

Calculated Risk⁴Real Estate

CR and Tanta Present: A monthly real estate analysis

Introduction

I love real estate investing.

That may seem like a strange introduction—especially for a “housing bear”—but I grew up in a real estate family, and I’ve invested in real estate my entire adult life. My father was a real estate broker and developer, and my mom worked part time in real estate too.

Tanta is an experienced mortgage banker, and she has always taken pride in helping people buy homes.

We’ve both been appalled by the bubble in housing and real estate, most of all the lax underwriting standards and lack of regulatory supervision. And we’ve written extensively on our blog (www.calculatedrisk.blogspot.com) about the bubble, and mortgage related issues.

But I’m no housing permabear. I’d like to buy more investment property and perhaps a new home someday. Perhaps some readers are interested in buying a home or investment property. Others might be interested in following real estate as part of their stock market investing. Hopefully this newsletter will be useful to all.

Our intention with this newsletter is to follow the national housing market closely, write about housing economics and mortgage issues, and provide readers with some tools to analyze their local markets. I also hope to provide examples of possible investments or home purchases.

Most importantly, we will try to write about the housing and real estate issues that

interest you—and your feedback is greatly appreciated.

Thanks for subscribing and Best Wishes,

CR and Tanta

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Thanks!

Housing Supply

When people talk about real estate and housing, the first topic is almost always price.

If housing were a perfectly competitive market, changes in supply and the quantity demanded would immediately impact price, bringing the quantity demanded and the quantity supplied back into balance. However, for housing, prices tend to display strong persistence and are sticky downward. Sellers want a price close to recent sales in their neighborhood, and buyers, sensing prices are declining, will wait for even lower prices. This means that real estate markets do not clear immediately, and what we initially observe during a housing bust is a

drop in transaction volumes and a surge in inventory.

For those analysts just looking at price, the first year or two of a housing bust doesn't look too bad. This can (and did) lead many observers to the wrong conclusion. However, by focusing on inventory levels, we could correctly predict that prices would eventually decline, and now predict that prices will decline significantly more over the next couple of years (or longer). In fact we are now seeing prices falling by all measures, and most predictions are for prices to fall nationally by 15% or more from peak to trough.

We will write about many housing issues, such as changes in demand due to tighter lending standards and buyer psychology, and we will track prices and project future price declines. But a key focus every month will be on supply.

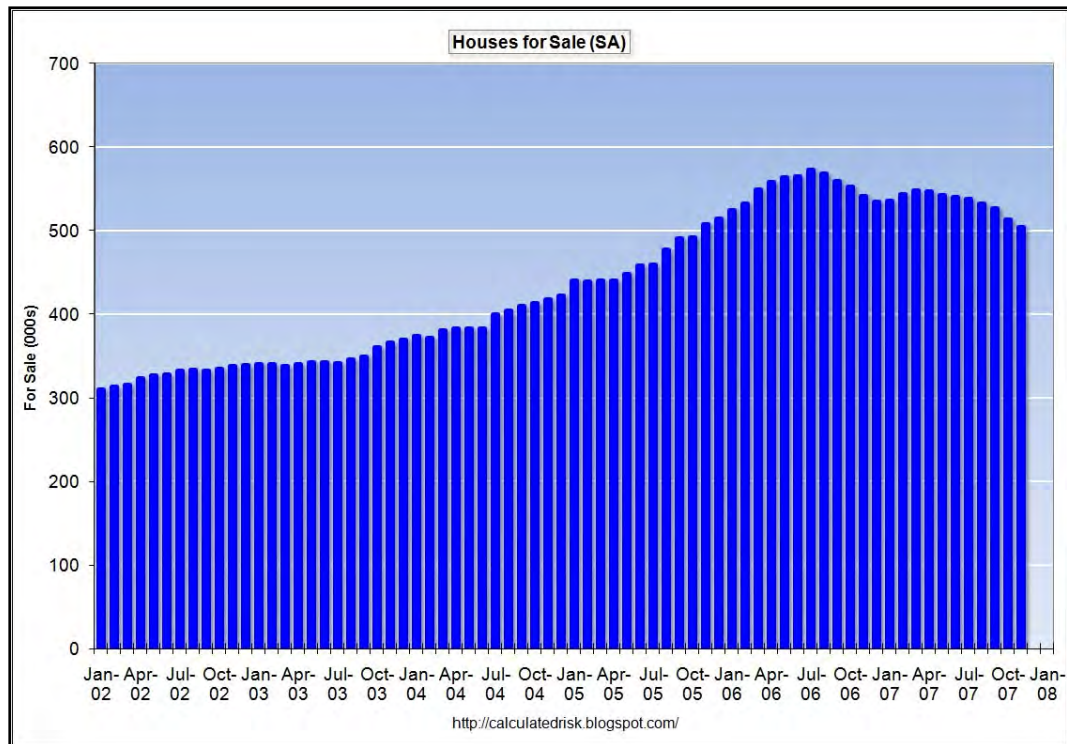
There are several different ways to look at

supply. The most frequently mentioned measures of supply are new and existing home inventory levels released monthly by the Census Bureau and National Association of Realtors (NAR) respectively.

The first graph shows new home inventory—houses for sale, seasonally adjusted (SA)—from the Census Bureau.

At first glance it appears new home inventory is declining. However there are a couple of important issues with new home inventory. First, the Census Bureau ignores cancellations, so during periods of rising cancellation rates, the Census Bureau overstates New Home sales and understates the increase in inventory. Conversely, during periods of declining cancellation rates, the Census Bureau understates sales.

By my calculations, the inventory of new homes is currently understated by about 100K.



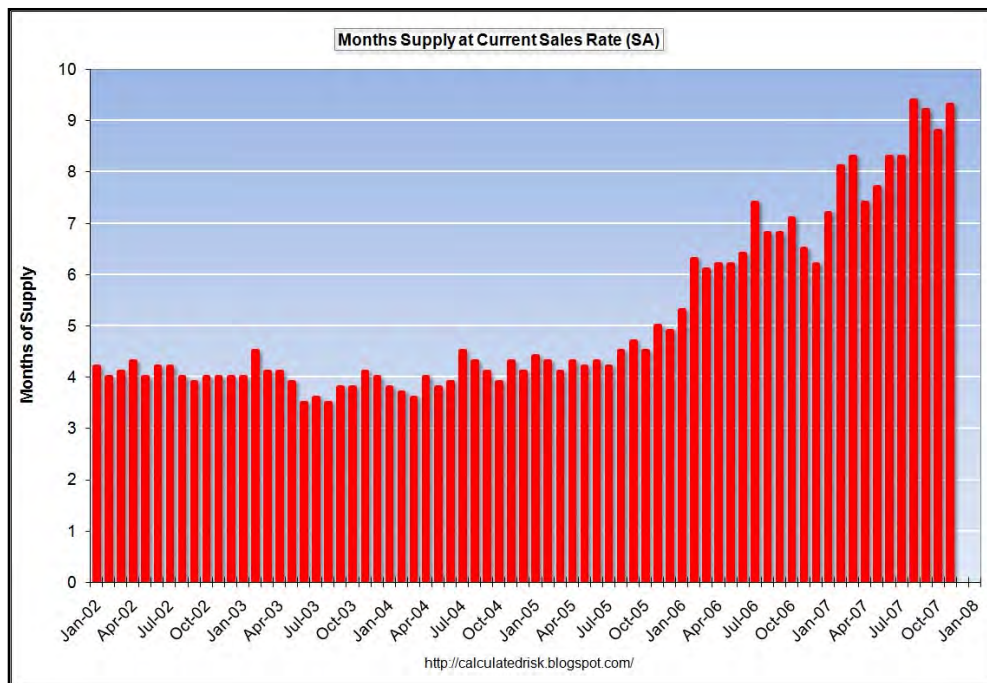
Second, new home inventory excludes many condominiums. The Census Bureau inventory includes only new single-family residential structures that include both the structure and the land. The Census Bureau defines single-family homes as either fully detached structures or certain attached homes with an unbroken ground-to-roof separating wall. This definition includes some condominiums (side by side units), but does not include condominium units with another unit above or below.

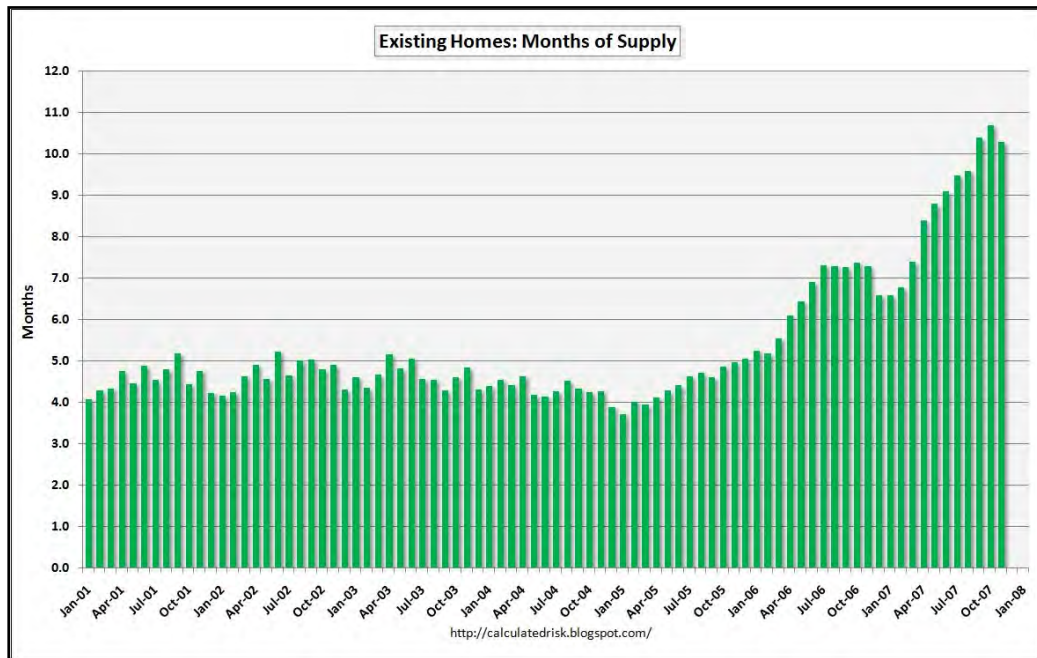
Although large multi-story condominium projects account for a small percentage of housing units in the U.S., it is important to note that inventory for these units are not included in the New Home sales report. Based on anecdotal evidence, there are a large number of these units currently for sale in certain communities (like Miami) – and this will impact housing in those communities.

Another way to look at new home inventory is as “months of supply” at the current sales rate. Currently the Census Bureau is reporting the “months of supply” is 9.3 months. Ignoring cancellations also means that the “months of supply” is understated. After adjusting for the impact of cancellations, the actual “months of supply” is probably closer to 11.3 months.

The general rule of thumb is about 6 months is the normal level of inventory. Anything above about 8 months will put downward pressure on prices. Conversely 4 months of inventory will put upward pressure on prices.

But new home inventory is just a small part of the picture. The graph on the following page shows nationwide inventory for existing homes. Note: Unlike the new home inventory data, the existing home inventory data is not seasonally adjusted.



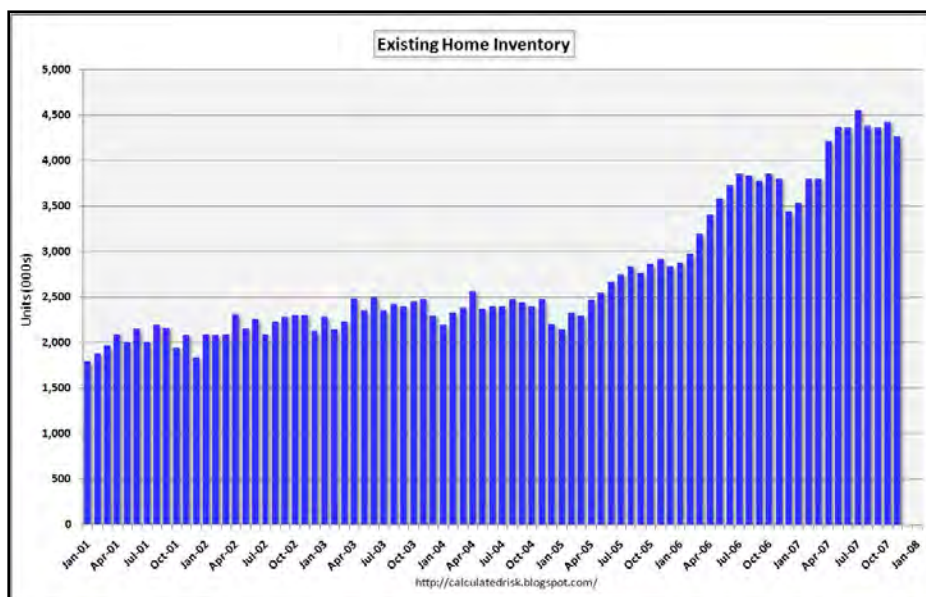


According to NAR, inventory was down slightly at 4.273 million homes for sale in November. This is a slight decrease in the inventory level from the last few months, and the months of supply also decreased slightly to 10.3.

This is the normal historical pattern for inventory - inventory peaks at the end of summer and then stay fairly flat until the

holidays (it then usually declines somewhat). This says nothing about the increasing anxiety of sellers and the rising foreclosure sales.

Looking ahead: the typical seasonal pattern is for existing home inventory to decline sharply in December (usually by about 15%), as homeowners take their homes off the market for the holidays. This will be



important to remember when the December data is released (at the end of January).

With the “months of supply” at 10.3 months, there is significant downward pressure on prices. I also expect sales to fall further in 2008, and the “month of supply” to be near record levels next summer.

The next graph shows the annual sales and yearend inventory since 1982 (sales since 1969), normalized by the number of owner occupied units. This shows the annual variability in the turnover of existing homes, with a median of 6% of owner occupied units selling per year.

Currently 6% of owner occupied units would be about 4.6 million existing home sales per year. This indicates that the turnover of existing homes - November sales were at a 5.0 million Seasonally Adjusted Annual Rate (SAAR) - is still above the historical median.

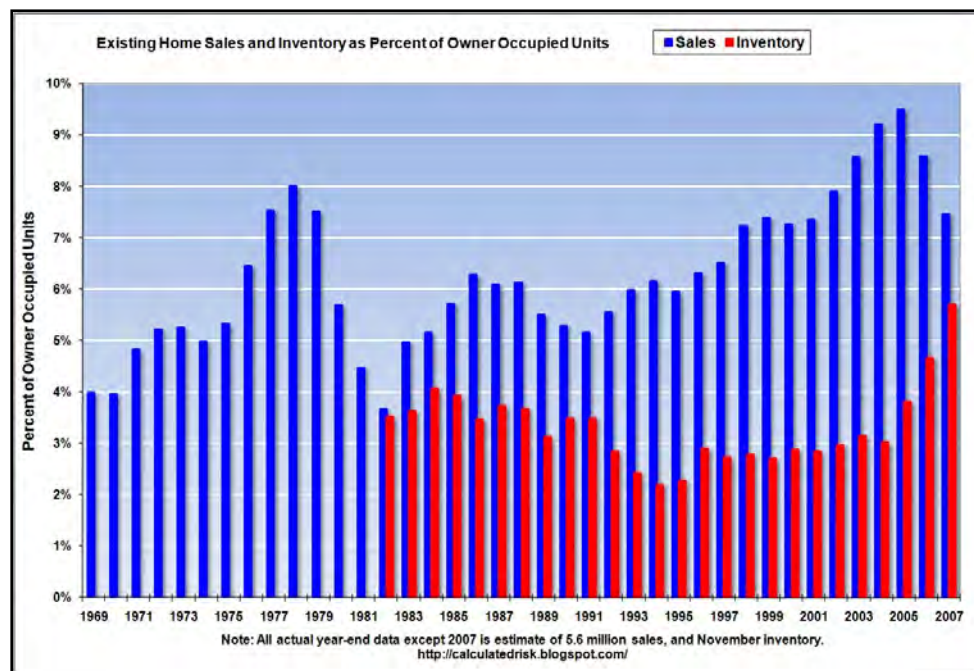
This suggests sales could fall much further in 2008.

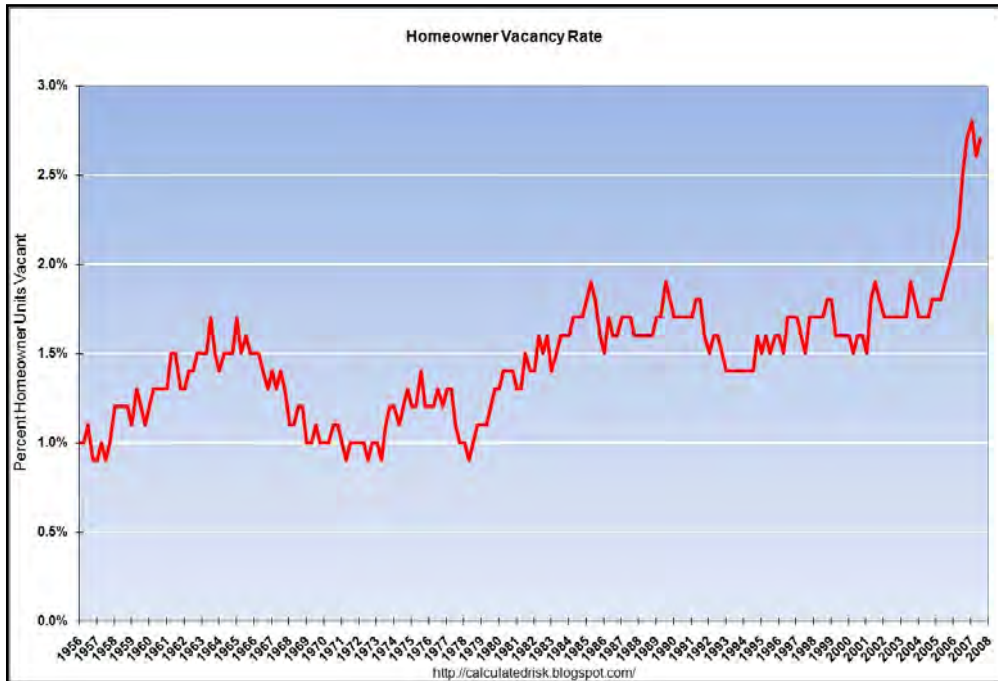
And for inventory, even if inventory declines 15% in December to 3.6 million units, it will still be at a record level of yearend inventory, both in absolute numbers and as a percent of owner occupied units.

Another way to look at excess supply is to use the homeowner and rental vacancy rates from the Census Bureau.

The graph on the following page shows the homeowner vacancy rate since 1956. A normal rate for recent years appears to be about 1.7%, and the current rate is 2.7%. There is some noise in the series, quarter to quarter, but it appears the vacancy rate might have stabilized.

Still this leaves the homeowner vacancy rate almost 1% above normal, and with approximately 75 million homeowner occupied homes; this gives about 750 thousand excess vacant homes.





Sometimes rental units are a reasonable substitute good for single family homes. So we also need to consider the rental vacancy rate, and calculate the excess rental units.

The rental vacancy rate has been trending down slightly for almost 3 years (with some noise). This was due to a decline in the total number of rental units in 2004, and more recently due to more households choosing renting over owning.

It's hard to define a "normal" rental vacancy rate based on the historical series, but we can probably expect the rate to trend back towards 8%. This would suggest there are about 700 thousand excess rental units in the U.S. to be absorbed.

Source	Units
Rental Units	630,000 (1)
Vacant Homeowner Units	750,000 (2)
Excess Builder Inventory	250,000 (3)
Total	1,630,000

The chart below is a rough estimate of excess inventory.

(1) According to the Census Bureau there are 35.12 million rental units in the U.S. If the rental vacancy rate declined from 9.8% to 8%, there would be 1.8% X 35.12 million units or about 630,000 units absorbed. A 2% decline would be 700,000 units.

(2) Based on the homeowner vacancy rate declining from 2.7% to 1.7% on 75 million units.

(3) Based on a return to 5 months of hard inventory (completed or in process). 100,000 additional units are included based on rising cancellation rates.

Finally, it's important to remember that housing markets are local - most housing services aren't transportable - and one area of the country might have different dynamics than other areas. CR

The Mortgage Scene in 2008

The current credit crunch in residential mortgages will, obviously, continue to exert downward pressure on prices for the foreseeable future. We will continue to discuss these issues throughout the year, as the shape of the new mortgage landscape becomes clearer. The following, however, reflect my sense of the reality of real estate financing in the new year.

Back to Commodity Product. Fannie Mae, Freddie Mac, and FHA products have become, in many markets, the only games in town. Clearly, unless legislation passes to increase the conforming loan limit, that means that financing pressures are most acute in the jumbo market (loans over \$417,000). Within the low-to-moderately-sized loan market, however, it means significant commodification of mortgage offerings.

When everyone is selling to the agencies, everyone offers the same product in the same tight price band. However, pullback from toxic lending excesses has limited the extent to which lenders can differentiate themselves in a commodity market with “speedy processes.” Margins are so thin that “buckshotting,” or brokering an application to many different lenders solely to find the best possible rate, becomes much less likely, as lenders cannot afford to process unserious applications.

Normally, such a market would give advantage to the “800 Pound Gorillas” (the very large national lenders with traditionally the most pricing power), but they’re having their own capital and servicing and portfolio management problems. In addition, many of them achieved their “economies of scale” and national market penetration precisely in those channels—wholesale and correspondent—that are being shut down in

the flight from credit and fraud risk. The bright side for real estate investors may be that smaller lenders with better service provision and local smarts may again be able to compete on rate. The bad news is that no one will compete on product: you’ll likely get the same terms offered from any lender you choose, unless you’re willing to pay a hefty premium for something “out of the box.”

Back to Retail. Retail mortgage origination is expensive and inefficient compared to wholesaling, but lenders can manage the risk and at the moment no other consideration matters much. Many lenders are in a position of having to, in effect, “subsidize” their mortgage operations, as volume is so low and loan (gain on) sales are either nonexistent or not especially lucrative. Depository lenders who wish to commit portfolio dollars to keeping their origination operations going will do so only in the retail channel.

This not only cuts loose brokers; it cuts loose a lot of correspondent lending in which smaller depositories (like community banks and credit unions) have been off-loading mortgages onto the big aggregators (who are currently shutting down their correspondent operations). There’s never been any upside of carrying a wholesale operation in a downturn—the whole point of wholesale lending is that it can be thrown off in a downturn, since brokers aren’t your employees—but it has never made less sense than it does today to stay in that channel. This has “tightening” effects in and of itself, beyond guideline or price tightening: more loans are being made by an originator who has some stake in the outcome (not as much as they ought, but more than a broker does). The upside for the serious real estate investor is the elimination of unqualified buyer competition; the problem will be that small local lenders without a correspondent outlet

may become completely unable to offer anything but the most commodified of the commodities.

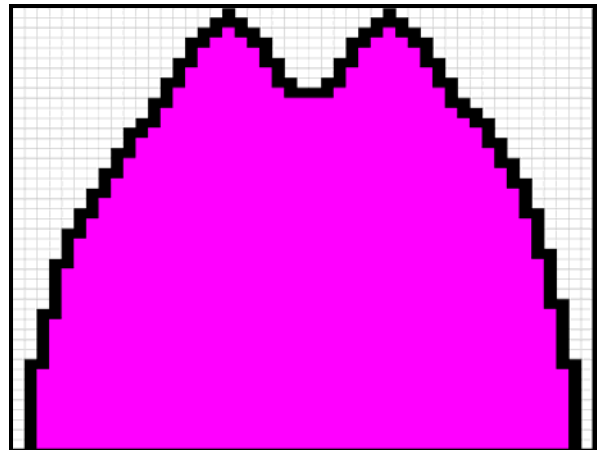
Back to Down Payments: The exit of second lien lenders and pricing decisions of the GSEs and MIs have made high-CLTV financing nearly impossible except for the pristine-credit move-up borrower. However, pristine credit doesn't mean someone buys your old home. It makes no difference that some lenders still advertise eligibility guidelines allowing 95% financing in Alt-A. You have to find a borrower who can qualify with the rate add-ons and new higher MI premium and, crucially, you'll need actual verification of sale of prior home before the new loan closes. There will be no letup, as far as I can see, on the pressure in "chained" RE transactions, or on negotiating financing contingencies. Nor do I expect lenders to get excited about offering bridge financing. Total transaction times will stay very long.

Back to Positive Cash Flow: We're done speculating. People who want to invest in residential RE, using a residential mortgage, are going to have to show cash flow on the property, or else qualify carrying the total payment. And now that you're talking to a retail originator, you're talking to someone who might know quite a bit about market rents in your area; anyone who is carrying a boatload of REO knows something about market rents. Expect appraisers to want to see leases again.

Back to REO. This bust will be even harder than usual on buyers looking for a deal at a foreclosure sale. Operational glitches due to securitization, too many second liens, and too much legislative uncertainty when tenants are involved will all affect the likelihood of conveying clear title in a foreclosure sale, and in many states and localities eventual eviction or redemption will be huge risks for a foreclosure sale

buyer. Old-time investors who might have once bid at the trustee's sale will, I suspect, wait to buy REO from lenders in a lot of markets. In some cases, you might pay more for the property, but you'll save a lot in legal hassles by buying from the lender rather than the borrower. Anecdotal reports are suggesting that short sales, at the moment, are hard to negotiate, lengthy, and highly likely to fall apart, even while foreclosing lenders are subsequently forced to drop the price well below the loan amount when the REO is marketed. Although I expect servicer strategies to become more rational (as reality kicks in), I don't anticipate that happening across the board for at least a few months yet.

Back to Mortgage Pig:



Tanta

Housing Economics: Impact of Falling Prices

Each month I will try to write about an economic issue concerning housing. In this issue, the topic is the potential economic impact of falling prices. This isn't an attempt to quantify the impact, but to illustrate the problems.

First, there is a very good chance that house prices will fall substantially over the next few years. The futures data for Radar Logic suggests a price drop of 11% over the next year, and close to 25% over the next 3 years for the 25 largest Metropolitan Statistical Areas (MSAs). A number of forecasters and academic researchers are suggesting a price decline ranging from 15% to 30% from peak to trough nationally in real terms (more in areas that saw the largest appreciation in recent years, less in other areas). Some economists see a 30% or more nominal price decline as likely. The more optimistic forecasters see a smaller price decline; see James Glassman, economist at J.P. Morgan Chase:

“The correction of housing prices is well under way. Given the present trends in

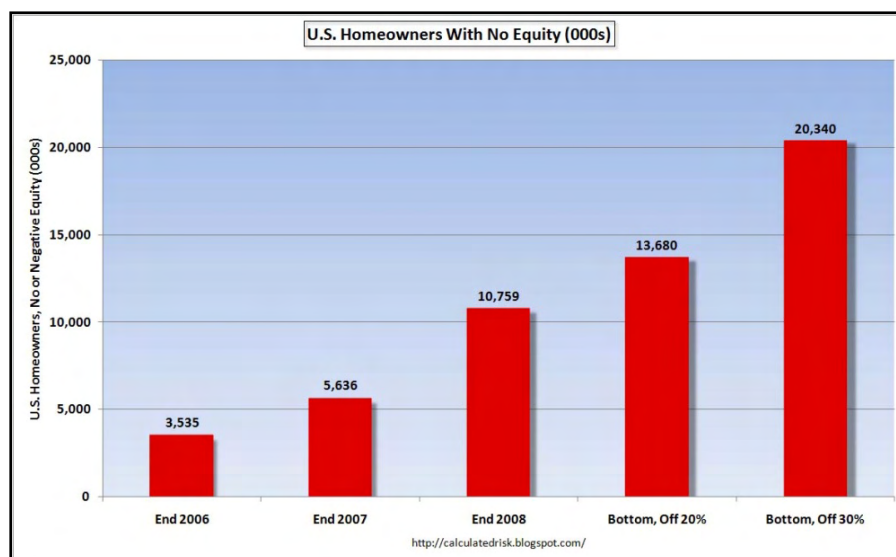
income and house prices, real estate excesses of the past five years will have vanished by spring 2008.”

<http://online.wsj.com/public/resources/documents/econreport12312007.pdf>

But what happens if prices fall 15% or 30% in nominal terms over the next few years? A large number of homeowners will be upside down on their homes (owe more than their homes are worth), and, in the aggregate, homeowners with mortgages will have very little equity in their homes. The first impact suggests the possibility that a large number of homeowners facing foreclosure with the slightest negative event; the second is a negative wealth effect impacting consumer spending.

The negative wealth effect comes from two sources: homeowners feel less wealthy and spend less as prices decline, and they also are unable to borrow from their homes (mortgage equity withdrawal or MEW) and simply have less money to spend.

Here are some numbers: According to the Census Bureau's 2006 American Community Survey there were 51,234,170 household with mortgage in the U.S. in 2006. The following graph shows the number of homeowners with no or negative equity, data



from First American CoreLogic, Inc., under several different price declines.

At the end of 2006, there were approximately 3.5 million U.S. homeowners with no or negative equity. (Approximately 7% of the 51 million household with mortgages).

By the end of 2007, the number will have risen to about 5.6 million.

If prices decline an additional 10% in 2008, the number of homeowners with no equity will rise to 10.7 million.

The last two categories are based on a 20%, and 30%, peak to trough declines. The 20% decline was suggested by MarketWatch chief economist Irwin Kellner and 30% was suggested by Professor Paul Krugman.

To put these price declines into perspective, the second graph shows 15% and 30% nominal price declines for the S&P/Case-Shiller U.S. National Home Price Index and the OFHEO, Purchase Only, SA index.

A 15% nominal price decline would take prices back to late 2004 for both indices. A

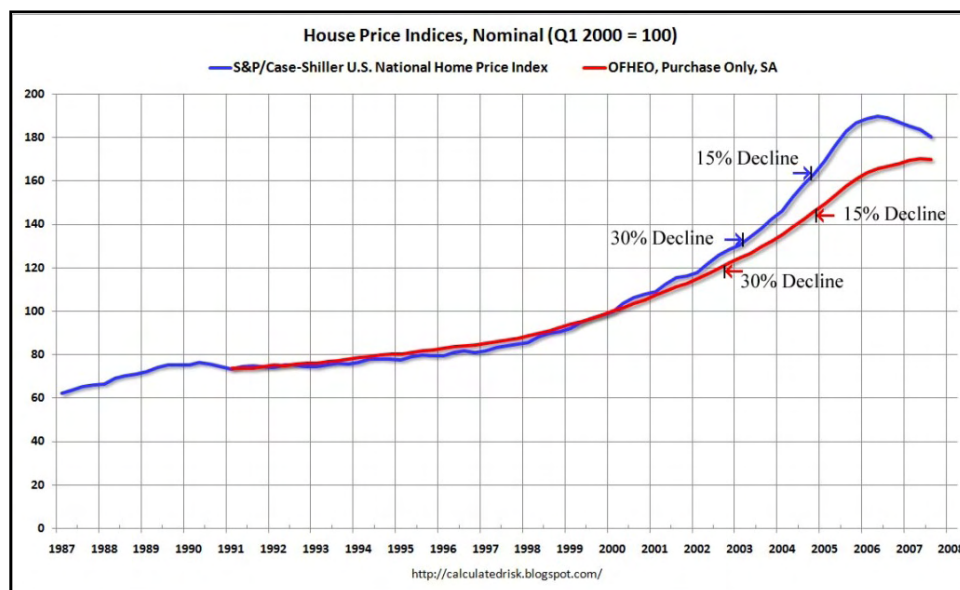
30% price decline for Case-Shiller would take prices back to mid-2003; 30% for OFHEO would take prices back to late 2002.

Not all areas will see the same price declines, but this does provide a gross estimate of the number of homeowners with no equity based on various price decline assumptions. This number is important because homeowners with little or no equity are very vulnerable to negative events - they will have difficulty selling their home, and they can't borrow from their home to meet emergency needs.

Falling prices will also impact the amount that homeowner can borrow.

Based on the Fed's flow of funds report, the percent of homeowner equity was at a record low of 50.4% at the end of Q3 2007.

According to the Census Bureau, 31.8% of all U.S. owner occupied homes have no mortgage. You can't do a direct subtraction because the value of these paid-off homes is, on average, lower than the mortgaged 68%. But we can construct a model based on data from the 2006 American Community Survey.



This approach suggests that the total value of U.S. houses, at the end of 2006, with mortgages was \$15.27 Trillion or 74.2% of the total. The value of houses without mortgages was \$5.32 Trillion or 25.8% of the total U.S. household real estate.

Since all of the mortgage debt is from the houses with mortgages, these homes have an average of 36% equity. It's important to remember this includes some homes with 90% equity, and some homes with negative equity.

Note: This calculation used 2006 data. The aggregate percent equity for households with a mortgage has fallen to 33% in Q3 2007, from 36% at the end of 2006.

If household assets fall 10%, and liabilities stay the same, the percent equity will fall to about 25%. If household assets fall 20%, the percent equity will fall to 17%.

If assets fall 33%, there will be no equity in the aggregate - households with positive equity will be offset by households with negative equity.

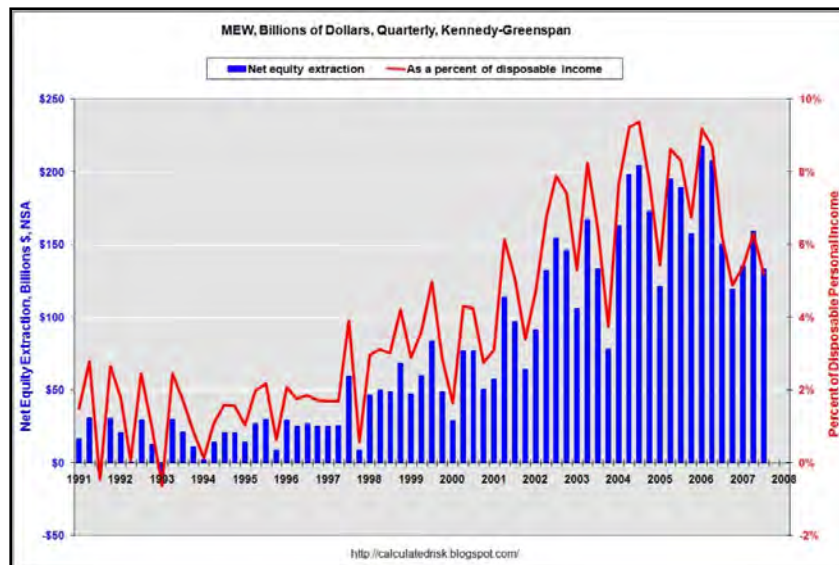
Mortgage equity withdrawal is already

starting to decline. Here are the Kennedy-Greenspan estimates (NSA - not seasonally adjusted) of home equity extraction for Q3 2007, provided by Jim Kennedy based on the mortgage system presented in "Estimates of Home Mortgage Originations, Repayments, and Debt on One-to-Four-Family Residences", Alan Greenspan and James Kennedy, Federal Reserve Board FEDS working paper no. 2005-41.

For Q3 2007, Dr. Kennedy has calculated Net Equity Extraction as \$133.0 billion, or 5.2% of Disposable Personal Income (DPI).

This graph shows the net equity extraction, or mortgage equity withdrawal (MEW), results, both in billions of dollars quarterly (not annual rate), and as a percent of personal disposable income. MEW was still strong in Q3 2007, even with tighter lending standards.

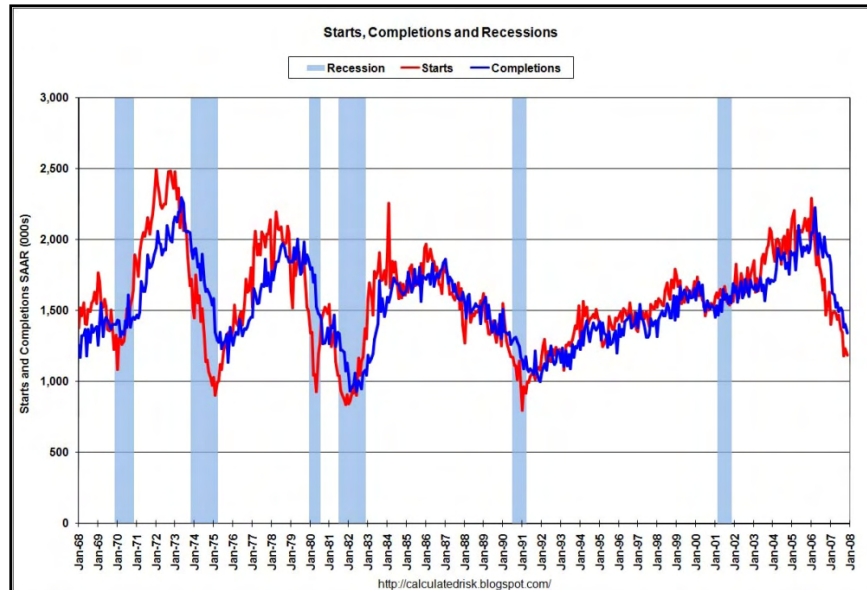
As homeowner equity declines sharply in the coming quarters, combined with tighter lending standards, equity extraction should decline significantly and impact consumer spending. CR



Quick Hits

Single Family Starts Fall to Lowest Level since April 1991

Single-family housing starts in November were at a seasonally adjusted annual rate (SAAR) of 829,000, the lowest levels since the '91 recession. Total private housing starts in November were at a SAAR of 1,187,000. When you look at inventories and new home sales, the builders are still starting too many homes and I expect starts to continue to decline over the next several months.



Here is a long term graph of starts and completions. Notice that completions follow starts by about 6 to 7 months. Completions were at a 1,344 million annual rate in November, but are about to follow starts to below 1.2 million.

Home Sales are in Free Fall

The following graph shows the SAAR of reported new and existing home sales since 1994. Since sales peaked in the summer of 2005, both new and existing home sales have fallen sharply.

Ignoring the occasional month to month increases, it is clear that sales of both new and existing homes are in free fall.



Mortgage Bankers Association (MBA) Reported Overall Mortgage Delinquencies at the highest Rate since 1986

The MBA is reported that mortgage delinquencies increased sharply in Q3 2007. A few data points:

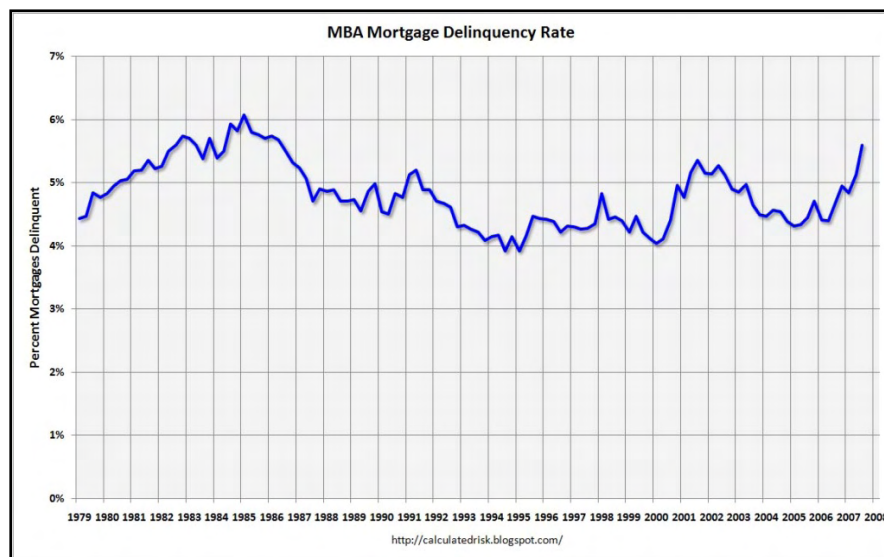
Total, 1-4 unit delinquencies increased to 5.59% from 5.12% in Q2.

Prime increased to 3.12% from 2.73% in Q2.

Subprime increased to 16.31% from 14.82% in Q2.

Delinquencies and foreclosures increased for every category, including prime fixed rates.

Here is a graph of the MBA mortgage delinquency rate since 1979.



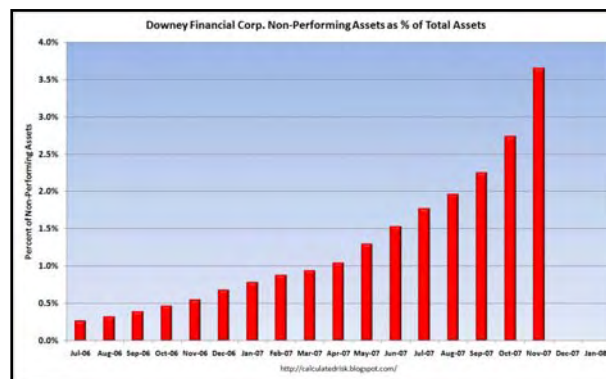
This is the overall delinquency rate, and it is at the highest rates since 1986. Delinquencies are getting worse in every category - including prime fixed rate mortgages - and getting worse at a faster rate in every category.

NAHB: Builder Confidence Unchanged at Record Low



From the National Association of Home Builders (NAHB): “Builder confidence in the market for new single-family homes remained unchanged for a third consecutive month in December as problems in the mortgage market and excess inventory issues continued, according to the latest NAHB/Wells Fargo Housing Market Index (HMI), released today. The HMI held even at 19 this month, its lowest reading since the series began in January 1985. ... In December, the index gauging current sales conditions for single-family homes improved by a single point, to 19, and the index gauging sales expectations for the next six months rose two points to 26. Meanwhile, the index gauging traffic of prospective buyers declined three points to 14.”

Downey Financial Non-Performing Assets



This is an interesting chart. This shows the percent non-performing assets by month. Yes, by month! CR