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Underwater households and strategic default

Massive strategic defaults are not going to occur

Economic Research

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- **Negative equity is a necessary condition for default, but not a sufficient one**
- **In most of the States, there are ways lender can recover the mortgage debt. In those States, strategic default does not make economic sense**
- **Sociological aspects have a significant influence on borrower behavior regarding negative equity and strategic foreclosures**
- **If underwater households strategically default, the net effect on housing demand would be negligible**

Housing prices and strategic default

Excess of housing supply at the end of 2010, is estimated at two million homes, one million below the peak reached in mid-2007. This adjustment allowed housing prices to stabilize during 2010. However, a sudden increase of this inventory could put pressure on residential prices again and lead to a further decline.

Some analysts believe that a large share of households "underwater" will go through "strategic default", thereby significantly increasing inventory levels. This is a recurrent issue in economic circles since the end of the housing tax credit, generating an element of uncertainty in the residential market. A household is underwater when mortgage debt is above the current price of the house used as collateral of the loan. A strategic default is when the borrower decides to default on the mortgage even if it can continue making the payment. This potential increase in homes for sale and further price depreciation would have a negative effect on both household wealth and consumption. It could also increase the risk of deflation. In addition, it could deteriorate the loan portfolio of financial institutions, increasing the bankruptcy risk for commercial banks. In this environment, an economic double-dip would be very likely.

In this brief we a take close look at the elements behind mortgage default and find that the risks of massive strategic defaults are overblown as households rationally consider many other factors besides financial before defaulting.

Negative equity is a necessary condition for default, but not a sufficient one

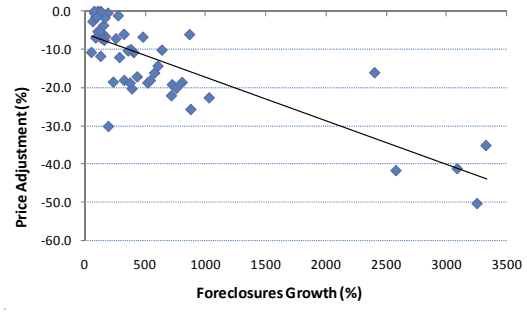
From a theoretical point of view, negative equity is a necessary condition for default; otherwise the borrower could sell the house and pay off the mortgage. But it is not a sufficient condition. Negative equity, as a result of declining housing prices, when it occurs in combination with increasing unemployment rate can explain a large proportion of the increase in residential mortgage default ratios observed since the economic recession began. The intensity of the blow will also depend on: a) type of mortgage amortization scheme (conventional, interest only, etc.); b) type of interest rate (fixed or adjustable); c) borrower's credit quality (prime or subprime); and d) purpose of the housing tenure (investor occupied or owner occupied).

As data confirms, declining housing prices and unemployment growth are both highly correlated with an increase in default ratios when compared at the state level. Declining home prices by state (measured as the price difference from peak to bottom) has a negative correlation of 80% with foreclosure variation (measured as the percentage change from the minimum to the maximum level). Unemployment growth (measured as the percentage change from the minimum to the maximum rate) has almost a 60% correlation with the increase of the mortgage loan foreclosure variation when considered by state.

[1] Gerard O'Neill, 2009. http://www.turbulenceahead.com/2009/05/negative-equity-so-what.html

Graph 1

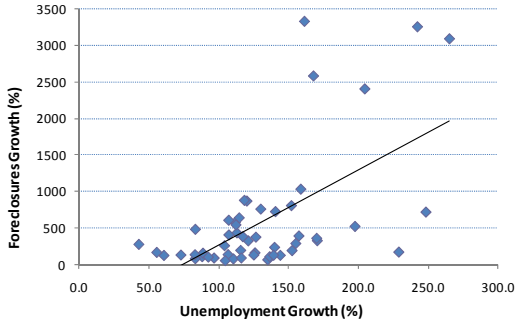
Housing Price Adjustment and Foreclosure Growth by State. %



Source: BBVA Research

Graph 2

Unemployment and Foreclosure Growth by State. %



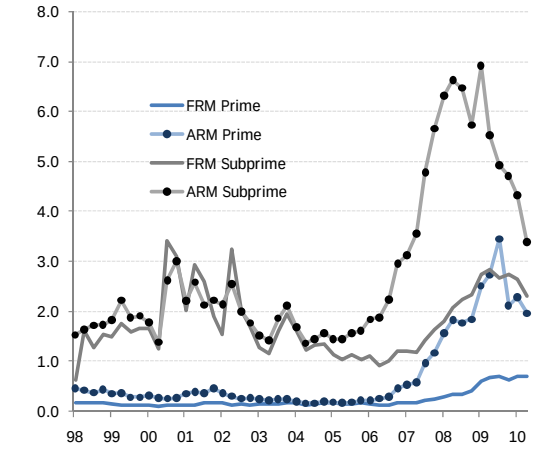
Source: BBVA Research

Some mortgage types are more likely to end up in negative equity than others (Ellis, 2008). Regarding the amortization scheme, repayment of conventional mortgages depends on the initial amount borrowed, the maturity period and the interest rate. Interest-only and negative amortization mortgage schemes do not necessarily involve the repayment of principal in the early years of the life of the loan; thus, the total debt remains constant or increases over time. In an environment of declining residential prices and unemployment growth, the latter two mortgage types are more likely to enter into negative equity than conventional mortgages.

Taking into account the type of interest rate of the mortgage, data from the Mortgage Bankers Association (MBA) suggest that in the recent housing meltdown adjustable-rate mortgages (ARM) have a higher probability of default than fixed-rate mortgages (FRM). Regarding the credit quality of the borrower, data indicates that the lower the credit score, the higher the probability of default (Haughwout and Okah, 2009). Therefore, a subprime borrower with an interest-only amortization scheme and an adjustable interest rate would have a higher risk of default than a prime borrower with a conventional fixed interest rate mortgage. In addition, it is important to note that the investor occupied housing foreclosure ratio is two percentage points higher than the owner occupied foreclosure ratio, according to First American CoreLogic data.

Graph 3

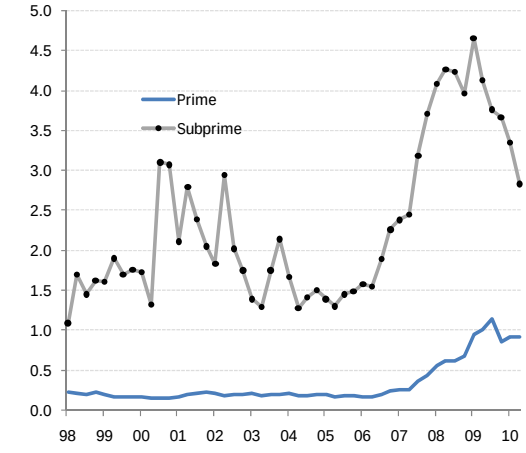
Mortgage Foreclosures Started in the Quarter. As % of portfolio



Source: MBA

Graph 4

Mortgage Foreclosures Started in the Quarter. As % of portfolio



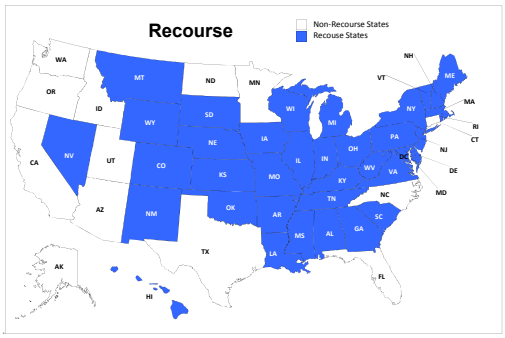
Source: BLS and Federal Reserve

In most of the States, there are ways lenders can recover the mortgage debt. In those States, strategic default does not make financial sense

According to First American CoreLogic, at the end of the second quarter of 2010, there were almost 11 million households whose mortgages had a higher outstanding balance than the property's current value. These families represented almost 23% of all families with mortgage debt. More than half of these households (about 6 million) were concentrated in five states: NV, AZ, FL, CA and MI. In NV, almost 70% of properties with a mortgage outstanding were underwater. In AZ and FL this ratio was around 50% while in CA and MI it was just below 40%.

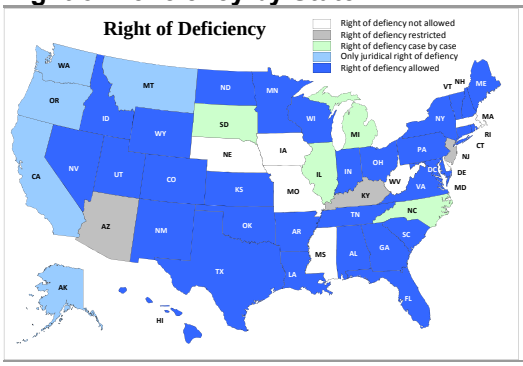
For underwater households, strategic default could carry legal consequences. According to mortgage legislation, in most states there are several ways lenders can recover the total amount of the mortgage debt. One potential way is mortgage recourse; which is possible in 36 out of 50 states plus Washington, DC. Recourse basically means that the lender can come after the borrower if the property sold at auction or through a short sale is for less than the amount owed the lender. Another legal method is mortgage deficiency, which is applied in different degrees in 43 out of 50 states plus the District of Columbia. When available, deficiency judgment is a court order permitting the lender to collect the amount of debt which is still left unpaid by the mortgagor even after foreclosure of the property or any type of security put against the loan.

Graph 5
Recourse and Non-Recourse States



Source: BBVA Research

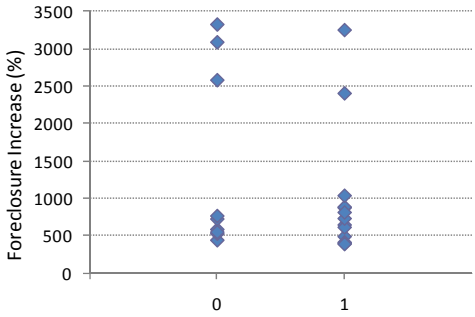
Graph 6
Right of Deficiency by State



Source: BBVA Research

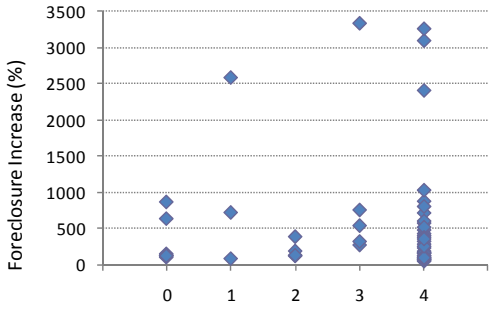
Current data show that there are no significant differences in foreclosure growth between those states that allow the lender to recover the total amount of mortgage debt and those which limit the legal action of the lender. This confirms that states with high underwater ratios and a weak legal framework will not necessarily experience a significant increase in default ratios. Likewise, states with strong legal framework and low underwater shares could have a high increase in delinquencies.

Graph 5
Recourse and Foreclosure Growth by State. (%)



Recourse: 0=not allowed; 1=allowed
Source: BBVA Research

Graph 6
Right of Deficiency and Foreclosure Growth by State. (%)



Deficiency: 0=not allowed; 1=restricted; 2=case by case; 3=only juridical; 4=allowed
Source: BBVA Research

Sociological aspects have a significant influence on borrower behavior regarding negative equity and strategic foreclosures

A recent survey (Fannie Mae, 2010) reveals several sociological aspects of the underwater households that help to understand their position on strategic default. It also reveals that at the end of the first half of 2010, the households had better perspectives than at the end of 2009. According to July 2010 survey, the percentage of underwater homeowners who were somewhat or very stressed decreased to 35% from 48% observed in the December 2009 survey.

Other interesting survey findings are that 69% of underwater borrowers say owning a home is a safe investment. Also, underwater borrowers increasingly feel that if they were to stop paying their mortgages, their lenders would pursue their assets (9 points above from December 2009). Finally, the vast majority of respondents still disapproved of borrowers stopping their mortgage payments; 91% of underwater borrowers said they would not stop their mortgage payments.

Although surveys have potential biases that limit the analysis and conclusions, they help to understand borrower behavior. In general, in the mentioned survey, underwater borrowers responded more like the general mortgage population than delinquent borrowers.

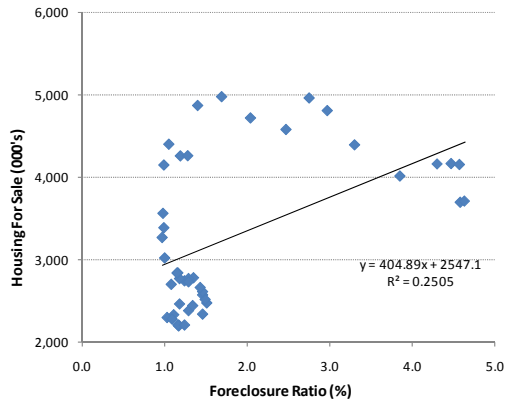
This confirms that the economic value of owning a house is not only the equity of the asset but also the value attached to other elements such as quality of education, safety, living space and control to modify it, location, symbol of success, community involvement, and ethical values. Therefore, an underwater borrower could not fall into strategic default if the sum of the economic value of all these elements more than compensates the financial gap.

What if households strategically default?

Housing is not only an investment asset with uncertain potential to generate capital gains but also a consumption good. As an investment, it could have either positive or negative capital gains through time. As a consumption good it has two particular characteristics: it is a basic necessity and it has no substitute.

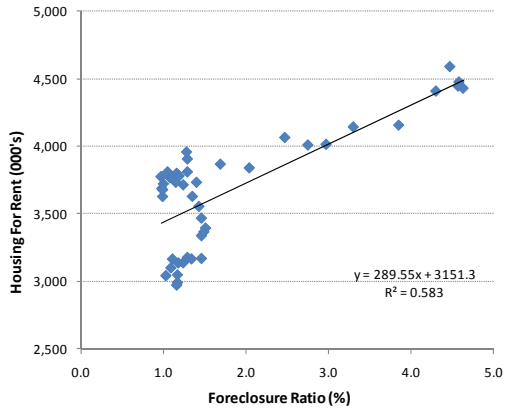
Let's assume that the 11 million underwater households decide to strategically default. Delinquency and foreclosure rates would skyrocket. On the one hand, a rise in delinquency rates generally will lead to an increase in housing supply, either for sale or for rent (around 11 million). The distribution will depend on the inventory level and the initial foreclosure rate. In fact, data show that once the inventory of housing for sale reaches a certain level, an increase in foreclosures does not add further to the supply of homes for sale but rather homes for rent. This could reflect that a large share of foreclosed properties is removed to the rental market. On the other hand, the housing demand would increase roughly 11 million of units; equivalent to the number of households that strategically defaulted mainly covered by the rental housing segment. As a consequence, rents would increase and attract investors to the market, resulting in higher housing prices.

Graph 7
Foreclosure Ratio and Inventory of Homes for Sale. (%)



Source: BBVA Research

Graph 8
Foreclosure Ratio and Inventory of Homes for Rent. (%)



Source: BBVA Research

The final result on prices would depend on the cross effects of supply and demand. Rental houses and apartments would see an increase in their prices (most of the underwater households would not be able to buy a house and, therefore, they would need to rent). Meanwhile, inventory of homes for sale will increase and prices would depreciate. The net effect on housing demand would be negligible, unless underwater families decide to become homeless or live with their in-laws. In any case, what is clear is that the share of the rental segment would increase while that of the owner occupied would decrease. In addition, underwater households would have to assume capital losses and they would also see their credit score deteriorate, compromising future consumption. This environment could be more harmful if financial institutions increase their write-downs and tighten credit conditions again.

Conclusion

According to our analysis further home price declines cannot be ruled out. However, this is only likely to happen if delinquencies and foreclosures rise in combination with an increase in unemployment. The fears of higher delinquencies and foreclosures stemming from strategic defaults from underwater households seem flawed. In the case of households that live in their own houses, a question arises when they have negative equity: Will they rationally default as soon as they fall underwater on their mortgages or will they stay in their houses and pay their mortgages? In fact, "negative equity only becomes a financial liability if and when the home owner sells: up until that point it is a matter of opinion rather than fact[1]". Massive strategic defaults are not going to occur. If this hasn't happen with higher ratios of underwater borrowers and worse economic expectations, why should it happen so suddenly?

Our outlook for home prices is not dazzling. However, economic fundamentals limit downside risks and our baseline scenario indicates moderate price appreciation. Additional monetary policy easing will support the secondary mortgage market and, therefore, the primary market. Most importantly, the higher quality of 2009-2010 mortgage vintages, with less ARM and subprime loans, will help to limit delinquency and foreclosure ratios.

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Fannie Mae, 2010. Fannie Mae National Housing Survey. September 2010. Available at: <http://www.fanniemae.com/about/housing-survey-091610.html>

[1] Gerard O'Neill, 2009. http://www.turbulenceahead.com/2009/05/negative-equity-so-what.html

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