America's Financial Apocalypse

How to Profit from the Next *Great Depression*

Stathis

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REAL ESTATE BUBBLE

The Big Recovery Myth

The big myth being told by Washington, Wall Street and the media is that the recession of the post-Internet bubble ended in November 2001, and the economy has since gained "significant ground." However, the fact is that the economy actually got worse since 2002. That's right, worse. And when these economic trends finally surfaced, they were reflected by the stock market lows established in October of 2003.

Since 2003, the economy has staged a *phantom recovery* fueled primarily by massive consumer debt sparked by record low interest rates, and out of control federal spending. This has led to record federal and consumer debt, as well as record trade deficits, particularly with China. Since 2002, U.S. companies have conserved cash, moved jobs and facilities overseas, bought down debt, and issued share repurchase plans as a way to increase earnings per share. And this has been enough to please Wall Street.

As a part of its strategy to enhance consumer confidence, Washington has hidden the true state of the economy using various means, hoping to buy more time until conditions improve. But this assumption that things will improve is unfounded. To stimulate spending, the Federal Reserve loosened credit to unthinkable levels and consumers responded. First, Greenspan ordered the U.S. Treasury to run its printing presses in overdrive, sinking short-term interest rates 15 times consecutively to a 43-year low with long-term rates not far behind.

Next, the mortgage industry all but eliminated responsible criteria for mortgage applications, allowing millions of financially unfit Americans to take out loans on overpriced homes. This historic release of money spurred what will be documented in history books as the largest real estate bubble in the past 80 years, if not ever. Consequently, low rates and relaxed credit standards have allowed an unprecedented number of mortgages, most notably in the booming sub-prime market, resulting in record home ownership rates.

Washington continues the charade of proclaiming a strong recovery using deceptive tricks to distort the gross domestic product (GDP), unemployment numbers, consumer price index (CPI), producer price index (PPI) and many other statistics (a detailed analysis will be presented in the next chapter). These critical indicators have been misrepresented in order to make consumers "feel good" about the economy so they'll continue to spend more money than they have. But this deception is swelling America's massive credit bubble, while increasing its dependency on foreign debt.

Washington's "dog and pony" tactics have proven to be very effective, as most consumers think it is only they who are struggling to make ends meet amidst this "robust" economy. However, Americans now have the lowest household savings rate since the Great Depression. Short-term interest rates are now much higher than in 2003, as is total consumer debt, while net job and real wage growth continue to linger, despite the lies from Washington. With rates much higher, there is no more credit to spend. Without the aid of David Copperfield, Washington will no longer be able to continue its illusion. Soon, the consumer will soon fall flat on its face.

Because virtually every type of payment benefit from Social Security, pensions and Medicare are tied to the CPI, Washington has had further incentives to under-report inflation data. These fuzzy calculations have been especially prominent over the past 15 years. The consequences of this deception are now pushing many Americans towards financial suicide through excessive credit card spending and extraction of home equity during a swollen real estate bubble. Consequently, I find the timing of the recently passed bankruptcy reform bill quite unfortunate for consumers, while very favorable to the consumer finance industry. Now that short-term rates are on the rise, credit card companies are putting "the squeeze" on consumers with higher interest rates, knowing that it will be much more difficult to file for bankruptcy.

The Real Estate Myth

A few decades ago, the real estate and mortgage industries devised a marketing campaign to increase business. They began preaching a myth to Americans that home ownership is always a great investment with no risk, because "home prices always go up." As a matter of fact, these industries have even made claims that real estate is a better investment than the stock market and has led to more millionaires. These statements are simply not true as historical data indicates.

As a result of this propaganda, most Americans have the misconception that they can buy a home and it will always go up in price. But this is not necessarily true, especially when buying during the last stages of a real estate bubble. Even without the effects of a bubble, in many cases the annual expenses associated with home ownership wipe out most of the gains in appreciation, yielding relatively modest returns.

For the average American, the fact is that residential real estate typically provides about the same rate of return over a twenty- to thirty-year period as a money market mutual fund after you deduct the total costs of property ownership. However, unlike a money market fund, owners of real estate have significant liquidity risk as well as other risks specific to this asset class. Of course, there are several variables that can deviate from these results, such as obtaining a low-interest fixed mortgage, buying a home in an area that becomes rejuvenated, and so forth. But these are not typical conditions and therefore cannot be relied upon with much certainty. Regardless, widespread speculation continues

to fuel perhaps the biggest real estate bubble ever seen in America. And the consequences are going to be devastating for millions.

Costs of Home Ownership

Although a mortgage interest tax deduction provides financial benefit to home owners, they rarely consider property taxes, insurance, PMI, HOA dues, and maintenance expenses when factoring in their decision to buy a home. Yet, no other asset appreciates in value like real estate; right? *But this is an illusion created by the time-value-of-money effect on mortgages; not due to a real appreciation.* Think for a moment; how is it that all other tangible, non-collectible assets depreciate in value, yet real estate appreciates? As we all know, depreciation of real estate is logical, since over time "wear and tear" diminishes its inherent value and thus buyer appeal. As it turns out, *what appreciates is not the actual physical property, but the cost effects of assuming a mortgage with compounding interest.*

Cost of a Mortgage

If your mortgage rate is 6.2 percent, your home has to provide an annualized rate of return of around 6.5 percent (to account for the annual percentage rate, or the actual rate you pay due to fees such as closing costs) just to keep up with the cost you are paying for this loan. Now, because you get a mortgage interest tax deduction, the savings effect would amount to about 2.0 to 2.5 percentage points (depending on your tax bracket). Therefore, factoring in the expenses paid for the loan, the home would have to appreciate by at least 4.0 percent annually, or else you would lose money each year.

Property Taxes

If we assume the average property tax is around 2 percent (a valid assumption, unless you live in AL, KY, MS, AR, TN, OK or a few other southern states with low rates, or in some parts of CA, which assesses property taxes based on the original purchase price), you will also have to add an expense of 2 percent of the annual appraised value of the home for property taxes. This can end up averaging 3 to 4 percent of the original purchase price over the life of the loan (depending on the rate of appreciation).

Let me explain. Most property taxes are based on the annual appraised value which is determined by the city government. Of course, these appraisals are highly inflated in order to extort higher tax dollars from unsuspecting home owners. Regardless, what appears to be a 2 percent annual property tax ends up averaging out to 3.5 percent relative to the original purchase price if your home doubles in value by year 15 (a reasonable assumption). So, in order to factor in annual tax expenses, you have to keep track of the annual assessed value of your home, as appraised by the city government. As your home appreciates, annual property tax expenses will grow. Therefore, your home would have to appreciate annually by an average of 7.5 percent (the tax-adjusted 4 percent mortgage expense plus 3.5 percent average property tax) over a 15-year period just to break even. These annual tax costs essentially suck equity out of your home.

Other Expenses

Now if we assume an annual 0.50 percent cost for home owner's insurance, as the home value increases so will the amount needed to maintain full insurance coverage. This amount will average around 1.0 percent of the annual cost relative to the original purchase price when the home value doubles. Maintenance costs could be anything from a new roof, carpet, AC unit, kitchen appliances, etc. We can estimate these costs at a conservative 0.5 percent per annum, based upon the original purchase price. Consider that in most cases, home owners will need to spend anywhere from $4000 to $20,000 to make a home older than 5 years competitive on the new homes market. Of course, this would be the most variable of all expenses listed thus far. Regardless, we can estimate the average annual costs for home ownership over a 15-year period to be 9.0 percent, or about three times the original sales price. Alternatively, you can assume an 8.5 percent figure and subtract the total dollar amount spent for maintenance from the expected sales price.

Adjustments

In order to determine a real rate of return on your real estate "investment" you must factor in the effects of inflation, which averages around 2.5 percent annually. When comparing the investment attributes of real estate with a safe investment such as a money market account, the effects of inflation would cancel. Therefore, any amount beyond this 9.0 percent annualized return will be profit (after you deduct the real estate sales fees). *The real benefit is the tax treatment of mortgage interest and exemption from capital gains tax after the sale.* Because the sales proceeds are tax-free (as long as IRS criteria are met), the 9.0 percent breakeven figure is reduced to about 7.0 percent. (1)

Therefore, generally speaking, if your home does not yield at least a 9.0 percent average annual appreciation through year 15, your investment yield will be similar to a money market mutual fund (after-tax) but with much greater risk and much less liquidity. Achieving a 9.0 percent annual appreciation under non-bubble conditions is not easy, but if accomplished it would lead to over three times the original purchase price. Good luck.

(1) Estimates are based on a home originally valued at $200,000 to $500,000, with several assumptions, as stated regarding tax brackets, appreciation, and other expenses. The mortgage interest savings will depend on the holding period and the financing terms, since interest payments are determined by the financing. The costs of PMI and HOA dues were not factored in, which can amount to large sums of money over an extended period, especially when adjusted for inflation. Real estate transaction costs (usually 6 percent of the sales price) were also not factored in. Savings due to the property tax deduction were not factored in. For simplicity, consider these items to cancel. In the best of scenarios, assuming there is no PMI or HOA fees, assuming a 2 percent property tax, and assuming you are in a high tax bracket, the annual savings due to the property tax deduction would still cause this tax expense to be at least 2.5 percent, annualized over 15 years. Thus, the breakeven rate would be reduced by one point to 6.0 percent—the average annual appreciation required to breakeven on a home purchase.

Shorter periods of home ownership will tend to reduce some of these costs, such as maintenance, insurance and property taxes. As well, the mortgage interest tax deduction provides more savings in the early years of a mortgage since most of the mortgage payment is due to interest. In the later years, as the mortgage deduction declines, the property tax deduction will increase due to home appreciation. The point is that home ownership entails many other costs that buyers rarely consider, and by no means represents a "slam-dunk" investment as the real estate industry would have you believe. There are no shortcuts to wealth. And home ownership as an investment isn't as sweet as the "gurus" make it sound. In fact, if these real estate "gurus" were so good at making money in real estate, wouldn't you expect them to be too busy making millions to fly around the country giving seminars and flooding television stations with infomercials? It's obvious how they make their money. It's not from buying and selling real estate, but selling you a dream.

Exceptions

There are exceptions to my argument. In California, the relatively low and fixed property tax treatment favors those who hold a home over a long period. These home owners benefit from the appreciation in property values while being taxed only on the original purchase price. As well, some get lucky and buy a home in an area that experiences a surge in development.

Investors should understand that, *over a long period real estate has shown an appreciation rate in line with the average annual inflation rate which is around 2.5 percent.* Only during bubble periods does this trend deviate upward, causing many to think real estate is a great investment. However, after a bubble corrects, home prices are depressed for long periods or by excessive amounts for shorter periods. And some home owners may be forced to move during a collapse, due to a job change, divorce, unexpected death or other event, adding further insult to injury.

Similar to the stock market, investment returns in real estate generally increase as the holding period increases, but only if one assumes a minimal holding period such as 5 years (under normal conditions) and 10 years (under bubble conditions). Such a period is required to account for price volatility. However, there are no annual fees when you hold stocks. Therefore, expenses do not accumulate, unlike with real estate. The effect of these annual expenses (insurance and property taxes) increases the total cost basis. However, home owners do receive annual tax deductions for mortgage and property taxes, as mentioned.

Rather than an investment, in most cases, home ownership provides an expensive method to obtain security of shelter—and over a long holding period, a rate of return comparable to a money market mutual fund. But with property taxes so high and eminent domain so common, one should question whether they really own their property.

Flipping and Rentals

While real estate can provide generous investment returns, they generally occur over short holding periods; specifically for property "flippers" since the mortgage interest deduction is at its maximum, while property tax fees are at their minimum. Yet, short-term strategies such as flipping can be extremely risky. If one wants to invest in real estate using a short-term strategy, they must allow for a cushion to absorb downward pricing pressures that occur in real estate, much the same as in the stock market. Owning rental units is a safer way to invest in real estate. But it usually takes many years before any profits are registered.

Housing Bubble

Today, virtually everyone believes that home ownership will provide the solution to their financial woes if they can "hold on." And even if they fail to profit within a few years, they have no doubt that a longer holding period will generate handsome returns. Obviously, they haven't thought about total home ownership expenses, the weak economy, current bubble conditions, job insecurity, and trending demographics.

Millions have bought homes during the last stage of the real estate bubble, which began over a decade ago. When this bubble deflates, many of these buyers will get caught holding properties they won't be able to sell for a long time. Even worse, many won't be able to continue mortgage payments due to millions of variable-interest rate loans that have repriced upwards.

Over the next two decades, most of the estimated 76 million baby boomers will retire and many will scale down to condos or retirement communities. This will create a buildup of existing home inventories, causing prices to decline independent of any other factors. Most likely, the deflation of this bubble will take many years and occur at different time periods around the nation.

In many parts of America, home prices have risen as high as 150 percent in just a few years. The cities with the biggest housing bubbles are Phoenix, Las Vegas, Portland, Los Angeles, Boston, San Diego, San Francisco, Miami, and Washington D.C. As well, much of California and Florida have experienced a huge appreciation in home prices. While Boston and San Diego have the highest median prices in America, these trends have been in place for many years due to their strong local economies, boosted in large part by the growth of their biotechnology industries. Consider that New York City and Seattle have also seen large spikes in home values. But their bubble isn't that bad since each of these cities has a very diverse and strong economy, with high-paying jobs. Other cities are not so fortunate. In fact, soaring home prices have caused many to relocate to one of the few regions that have not been hit by this bubble.

Where is the Middle-Class Living?

Despite its strong economy, unless you are in the top 10 percent of income earners in America, you won't be able to afford the average home in San Diego unless you use alternative financing. And that is precisely what many have done, placing them in danger of foreclosure. But San Diego is not an isolated case, as millions of Americans have been forced to use interest rate-sensitive financing as their only way to afford home ownership.

As of December 8, 2005, Los Angeles was the least affordable American city to live in when comparing its median home price with median income. With an average home price of $495,000 and a median income of $54,500, (2005 data) calculating this ratio yields a 9.09 value for the "City of Angels." The next highest was Honolulu at 6.77, Boston at 4.97, and Washington D.C. at 4.72.

These figures illustrate the harsh effects of a housing bubble that's caused the average American to be priced out of the market. *Many have borrowed using loans that are not compatible with their financial means, in part because they do not understand the risks.* These unconventional loans allow buyers to purchase a home for a lower monthly mortgage payment. However, they're not suitable for long-term home purchases and introduce many layers of risk as we shall see.

Yet, remarkably, home ownership rates are the highest in U.S. history, at 70 percent. If this isn't a warning sign of what's ahead, I don't know what is. Is the economy so much better now than in the 1990s? You might recall that household ownership in equities approached the highest point ever during the peak of the stock market bubble at around 60 percent. And of course we all know what happened shortly thereafter.

Tourists Spots Are in Big Trouble

What about Las Vegas? How can property values remain high there? After all, it has no major industries other than gaming. Las Vegas is basically fueled by a service industry with low- to mid-paying jobs stemming from its huge tourism and gaming business. The same can be said of Florida, with its huge tourism and service economy catering to retirees and seasonal tourists. Recent increases in hurricane incidence in the "Sunshine State" as well as expectations for more over the next several years could be enough to cause an exodus from beachfront properties, adding to the effects of the real estate bubble deflation.

Even California Will Get Hit

Ever since the late 1970s, relatively low property taxes have been at least partly responsible for the high appreciation of property values in California. Fueled by the nation's largest high-tech output and the world's fifth largest GDP, it's easy to appreciate why California is a state where successful techies have money to burn. But these individuals are only a tiny minority. In reality, the majority of residents are struggling with living expenses. Consequently, with major state deficit problems, I have little doubt that more taxes and fees are on the way.

Not everyone in California is a biotech or Internet millionaire. Every region needs workers at all levels to provide the right balance of labor and consumer demand required to sustain the health of its economic engine. However, some parts of California are experiencing a shortage of lower income service workers due to the state's high living expenses.

This has been the situation in San Jose for well over a decade, where it's difficult to find restaurant workers due to the high cost of housing. Perhaps that's why San Jose has the highest average number of inhabitants per room at nearly 4. Of course, California has its own minimum wage, which is higher than the federal rate. And in the Bay Area it's nearly $9 per hour. But still this is no where near enough for the working-class to meet the high costs of living in the Bay Area.

Warren Buffett

"I recently sold a house in Laguna for $3.5 million. It was on about 2000 square feet of land, maybe a twentieth of an acre, and the house might cost about $500,000, if you wanted to replace it. So the land sold for something like $60 million an acre"

Can You See the Bubble?

Over the past decade, the price of the average home in America has increased by over 62 percent (from 1995 to 2004) unadjusted for inflation. As of late 2006, *the average home price since 1995 has increased by over 75 percent (unadjusted for inflation).* Meanwhile, real income growth has declined due to decreased employer benefits. Yet, costs for basic necessities such as energy and healthcare continue to increase at alarming rates. *The gimmick for the real estate and mortgage industries was to convince Americans that record low rates had created the best home-buying opportunity in over 40 years, regardless of swelling home prices; and it worked.* But most home buyers haven't thought about the consequences of buying a home that's on average 35 to 40 percent overvalued.

According to a 2004 report written by the Economic Policy Institute, *the median household income for all American households declined by $1669 (3.6 percent) since 2000.* Yet, many Americans feel wealthier due to the rise in home values on paper. This "wealth effect" has been the result of a transfer of assets from the stock market bubble into the housing market, sparked by a partial, yet devastating stock market correction and Greenspan's record rate-lowering campaign enacted to delay the inevitable financial apocalypse.

For nearly two decades, the loose credit policies of Greenspan encouraged Americans to spend beyond their means, while piling up massive debt. And that's part of the reason why Americans don't realize their standard of living has been in decline. When the real estate bubble finally corrects, there will be no other way to extend the wealth effect because the stock market will not recover for several years. And this period might very well represent the beginning stages of America's economic correction.

The main stimulus for the housing bubble has been extremely low interest rates, along with the proliferation of alternative financing products such as interest-only and adjustable-rate mortgages (ARMs). Whether you live in one of the real estate hotspots or not, the fact is that most *Americans have chosen to use their homes as ATM machines, extracting cash based upon property values that are in most cases ridiculously overvalued.* Rather than use this money for home improvements, the vast majority of home equity dollars and cash-back financings have been applied towards paying off credit card debt, for vacations and auto purchases. Even when consumers paid down credit card debt, they've found it irresistible to ignore the generous offers of "0% financing for one year." Soon after, their credit card debt reappears, similar to a junkie relapsing after a drug rehab treatment program.

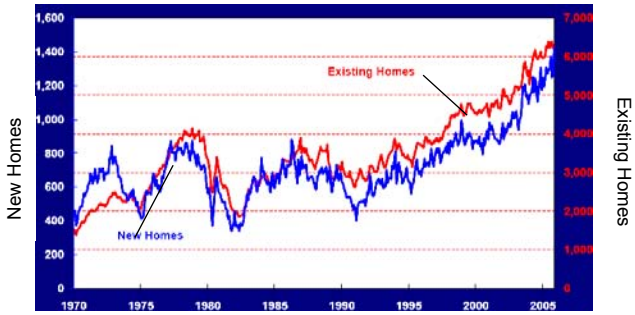
Washington is largely to blame for this irresponsible behavior. Our leaders continue to allow finance companies to flood the market with tempting credit offers and low barriers for under-qualified home buyers. Washington knows well what it did. It wanted these home equity loans and sub-prime mortgages to propagate as a way to stimulate consumer spending. And Greenspan assisted in the process by smashing rates. As a result, a large correction of the real estate bubble is a more certain outcome.

Although most Americans view their home as an investment, approximately 25 percent of home purchases over the past 2 years were made by real estate investors. At the best of situations, when the bubble does correct, many will be stuck holding properties they'll have to sell for much lower than they bought. Others will enter foreclosure.

But don't expect this shakeout to occur overnight. Most likely, it will take several years. And during the decline, many will rush in thinking they are getting bargains, when in fact they will end up losing as well.

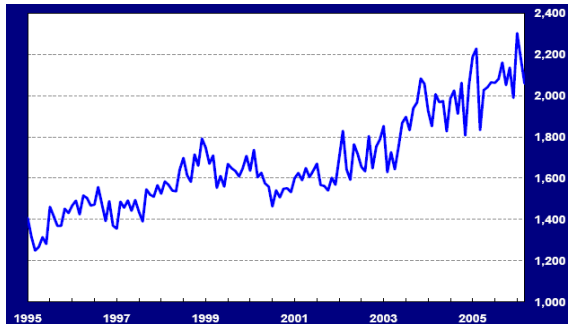
According to the Center for Housing Policy, *from 2000 to 2004 the number of working families paying more than 50 percent of their income for housing soared by 76 percent.* And because home prices have been rising much faster than the average median income, this has actually caused many to purchase homes they can't afford for the fear (or greed) that home prices will go even higher. *Since 1980, household debt has increased by 623 percent (figure 6-13) while personal savings declined 75 percent* (figure 9-1). As a result, interest-only and option ARM mortgages have become very popular for many who couldn't normally afford a home during this bubble.

Figure 10-1. New and Existing Home Sales (thousands)



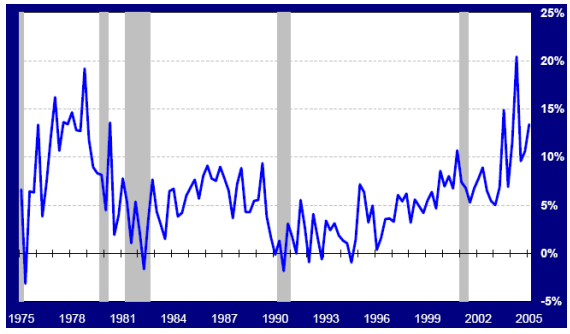
Sources: U.S. Census Bureau, National Association of Realtors

Figure 10-2. New Home Starts (thousands)



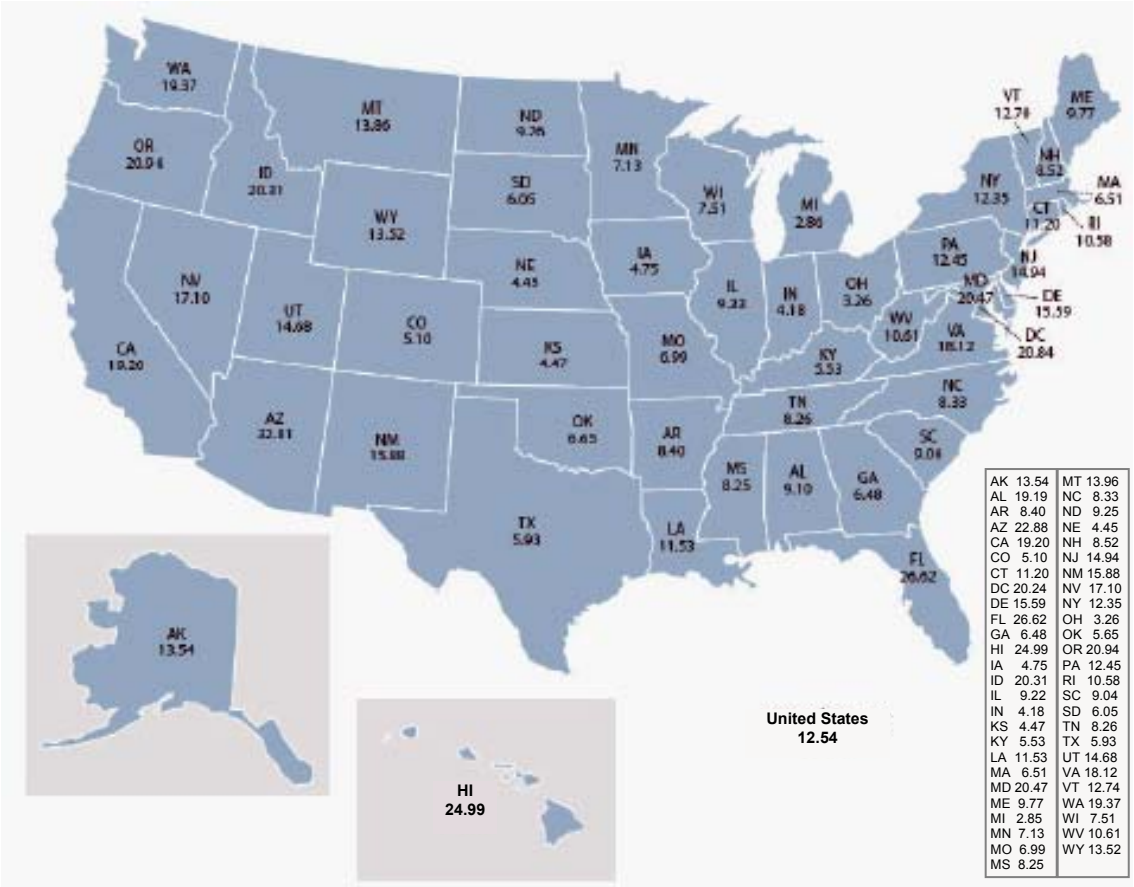
Source: U.S. Census Bureau

Figure 10-3. Housing Prices (Year-over-year percentage change)



Grey regions denote recessions
Source: Office of Federal Housing Oversight, U.S. Census Bureau

Figure 10-4. One-Year Change in House Prices (First Quarter 2005 to First Quarter 2006)



Source: Office of Federal Housing Enterprise Oversight, June 1, 2006

Figure 10-5. Increase in Home Prices 1995-2004

	Nominal	*Real**
U.S.	62.6%	33.4%
Northeast	94.3%	59.4%
Mid-Atlantic	65.1%	35.4%
East South Central	39.9%	14.7%
West South Central	41.5%	16.1%
South Atlantic	60.7%	31.8%
East North Central	50.5%	23.5%
West North Central	60.8%	31.9%
Mountain States	87.0%	53.4%
Pacific	86.9%	53.3%

*Real indicates adjustments for inflation.
Source: Office of Federal Housing Enterprise Oversight 2004

Further Evidence of a Bubble

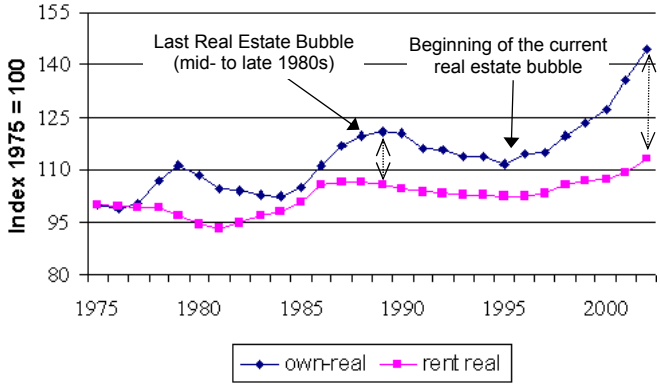
One would assume a housing bubble is present if buyers were purchasing homes primarily for investment purposes rather than for housing needs. Accordingly, if we examine the cost of home prices versus renting, there should be a similar rise in both if consumers have been driven by housing needs. However, if the cost of renting falls well below that of home price increases, this would indicate that consumers are willing to absorb higher home prices hoping ownership will lead to investment gains.

Figure 10-6 shows the rent index from the CPI and the OFHEO Home Price Index from the first quarter of 1975 to the first quarter of 2002. As you can see, shortly after 1995 home prices began an upward divergence relative to rental units. As it stands today, monthly rental prices have been suppressed significantly relative to total housing demand. However, the dynamics of supply-demand have not trickled down to rental units since rental occupancy has not picked up and has failed to drive prices higher.

One of the primary reasons for the depression in the rental market has been the relative ease of mortgage financing. Why rent when you can buy for smaller monthly payments? Of course these payments don't include total costs such as insurance and property taxes. Monthly payments will balloon as interest rates increase for variable-interest and interest-only loans. Consequently, *as the real estate bubble continues to deflate, we should see rental unit pricing pick up strongly.*

Prior to 1995, since the end of World War II home prices have moved in line with inflation. However, as figure 10-7 illustrates, home prices began to diverge from the inflation rate in 1995 and skyrocketed towards the end of the Internet bubble. Ever since the Internet bubble correction, we've seen a surge in mortgages (table 10-1). And when the stock market failed to recover, interest rates were smashed, stimulating even more home-buying and home equity loans. By 2005, there was over $9 trillion in residential mortgages outstanding in America, which is close to the entire capitalization of the stock market ($13 trillion). As of mid-2006, the $10 trillion mark was passed. It is thought that *at least $3 trillion of this mortgage debt is due to overvaluation.*

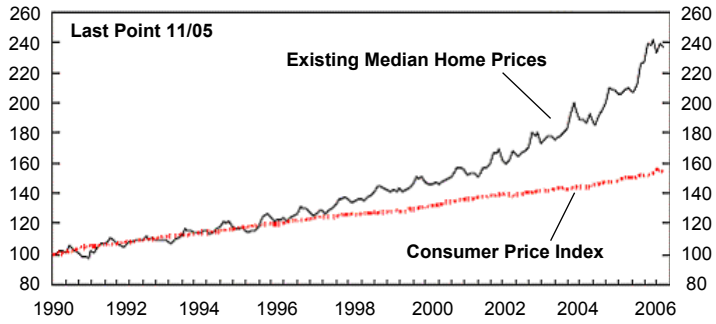
Figure 10-6. Costs of Home Prices versus Rental Units



Data is reported for each consecutive quarter and the indexes are deflated by the CPI-non-shelter index.

Doing its part to swell the housing bubble further, the Federal Reserve Bank of New York published a report attributing the recent appreciation in real estate to home improvements. However, their own data suggest this is not the case at all. As table 10-2 shows, the rise in home prices is in no way due to the rapid increases in spending for home improvements. As the data indicates, the percentage of spending for improvements has remained relatively constant. Obviously, this not only helps confirm the presence of a real estate bubble, but it also has implications for home improvement companies once the bubble deflates.

Figure 10-7. Existing Median Home Prices and Consumer Prices (Jan. 1990 = 100)



Source: National Association of Realtors and Bureau of Labor Statistics

Table 10-1. Total Mortgages Outstanding 2001-2005 ($ billions, end of year)

	2001	2002	2003	2004	2005
Total mortgages	**$7,422.6**	**$8,244.4**	**$9,234.4**	**$10,472.4**	**$11,942.2**
Home	5,571.3	6,244.2	7,024.1	8,016.2	9,149.0
Multifamily residential	447.8	486.7	557.3	612.2	674.5
Commercial	1,285.6	1,388.1	1,519.6	1,702.1	1,967.9
Farm	117.8	125.5	133.5	141.9	150.9

Source: Board of Governors of the Federal Reserve System, Insurance Information Institute.

Effects of the Bubble

As of estimates during 2002 by the Center for Economic Policy Research (CEPR), the housing bubble correction would imply a drop of 11 to 22 percent in value for the average home, evaporating between $1.3 and $2.6 trillion of paper wealth. Since that time, there has been an 18 to 25 percent increase in median home prices, which would imply an even larger decline when the bubble deflates.

At its bottom, I would estimate a 30 to 35 percent correction for the average home. And in "hot spots" such as Las Vegas, selected areas of Northern and Southern California and Florida, home prices could plummet by 55 to 60 percent from peak values. I expect the fallout in home prices to affect different regions at different time periods. This will be one of the confusing dynamics that will cause some to think the correction is over. But it will most likely move in waves, from region to region as a repeating cycle, sucking in more blind investors with each repeating wave.

Table 10.2. Value of Housing stock and Spending on Improvements (billions of 2002 dollars)

Year	Value of Residential Of Housing Stock	Spending on Improvements	Spending on Improvements as a Value of Housing Stock
1991	$6709.2	$62.6	0.9%
1992	7018.8	72.9	1.0%
1993	7248.3	77.6	1.1%
1994	7405.7	85.9	1.2%
1995	7870.3	79.0	1.0%
1996	8194.0	84.5	1.0%
1997	8652.2	90.7	1.0%
1998	9406.8	96.2	1.0%
1999	10250.1	95.8	0.9%
2000	11268.3	100.2	0.9%
2001	12362.3	106.0	0.9%
2002	13573.0	116.2	0.9%

Source: Federal Reserve Board and Bureau of Census

Diminished Morale and Income

At this point, you might be thinking "a correction won't really destroy wealth for those who plan to live in the same home for many years," but you'd be wrong. Once you agree to a price for a home and take out the mortgage, you are stuck with the final sales price (the total cost of the mortgage over the period financed), unless of course you refinance at a lower rate.

Even if you were able to refinance at a lower rate, it's not going to lower the price you paid for your home. It would only lower the interest portion of the loan. Most likely, there will be no more refinancing opportunities for many years since we're just coming out of the lowest mortgage rates in decades. *In fact, I expect long-term rates to move higher over the next few years due to the weak dollar and mounting national debt. And when that happens it will add further downward pressure on home prices.*

When home values plunge, Americans will be stuck with monthly payments that are inflated relative to the value of their home, causing further erosion of disposable income. Of course, these are some of the consequences for those who've purchased homes using a fixed-rate mortgage. For those who've used interest-only or adjustable-rate mortgages, the effects of the housing correction will be much more pronounced.

The "Poor Effect"

Considerable research has shown that Americans view their homes as a significant portion of their future wealth. Therefore, when home prices increase rapidly, they save less. Instead, they consume excessively because they feel richer than before. A similar situation occurs during bullish stock markets, as previously discussed. But can not the opposite be true as well?

The average ratio of homeowners' equity-to-value as of early 2002 was 55.2 percent, which is near its low for the post-war period (figure 10-8). With a large drop in house prices expected from the correction, this ratio would fall much lower (table 10-3). Across the nation, even if we assume a very conservative 20 percent correction, there would still be several major regions that would experience declines of 35 to 40 percent. Declines of this magnitude would wipe out the wealth effect, as many watch their home equity evaporate into thin air. This will not only halt consumer spending, but it will also force millions of foreclosures across America, causing housing inventories to rise, which could cause a further collapse in home prices. The aftermath of record foreclosures will send shockwaves to the stock and bond markets.

Figure 10-8. Ratio of Homeowner's Equity to Market Value

Period	*Equity/Market Value*
1950-59	77.1%
1960-69	66.7%
1970-79	67.5%
1980-89	67.7%
1990-99	56.8%
2001-2002	55.2%

The ratio of household debt to disposable income reached a record 108.3 percent at the end of 2003, mainly due to rising mortgage debt. In addition, the ratio of consumer debt (mainly credit card and car loans) to disposable income was near record levels. The cost of servicing this debt will increase due to the continued trend of debt spending, as well as increasing interest rates. This will cause a record number of foreclosures, as over 10 million are possible within the next 6 to 8 years.

Will the deflation of the housing bubble cause Americans to start saving again? Perhaps Americans will once again recognize the importance of saving rather than amassing debt. Yet, many won't be in a position to save. They'll be overburdened with interest payments on debt and higher monthly payments for a good portion of the 10 million homes that have been financed using ARMs.

Table 10-3. Declines in Housing Values have Significant Effects on Home Equity
(Changes in Home Equity Resulting from Declining Housing Values for Households Aged 50-62, 2001)

Change in Housing Value	*Produces a Multiplied Change In Housing Equity*
-10%	-14%
-25%	-35%
-50%	-71%
-75%	-106%

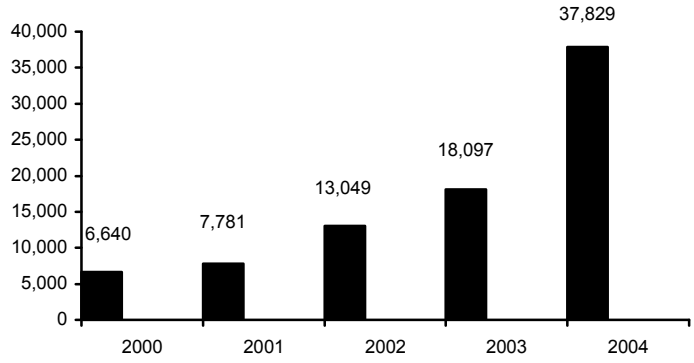
Source: Soto, Mauricio "Just the Facts: On Retirement Issues" CRR Number 15. March 2005. Calculations from the author.

The Next Financing Boom: Reverse Mortgages

Over the next decade, as America's boomers reach retirement age, the effects of the Internet bubble correction will be compounded with a deflation in the housing bubble. This could cause existing home inventories to rise, as many boomers downscale to smaller homes. Alternatively, as more boomers feel the credit squeeze amidst higher inflation, we could see a massive increase in reverse mortgages. This type of financial arrangement allows home owners 62 and older to sell their homes to a bank or mortgage company in exchange for monthly payments. It's a way to sell your home gradually and generate income, while continuing to live in it.

The Home Equity Conversion Mortgage (HECM) is a federally insured reverse mortgage product that accounts for over 90 percent of all reverse mortgages in the United States. Already, we see a rise in reverse mortgages, representing the harvesting of Americans' last tier of wealth (figure 10-9). This is going to be a great business to be in over the next two decades. And you can bet that the big banks will be all over it.

Figure 10-9. Reverse Mortgages (HECMs), Fiscal Year 2000-2004



Source: National Reverse Mortgage Lenders Association.

Real Estate Cycles

The real estate market is similar to the stock market in that both oscillate through cycles of boom and bust. According to the FDIC, a real estate boom is considered to have occurred when prices rise by 30 percent or more. A bust is a defined by the FDIC as a decline of 15 percent or more (over a 5-year period in inflation-adjusted prices). Using these definitions, since 1978 there have been 50 booms and only 21 busts.

America's last major real estate crisis occurred in 1988. But the current one is of much greater magnitude, comparable only to that in the 1920s. Back in 1988, the housing bubble was mainly centered in California. In contrast, the current real estate bubble has effected more regions of America than any in the past, having reached approximately 65 metropolitan regions throughout the United States. However, over 200 additional cities have seen above average appreciation in the 2005 to 2006 period alone.

While the boom in the 1920s is comparable to the current housing bubble, it was of much smaller scope. Unlike the devastating effects of the more localized real estate bubble of the '20s, today's housing boom has been fueled by record low mortgage rates and loose lending practices such as heavy use of interest-only loans, adjustable-rate mortgages (ARMs), and other creative financings. Therefore, it has affected a larger percentage of Americans throughout the nation and in all socioeconomic categories.

As with all bubbles, the current one can be thought of as a sequential stage of the longer-term oscillation of the economic cycle, and is therefore not an unordinary event. What are less ordinary are the broader economic effects of America's declining global competitiveness, which have resulted in diminishing living standards for three decades. This trend has been masked by misleading government reporting standards, exploitation of illegal aliens, two-income households, heavy use of credit, and a disproportionate share of the nation's wealth, mainly benefiting the wealthy.

Figure 10-10. Number of Areas affected by Previous Real Estate Booms (1978 to 2004)

Year	Number of Metro Areas	Year	Number of Metro Areas
1978	3	1992	1
1979	9	1993	0
1980	1	1994	3
1981	0	1995	4
1982	0	1996	3
1983	0	1997	0
1984	0	1998	0
1985	5	1999	1
1986	13	2000	9
1987	16	2001	14
1988	24	2002	22
1989	14	2003	32
1990	15	**2004**	**55**
1991	5	**2005**	**65**

While the deflation of this bubble will definitely impact the economy and stock market, it's difficult to say by how much or when. If it deflates independently of other economic woes, its affects will be minimal but still very large. If the deflation occurs in phases over a long period, it could coincide with or magnify other problems, such as rising fuel prices, terrorist attacks, peak oil, or any other broad-reaching event. Alone, this bubble could very well signal the beginning of a major economic crisis that could send the markets plummeting.

Who Stands to Gain?

Most real estate investors and home owners believe they will be the beneficiaries of the housing boom. However, the only definitive winners have been builders, mortgage brokers, appraisers, and local governments (due to higher property tax income). For those investors who have profited thus far, the game isn't over until you leave the table. And many will no doubt get caught holding properties they planned to flip or sell only after a few years when the bubble deflates. Regardless, even investors who have profited are the small winners. The big winners are the Government-Sponsored Enterprises (GSEs), investment and mortgage bankers, and everyone else who creates or sells mortgage-backed securities (MBS).

When house prices go up, larger mortgages are needed. Therefore, the loans required are bigger. This results in more interest dollars over the life of each loan for banks, even though the house value may go down by 30 percent thereafter. Banks have been in stiff competition with each other, opening up the sub-prime market in order to lock in these huge-dollar interest payments while the bubble has not yet deflated. But they have only been able to provide this endless inventory of loans due to the liquidity created by GSEs and their repackaging of these mortgages onto the MBS market. Throughout this credit frenzy, someone has been assuming these risky loans, and you might be surprised to find out who it has been.

Mortgage Mania

According to the U.S. Department of Housing, the total monthly "home cost" should not exceed 28 percent of a household's gross income. The "home cost" consists of the mortgage, interest and principal payments, home insurance costs, property taxes, property mortgage insurance (PMI) and home-owners' association (HOA) dues. But due to skyrocketing home prices, most Americans don't make the income needed to meet this criteria, so many have opted for non-traditional mortgages, allowing millions to buy a home, many of which will end in foreclosure.

If so many Americans are in no financial position to purchase a home, why have they done so? As previously discussed, the wealth effect has caused many to think of

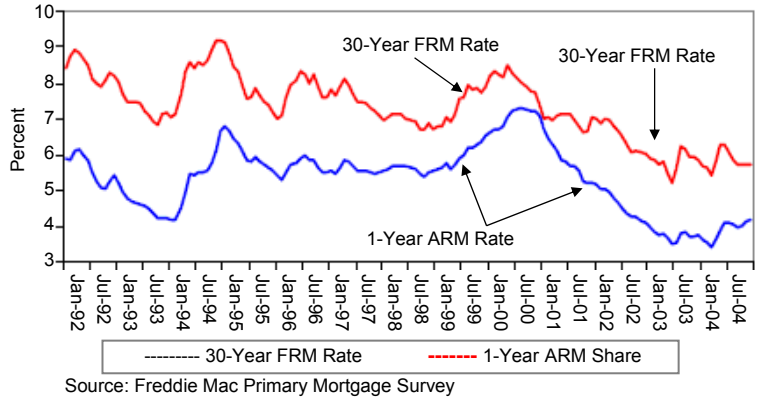
home ownership as an investment. And given such low mortgage rates, the real estate industry has delivered a sense of urgency to consumers. But many fail to realize the almost invariable equilibrium that exists between mortgage rates and home prices.

There is almost always an inverse relationship between mortgage rates and home prices that serves to balance the supply-demand relationship between home buyers and sellers. In other words, when mortgage rates are high, home prices drop to counter the effects of the mortgage expense. In contrast, when mortgage rates are low, home prices capture this savings in financing costs and increase in value. Under normal circumstances, a balance in overall cost of the home (the home sales price and the mortgage cost) results in an annual appreciation right in line with inflation. *In other words, there is never really a "great" time to buy a home because the market balances the total price point by adjusting the home price versus the mortgage rates.* The best time to buy a home is when you have amble savings and a well-paying, secure job with full benefits. Thus, most Americans don't qualify for home ownership.

Regardless, several forces have caused an imbalance in this normally steady relationship which cannot be explained even if one were to assume the economy were healthy. As mentioned, the real estate and mortgage industries have convinced consumers that it's the best time to buy a home in the past 40 years due to low mortgage rates. They were so successful delivering this propaganda that supply couldn't keep up with demand. As well, many consumers were already looking for another place to invest their money due to the stock market scandals that continue to this day.

It was this imbalance in home supply that led to the bubble-type acceleration in home prices early on. As prices continued to rise, many prospective home buyers were being priced out of the market. So the mortgage industry began offering a larger number of sub-prime and alternative mortgages by around 2002 in order to convince financially unfit consumers they could afford a house or even a more expensive house. But as we know, ARM and interest-only loans are financially irresponsible for most.

Figure 10-11. Mortgage Rates Have Bottomed and are on Their Way up



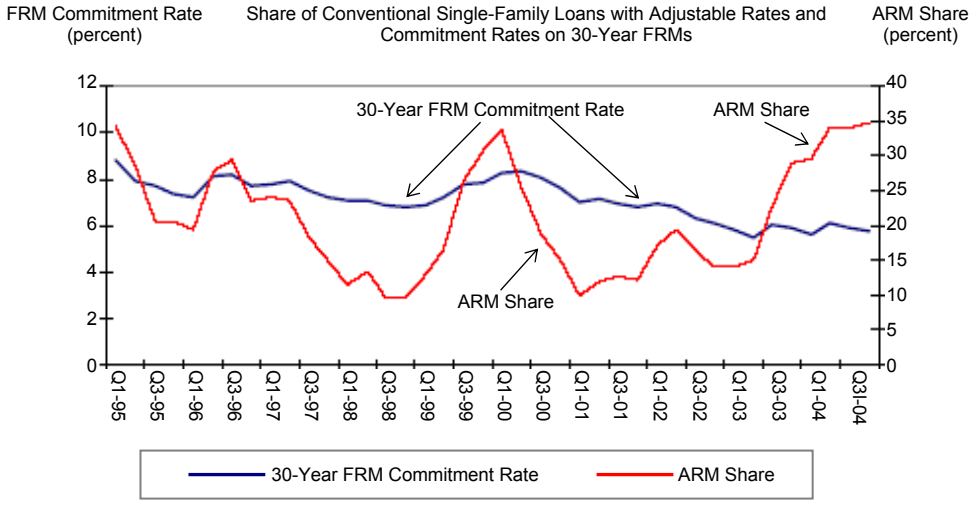
Source: Freddie Mac Primary Mortgage Survey

The large increase in short-term rates since 2004 has already created hardships for those who've used ARMs, causing many to cut back on necessities. It's safe to say that most home owners with variable-rate loans have very little disposable income remaining to fuel consumer spending. If long-term rates can remain relatively low over the next 2 years, many home buyers who purchased ARMs with 3- or 5-year durations might be able to refinance with a reasonable fixed rate; if they still qualify for a loan.

According to David Rosenberg at Merrill Lynch, approximately $2.5 trillion of household debt, or 21 percent of outstanding household debt will reprice upwards in 2006. Unless there's a surge in disposable personal income, the already record high debt-service ratio will move higher in 2006 and beyond. I will state with confidence that disposable income will not surge for at least a few years. As a matter of fact, it will only continue to decrease since much of consumer debt is tied to short-term rates, employers continue to cut benefits, oil prices and healthcare costs are going nowhere but up.

One cannot know for certain how the correction in the real estate market will play out because it depends primarily upon how developers decide to handle it. If they're concerned they may scale back on new developments which will prevent an excess inventory buildup. However, if they ignore soft new home sales and the trend continues, the inventory buildup could extend to existing home values, magnifying the problem.

Figure 10-12. The Large Number of ARMs Makes Many Vulnerable to Rising Rates



Source: Freddie Mac Primary Mortgage Market Survey

Finally, if a correction in home prices occurs in conjunction with higher long-term rates, real estate values will be depressed even further. I'm not expecting appreciable increases in 30-year mortgage rates until at least late 2007. But thereafter, I am expecting rates to reach 8.0 percent within 2 to 3 years, and head north of that by 2012. If things continue to play out as I have proposed, I expect long-term rates to reach the low double-digits within the next 10 to fifteen years.

Figure 10-13. Mortgage Rates at a Historic Low (Average 30-year fixed rate mortgage)

Source: Federal Home Loan Mortgage

Choices, Choices, Choices

The past few decades have witnessed an explosion of creative financing options available to home buyers. Just over three decades ago, an ARM was rare. But when interest rates soared during the '80s, the use of ARMs exploded. By 1984, ARMs peaked at 60 percent of loan originations. Most recently, ARMs have begun to take off again as a way to decrease the total home purchase price since short-term rates were so low (figure 10-14 and tables 10-4 and 10-5). *ARMs were less than 2 percent of all mortgages in 2001, and peaked at 34 percent in 2004 when short-term rates were at their lows. But just in the first three months of 2005 they reached 19 percent.*

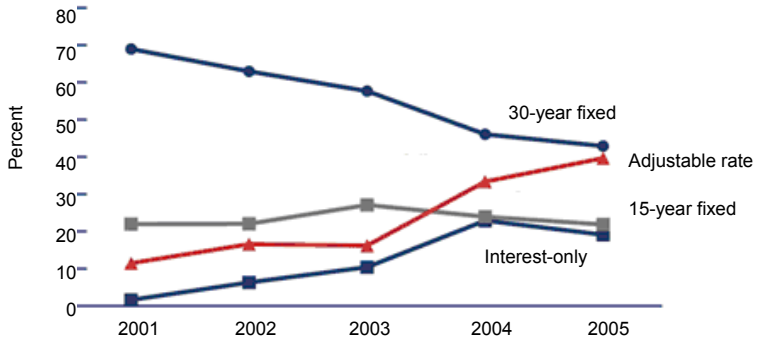
Record low rates have also caused a boom in interest-only loans, which are the only way many can afford housing in places like San Diego, Los Angeles, Boston, San Francisco and dozens of other cities. But *the use of interest-only loans during record-low rates is like burning money since you're not paying off any principal. And when interest rates rise, these mortgages can actually create negative amortization.*

Finally, there are even riskier mortgages that allow one to pay less than the current short-term interest rate. These are referred to as option-ARMs. Also known as cash-back financings, these mortgages create the illusion of home ownership while accelerating a negative amortization schedule. In other words, each month you're paying the mortgage, the total amount owed on your home actually increases.

Option-ARMs are truly the epitome of desperation utilized to take advantage of what many feel will be a great investment in real estate. It's safe to say that consumers

with these mortgages are speculating in real estate whether they realize it or not. While most statistics don't count option-ARMs as home equity loans, they have a much worse affect since home equity is depleted, allowing the buyer to have more disposable income, but only for the short-term. Finally, these loans expose buyers to interest-rate risk since they typically expire in 3- to 5-years.

Figure 10-14. Types of Mortgages Issued, 2001-2005(1)



(1) Represents outstanding credit on all 1-4 unit residential mortgages. Percentages will add to more than 100 percent because some loans fit into multiple categories.

Source: LoanPerformance, a Unit of First American Corporation, Insurance Information Institute.

As rates continue to climb, many who expected to sell their homes in 3 to 5 years may be out of luck. Increased rates have already pushed monthly payments as high as 40 percent from just two years ago. And millions of Americans with interest-only and ARM loans have had to cut back on all expenses. Some have even had to cancel health insurance or face foreclosure. For others, high gas and electric bills have caused foreclosures. Many expect to cash out with big profits if they can just sit tight for a couple of more years. It's a shame so many will be disappointed.

ARMs

According to the California Association of Realtors Affordability Index, San Diego has an affordability index of 9 percent, meaning that only the top 9 percent of income earners in America can afford to purchase the median-priced home using a 20 percent down fixed rate mortgage. This explains the massive increase in interest-only and ARM mortgages in this area.

In 2004 alone, 80 percent of all new mortgages in San Diego were ARMs, 47 percent were interest only, and 27 percent required no

down payment. Other regions of Southern California had similar statistics.

For over two decades now, Americans have embraced the "buy now, pay later" mentality. In part, this has led to America's "tremendous economic expansion" over this period. However, during the same period, income growth has not kept up with inflation, forcing many to borrow in excess. Payback is inevitable and it's going hurt most Americans bad.

ARMs are linked to some type of economic index, typically short-term interest rates, so they adjust up and down along with this rate. Because borrowers assume the risk of rising rates, they're offered lower interest rates than FRMs. ARMs are attractive because they allow buyers to make lower monthly payments so they can buy a home that they would otherwise not be able to afford. ARMs are also much easier to qualify for since the debt holder has a shorter duration of repayment, thereby lowering the risk to the lender. Given the extremely low rates provided by FRMs, one would expect them to dominate the mortgage markets. Despite this, in 2004 alone according to Freddie Mac's Primary Mortgage Market Survey, ARMs accounted for 34 percent of single-family mortgages.

Because of the way they work, *ARMs are usually popular when the yield curve is steep* (short-term rates are much lower than long-term rates). Although the yield curve remained steep for much of 2004, even when it flattened thereafter, the share of ARM loan originations remained fairly constant. How can we explain this? Due to the huge appreciation in homes over the past several years, many first-time home buyers could only afford to buy a home if they used ARMs and variants of ARMs. Interest-only ARM applications were high for the same reason. As a result of the increase in sub-prime lending, ARMs accounted for almost 20 percent of sub-prime loans in 2004.

As of mid-2006, nearly 25 percent of home owners had an adjustable-rate mortgage (ARM) of some kind. It's no wonder why home ownership hit a record 70 percent. But what will that number will be once the bubble deflates? Misperceptions of America's economic status have led most home buyers to engage in risky behaviors, from risky mortgages to huge levels of home equity and credit card debt.

Table 10-4: Interest-Only Loans

Metro Area Loans	*Interest-Only (as a share of total, 2004)*
San Diego	47.6%
Atlanta	45.5%
San Francisco	45.3%
Denver	43.4%
Oakland	43.1%
San Jose	41.1%
Phoenix-Mesa	38.8%
Seattle-Bellevue-Everett	37.2%
Orange County, CA	37.0%
Ventura, CA	35.3%
Sacramento	34.9%
Las Vegas	33.7%
Stockton, CA	32.0%
Washington, DC	31.4%
Charolette, NC	29.1%
W. Palm Beach-Boca Raton	28.0%
Portland, OR	27.8%
Los Angeles	26.7%
Salt Lake City	25.6%
Nation-wide	**22.9%**

Oddly enough, most Americans don't understand the concept of compounding interest. Hence, it's safe to assume that most home owners with ARMs and other sub-prime loans don't fully understand how they work, and thus have no idea how risky they are.

The most disturbing trend in mortgage data is that *the majority of the 10 million ARMs issued have occurred towards the end stages of the housing boom, and after short-term interest rates were already on the rise (i.e. between 2004 and 2005).* Americans have become greedy and the credit economy has trained them to always overextend themselves and make up the difference with credit. Subsequently, excessive use of ARMs and interest-only loans has also been a reflection of consumer greed and financial irresponsibility that has reached dangerous levels in America.

According to First American Real Estate Solutions, of the *7.7 million Americans who took out an ARM from 2004 to 2005*, up to 1 million could lose their home through foreclosure over the next 5 years due to rising mortgage payments. However, I feel that these estimates are way too conservative. *I expect anywhere between 25 to 30 percent of these mortgages (or around 2 million) to face foreclosure during the next six years.* And that estimate doesn't include the other types of non-FRM mortgages, nor does it include other foreclosures from the sub-prime market, or the average foreclosures expected even without a real estate bubble, *all of which could result in over 10 to 12 million foreclosures over the next 8 to 10 years.* Of course, the ultimate outcome will depend on how Bernanke handles inflation. The higher rates go over the next 3 to 4 years, the more foreclosures we will see.

Table 10-5. Family Home Mortgage Originations, 1995-2004 ($billions)

Year	Total Volume	Refinance Share	ARM Share (1)
1995	$639	21%	33%
2000	1,047	19	25
2001	2,080	59	12
2002	2,745	59	17
2003	3,711	65	19
2004 (2)	2,227	40	38

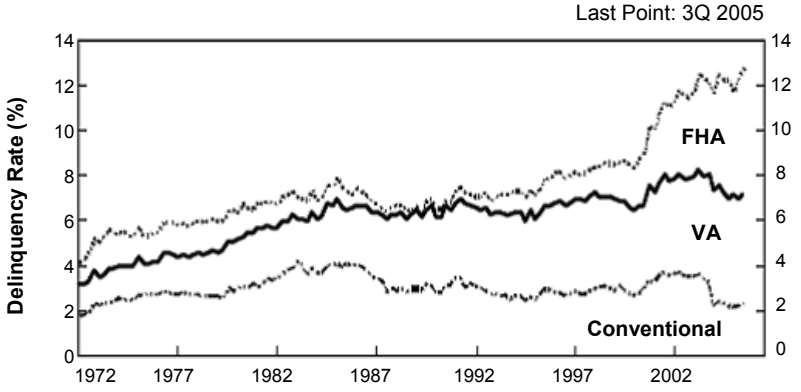
(1) ARM share is percent of total volume of conventional purchase loans.
(2) Projected by Freddie Mac.

Source: HUD Survey of Mortgage Lending Activity; Mortgage Bankers Association; Federal Housing Finance Board; Freddie Mac, Insurance Information Institute.

But there is a strong force acting to keep rates high and push them even higher—the need to create an incentive for foreign investors to buy more U.S. Treasury bonds to support Bush's deficit spending. And this upward force on rates is further accentuated by the weakness of the dollar (diminished value on the foreign currency exchange). Therefore, Bernanke has a difficult decision to make. Even for those who are able to hold on, many will owe more than their home is worth for several years. Imagine making payments on a mortgage you took out for $600,000 and having your home worth only $450,000 ten years later. This scenario is very possible and it doesn't exactly do much to help consumer sentiment or disposable income. If you don't think such a scenario is possible, ask the Japanese about it.

First American also expects the pressure on borrowers to peak in 2007 and 2008, as the largest number of mortgages reset to higher rates. After 90 days of no payments, the foreclosure process begins. And many with ARMs wishing to refinance to a FRM don't seem to have many options. In order to prevent borrowers from refinancing their ARMs in order to lock in low FRMs, some companies have included $20,000 penalties if home owners refinance within the 3-year term of the ARM. These restrictions are the result of mortgage-backed securities markets, which seek to lock investment gains for their investors. As a disturbing side note, minorities and low-income home owners have been the subject of these predatory practices. And it will be these groups who suffer the most from the fallout of the sub-prime market.

Figure 10-15. Home Loan Delinquency Rates by % Past Due (1972 to 2005)



Source: Mortgage Bankers Association of America

Mortgage Debt

Despite the huge run-up in prices, the debt-to-value ratio of real estate holdings is at dangerous levels due to the enormous cash-out financings and home equity loans. By the beginning of 2006, the total household mortgage debt relative to the market value of residential real estate (the debt-to-value ratio) stood at just under 45 percent. In contrast, in 1955 when the economy was vibrant, this ratio was 25 percent and climbed to a peak of about 37 percent in 1965, only to fall to about 32 percent over the next twenty years. Double-digit inflation during the Reagan years pushed this ratio above post-war levels, where it has gradually climbed since then (figure 10-16). With real estate values extremely high, there seems to be no upper limit for this ratio once market values correct downward.

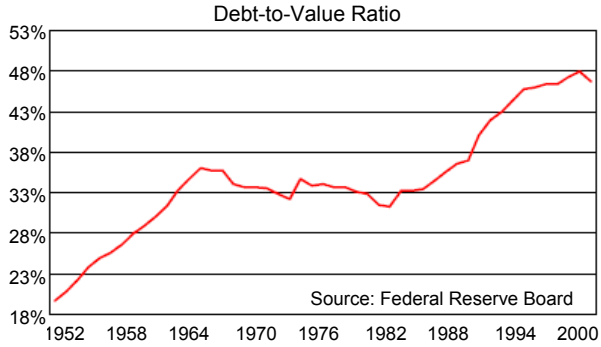
While mortgage rates are fixed for many home owners, consider that on average *about 9 percent of existing homes are sold every year. This means that after five years close to 40 percent of homes will have been sold* (assuming homes are sold twice). This implies a fairly high turnover of homes under normal circumstances. Accordingly, even many who refinanced or bought a home when FRMs were at 40-year lows won't be so lucky when long-term rates begin to rise in 2008 because they'll eventually need to move for one reason or another. Most likely, mortgage rates will be much higher by then. And this will put an additional downward pressure on home prices.

According to estimates by the Federal Reserve Board, by the end of 2013 residential mortgage debt is expected to top $17.2 trillion, assuming a mid-range estimate of 8.25 percent annual growth rates. The Fed's higher growth rate assumption of 9.5 percent per year would place this debt at $19.2 trillion (see appendix figures 10.1 and 10.2). Either outcome will result in a huge debt burden for Americans.

In 2003, the total residential mortgage debt outstanding (MDO) grew by 13.2 percent to $7.8 trillion. At that time, this was the fastest rate since the last major real estate bubble in the late '80s. By 2003, the MDO was nearly as large as the national debt. In 2005, the MDO grew by a record 13.8 percent to $9.8 trillion. As of mid-2006, the MDO was approximately $10 trillion, or about $1.5 trillion larger than the official national debt. Overall, *since the early stages of the bear market, the MDO has risen by 50 percent between 2002 and mid-2006*.

Over the next decade, expected increases in mortgage debt will put a strain on disposable income. Figure 10-17 estimates the current debt-to-value ratio (mid-2006) at around 48 percent (versus the 45 percent data in Jan. '06, figure 10-16). As mortgage debt continues to increase according to these projected growth rates, the debt-to-value ratio will experience a disproportionate increase as the bubble deflates. Finally, forecasts show that by 2010, the debt-to-value ratio will range between 53 and 55 percent. When the housing bubble deflates, this ratio will most likely surge to previously unseen levels and could easily surpass 70 percent within the next decade.

Figure 10-16. Mortgage Debt Use for Home Purchases Has Been Rising

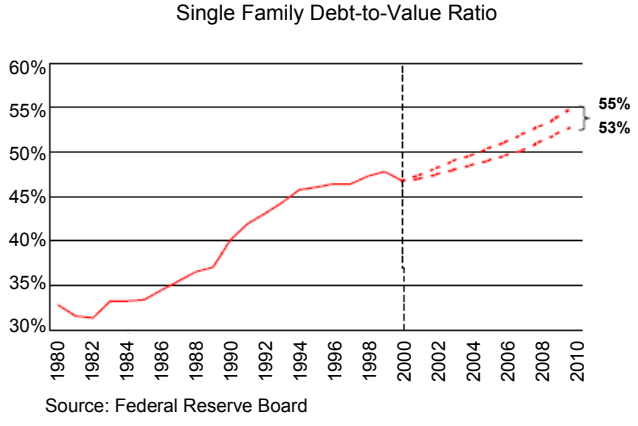


The Real Estate ATM

According to the Federal Reserve Board, American home owners extracted $600 billion in equity from their homes in 2004 (up by $39 billion from 2003) and spent half of this money on goods and services. *This $300 billion accounted for 40 percent of the GDP growth in 2004.*

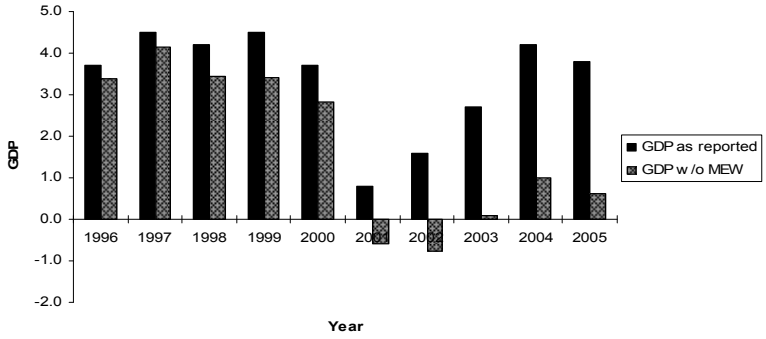
Figure 10-18 illustrates the effects of mortgage equity withdrawal on GDP growth from data reported by the Federal Reserve. Between 2003 and 2004 alone, the Federal Reserve estimates that Americans tapped into over $1 trillion of equity from their homes using home equity loans, refinancings, and cash-out purchases at closing (figure 10-19). Alone, these cash-out financings have been estimated to account for a significant portion of inflated values during the more recent stages of the bubble. It has been this source of credit that has fueled the primary portion of GDP growth since 2003.

Figure 10-17. Debt-value Ratio is Expected to Surpass 50 Percent Soon



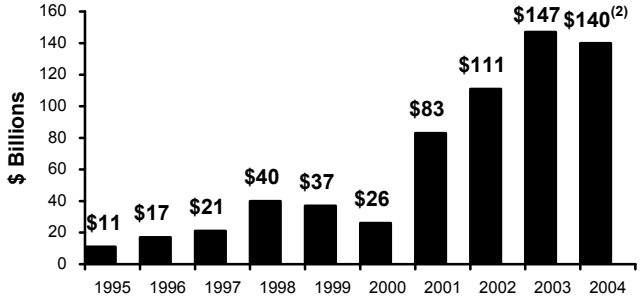
Ironically, it has been the flight from the scandals of the recent stock market bubble that have caused many to seek real estate as a "safe" investment alternative. And while the stock market is by no means finished correcting from the bull market period of the 1990s, we now have a real estate bubble that must also correct.

Figure 10-18. The Effects of Mortgage Equity Withdrawal on GDP Growth



Source: Mortgage Bankers Association of America and Federal Reserve Flow of Funds

Figure 10-19. Cash-Out Home Mortgage Refinancing, 1995-2004 (1)



(1) Represents home owners' cash withdrawals from home mortgage refinance transactions. Includes prime conventional loans only and are net of retirement of outstanding second mortgages.

(2) Estimated.

Source: Freddie Mac

Mortgage Money Machine

How is it possible that the mortgage industry has been able to lend so much money to so many under-qualified consumers? Even back in the late '90s when the economy was at its peak, it was more difficult to obtain mortgages than today. With few options remaining, *Washington has permitted this industry to engage in irresponsible lending practices to increase access to credit for the purpose of fueling the phantom recovery.* This has served to enhance consumer spending that has boosted many industry wages; fees and commissions of brokers in the real estate and mortgage industry, commercial banking salaries, and revenues in all industries as a result of reckless debt spending.

Hence, without this real estate bubble, there would be very few signs of improvement in the economy since 2003. As well, remember that the majority of government discretionary spending items have been for Iraq, Afghanistan, Katrina, and homeland security—none of which resulted in a direct improvement in living standards, as normally implied by GDP numbers. Therefore, *if we adjust for the effects of spending due to credit released from the real estate bubble and due to government expenditures that have not resulted in an improved economic benefit, America has actually registered negative GDP growth since 2003.* Yet, aided by the loose monetary policies of Greenspan, the financial industry has helped create the illusion of a recovery.

Securitization of the Credit Bubble

Over the past two decades, the consumer finance industry has become so specialized that most loans now pass through several hands after they are originated. Today, all consumer and mortgage loans are packaged into special types of securities sold to institutional investors in transactions outside of the stock market. In the process, thousands of loans are combined into a single debt product and then sliced into smaller securities, each with different credit scores.

This allows financial institutions to mask very risky sub-prime loans within a package of higher quality loans. It's been the strength of this large market for hybrid debt products that has provided massive liquidity to banks. In large part, the strong demand for these investment products has led to the swelling of the real estate and credit bubbles.

The process of converting these loans into investment-grade products of variable risk is called securitization. It's the process used by banks to package otherwise unmarketable credit card debt, mortgages, auto loans, business lease payments, tax liens, and many other debt payments into what are categorized as investment-grade securities, purchased by large financial institutions such as pension plans; most likely, yours.

> *"The old wisdom that you had to be of mid- to high-investment grade quality to compete in the finance business was turned on its head by securitization."*
>
> Scott J. Ulm, managing director of Credit Suisse First Boston.

Virtually all consumer and business loans in America are analyzed and packaged into a pool along with hundreds or even thousands of other loans, then rated for default risk by an outside agency. This is the basic process of *securitization*. And once the process is complete, these securities are considered *collateralized*, since they are backed by cash flow payments of the borrowers. When this debt has been securitized from auto loans, collection notes, business credit, royalties, TV syndication deals, or virtually anything else with a revenue stream (except mortgages) they are known as *asset-backed securities*. They are then resold to institutional investors outside of the stock and bond markets in what is known as the asset-backed securities (ABS) market. Mortgage loans securitized in a similar manner are known as *mortgage-backed securities* (MBS) and are bought and sold by the same institutional investors on the mortgage-backed securities market.

The complexity of the MBS market has evolved beyond that of the ABS market, due to the various levels of securitization as well as the multitude of mortgage derivative products sold in this market. The vast majority of MBS exist due to the upstream liquidity provided by Fannie Mae, Freddie Mac, and Ginnie Mae (the GSEs). Together, these three government agencies are responsible for securitizing and marketing the majority of the $11 trillion of outstanding residential mortgage debt in America.

Once packaged and rated for credit risk, institutional investors supply the downstream liquidity needed to keep the cycle running, through their purchase of these securitized mortgage products from the GSEs. Meanwhile, loan origination companies get cash to issue more loans. In short, *the asset- and mortgage-backed securities markets (collectively known as the collateralized securities market) serve to create a perpetual money machine that has fueled the massive credit and real estate bubbles seen today*.

Secondary Mortgage Market

The same financial institutions that originate mortgage loans are not required to service the loans. In fact, over the past two decades the rapid growth of America's financial system has led to a new trend in which most banks that originate loans sell them to other companies in exchange for cash flows to originate more loans. This has given rise to the *mortgage servicing industry*, which is now larger than the *loan origination industry*. Together, both industries comprise the *primary mortgage market*.

Closely associated with the primary market is the *secondary mortgage market*, which specializes in buying and selling mortgages packaged in bulk and sold to institutional investors on the MBS market. The mortgage servicing industry works closely with the providers of MBS to ensure these investment products meet certain standards, as well as a timely collection of payments.

Incidentally, government-sponsored student loans are the least risky of all collateralized securities and possibly the safest and best investment one can make in a financial company due to the guaranteed repayment requirement set forth by Congress. Unlike other collateralized securities, debtors who owe money to Sallie Mae or similar

agencies cannot get out of their debt under any circumstances, including bankruptcy. These companies even have the power to garnish Social Security benefits until the loans have been paid off (if you are looking for a safe financial stock, look no further; Sallie Mae is your answer).

Furthermore, Sallie Mae even owns many debt collection companies that pile on penalties and fees when these loans are not repaid as scheduled. Thus, Sallie Mae is unique among other types of collateralized securities, which can be eliminated through bankruptcy, although now more difficult. In contrast, it's still very easy for home owners to walk away from their mortgage commitment with no major ramifications other than the loss of their home.

MBS Money Machine

The first mortgage-backed securities were created during the 1970s by the former Salomon Brothers, when housing demand was greater than the availability of credit. Basically, the mortgage cash-flow cycle works like this: homebuyers go through a mortgage broker who advertises the loan applicant to larger financial institutions, who then place competitive bids for the loan. Next, a finance company buys the loan and places it among thousands of similar loans to create the mortgage-backed security (MBS). The company gets some agency to oversee the process and receives a rating on the loan based upon the individual credit records of the borrowers.

Typically, financial institutions use a cooker-cutter formula to determine loan suitability, while the homebuyer's interest rate is based upon the perceived risk of default. Then an investment banker underwrites the security and markets the deal to institutional investors, slicing each security into different levels, each with a different risk level. Institutional investors purchase the debt slice of their choice based upon the amount of risk exposure they want. In return, these investors receive principal and interest payments from the homeowner's monthly mortgage payments. When home owners obtain home equity loans, a similar process occurs. However, home equity loans are often (but not always) placed into the ABS category, secured by the equity from the home.

Bigger than the Stock and Bond Markets

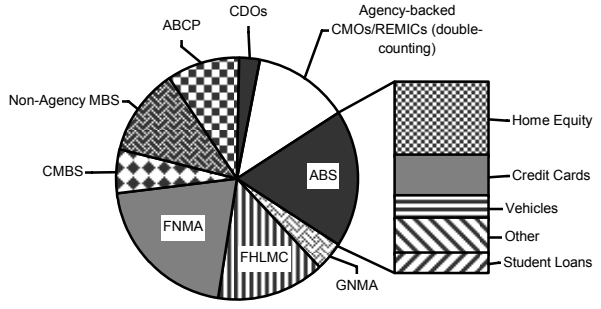
The MBS and ABS markets have exploded over the past two decades and now are considered amongst the biggest investment markets worldwide. Most consumers aren't aware of them since these securities aren't publicly traded like the stock and bond markets. Rather, ABS and MBS are typically bought by pensions, insurance funds, mutual funds, and other large institutions. But since the primary companies involved in securitization of ABS and MBS are publicly traded, (Freddie Mac, Fannie Mae, and Ginnie Mae for MBS; Sallie Mae, Citigroup, Chase, and Bank of America for ABS and some MBS) a significant portion of mortgage and consumer debt is indirectly linked to the stock and bond markets.

Figure 10-20 shows a breakdown of the $12 trillion collateralized securities markets, mainly made up of MBS and ABS. The entire pie excluding the ABS slice makes up the $9 trillion MBS market (note that 2006 data has increased to nearly $11 and $4 trillion for MBS and ABS respectively). As you can see, the MBS market has become so large that it now dwarfs the $2 trillion ABS market. The extra $1 trillion comes from collateralized derivative securities. Note that the ABS market includes not only credit card and auto loan securitization debt, but also student and home equity loans.

Figure 10-21 illustrates the size of the ABS and MBS markets relative to the overall publicly traded bond markets. As you can see, the $10 trillion MBS market alone (Agency MBS and Agency debt, private MBS, and ABCP) is larger than the corporate and U.S. government bond markets individually, and nearly as large as both of these markets combined. When you add the $1.9 trillion ABS market to the MBS market, the entire $12 trillion ($14 trillion 2006 data) collateralized market is larger than the U.S. government and corporate bond markets combined. In comparison, as of June 30th, 2006, the estimated value of the collateralized securities markets stood at over $14 trillion while the total value of the U.S. stock market stood at around $13 trillion. Thus, the collateralized securities market (primarily made of mortgage debt) is the biggest investment market in the world.

Combined with the fragility of the economy, it should be easy to appreciate the enormous credit risk the collateralized markets have generated. Depending on how, when and to what extent the real estate and credit bubbles correct, large aftershocks could ripple throughout America's financial system, triggering a massive stock and bond market sell-off, as well as huge problems for Fannie Mae, Freddie Mac, and all other banks involved with ABS and MBS, depending upon their exposure.

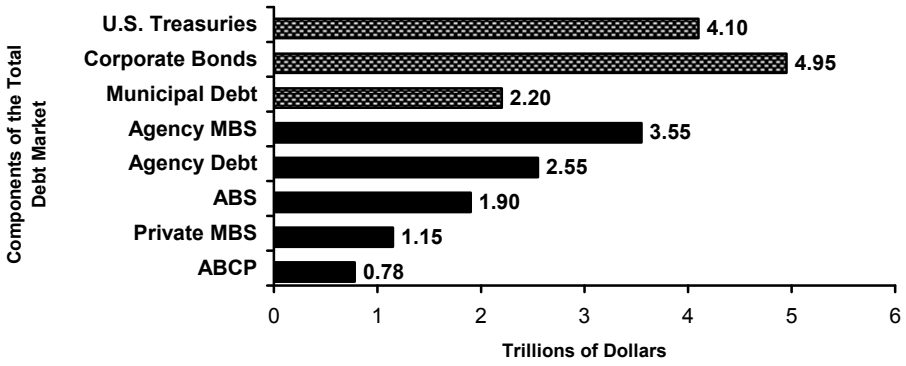
Figure 10-20. Breakdown of Debt Type in the Collateralized Markets by Asset Class



Based on a total $9.02 trillion total as of September 30, 2005
Source: Bond Market Association, 2005

Imagine for a moment how the stock and bond markets would react to a large number of bond defaults by corporations. Now think about how vulnerable the MBS and ABS markets are, given the potential effects of the real estate and credit bubbles. Remember, *it's very easy to walk away from a mortgage with no real consequences.* Thus, it should be clear that America could face a devastating financial crisis from a misstep in the MBS market alone.

Figure 10-21. U.S. Capital Debt Markets (selected components as of September 30, 2005)



Source: Bond Market Association, 2005

MBS & ABS Markets Created the Bubble

While many think record low interest rates led to the housing boom, it was actually the enormous amount of liquidity generated by the ABS and MBS markets that allowed the lax credit standards resulting in ridiculous financing terms such as interest-only, high-loan-to-value loans (HLTV, where the borrower borrows up to 125 percent of the value) and ARM mortgages. Augmented by low rates and consumer greed, it has been these irresponsible mortgage products that have fueled the housing boom.

However, if financial institutions did not provide demand for these securities, many of the irresponsible lending practices would not have occurred. In fact, the overwhelming demand for these securities spurred the growth of the sub-prime market as a way to feed this demand. Similarly, it was the securitization of credit card and auto debt that enabled financial companies to offer great rates. After all, many of the originating banks simply sold off the debt notes to institutional investors who provided them even more cash for new loan originations. Yet, with so much importance to the U.S. economy, *neither MBS or ABS are sold on any public exchanges, so they are not subject to the strict reporting and disclosure requirements of the SEC.*

Risks of Collateralized Securities

The great thing about securitization is that it creates liquidity and makes credit widely available to consumers and businesses at competitive rates, all of which helps drive the economy. While securitization is often an invaluable resource for generating abundant credit for economic expansions, it can also lead to busts if a sufficient number of consumers default on payments.

Noteworthy of mention are some of the shortfalls of the securitization process. For instance, securitization doesn't eliminate the risk of collateralized loans and assumes their liquidity and marketability will remain in tact. As well, there's an enormous amount of guesswork that goes into structuring the risk of these loans. In short, GSEs and other financial institutions have to estimate how much revenue they can expect at any given time, how much of that money they'll need to back their bonds safely, and how much cash will remain as a profit—a lot of uncertainties.

Even the riskiest of these loans can be manipulated into AAA-rated debt and sold to pensions and other large funds because the same standards that apply to corporate debt are not applied to collateralized debt products. In addition, these ratings do not account for whether investors will receive a return on principal. And since companies that securitize these loans are not regulated like banks, they don't have a capital requirement that would ensure adequate reserves to fund payments to investors.

Ever since the birth of the collateralized securities market three decades ago, we have yet to see a blowup. However, that scenario may not be so far off, as credit risk continues to increase. Consequently, recent concerns emphasizing the vulnerability of this huge market might be the major reason for the new bankruptcy law passed in October 2005. The bankruptcy law provides some security to the ABS markets since it's now more difficult to walk away from consumer debt. However, it's still relatively easy to walk away from a mortgage. Therefore, the vast majority of this market remains very vulnerable.

Government-Sponsored Enterprises

GSEs are corporations that were created by Congress to increase Americans' access to mortgage loans. There are three GSEs and several related agencies: the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Home Loan Bank (FHLB) system.

Fannie Mae was created in 1938 during the Great Depression to help Americans afford housing. It sells conventional mortgages as well as those insured by the Federal Housing Administration (FHA). Freddie Mac was established in 1970 for the purpose of providing more funds to lenders. In addition to these GSEs, there is also the Farm Credit System (established in 1916) and the Federal Agriculture Mortgage Corporation (Farmer Mac).

As far as the real estate and mortgage industries are concerned, the primary function of GSEs is to sustain a liquid mortgage market. As we have seen, the primary mortgage market is created by banks and other lenders providing financing for mortgages. But without a place to go, these creditors would soon run out of funds to loan customers. So in order to keep mortgage cash flows robust, Fannie Mae, Freddie Mac, and Ginnie Mae buy these origination loans, providing banks with cash to approve more loans. From these agencies, loans are packaged into a variety of securities, which are typically purchased by pension funds, mutual funds and banks. Thus, *the secondary mortgage market (the GSEs) generates money for lenders (the primary mortgage market) to continue supplying mortgages to consumers.*

The original intended purpose of the GSEs was to focus on affordable housing for the private sector. Yet, dozens of studies have shown that Freddie and Fannie have not been dedicating their resources towards this mission, but have been supplying funds to the overall market. Therefore, *the GSEs have been a significant stimulus for the rapid growth of sub-prime loan market that has contributed to the enormous risks we see within the real estate bubble.*

Why GSEs are Dangerous

As confirmed by the Office of Federal Housing Enterprise Oversight (OFHEO), an arm of the government that regulates Fannie Mae and Freddie Mac,

> *"The housing market contributed significantly to the Nation's economic recovery. Falling mortgage rates stimulated housing starts and sales, and many refinancing borrowers took out loans that were larger than those they paid off, providing additional funds for consumption expenditures."*

Because Fannie and Freddie lack sufficient government oversight, they haven't maintained adequate capital reserves needed to safeguard the security of payments to investors. And due to exemption from the SEC Act of 1933, they aren't required to reveal their financial position. In fact, *they're the only publicly traded companies in the Fortune 500 exempt from routine SEC disclosures required for adequate transparency and investor accountability.* Exemption from the Act of 1933 also releases the GSEs from adherence to rules governing tender offers and public reporting of insider stock transactions. Finally, they're not required to register their debt offerings with the SEC, which diminishes transparency further. As a result, many feel the GSEs are exposing themselves to excessive risk. Oddly enough, while Washington subsidizes Fannie Mae and Freddie Mac each year by over $10.6 billion (2002), they don't require complete disclosure or insist on standard capital requirements.

Fannie and Freddie hold between 20 to 50 percent of the capital required by bank regulators for depository institutions holding mortgages. As of 2003, the GSEs had $1.6 trillion in combined assets, $1.4 trillion in retained mortgages in their portfolios, $1.5

trillion in outstanding debt, and $1.5 trillion in derivatives. In addition, outstanding MBS generated by the GSEs but held by third parties totaled $1.7 trillion.

What would happen if one or more GSE got into financial trouble? Not only would investors get crushed, but taxpayers would have to bail them out since the GSEs are backed by the government. Everyone would feel the effects. With close to $2 trillion in debt between Freddie Mac and Fannie Mae alone, as well as several trillion held by commercial banks, *failure of just one GSE or related entity could create a huge disaster that would easily eclipse the Savings & Loan Crisis of the late 1980s.*

Furthermore, the GSEs have created very risky derivatives exposures for themselves and many financial institutions. As these debt instruments evolve into different products, less transparency and more uncertainty is created. Fannie Mae has taken about half of its MBS and pooled them into another security called a Real Estate Mortgage Investment Conduit (REMIC), otherwise known as a restructured MBS or Collateralized Mortgage Obligation (CMO). These mortgage derivatives are complex and considered very speculative.

According to recent data, the total derivative exposure for all securities stands at nearly $300 trillion. However, it's not known for certain what the net exposure is. In other words, how much of these derivatives are used as hedging securities versus leverage. As a simple example, if $1 million in derivatives are in call options for Microsoft stock with the same strike price and expiration as another $1 million in put options, the net derivatives exposure is 0. Thus, even a 5 percent net exposure would be huge. It's also not known with certainty how much of these derivatives are in mortgage-related securities, since only a small portion are listed in the collateralized securities markets.

I want you to stop and think for a minute about all of the fraudulent practices that have occurred within the housing industry, from known problems of poor workmanship and cheap materials by some builders, to inflated appraisals performed to generate ease of lending and to support cash-out deals. *From inflated appraisals alone, 10 to 15 percent of MBS securities or up to $1.5 trillion have been overvalued by conservative estimates.* Combine that with the lack of transparency, questionable risk exposure and fraudulent practices by executives at Fannie and Freddie, and you have a disaster ready to strike.

Now combine that with over 10 million Americans holding interest-only and ARM mortgages, throw in a million or two job losses due to say the failure of Delta, Ford, General Motors, or some other large vulnerable company, and you could end up with a blowup in the MBS market. This scenario would devastate the stock, bond and real estate markets. Most likely, there would also be an even bigger mess in the swaps and derivatives markets. In conclusion, the collateralized securities market is a very tall and fragile house of cards poised to collapse, and all it might take is one card to be dislodged. A breakdown in just one of the GSEs is very possible and could result in a financial collapse of far greater magnitude and scope than Enron, triggering massive losses.

Troubles Already Showing

Lack of congressional oversight and transparency with the GSEs has already resulted in mismanagement, fraud, and abuse of power. Only in 2003 did Fannie Mae finally agree to register under the SEC Act of 1934 due to mounting pressure from outside critics. It will now be required to provide annual and quarterly financial filings. But the damage has already been done. Recent investigations have forced Fannie to restate earnings to the tune of nearly $11 billion from 1998 to mid-2004. The SEC has fined them $400 million and the management is now being investigated by the Department of Justice. The SEC has a long track record of acting too little too late, and this could prove to be another example.

Thus far, Fannie Mae was found to have misrepresented its risk position, acted irresponsibly, and manipulated earnings so company executives would receive huge bonuses. Figure 10.3 (appendix) shows that Fannie was able to meet earnings goals for all bonuses from 1996 to 2003. No doubt, these bogus numbers would have continued if they were not caught. Box 10-1 (appendix) shows a partial summary of the 311-page special report of the OFHEO's special investigation of Fannie Mae.

Lack of Government Controls

Given the lack of standards for traditional FRMs and interest-only ARMs, it seems odd that America's home ownership is not closer to 90 percent. Think about a person who pays $600 per month for an apartment; he can get a loan for $200,000 and have lower monthly payments using an option-ARM. There's virtually no limit to the different types of mortgage products that have been issued. If you want you can get a 1 percent interest loan (a negative amortization loan) reducing the monthly payment even further.

The problem with this explosion of mortgage options in the midst of America's biggest housing bubble is that there's no one to provide financial advice to homebuyers regarding the suitability and financial risk of these loans. With the complexity of mortgage products thrown out in the market to entice buyers there's certainly a huge need for such an industry. We have the NASD and SEC for the stock and bond markets. Why isn't there a similar regulatory agency to prevent consumers from making potentially disastrous mortgage decisions? As well, one might ask the question why Washington hasn't created an agency to protect consumers against unfair business practices by credit card companies. Of course, having the NASD and SEC didn't prevent the Internet bubble, devastating accounting scandals, and hundreds of other episodes of large-scale fraud.

By now you should realize that Washington supports any industry that encourages consumers to spend. Creating an agency to help Americans make wise consumer financing decisions would destroy all the efforts the government has made to pump credit into the banking system. If the economy was truly healthy, Washington wouldn't need to rely on these cheap tactics. While producing deceptive gains in productivity via credit-driven consumer spending, the longer-term consequences are just one more straw (and a very large one at that) added to the camel's back. And eventually the camel's back will

break.

What to Look For

As the real estate bubble begins to lose steam, cautious investors may be able to spot early warning signs and avoid loses or even profits. Investors should keep an eye on rising inventories of new homes and the length of time homes are on the market, coupled with price declines. Although large one-month drops would be a reason for focused attention, investors should look for a change in trends over a several month period.

The real estate fallout will no doubt cripple smaller companies such as mortgage lenders, home builders, and home improvement stores. But it will also affect huge financial institutions such as Citigroup, Bank of America, Chase, General Motors (GMAC), General Electric (GE Finance), and Washington Mutual, depending upon the extent of their exposure. As well, if things get really nasty the credit problems could extend to the ABS market which would cause further devastation.

What Can We Expect?

America has become a nation of credit spending. And most believe that home ownership is the biggest and safest investment they will ever make. These perceptions have been further magnified since the deflation of the Internet bubble. However, as I have discussed, there are tremendous risks for both home owners and real estate investors alike. Already, outstanding residential mortgage debt has continued to surpass record levels. Even amidst tremendous price appreciation, the debt-to-value ratio is approaching record highs. When home prices correct downward, these effects will be more pronounced and the "poor effect" will kick in.

Housing prices are absolutely critical to the success of companies such as Lowe's, Home Depot, and Sears. As well, most banks are closely tied to the health of the housing market because one way or another you can bet they have exposure to the MBS market. Many of the larger financial institutions have a much greater risk exposure with real estate derivative products. Overall, the biggest threat of this bubble may be the broad-reaching impact of a blow-up in the MBS market that would send shockwaves throughout the capital markets.

Based on today's grossly overvalued housing prices, a 35 percent correction on average seems very likely. And in some areas, a 50 to 60 percent correction is possible. However, don't expect a sudden collapse. Most likely, it will take several years for the real estate washout to be completed. We can only hope that the MBS market doesn't experience its first blow up since inception, but don't bet on it.

Conclusions

On average, since 2001, U.S. home prices have risen by over 57 percent, (33 percent adjusted for inflation) and in many cities this number is closer to 150 percent. As of June 2006, the median home price in America approached $230,000. Therefore, as it stands today, unless you take out a risky ARM or interest-only mortgage, the average home is not affordable for the average worker. Already, with short-term rates above 5 percent, ARMs are no longer an option, forcing those who cannot afford a home (but who believe real estate is a great investment) to take out interest-only loans.

Just as Greenspan denied any existence of an Internet bubble a few years back, he has also denied any trace of a real estate bubble. He even recommended that Americans consider financing their homes with ARMs in January 2004. A few months later, he began raising rates by nearly 400 basis points over the next two years.

There is indisputable evidence that most Americans have been buying homes as an investment vehicle for at least the past ten years. And this behavior is the primary indicator of a real estate bubble. Specifically, this evidence arises from the disparity in home prices versus rental costs, lack of real wage growth, and the massive expansion of credit provided by Greenspan's reckless monetary policies. GSEs have added to the real estate boom by providing endless liquidity, thereby encouraging the growth of the sub-prime market.

Since 1997, the U.S. total home mortgage debt outstanding for has risen by over 160 percent to about $11 trillion. With an estimated *75 million home owners* and over $4 trillion of increased residential real estate value in the past few years, there should be no doubt that the real estate bubble is peaking. At least 30 percent of the $11 trillion residential mortgage debt market will correct downward leading to record foreclosures, which will affect the MBS and ABS markets. If this correction has not ended by 2011, the housing share of consumer expenditures will decline gradually as the boomers reach retirement.

Under normal conditions, anywhere from *25 to 30 percent of the U.S. economy is directly affected by the housing sector*. However, due to exaggerated asset prices from the housing bubble, this share is significantly higher. I have shown the magnified effects of a loss of housing value on home equity, but this also has a magnified affect on the stock market because the wealth effect is reversed, resulting in dampened consumer spending. Accordingly, numerous studies have shown that *housing prices have up to two times the effect on consumer spending as they do on declines in stock prices*. Consequently, if housing prices decline by 25 percent, the economic impact will be as if the stock market declined by 50 percent.