

Research Review

Out of the Woods? -Denali Research Commentary on the Housing Market

By Robert Snigaroff, President & Chief Investment Officer

The U.S. and the world financial system continues to trudge through a bout of highly unusual stress. The spread between Fed funds and T-bills – a measure of financial stress – at the time of the Bear Stearns forced sale in March rose to 250 basis points; a 10 sigma event; and has bounced around above 5 since then. For the VAR model building risk management PhD's it's been a lesson in fat tails likely leading to a fair number of pink slips. Are we out of the woods yet? At Denali, we don't think we are yet.

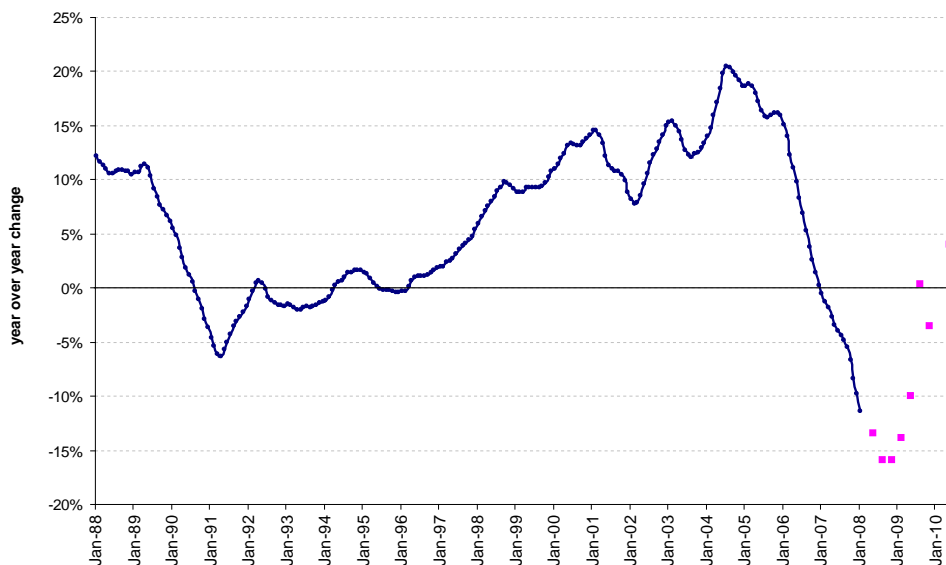
Exhibit 1 is a graph of U.S. house prices. The solid line is the Standard & Poor's/Case Shiller national index of home prices. The dotted line is the futures implied prices of the CME futures contracts on that same index. This CME futures contract is extremely thinly traded and we wouldn't suggest making too much of the dotted portion of this graph. However, housing transactions, because of their expense and lack of liquidity (not to mention the difficulty of moving) make serial correlation in the house price series a defining feature of the asset; and unfortunately the solid line is still well below zero. As housing prices are the ultimate source of the current predicament, we think it is useful to keep this in mind.

So a useful question is: when is the bottom for the housing market? For our estimate we look at subprime adjustable rate mortgage (ARM) loans. These loans

have a higher chance of delinquency at the month of the interest rate reset. If we assume houses with subprime ARMs becomes delinquent at the month of rate reset and the houses enter foreclosure six months after delinquencies, the rate of foreclosure will reach a peak six months after the peak of interest rate resets. As shown in Exhibit 2 below, the maximum subprime ARM reset is around August – October 2008. This implies the rate of foreclosure will reach a peak

around March 2009. The current existing home inventory represents a 9.6-month supply according to the National Association of Realtors [1]. The total number of foreclosed homes in the housing inventory will continuously increase until the peak of foreclosures walks off the 9.6 month supply window. The increasing supply of foreclosed homes in the housing supply will continuously decrease the house price as the demand is

Exhibit 1: Composite S&P/Case Shiller Home Price Index with CME Futures implied prices



[1] http://www.realtor.org/press_room/news_releases/2008/existing_home_sales_rise_in_february.html

not likely going to increase in the near future. Many borrowers with ARMs have been refinancing with fixed rate loans, but only those who can. We believe the residential home price will not reach the bottom before the end of 2009 (consistent with the CME futures implied in Exhibit 1).

The federal government has been undertaking efforts to alleviate delinquencies, which conceivably ease the housing market slide. These include:

1. The FHA Secure program has helped 3000 homeowners with ARM loan resetting. This means less than one billion dollars of the ARM mortgage is not resetting to a high rate. This policy only able to decrease the number of foreclosure properties by 3000 which is less than 0.3% of the total foreclosure properties in 2007[2].
2. The administration has increased the size of mortgages that Fannie and Freddie can guarantee, from \$417,000 to as high as \$729,750 in some areas.
3. The Federal Reserve has cut interest rates consecutively in large steps.
4. Federal Reserve has injected more liquidity to the mortgage security market through expanding its lending to banks and securities dealers in hope of lowering the mortgage rate.

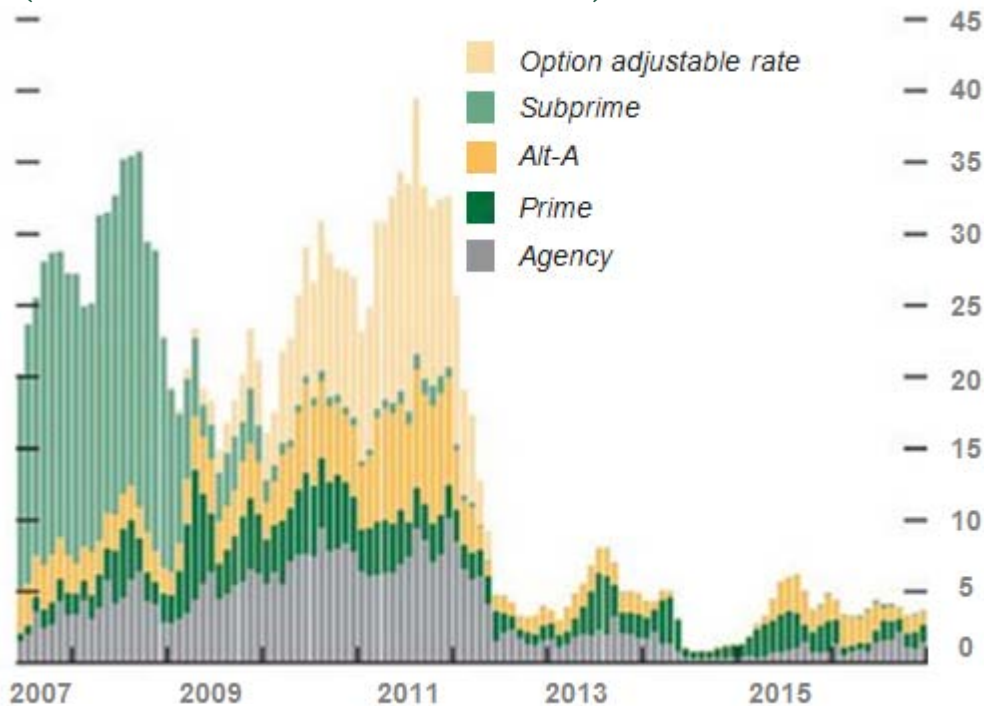
According to the International Monetary Fund's report [3], the value of subprime mortgage, Alt-A mortgages, and their securitized MBS and CDO's is approximate \$2.4 trillion. Given this large scale problem, we believe the federal effort is not going to stop home prices from falling further. The federal effort may shorten the period of the housing market drop. However, the low affordability, low rental return, the tightening of lending standards, and buyers' expectation of a continual fall in house prices will lead to lower demand and lengthen the house price decrease period.

What does this mean for stocks? Obviously those sectors that directly and indirectly depend on house prices have fared poorly. We believe this will continue. But importantly, we believe the financial sector will continue to underperform. An increase in the average credit spread of 50 bp in the mortgage security market generates an estimated loss of \$270 billion in value for the \$11 trillion dollar residential mortgage market. The entire credit crisis has hinged on problems in this market. Although

Exhibit 2: Monthly Mortgage Rate Resets

The first reset in billions of U.S. dollars

Figure 1.7. Monthly Mortgage Rate Resets (First reset in billions of U.S. dollars)



Source: Credit Suisse.

banks are de-leveraging via capital infusions and reducing loan activity, we still think there is more pain to come for many banks, as well as other holders of mortgage securities.

Our model successfully forecast problems in financials (where Denali has been and continues to be underweight) in the second half of 2007, and continues to forecast relative underperformance going forward. There have been a couple of rebound months for financial stocks; but we think these are largely due to technical position unwinds (i.e., August 2007, January 2008) by hedge funds and others who themselves have episodically de-levered their own positions. In answer to the question of whether we are “out of the woods yet” we think *the woods* – in this case a suburban forest of forlorn foreclosure signs – are going to get a little thicker.

[2] <http://www.realtytrac.com/ContentManagement/pressrelease.aspx?ChannelID=9&ItemID=3988&acct=64847>

[3] <http://www.imf.org/External/Pubs/FT/GFSR/2008/01/index.htm>

About

Denali is an independent investment boutique that specializes in U.S. value equities. All of our investment strategies leverage the same proprietary forecast model and benefit from the experience, skill, and judgment of our investment team.

We serve an array of institutional clients include public pension funds, Native American tribes, corporations, and endowments. We manage a total of over \$1billion in assets along the following strategies:

- Large Cap Value
- Mid Cap Value
- Market Neutral Hedge Fund

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