RESEARCH

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10 Things to Understand About the Housing Bubble and the Debt Crisis

Highlights

- In time, history will provide a fulsome overview of the twin housing and debt crises, perhaps the most challenging debacle since the Great Depression. At this early stage, however, Westwood tallies a "top 10" list of underlying causes and considers what can be done to reverse the situation.

- Ranging from an unprecedeted level of debt creation that fueled massive asset inflation, to insane lending practices and, ultimately, exploring the last 20 years of the American debt-culture, this report outlines just how the economy arrived at this juncture, and how our business and government leaders mistook debt-driven liquidity for real wealth.

- In order to avoid the dismal results experienced by Japan after its bubble burst in 1989-1990, we must rapidly resolve loans, re-capitalize and rehabilitate our financial institutions, and end our dependence on easy money (negative real rates of interest).

- Moreover, Wall Street, the banking sector and government must cooperate to recognize the magnitude of the crisis, to enable a swift recovery and to minimize the chances of its reoccurrence.

Overview

The current state of affairs in our housing and mortgage capital markets should not have come as a shock to regulators, lenders, investment bankers or homeowners. All were, evidently, willing participants in a classic bout of speculative asset inflation, the likes of which have been seen before but have, unfortunately, become a more frequent occurrence in the US-led, global economic system. The hallmarks of asset bubbles and resulting financial crises over the past quarter century have been substantially similar: (a) a failure to observe basic economic and financial fundamentals regarding value, capital and the markets; combined with (b) a uniquely American tendency to believe that almost any new economic phenomenon ushers in a new era to be governed by a completely new set of measures of value and economic performance. The results of bubble behavior are invariably the same, and it is certainly debatable as to whether the absolute defense of unfettered and undisciplined markets, that leads to such bubbles, is in our nation's, and our economy's, medium or long-terms interests. The clean-up required in the current case, and in prior bubbles, results in the elimination of huge amounts of wealth and is accordingly destabilizing to our country's interests.

The "Top 10" List

In Westwood's view, the following ten factors most significantly contributed to the housing bubble and mortgage crisis:

1) Residential mortgage and consumer credit more than doubled in the first six years of this decade. From the founding of the nation through 1999, our citizens amassed some $5.1 trillion of home mortgage debt and $1.4 trillion of installment and credit card debt. By the end of 2006, these numbers stood at outstanding amounts of $11.0 trillion and $2.4 trillion, respectively. In total, American individuals became indebted by an additional $6.9 trillion in six short years (the bulk of which was in the three-year period from 2004 through 2006) more than doubling the debt outstanding at the beginning of the decade. Apologists often cite increases in wealth and in home equity value as offsetting this unprecedented and crippling increase in our citizens' indebtedness. But the truth is we live in a nation with one of the lowest savings rates in the world (it was actually negative in 2005 and was likely negative in the year just ended) and, as detailed below, a significant portion of the perceived growth in home values has been specious at best.

2) Cheap mortgage loans offered on lax lending terms were responsible for much of the ballooning of home prices. Let's say that in 2000, you had $100,000 to put down on the purchase of a home. In the same year, with residential mortgage rates at 6% for adjustable rate mortgages, you were offered a mortgage for 80% of the purchase price of the home you were seeking to buy. The $100,000 you had available meant that you could afford a $500,000 home (80% of $500,000 = $400,000 in mortgage) and, interest only, your monthly payment would have been approximately $2,000 per month. Now, zoom ahead to 2006. With the same $100,000 in your pocket, and an adjustable teaser interest rate of 3%, mortgage companies nationwide were knocking down your door offering you mortgages at 90% of your purchase price (and more – often over 95% in some cases). With your same $100,000 and for the same $2,000 per month interest payment – voila – you could now afford to pay $1,000,000 for the same house for which you would have been able to pay $500,000 six years before. And of course, that is pretty close to what happened during this period – residential home prices increased by over 74% from 2000 through 2006. Does that mean the homes themselves were actually worth more? Of course not.

3) The growth in home prices during the first six years of this decade has been unprecedented and should have had our mortgage bankers, investment bankers, regulators and the Fed raising at least an eyebrow or two. As prices more than doubled in some markets and increased over 74% nationwide from 2000 through their peak in 2006, the stewards of our banking sector and their overseers in government apparently neglected to consider why. Pointing to "global reserves of excess savings" and "more efficient capital markets" as the new paradigms rendering previous market fundamentals obsolete, the best and the brightest ignored the fact that debt driven home prices had totally disconnected from median household income which has increased by a mere 15% during the same period, before adjusting for inflation (median income actually decreased after adjusting for inflation). If there had been a global glut of savings, we would have experienced a boom in the production of all capital goods – not just limited to housing – which would be fully sustainable by those real savings (in contrast to what was actually a debt driven spate of asset inflation in housing). More importantly, the purchase price of homes actually rendered it more expensive, even on an after-tax basis, to own rather than rent a residence – in some markets by more than 30%. This phenomenon is not only historically unprecedented, but any student of finance and economics can tell you that it is as unsustainable as any market that is

based on pure speculation. And pure speculation is what ultimately developed in residential real estate market – the notion of ever rising value, so similar to the dot com boom.

4) Mortgage lenders, seeking to maximize lending, relied on aggressive appraisals to justify outsized loans – and appraisers cooperated by ignoring their own established methodologies. The Chicago-based Appraisal Institute, the gold standard in real estate appraisals with 22,000 members, maintains guidelines known as the Uniform Standards of Professional Appraisal Practice (USPAP). Among other requirements, the USPAP directs, generally, that appraisers consider multiple indicia of the value of any form of property being appraised, with value defined as the most probable price at which a willing buyer and a willing seller would agree to transact a fair sale, assuming (among other things) that "both parties are well informed, or well advised" and "the price [is] unaffected by special or creative financing…..granted by anyone associated with the sale." In addition to considering recent sales of real estate, generally, Appraisers are regularly required to consider the value of properties based on the income they would produce if rented and based on the cost of replacing any improvements (buildings) to the property. They are then required to reconcile any differences among these three classic valuation methods. As it turns out, however, during the housing bubble, home prices completely disconnected from both rental values and from replacement costs. From 1960 through 1996, the ratio of average home rents to average home prices hovered in a band of 5% to 6% per annum. From 1996 to 2000, it declined to 4.6% and then, in a stunning drop this decade, the ratio fell to 3.5% by the end of 2006. Although common wisdom may have it otherwise, the fact is that construction costs barely moved at all during this decade, on an inflation adjusted basis, while home prices increased by 74%. If construction costs were constant and home prices ballooned, the only explanation – according to established valuation methodologies – could be that land was very suddenly worth dramatically more. But that much more, and that quickly? Appraisers couldn't possibly reconcile these dramatically divergent indications of fair market value, so what did they do? Well, as it turns out – Fannie Mae, Freddie Mac, and pretty much all other mortgage originators, guarantors and investors, don't consider income value as relevant to the appraisal of non-rental, residential real estate. Instead, appraisers merely conclude that recent sales are, for all intents and purposes, the only valid indication of fair market value. In doing so they enabled the entire market to ignore the impact of comparisons to rental properties and "special and creative" financing that – although it didn't come from sellers – was demonstrably, and has now proven to be, uneconomic.

5) Incremental home sales are not always a reliable indicator of fair value – a market almost tailor-made for a bubble. While homes are the largest repository of individuals' wealth in the United States and certainly the largest asset of most homeowners, they are extraordinarily inefficient to buy and sell and the number of all homes that change hands in a given year is tiny, in comparison with the stock market, for example. By nature of their unique locations and characteristics, homes are very difficult to trade, relative to other assets of such substantial financial significance to their owners. Sellers typically pay sales costs of 5% to 6%, incur repair and improvement costs to make homes more saleable and, ultimately, have to suffer the cost and inconvenience of moving all their possessions. Contrast that with the pennies it costs to effectuate a stock trade, and the differences become apparent. Consequently, people are not constantly pricing and re-trading their residential real estate and, when they do, the value of their property is very much in the eye of the buyer as no two residences (as opposed to shares of stock) are exactly the same. Depending on where we end up as a result of the present crisis, the value of all homes in America will likely level off somewhere in the range of $15 to $20 trillion (a big chunk of our national assets). At current valuations, some 7.6% of existing homes change hands each year. In

comparison, the total current market capitalization of all the stocks listed on the New York Stock Exchange is $18.26 trillion, and the recent annual volume of all trades on the NYSE is $17.14 trillion – a full 94% of the total market value. The old saw on Wall St. that "the tape never lies" may not always be true, but share pricing on the big board is certainly a better indicator of fair value than what Joe down the block sold his house for to some rube at the peak of the bubble. And when what the rube paid causes someone to pay as much or more for a roughly similar house a mile away, that's how bubbles are born – marginal sales volume, relative to the size of the overall market capitalization, translating into false assumptions of value for the entire market.

6) The game of musical mortgages undervalued risk and spread the resulting pain across vast sectors of the global capital markets and market participants. It is not reasonable to believe that the housing bubble and the mortgage crisis issues discussed here eluded everyone in the financial community. A vigilant few (Robert Shiller comes to mind) long predicted the current outcome. Many more, in order to profit from the enormous volume of new debt being created, chose to ignore or didn't fully appreciate the situation – and didn't care much either as they were playing a game of musical chairs with limited capital at risk (insufficient capital, as has been demonstrated recently). Mortgage originators (primary lenders) were able to sell off mortgages – often at a profit – to banks, investment banks, Fannie Mae and Freddie Mac, retaining little more than the risk that they might lose ongoing mortgage servicing revenue. Investment banks, Fannie and Freddie, labored mightily to turn mortgages into, and sold to investors, residential mortgage backed securities (RMBS), with the blessing of the rating agencies which assumed that sub-prime, Alt-A and other high loan-to-value mortgages would perform pretty much like more conventional mortgages of yore and, like the appraisers, ignored the real world implications of the housing bubble being created by precisely the same debt they were rating. Buyers of the more risky portions (known as tranches) of the RMBS, swiftly aggregated those tranches into more highly rated collateralized debt obligations (CDOs) which were sold to even more investors. Investors in CDOs then often packaged multiple CDOs they held into what became known as CDO-squared securities in order to wring out more fees and profit. Finally, investors holding the most risky pieces of these securities variants then sought to hedge their risk by trading nifty hedging securities known as credit default swaps, the magnitude of which were virtually unlimited as they amounted to nothing more than bets for or against the performance of a particular security or pool of loans (and, as any bookmaker knows, you can take as much action on one side of a bet as you have on the other). At each stage of this game, there were enormous fees generated – and the more lax lending standards became, the more loan volume there was to generate fees. Until, of course, the music stopped. When it did – losses were scattered all over – vast amounts of investor capital vanished, and continue to disappear. Vast numbers of homeowners will either lose their homes or be "under water" on their mortgage debt. But – as has become customary in the boom and bust cycles of the financial markets, the fees, bonuses and capital gains will be retained by the owners and employees of the lenders and bankers orchestrating the music.

7) The amount of mortgage debt outstanding versus the value of homes securing that debt is a risk that is concentrated in middle class income earners. Many professionals, who saw mortgage loan balances ballooning to $11 trillion by the end of 2006, took comfort in the fact that home values had ostensibly ballooned to roughly $20 trillion at the same time. At first glance, that would indicate that – on average – about 55% of the value of all homes was owed to lenders, not a particularly uncomfortable percentage. Looking more closely at these numbers, however, raises some uncomfortable questions. First off, US Census data estimates that 33% of all homes have no mortgage debt on them at all. Homes belonging to our older or retired citizens generally have little or no debt outstanding against them, if only by virtue of the period of time such people have

owned their homes. In reality, therefore, the $11 trillion of mortgage debt outstanding may be secured by homes worth only about $14 trillion to $15 trillion when the market peaked in 2006. This would indicate that the average loan-to-value ratio was actually north of 75%. Accordingly, if the value of homes falls 25%, on average, from 2006 values, as some very respectable economists and analysts believe may be the case, such a reduction would set the value of all homes in the US at around $15 trillion and the value of all homes with mortgages at about $11 trillion – a 100% average loan-to-value ratio. If that is not bad enough, consider the fact that mortgage debt is not spread evenly over all mortgaged homes, some homes are mortgaged for well below the average loan-to-value ratio. The unfortunate corollary is that a similar number of other homes, after such a reduction in value, would be mortgaged for amounts in excess of 100% of their value. A large number of these homeowners will find their homes worth far less then the mortgage debt outstanding thereon. Unfortunately, older and retired individuals with low or not mortgage debt do not comprise the heart of our consumer economy. Thus the impact of over-leveraged or "under water" housing will fall squarely on the shoulders of middle class homeowners, those raising families, working and, in better times, the core earners and consumers on which our economy depends.

8) Selling homes to 20 year-olds – how the homebuilding industry killed off years of future demand. With inventories of existing homes for sale honing in on nearly a 12-month supply (the highest since the early 1980's) at current absorption rates, and new home sales inventories at roughly nine month's supply, reaching price equilibrium may be a long process. One of the reasons that price firming, to say nothing of recovery, may not occur until at least 2009 is that so many people who would have remained as renters during the first half of this decade were instead encouraged to buy homes with little money down. Sub-prime/Alt-A mortgage lending not only targeted people with bad credit, but also young people – many of them in their early 20's – with no bad credit history, but with nowhere near the equity down-payment required to qualify for a conventional mortgage. In earlier times, this portion of the population would have rented until they saved up enough to acquire a home. Not in this decade. As a result, a significant number of families that would have normally entered the home buying market over the next 5 or more years are already homeowners (albeit burdened by mortgage debt they may not be able to afford). Essentially, the extraordinary demand created by this decade's "special and creative financing" will not reappear until an entirely new cadre of young people can save up enough to truly afford a home.

9) The current crisis can be traced back to the advent of home equity and sub-prime lending in the 90's, and in part to the Tax Reform Act of 1986. There are few financial crises in this country that aren't traceable to events occurring long before the crisis. For generations, people in this country have borrowed to afford a home and grew equity in their home through slowly paying off their mortgage loan and being the beneficiaries of normal economic inflation. The vast majority of people had the vast majority of their net worth represented by their home equity, and paying off mortgage debt contributed significantly to the nation's savings rate. The federal and many state governments promoted what is generally regarded as the social good of home ownership by providing a tax deduction for interest paid on mortgage loans. Prior to the Tax Reform Act of 1986, however, governments also permitted taxpayers to deduct almost any other kind of interest they incurred as well and the credit card companies and other consumer lenders naturally benefited, as their "product" (unsecured credit, auto loans, student loans, etc.) was this made cheaper to the consumer. After the non-mortgage interest deduction was phased out in the early 1990's, a new financial product came over the horizon – the Home Equity Line of Credit, or HELOC. At first, the HELOC was designed to solve the problem created by the elimination of

interest deductions on consumer loans. Simply grant a lender a second mortgage on your home and suddenly, as long as you had less than $1 million in total home loans, you could deduct all of the interest on what really was a personal line of credit. Better yet, because it was secured, the interest charges were typically lower than on credit card debt. A great solution to the problem from lenders' and consumers' points of view, HELOCs became very popular and – by the end of the 90's – ubiquitous. Homeowners soon realized, however, especially as home values began to rise more rapidly beginning in 1996, that they could qualify for HELOCs far exceeding the amount of credit card lines and other consumer debt they used to have. And why was that? Because they were now borrowing against their home equity – their largest concentration of savings. Suddenly, consumers realized there were all sorts of things that they needed to acquire – available liquidity tends to produce that reaction in the United States – beginning with things like home improvements (a good investment) and better education for their children (also a good idea). But before long, and as the wealth effect of persistently rising home values entered the national psyche, American consumers needed other things too – that great vacation, the newest electronics and technology, or perhaps a nice boat. The mortgage lending industry made such spending almost irresistible, even providing special check books to pay for the things you thought you needed or deserved. It didn't feel as though people were dipping into savings – but they most assuredly were. And all along the government was subsidizing the interest on the debt being created. And if you used a lot of availability under your HELOC, the industry was all too happy to take some fees to refinance your entire mortgage. And when borrowers got in a little over their heads in the 90's, something called a "sub-prime" mortgage loan was created by the lending industry – at a little higher interest cost – to help them still qualify for refinancing, When interest rates started to drop precipitously earlier in this decade, it saved borrowers money to refinance and they could borrow even more against home equity without seeing payments increase.

10) The levels of consumer spending over the past several years are being re-evaluated and consumer spending is in jeopardy as the culture of debt is dis-assembled. As noted, from 2000 to 2006, residential real estate and consumer debt more than doubled by a factor of some $6.9 trillion. That money found its way into the pockets of homebuilders (in small part, about $1.3 trillion) on the one hand and, on the other hand, to homeowners, sellers of land and existing homes and others (through home sales at inflated prices, refinancings, home equity lines of credit and credit card/installment sales credit). Other than the portion going towards the creation of new homes, where did all that money go? Depending on the proclivities of the homeowner or home seller, the money went to one of three places:

    - Savings and investments in stocks and bonds, causing massive rallies in both markets;
    - Consumer spending – all those plasma TVs, boats, home improvements, and Asian imports that have been the life blood of our economy; or
    - Inter-generational wealth transfer – spurring consumption and or investment by the lucky recipients.

    At first, that sounds OK, saving and investing are good, consumer spending is generally good, and we all love our children – so what's wrong with all that? The problem is that somebody in the equation needs to pay back a lot of money – it was a debt driven cycle, not production driven, after all. The extent to which all of this liquidity impacted consumer spending over the past several years is difficult to assess. It is a fair assumption that a good portion of this wall of money found its way into investments of a number of types, but it is equally reasonable to be concerned that a very sizable amount fueled a significant portion of consumer spending (of particular concern is that credit card companies, attempting to lend where mortgage lenders no longer can, are continuing to put out money to the already strapped consumer – the most recent data showed unsecured consumer credit ballooning 7.5% in November to a new high of $2.5 trillion – credit card defaults are the inevitable next shoe to drop). What is truly alarming is that the 2000 through 2006 bubble debt is equal to about 25% of all consumer spending during the 6-year period of the debt's creation, and an even higher percentage if one looks at the three years from 2004 through 2006 (this is just math, not necessarily a direct correlation). Certainly, not all of the bubble debt was attributable to overvaluation of housing. Some of it can be accounted for by the increases to home prices consistent with inflation in the rest of the economy. But it is apparent that a good chunk of it found its way into consumer spending and represented a significant enough portion thereof that the elimination of that consumer liquidity would significantly impact consumer spending, and thereby, corporate profits. If the country descends into a recessionary environment, the foregoing will be the cause of that recession. And a pullback in jobs and consumer spending of the magnitude indicated by the size of the debt bill that was driving jobs and spending, could be quite severe.

What Can be Done to Put this Behind Us

So that's what happened and why. Now the question is what to do about it, both to recover from the present situation and to prevent its possible reoccurrence (the financial markets have very short memories). The catastrophic debt driven bubbles in Japan and the US in the period of 1989 – 1990 provide good direction in this regard. In Japan, assets re-priced just as assets must at the end of any bubble (with real estate falling by an unimaginable 75% from peak to trough). Financial and commercial real estate assets also fell dramatically (although not nearly as much) in the US. The difference between the two cases is that Japan allowed their financial institutions and investors to continue in business without recognizing the massive losses they had incurred. This delayed the re-capitalization of their institutions and continued their post-bubble recession for some 13 years. In the US, however, the Fed, banking regulators and ultimately the then-newly formed Resolution Trust Corporation moved relatively swiftly to force assets and investments to be marked to market, disposed of and recapitalized, which saw the US back on track by the mid-90's. This must happen again, and without waiting for a change in administration.

The recent pressure on the Federal Reserve Bank to lower its Fed Funds target is counter productive in the above context. Encouraging more lending, the creation of more indebtedness and dis-saving, is precisely what got us into trouble in the first place. And in any event, more lax lending is fundamentally impossible in the current situation. Lenders and investors have finally woken up to the fact that more of the same will merely result in their not getting their money back. And the marginal reduction in floating rate mortgage loan interest rates will not prevent the eventual revaluation of homes, and may in fact delay it, resulting in a more sustained recession.

Conclusion

In past debt debacles, and other market crises, the affected assets have been things like commercial real estate, farmland, tech stocks and bank shares. This time around, along with the stock market, it is people's homes, the re-pricing of which literally hits us where we live. The potential for massive social and economic destabilization needs to be taken into account in considering solutions. Every effort must be made to restore lost jobs, production and eventually savings – and that will be nearly impossible by increasing the number of bankrupt and/or homeless citizens. At the same time, we are a nation of laws and contracts and the government should not be stepping in to advocate the abrogation of loan documents and other legally-engaged-in business dealings (consumer fraud is another matter).

It is often said that economic bubbles don't burst, they deflate. We are watching the air gradually leak out of a bubble of our own creation – the underpinnings of which were the massive increase in the indebtedness, and the reduction in savings and net worth, of our fellow citizens. Wall Street, the banking sector and government must cooperate to recognize the magnitude of the crisis, to enable a swift recovery therefrom and to minimize the chances of its reoccurrence.

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