# Center for American Progress

## Don't Raise the Federal Debt Ceiling, Torpedo the U.S. Housing Market

Failure to Act Would Have Serious Consequences for Housing Just as the Market Is Showing Signs of Recovery

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#### Introduction

Houses across the country are on display this spring and summer during the annual real estate market's busiest time of year. But hoped-for sales of new and existing houses and the benefits this brings to the broader U.S. economy—could well be dashed by the Republican majority in the U.S. House of Representatives, which continues to toy recklessly with the idea of not raising the federal debt ceiling.

If Congress fails to raise that ceiling then the U.S. housing market would most likely experience a severe double-dip contraction marked by much lower home sales and depressed house prices. That in turn would spark a return of the economic pain of the past few years for many families as foreclosures would remain at or near record highs, and jobs in key sectors, such as construction, would disappear again.

The connection between the debt ceiling, the housing market, the construction industry, and the broader economy is the rate of interest paid on U.S. Treasury bonds and home mortgage rates. Failing to raise the federal debt ceiling, which is the maximum amount that the federal government can borrow without additional congressional action, would cause interest rates to climb, perhaps sharply, and they would remain higher than they otherwise would. Mortgage rates, among other interest rates, would rise alongside interest rates on U.S. Treasury bonds, making homes less affordable and depressing house sales and prices. The housing market double-dip decline that many fear would quickly become a reality, destroying even more of families' home equity, slowing the economic recovery, and cutting much-needed jobs.

This issue brief will examine these links in detail, but a quick overview of the data presented here demonstrates the following:

- Mortgage interest rates will rise more than U.S. Treasury rates. An increase in the 10-year Treasury rate by half a percentage point—which is likely if the debt limit isn't raised—could translate into a jump in the mortgage rate equal to 0.66 percentage points, increasing mortgage rates by close to 14 percent from their current levels to their highest levels since 2008.
- Mortgage rates will remain high for some time. Shocks to Treasury rates typically translate into mortgage rates rising and staying high. The housing market would consequently not get a reprieve once the federal government has to delay debt payments—even if the debt ceiling is eventually raised.
- New home sales could drop to new record lows. The relationship between mortgage rates and new home sales over the past decade suggests that between 27,300 and 31,600 fewer new homes will be sold in 2011 because of the increase in mortgage rates.<sup>1</sup>
- Existing home sales will decrease. Higher mortgage rates will slow the sales of existing homes, such that between 92,700 and 129,500 fewer homes will be sold. The drop in existing home sales will contribute to lower prices.
- House prices will drop in the wake of fewer sales. House prices will drop as owners, developers, and builders looking to sell houses will find fewer buyers. Lower house prices will put more mortgages "underwater"—homeowners owning more than their homes are worth—lowering the incentives for homeowners to stay current with their mortgages. This could keep mortgage delinquencies and foreclosures near record highs.
- The economy will suffer. Count on a repeat of the recent housing market-led downturn of the economy. The housing market's decline during the Great Recession of 2007-2009 dragged down the economy for long afterwards. The economy would have been \$222 billion larger (in 2011 dollars) than it was in March 2011without the decline in new home sales and home extensions alone from December 2007 to March 2011.
- Construction jobs would disappear again. Residential construction jobs fell by 1.1 million from December 2007 to December 2010, accounting for 13.9 percent of the job losses during this period. Residential construction employment has only started to level off in the spring of 2011, putting an end to more than three years of massive job losses. A double dip in the housing market—fewer sales and lower prices—would send construction employment lower again.

So let's examine each of these consequences in turn to demonstrate the sheer folly of playing politics with the federal debt ceiling.

## Higher Treasury interest rates mean higher and lingering mortgage rates

The interest charged on U.S. government debt serves as a benchmark for the interest charged on all other debt. U.S. government debt is seen as risk free, and other debt has to cost more to compensate lenders for the higher risk. The interest rate on U.S. Treasury bonds, or Treasuries as they are often referred to in financial markets, will go up if the debt ceiling isn't raised, which will in turn raise the interest rates on other debt, such as mortgages. Treasury rates will increase because lenders will have to be compensated for the new risk of delayed payments from the U.S. government.

William H. Gross, founder and managing director of PIMCO, one of the largest bond investment companies in the world, estimates that failure to raise the debt ceiling would increase interest rates on Treasury bonds by 50 basis points, or 0.5 percentage points.<sup>2</sup> That, in turn, means mortgage rates would likely rise by more than half a percent, as Table 1 shows. And such an increase in the Treasury rate would result in a larger increase in mortgage rates over time.<sup>3</sup> The average monthly increase for the 10-year Treasury rate when the 10-year Treasury rate rose by at least half a percentage point between 1973 and 2011 has been 0.71 percentage points in the first month, 0.93 percentage points over the first two months, and 0.73 percentage points in the first three months. The initial interest rate shock in the Treasury market eventually starts to subside in the third month.

But the interest rate effect lingers in the mortgage market. Mortgage rates increased by 1.05 percentage points in the third month of the interest rate shock, suggesting that mortgage rates rise by an additional 0.25 percentage points—or about one-third more—than in the Treasury market over the initial three-month period following a shock to Treasury interest rates. A shock of 0.5 percentage points for 10-year Treasuries—which is expected from Congress's failure to raise the debt ceiling—could lead to a 0.66 percentage point increase in mortgage rates over three months. This would raise the interest rate on a traditional mortgage by 13.6 percent to about 5.5 percent—the highest rate since the end of 2008—compared to the average mortgage rate of 4.84 percent in March 2011.<sup>4</sup>

#### TABLE 1 Mortgage rates are greatly affected over time by Treasury rate jumps

Mortgage interest rate impact from Treasury rate increases of more than 0.5 percent over a three-month period

Time period	Change in 10-year Treasury bond rate	Change in mortgage rate	Difference in change between mortgage rates and 10-year Treasury bond rates
One month	0.71	0.38	-0.35
Two months	0.93	0.94	-0.03
Three months	0.73	1.05	0.25

Notes: Author's calculations based on Board of Governors, Federal Reserve System, 2011, Release H.15, Selected Interest Rates, Washington, DC: Federal Reserve.

A shock to Treasury rates—and thus other interest rates—will linger even longer if the debt ceiling isn't raised. The reason: The assumption is that even if the debt ceiling is not raised in August, members of Congress will eventually come to a budget agreement to pay for the government's operations and pay the outstanding debt.

The debt default may be temporary, but the impact on interest rates may be permanent. Higher Treasury interest rates will reflect the new risk associated with lending to the U.S. government—and that estimated risk will not disappear because the government will eventually make its payments. That's because there is nothing to say that Congress won't play the same game in the near future once it has allowed the federal government to default on its debt payments, albeit temporarily.

The U.S. government will hence have to raise interest rates for some time to attract the same amount of interest as before from investors seeking to buy Treasuries. The past experience of Treasury rate increases of at least 0.5 percentage points in a month may understate the effect of an interest rate shock associated with congressional Republicans' failure to raise the debt ceiling since past shocks were temporary.

The data suggest that an increase of mortgage rates by 0.66 percentage points as a result of Congress not raising the debt ceiling is reasonable and possibly understating the effect on mortgage rates.

### Higher mortgage rates result in lower home sales

Higher mortgage rates are typically immediately associated with fewer home sales because it costs more for people to borrow and buy a home. Home sales go down when interest rates go up, and housing prices appreciate less or even fall. Higher interest rates also mean higher mortgage payments, thus making homes more costly. And falling prices mean fewer sales since more buyers fear that home values will end up below their outstanding mortgages. They would rather wait until they are sure that prices have reached their bottom.

These two factors—mortgage rates and house price appreciation—can be combined into one measure: the so-called real mortgage rate. The real mortgage rate is the mort-gage rate minus the rate of house price appreciation.<sup>5</sup> An upward movement of the real mortgage rate, for instance, is the result of rising interest rates, falling house prices, or a combination of both, making the housing market less attractive for potential buyers. A falling real mortgage rate, in comparison, is the result of a lower interest rate, rising house prices, or a combination of the two, indicating that real estate is becoming more attractive for potential buyers.

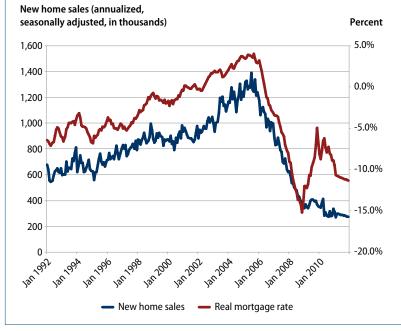
Figure 1 shows the link between the real mortgage rate and new home sales.<sup>6</sup> The real mortgage rate is inverted here to highlight the systematic relationship between interest rates and home sales. The data show that home sales go up if the real mortgage rate goes down, either because mortgage rates fall or because house prices go up (remember that the real mortgage rate is the mortgage rate *minus* the rate of house price appreciation).<sup>7</sup>

The relationship between home sales and the real mortgage rate changed early in the recent economic crisis as a severe credit crunch and a wave of record foreclosures depressed the housing market beyond what house price and interest rate changes would have suggested. The housing market became particularly vulnerable during the most severe part of the Great Recession, meaning that home sales were well below where they should have been given the level of mortgage rates.

The middle of 2009 saw a normalization of the relationship between new home sales and real mortgage rates. The real mortgage rate has gradu-

FIGURE 1 A tie that binds

#### Real mortgage rates and new home sales, 1992 to 2011



Notes: Data after February 2011 are forecast. See text for discussion of calculation. The real mortgage rate is inverted to show relationship with new home sales. Author's calculations based on Board of Governors, Federal Reserve System, "Release H.15 Selected Interest Rate" (2011); Federal Housing Finance Agency, "House Price Index" (2011); and U.S. Census, "New Residential Home Sales" (2011).

ally been rising—it is shown as a declining line in Figure 1 since it is inverted. Mortgage interest rates have slowly moved upward while house prices continued to fall, but at a slower pace, generating a rising real mortgage rate. The two lines have moved closer together, suggesting that the rising real mortgage rate due to higher interest rates has contributed to the slowdown of home sales.

The housing market is still depressed at record low levels, and higher interest rates due to the U.S. government delaying its debt payment could lead to even fewer home sales.<sup>8</sup> What would happen to new home sales if interest rates went up? Mortgage rates could increase by 0.66 percentage points in response to a 0.5 percentage point increase in Treasury rates. The real mortgage rate would increase by at least 0.66 percentage points. The change in the real mortgage rate would be greater if home prices also fell faster due to fewer home sales.

The available monthly data from 2000 to 2005—the boom years—suggest that new home sales increased by 41,400 for each percentage point decrease in the real mortgage rate, and the data for the housing market decline from 2005 to 2008 suggest that new home sales fell by 47,600 for each one percentage point increase in the real mortgage rate.<sup>9</sup>

A 0.66 percentage point increase in the real mortgage rate could depress annualized, seasonally adjusted sales by between 27,300 new home sales and 31,600 sales for 2011. The annualized, seasonally adjusted rate would fall to 254,400 homes, another record low, if sales dropped by 45,600 through the end of 2011, as shown in Figure 2. The housing market double dip would move from speculation to reality.<sup>10</sup>

The data show a similar pattern for existing home sales.<sup>11</sup> Existing home sales go down when the real mortgage rate goes up. Data from 2000 to 2010 suggest that an increase in the mortgage rate by 0.66 percentage points will slow sales by between 92,700 and 129,400 for 2011.<sup>12</sup> Slower sales, though, will mean that foreclosed and other houses for sale will sit longer on the market, thus depressing house prices further from their already low levels.

#### The housing market, the economy, and jobs would suffer

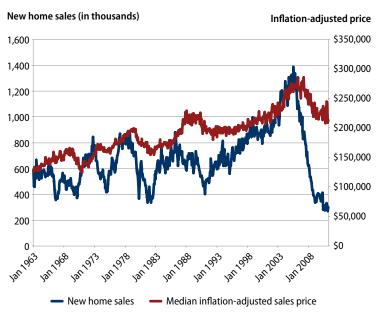
Fewer new home sales would have serious ripple effect throughout the economy. First, there's the effect of fewer sales on home prices. Figure 2 shows that the two lines, sales and inflation-adjusted prices, generally move in the same direction. When sales fall, so will prices. And the median real home sales price—half of all sales are above and half are below this price—has already been hovering around its lowest point since 1997

in recent months.<sup>13</sup> Lower sales, following higher mortgage rates, would thus further depress already low home prices. And this leads to economic hardship for families.

Lower home prices will further erode families' equity in their homes. Home equity as a share of total home values has already fallen to record lows, reaching an all-time low of 38.5 percent at the end of 2010. This means banks owned more than 60 percent of the average home at the end of last year.<sup>14</sup>

The decline in home equity as a share of total home values came as house prices dropped faster than the total amount of mortgages. Mortgages have indeed decreased as banks foreclosed on families and as families could borrow less in a tight credit market. Yet these declines were not enough to keep pace with falling home values, such that the banks owned the majority of families' homes for the first time in December 2007, and families' equity share in their own homes kept going down through the end of 2010, the last quarter, for which data are available.

#### FIGURE 2 Home prices fall with fewer sales



Inflation-adjusted median new home prices and new home sales, 1975 to 2011

Notes: Author's calculations based on U.S. Census, "New Residential Home Sales"; Bureau of Labor Statistics, "Consumer Price Index for Urban Consumers." Families owning a smaller share of their own homes, though, also means that more and more families will fall "underwater"—owe more on their mortgages than their homes are worth—or stay there. There are, however, fewer incentives for homeowners to keep up with payments on their mortgages if they owe more than their homes are worth. More mortgages then become delinquent and ultimately go into foreclosure as the share of homeowners who are underwater on their mortgages goes up.

One in eight mortgages was already delinquent or in foreclosure by the fourth quarter of 2010, and this high level of distressed mortgages has barely budged in two years.<sup>15</sup> An interest rate shock caused by Congress's failure to raise the debt ceiling would only exacerbate the troublesome situation in the housing market.

The troubles in the housing market will quickly spill over into the economy, too. The economy, for instance, would have been \$222 billion larger (in 2011 dollars) in the first quarter of 2011 if there had not been an implosion of new home sales and renovation since December 2007.<sup>16</sup> This adverse effect of a decreasing housing market would only become more severe, slowing economic growth, if rapidly rising mortgage rates pushed the housing market into a double-dip decline.

The economic troubles in new home sales would quickly translate into new woes for construction jobs. Construction jobs for residential buildings decreased by 1.1 million from December 2007 to December 2010, accounting for 13.9 percent of the job losses during this period. And residential construction employment has only started to finally level off in the spring of 2011, putting an end to more than three years of massive job losses.

A double dip in the housing market—fewer sales and lower prices—would send construction employment lower again and prolong the economic pain for laborers and specialty contractors alike.

#### Conclusion

Republicans are gambling with the housing sector's health just as it's starting to stabilize. Not raising the debt ceiling would have serious economic consequences if it became a reality. The housing market would be one of the first sectors feeling the pain from this policy decision. House sales and prices would tumble, quickly raising foreclosures, lowering growth, and destroying jobs.

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#### Endnotes

- 1 The impact of not raising the debt ceiling on other parts of the government could reduce home sales even further. For more details see David Min, "A Shutdown Risks Crippling Still-Recovering Housing Markets" (Washington: Center for American Progress, 2011).
- 2 John Case, "What if Congress does not raise the debt ceiling?" People's World, May 6, 2011, available at http://peoplesworld.org/ what-if-congress-does-not-raise-the-debt-ceiling/.
- 3 The analysis stops with a three month effect to avoid overlapping periods.
- 4 Data taken from the Board of Governors, Federal Reserve System, "Release H.15 Selected Interest Rate."
- 5 House price appreciation is calculated as the 12-month percent change in the House Price Index. The House Price Index is taken from Federal Housing Finance Agency, "House Price Index" (2011).
- 6 The mortgage rate is taken from the Board of Governors, Federal Reserve System, "Release H.15 Selected Interest Rate." New home sales are seasonally adjusted, annualized new residential home sales from the U.S. Census, "New Residential Home Sales" (2011).
- 7 There is a similar relationship prior to 1991, based on quarterly data.
- 8 The discussion here is presented in terms of new home sales since new home sales matter the most for economic growth, but the same relationship between the real mortgage rate and sales also exists for existing home sales.
- 9 The figures represent the change in average annual sales from 1992 to 2005, and from 2005 to 2008 relative to the average annual change in the real mortgage rate during the same periods.
- 10 David Min, Associate Director for Financial Markets Policy at the Center for American Progress, argues that the impact on home sales would be much worse, based on the effect of shutting down the government earlier this spring, which is comparable to not raising the debt ceiling. The Federal Housing Authority, FHA, which insures a significant share of mortgages, could no longer underwrite the same amount of loans that it has since the crisis began and thus result in fewer sales. Also, non-FHA loans generally require verification of Social Security numbers and IRS tax returns, which would be delayed as nonessential employees at the Social Security Administration and the Internal Revenue Service were furloughed due to a government shutdown. See Min, "A Shutdown Risks Crippling Still-Recovering Housing Markets," for more details.
- 11 Data not shown here. New home sales are counted as part of gross domestic product (GDP), while the resale of existing homes is not. New home sale changes are thus more relevant for economic growth and job creation than existing home sale changes. Existing home sales data are annualized seasonally adjusted rates, taken from the National Association of Realtors, "Existing Home Sales" (2011). New home sales are counted as part of gross domestic product, GDP, while the resale of existing homes is not. New home sale changes are thus more relevant for economic growth and job creation than existing home sale changes.
- 12 Calculations based on National Association of Realtors, "Existing Home Sales"; Board of Governors, Federal Reserve System, "Release H.15 Selected Interest Rate"; and U.S. Census, "New Residential Home Sales" (2011).
- 13 The average inflation-adjusted sales price is above the median and at its lowest point since 1998 with \$246,800 in March 2011. Data taken from U.S. Census, "New Residential Home Sales,"The data are adjusted for inflation by the Consumer Price Index for Urban Consumers (CPI-U), such that March 2011 is the base month, i.e. inflation-adjusted and nonadjusted prices are the same in March 2011.
- 14 Data taken from Board of Governors, Federal Reserve System, "Release Z.1 Flow of Funds Accounts of the United States" (2011).
- 15 Data taken from Mortgage Bankers Association, "National Delinquency Survey" (2011).
- 16 Author's calculations based on Bureau of Economic Analysis, 2011, National Income and Product Accounts, Washington, DC: BEA. This is just the direct effect of decline home sales and renovations on economic growth. It does not count the losses due to lower construction employment, fewer job in mortgage banking, less spending on furniture and home improvement goods, less household wealth, among others.