial crisis of 2008. Some numbers can help put this in perspective:

- In almost 50 years, from January 1959 to September 2008, the lowest annualized rate of housing starts recorded for any month was 798,000, and the average rate was more than 1.5 million units. Since January 2009, the highest rate recorded for any month has been 687,000, and the average rate has been just 575,000.
- From their peak in late 2005, nationwide median existing single-family home prices have fallen by 29% in nominal terms and by 37% relative to inflation.
- Since the first quarter of 2006, the value of home equity has fallen from \$13.5 trillion to \$6.2 trillion, a 54% decline.

All of this has had a profound impact on the economic environment, investment environment and even the psychological outlook of Americans.

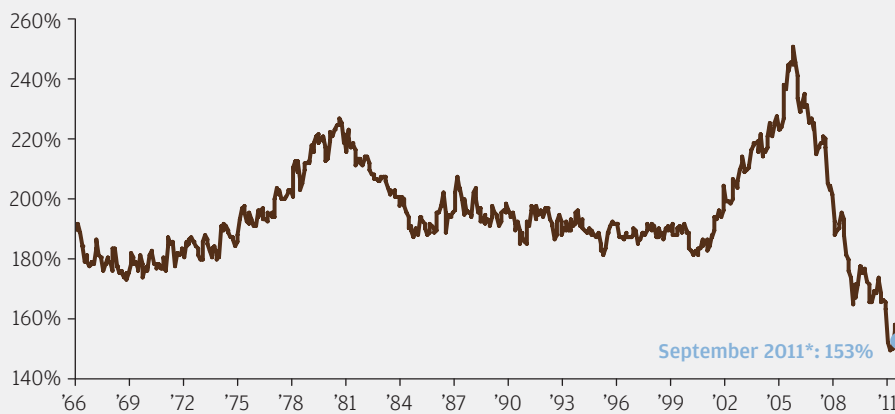
- Since the start of the recession in December 2007, construction employment nationwide has fallen by 1.9 million jobs, or 30% of the 6.6 million jobs lost. This from a sector that even at its peak only ever accounted for 5.7% of U.S. jobs. However, even this understates the impact of the housing slump on employment, as it ignores the ancillary industries that have been impacted by the decline in housing, along with all the employment effects caused by the impact of a collapse in housing market wealth, confidence and the stock market.
- Since the middle of 2006, home building has fallen from 5.9% of nominal GDP to just 2.2%.

- Falling home prices have also had a profound impact on consumer confidence. Statistical work over the last decade suggests that a 10% change in year-over-year average existing home prices tends to move the consumer sentiment index by approximately 6.4 index points in the same direction, even after accounting for feed-through effects of housing on the stock market and employment. For reference, the consumer sentiment index was at a level of 57.5 in early October 2011, almost 30 points lower than its average level of the last 40 years.
- Perhaps most important, declining home prices have undermined the confidence of both lenders and borrowers, impeding any healthy recovery in housing and restraining a rebound elsewhere within the economy.

### Measures of value

While no one should underestimate the pain and destruction caused by the bursting of the housing bubble, it has had one undeniable effect: Across a wide range of measures, it has left the United States with its cheapest housing market in decades.

**CHART A: Median home price of existing single-family home as a % of personal income per household**  
Percent, seasonally adjusted



Sources: Census, National Association of Realtors, BEA, J.P. Morgan Asset Management.  
\*September 2011 is a J.P. Morgan Asset Management estimate.

One of the simplest measures is just to look at home prices relative to average household income. The chart to the left shows the relationship between average, per-household personal income<sup>1</sup> and home prices over the years. Since 1966, the median price of an existing single-family home in the U.S. has varied between 150% and 251% of personal income per household. However, roughly three-quarters of the time it has been in a relatively narrow band between 185% and 230%. In September 2011, the ratio was just 153%, implying that to get back to an average price to income ratio, home prices would have to rise by about 27%.

<sup>1</sup>Unlike most consumer spending, because of the mortgage interest deduction on federal taxes, it is more appropriate to measure housing affordability relative to pre-tax rather than disposable (after-tax) income.

However, price is only part of the story. Economic malaise, bond market complacency and the active intervention of the Federal Reserve have reduced mortgage rates to their lowest level in modern history. During the week of October 7, Freddie Mac reported that mortgage rates had fallen to an average annual level of 3.94%. Assuming the use of a fixed rate mortgage with 20% down, this would make the median mortgage payment on a single-family existing home just 6.9% of per household personal income, compared with an average of 14.4% since 1966. This is not to imply that home prices would have to double to get to “normal” levels – any revival in housing will likely push mortgage rates higher along with home prices. However, it does emphasize the potential long-term financial gain for those who buy much-cheaper-than-average housing while also locking in much-cheaper-than-average long-term financing.

A third way to look at home valuations is to look at the cost of renting versus the cost of owning. Since the late 1980s, as part of the Current Population Survey<sup>2</sup>, the Census Bureau has asked the owners of vacant properties whether they are trying to rent or sell the property and, depending on that answer, what they are asking for rent or asking as a sale price for the property. Assuming a 20% down payment and prevailing 30-year mortgage rates, this allows us to calculate the monthly mortgage payment necessary to buy the median vacant home and compare it to the cost of renting the median house or apartment. As shown in the bottom chart to the right, from the start of 1988 to the start of 2005, these two numbers tracked each other very closely, with the implied median mortgage payment just 5% higher than median rent. However, in 2005 the housing market began to soar and by mid

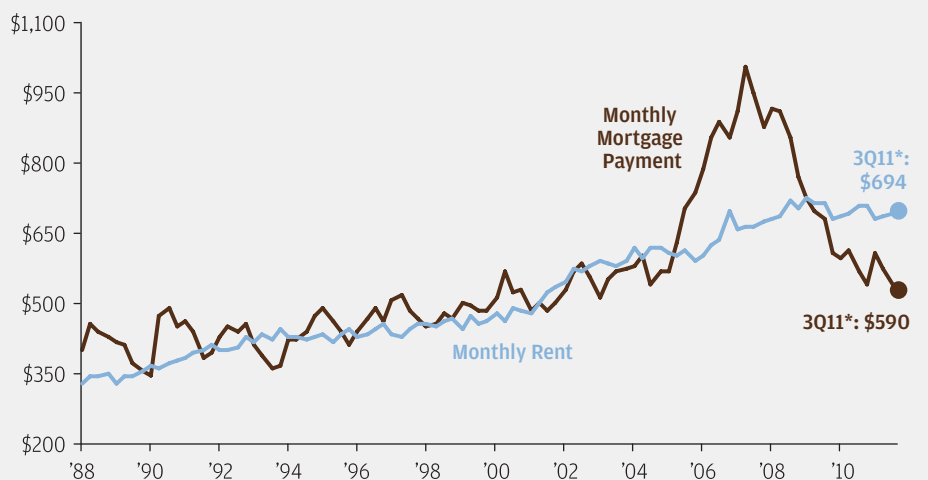
**CHART B: Median mortgage payment as a % of personal income per household**  
Percent, seasonally adjusted



Sources: Census, Federal Reserve, BEA, J.P. Morgan Asset Management.

\*September 2011 is a J.P. Morgan Asset Management estimate. These numbers are lower than the *Guide to the Markets* p21 due to the use of median existing single family home prices, rather than average new single family home prices.

**CHART C: Monthly rent vs. monthly mortgage payment**  
Vacant properties



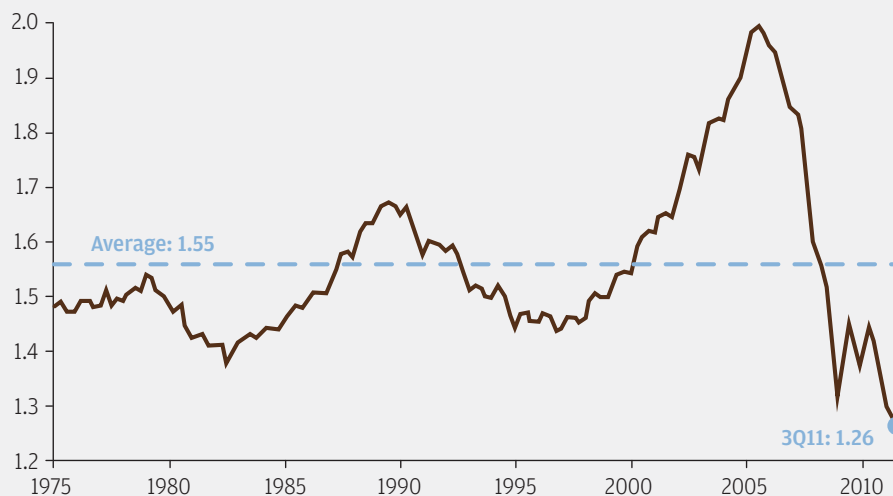
Sources: Census Bureau, J.P. Morgan Asset Management. Monthly mortgage payment assumes a 20% down payment at prevailing 30-year fixed-rate mortgage rates; analysis based on median asking rent and median mortgage payment based on asking price. \*3Q11 estimates provided by J.P. Morgan Asset Management.

<sup>2</sup>This monthly survey is used, among other things, to calculate the monthly unemployment rate.

2007, the implied median mortgage payment was about 50% higher than the asking rent. Then housing began its long swoon, and by the third quarter of this year, we estimate that the implied median mortgage payment had fallen to just 78% of the median asking rent. In other words, at current mortgage rates, home prices would have to rise by 35% just to get back to their average relationship to rents.

A fourth way to look at home pricing is to look at home pricing relative to the cost of construction – a sort of price-to-book ratio for the housing market. The price of any home can be divided into two separate components – what it would cost to rebuild the house itself from scratch, and the implied value of the land on which it is located. Ongoing work conducted by the Lincoln Institute of Land Policy and the University of Wisconsin decomposes the value of U.S. housing into these two pieces<sup>3</sup>. On average, since 1975, U.S. residential real estate has been worth about 55% more than the cost of rebuilding it – that is to say, land has represented about a third of the total value of residential property. In the housing boom, home prices rose much faster than construction costs so that by the middle of 2005, the value of houses was implicitly twice what it cost to build them, as is shown in the chart below.

**CHART D: Ratio of home building to home buying**  
Aggregate market value of homes divided by replacement cost of residential structures



Sources: Lincoln Institute of Land Policy, University of Wisconsin, Federal Reserve, J.P. Morgan Asset Management.

Of course, this was tremendously encouraging to builders, since, if they could get their hands on a piece of vacant land at any reasonable price and put up a house, they could walk away with a healthy profit.

Since then, like practically every other number in the housing market, the implicit value of land has plummeted, even as the costs of labor, cement, lumber, and so on have risen. Consequently, by the third quarter of 2011, the estimated value of the U.S. housing stock was only 26% higher than the cost of constructing it<sup>4</sup>. In some metropolitan areas, existing home prices have fallen so much relative to construction costs that building, rather than buying, would only seem logical if the land could be bought for close to nothing.

While this is a big part of the reason why home building has ground to a halt in many metropolitan areas, it should be somewhat comforting for current home buyers and home owners. Given that builders can't actually buy land for a song, in many cities, home prices will have to rise before there is any significant increase in supply.

<sup>3</sup>See David, Morris A and Jonathan Heathcote, 2007, "The Price and Quantity of Residential Land in the United States," *Journal of Monetary Economics*, Vol. 54 (8), p. 2595-2620. Data located at Land and Property Values in the U.S., Lincoln Institute of Land Policy <http://www.lincolnst.edu/resources/>  
<sup>4</sup>Using Lincoln Institute data from 1975:1 to 2011:1 and extrapolating based on construction cost and home price data through 2011:3

## Supply, demand and inventories

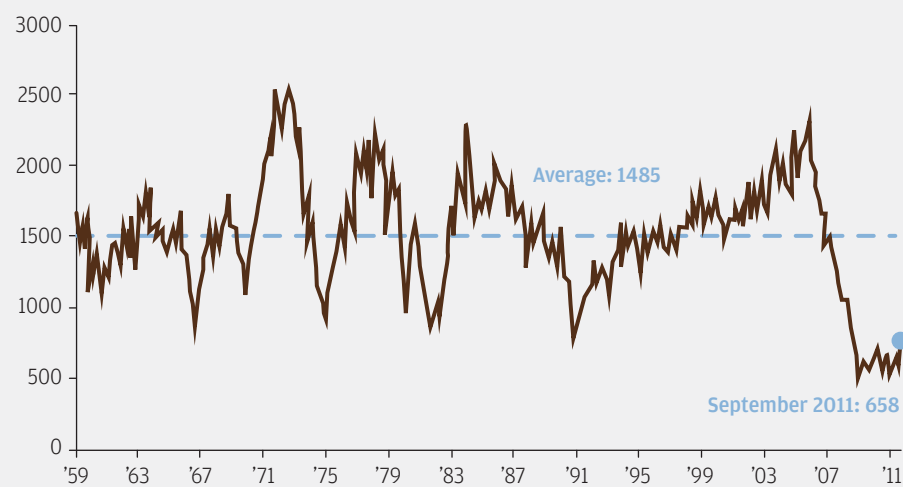
On a variety of measures, U.S. home prices look very low. This, in itself, does not guarantee that they are about to turn. However, trends in supply, demand and inventories strongly point to rising home prices in the years ahead.

First, on the supply side, the great housing bust of the late 2000s has reduced home building to a shadow of its former self. Perhaps the most dramatic statistic is illustrated in the chart to the right, which shows total U.S. housing starts at a seasonally adjusted annual rate from 1959 to today. Prior to 2008, there had not been a single month in almost 50 years when housing starts had fallen below 798,000. Since the start of 2009, there has not been a single month where starts have exceeded 687,000.

This extraordinarily low rate of construction looks even more dramatic when normal housing depreciation is considered. Over the past decade, the total stock of housing in the United States has risen by 13.5 million units. However, we know that 15.4 million homes have been completed, so a net 1.9 million units, or 190,000 per year, have been destroyed by fire, natural disasters, and so on. Given this, the current construction rate of roughly 575,000 units per year implies an annual increase in the housing stock of just 385,000 units.

On the demand side, normal demographic trends should still be building pent-up demand. In the last decade from 2000 to 2009, the U.S. population grew by an average of 2.8 million people per year, with natural population growth contributing approximately 1.7 million people and immigration adding about one million. In addition, over the same period, an average of 2.2 million couples got married each year<sup>5</sup>. All of these numbers have fallen somewhat in the recession of 2008-2009 and its aftermath, as couples have postponed marriage, families have postponed having children, and immigration has been discouraged by the lack of jobs. However, even if births, immigration and marriages have all been depressed by the slow economy, they all likely still imply a much stronger pace of home building than currently exists.

**CHART E: Total housing starts**  
Thousands, seasonally adjusted



Sources: Census, J.P. Morgan Asset Management.

<sup>5</sup>Based on data from the Census Bureau and the Centers for Disease Control and Prevention.

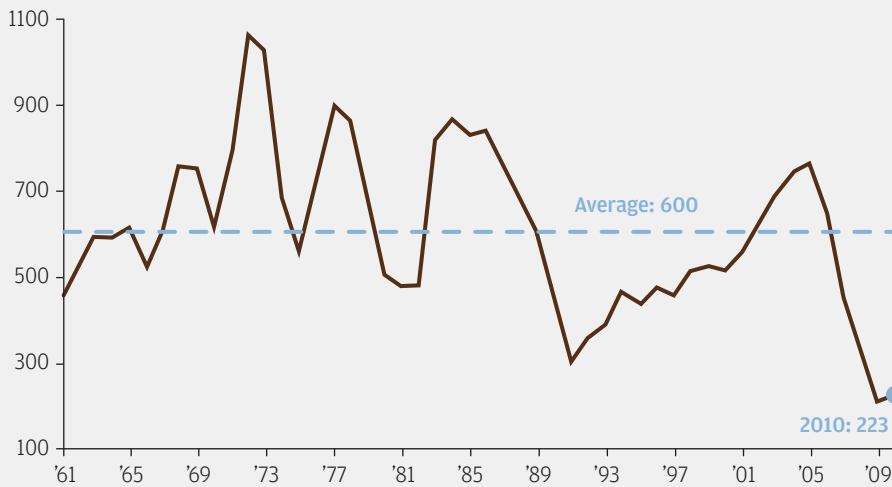
The top chart to the left shows the relationship between annual population growth and housing starts over the past 50 years. While home-building numbers are much more volatile than demographic ones, on average over this period, the U.S. has seen 600 homes started for every 1,000 person increase in the population, or a ratio of 0.6 homes per person. Given

estimated population growth of 2.46 million people in the 12 months ending in August 2011, this relationship today would suggest total housing starts of 1.4 million units compared to the 572,000 starts that actually occurred<sup>6</sup>. Moreover, it is also worth noting that at least when it comes to marriages and births, decisions to postpone may also be generating a pent-up demand, which will be expressed as the economy gradually improves.

Given these statistics on supply and demand, it seems almost inevitable that the inventory of unsold homes must be falling. It is – but it still has a long way to go.

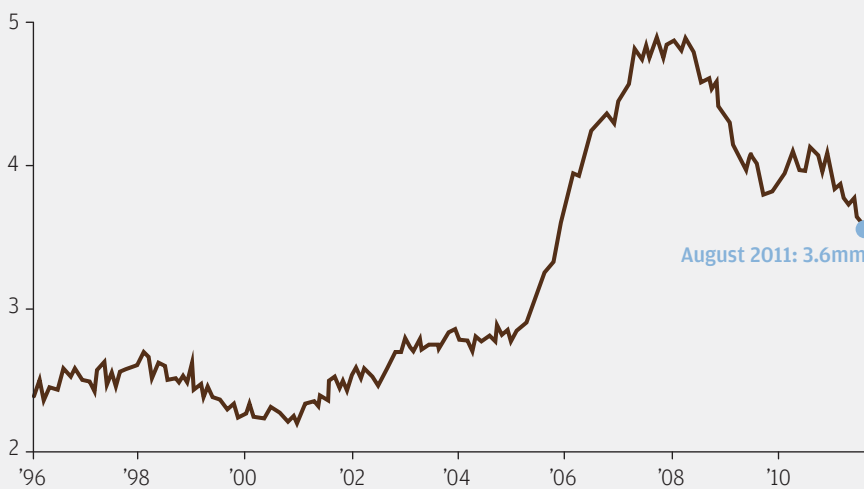
The bottom chart to the left shows the total number of new and existing homes for sale in the United States from 1996 to today. From the mid 1990s to the mid 2000s the number was fairly steady at about 2.5 million units. However, as the housing bubble grew, so did the pace of home building, which naturally outstripped the demographic growth in demand; by the summer of 2007, the total number of homes on the market peaked at just under 5 million units.

**CHART F: Ratio of housing starts to population growth**  
1961 – 2010, housing starts per every 1,000 person increase in population, annual



Sources: Census, BEA, J.P. Morgan Asset Management.

**CHART G: Housing inventories**  
Combined new and existing home sales, millions, seasonally adjusted



Sources: Census, National Association of Realtors, J.P. Morgan Asset Management.

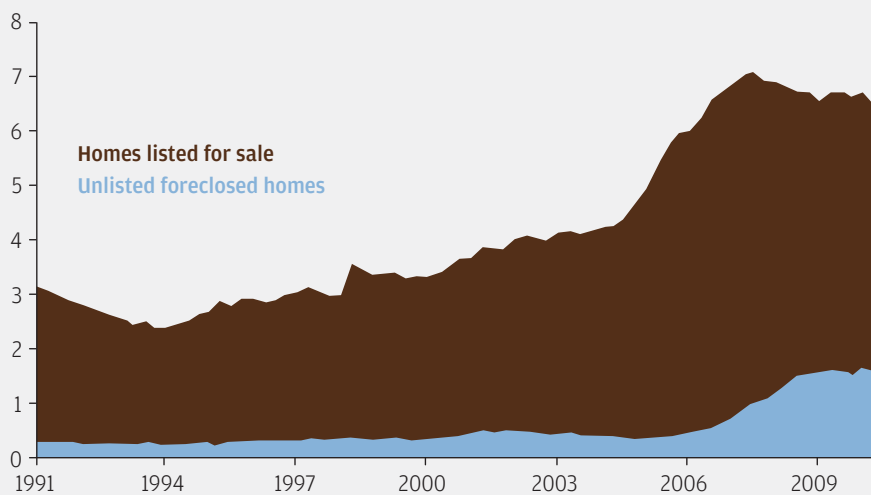
<sup>6</sup>Data are as of August 2011.

Since then, inventories have been on a painfully slow drift downward as a drop in demand offset much of the impact of the collapse in home building. However, by August of this year, combined new and existing homes listed for sale had fallen to 3.6 million units, having completed roughly 70% of the journey back to normal.

Many have argued correctly that even this excessive level of inventories understates the problem, as there are millions of homes today in foreclosure that are not yet listed as being for sale. Data from the Mortgage Bankers Association can be used to estimate the number of homes in foreclosure, which today stands at roughly 2.2 million units<sup>7</sup>. It is estimated that approximately a third of these are in fact listed for sale, so adding unlisted foreclosures to the number of homes actually listed for sale boosts the inventory of homes for sale, as well as diminishes the progress made in cutting into this during the past four years.

Some further argue that the problem of foreclosures will only get worse, as there is a backlog of pending foreclosures that is being suppressed by litigation and legislation aimed at preventing foreclosures. However, while such a backlog may well exist, it should be noted that mortgages issued since the bursting of the housing bubble are much less problematic, and that the percentage of mortgages 90 days+ delinquent (a reliable precursor to foreclosure) is actually falling.

**CHART H: Total homes for sale**  
Listed homes and unlisted foreclosures, millions, seasonally adjusted



Sources: Census, MBA, BLS, J.P. Morgan Asset Management.

**CHART I: Percent of mortgages +90 days delinquent**  
All mortgage loans with installments 90 or more days past due, sa



Sources: MBA, J.P. Morgan Asset Management.

<sup>7</sup>This calculation uses the number of mortgages outstanding according to the BLS Consumer Expenditure Survey, foreclosures as a percent of total loans, housing inventories and assumes that 30% of foreclosed properties are listed as for sale.

**Housing market attitudes**

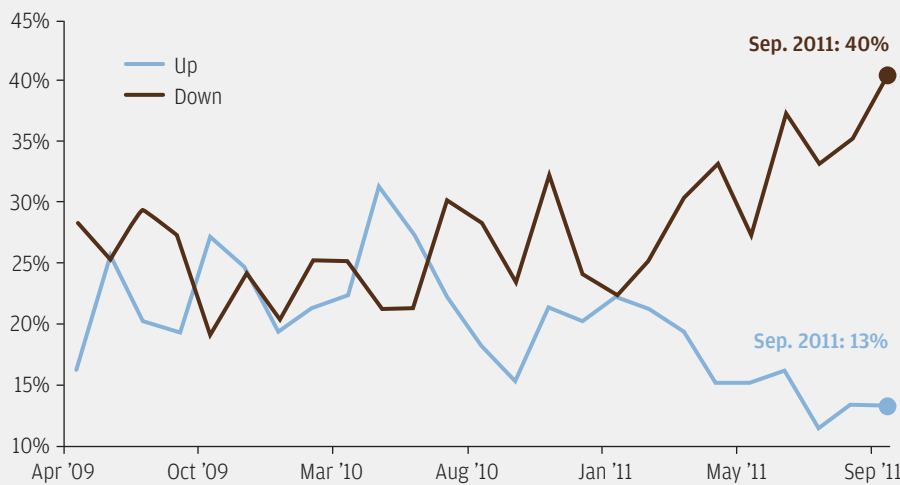
Given all of this, why have home prices not already begun to recover?

Part of the problem is simply one of attitudes and expectations. In a recent poll<sup>8</sup>, just 13% of Americans expected the price of their home to go up in the next year, and just 36% thought it would go up over then next five. Unfortunately, this poll wasn't conducted prior to 2009. However, a similar survey in 2006 showed that fully 81% expected the value of their home to increase in the future<sup>9</sup>.

The attitude of lenders is also a barrier. While the wild-west lending standards of the mid 2000s undoubtedly fueled the housing bubble, in its aftermath, banks have become very cautious. This can be seen in the chart on the bottom left, which looks at the loan to price ratio on conventional, single-family mortgages since 1990. This ratio has fallen sharply since its 2007 peak, reflecting the reluctance of banks to make loans on the scale that they had during the housing bubble.

**CHART J: Will home prices be higher a year from now?**

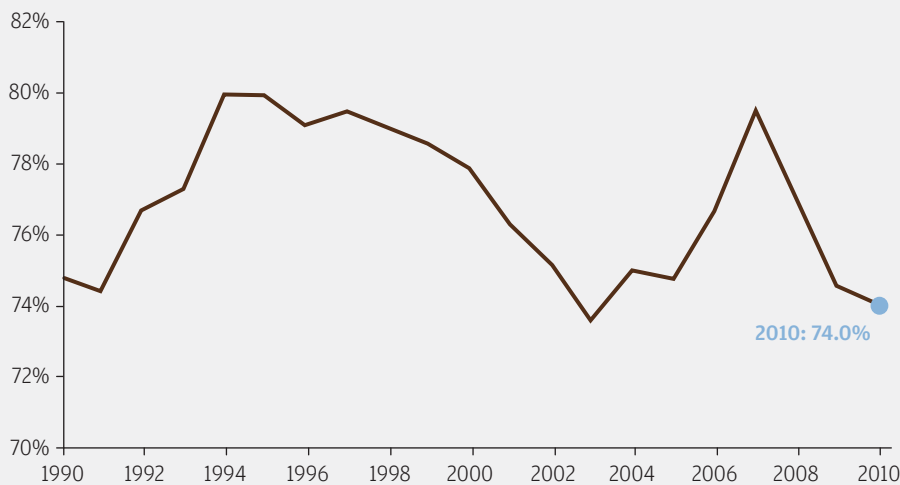
Percent of respondents



Sources: Rasmussen Reports, J.P. Morgan Asset Management.

**CHART K: Loan to price ratio on conventional, single-family mortgages**

All homes, percent



Sources: FHFA, J.P. Morgan Asset Management.

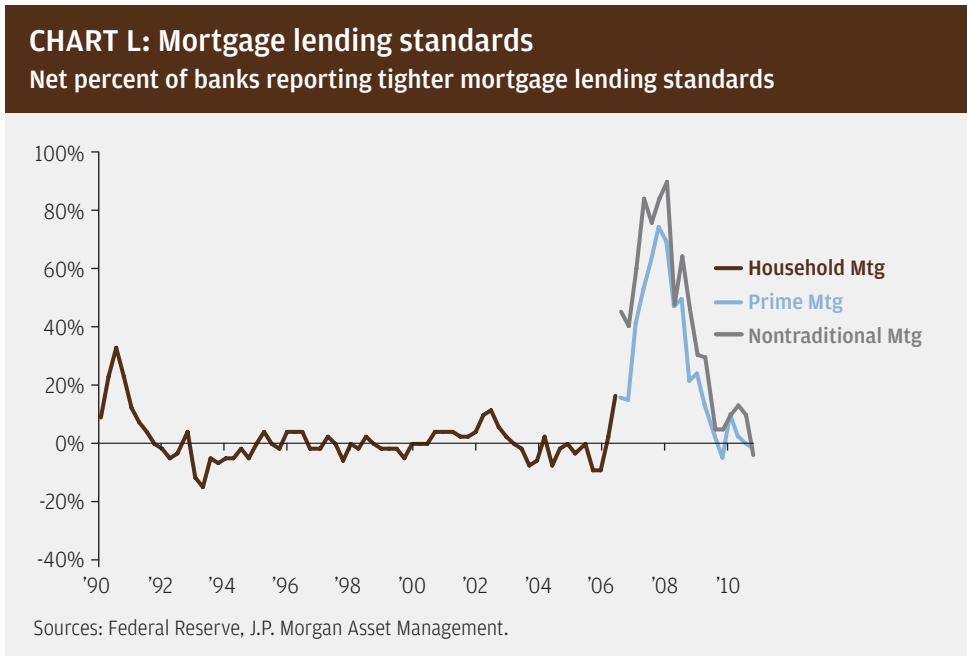
<sup>8</sup>Survey completed September 15-16, 2011 by Rasmussen Reports.

<sup>9</sup>Survey by Pew Research Center, December 6, 2006

A heavy overhang of foreclosures is a reminder of the dangers of easy lending, and a waft of litigation associated with foreclosures is, not surprisingly, limiting the desire of banks to lend to anyone who might, in the future, default. New regulations are reducing bank profitability in certain areas, forcing banks to raise capital, and generating uncertainty about business conditions for banks in the years ahead. Finally, the Federal Reserve's policy of reducing long-term interest rates, while making mortgages more attractive to borrowers, are also making them much less attractive to lenders by squeezing net interest margins and increasing the risk of loss once the Federal Reserve finally allows long rates to rise.

However, having said all of this, in both economics and finance, direction can be as important as levels. As shown in the chart to the right, lending tightened in the aftermath of the housing bubble, but since then banks have been gradually easing lending standards despite a very unfavorable Washington environment.

In the decision to buy a home, as in any investment decision, it is very important to distinguish between levels and changes. Home prices, housing demand and home building are very low, but they all seem set to increase. Housing inventories remain too high, but they are on a downward trend. And while the attitudes of both home buyers and home lenders remain very cautious, they should become less so in the years ahead.



### **The implications of a housing rebound**

If the housing market does begin to recover, what could this mean for the economy? The short answer is: a lot.

First, on average, over the last 50 years, home building has accounted for 4.5% of U.S. GDP, while in the second quarter it accounted for merely 2.2%. If it took five years for housing to return to that average level, then home building alone would directly add almost 0.5% to real GDP growth each year. Moreover, on average, over the last 50 years, U.S. housing starts have amounted to 1.491 million units per year. In every month since April 2007, starts have fallen short of this number, with a cumulative shortfall relative to this average of now 3.3 million houses. Moreover, a steady five-year climb back to this level from the current starts rate of 658,000 would result in a further cumulative shortfall of 1.2 million units relative to normal demand, potentially pushing inventory levels to well below their long-term averages.

In addition, a rebound in home prices would have a dramatic impact on household net worth. Housing is a leveraged investment. As mentioned earlier, even ignoring today's super-low mortgage rates, home prices would have to rise by roughly 27% from current levels to get back to their average relationship to average household income. If this took five years and average household income grew by 4% per year over that period of time, then home prices would rise by roughly 55% over the next five years. However, since home equity now represents just 40% of home prices, an increase of 55% would more than double the housing wealth of U.S. households.

Rising home prices should also help lending in the economy in general, as they would reduce foreclosures and the reserves that banks need to hold against potentially bad loans. Moreover, more lender confidence about the state of the housing market should lead to a more general easing of lending standards back to more normal levels.

However, perhaps most important would be the general effect on confidence of a rebound in U.S. housing. For years, the purchase of a home was a point of celebration, a first solid building block for a family's financial future. The optimism that embodies has been sadly lost in recent years, and the fretful pessimism that has replaced it has discouraged risk taking across all dimensions. When housing recovers, it should improve the public mood, spurring more spending, more hiring and more investing. While housing has always been central to improving family fortunes, today, more than ever before, it is central to a recovery in the nation's. That is why it is important for America to realize that when it comes to housing, now is a time to buy.



To learn more about the  
**Market Insights** program,  
please visit us at  
[www.jpmorganfunds.com/mi](http://www.jpmorganfunds.com/mi).



*Contact J.P. Morgan Funds Distribution Services Inc. at 1-800-480-4111 for a fund prospectus. You can also visit us at [www.jpmorganfunds.com](http://www.jpmorganfunds.com). Investors should carefully consider the investment objectives and risks as well as charges and expenses of the mutual fund before investing. The prospectus contains this and other information about the mutual fund. Read the prospectus carefully before investing.*

The information in this brochure is intended solely to report on various investment views held by J.P. Morgan Asset Management.

Opinions, estimates, forecasts, and statements of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable but should not be assumed to be accurate or complete. The views presented are subject to change. The views and strategies described may not be suitable for all investors. References to specific securities, asset classes and financial markets are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations. This brochure is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security. The information in this brochure is not intended to provide and should not be relied on for investment recommendations. Past performance is no guarantee of future results.

J.P. Morgan Asset Management is the marketing name for the asset management businesses of JPMorgan Chase & Co. Those businesses include, but are not limited to, J.P. Morgan Investment Management Inc., Security Capital Research & Management Incorporated and J.P. Morgan Alternative Asset Management, Inc.

JPMorgan Distribution Services, Inc., member FINRA/SIPC

© JPMorgan Chase & Co., October 2011

WP-MI-HOUSING

NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

**J.P.Morgan**  
Asset Management