The State of Real Estate

By

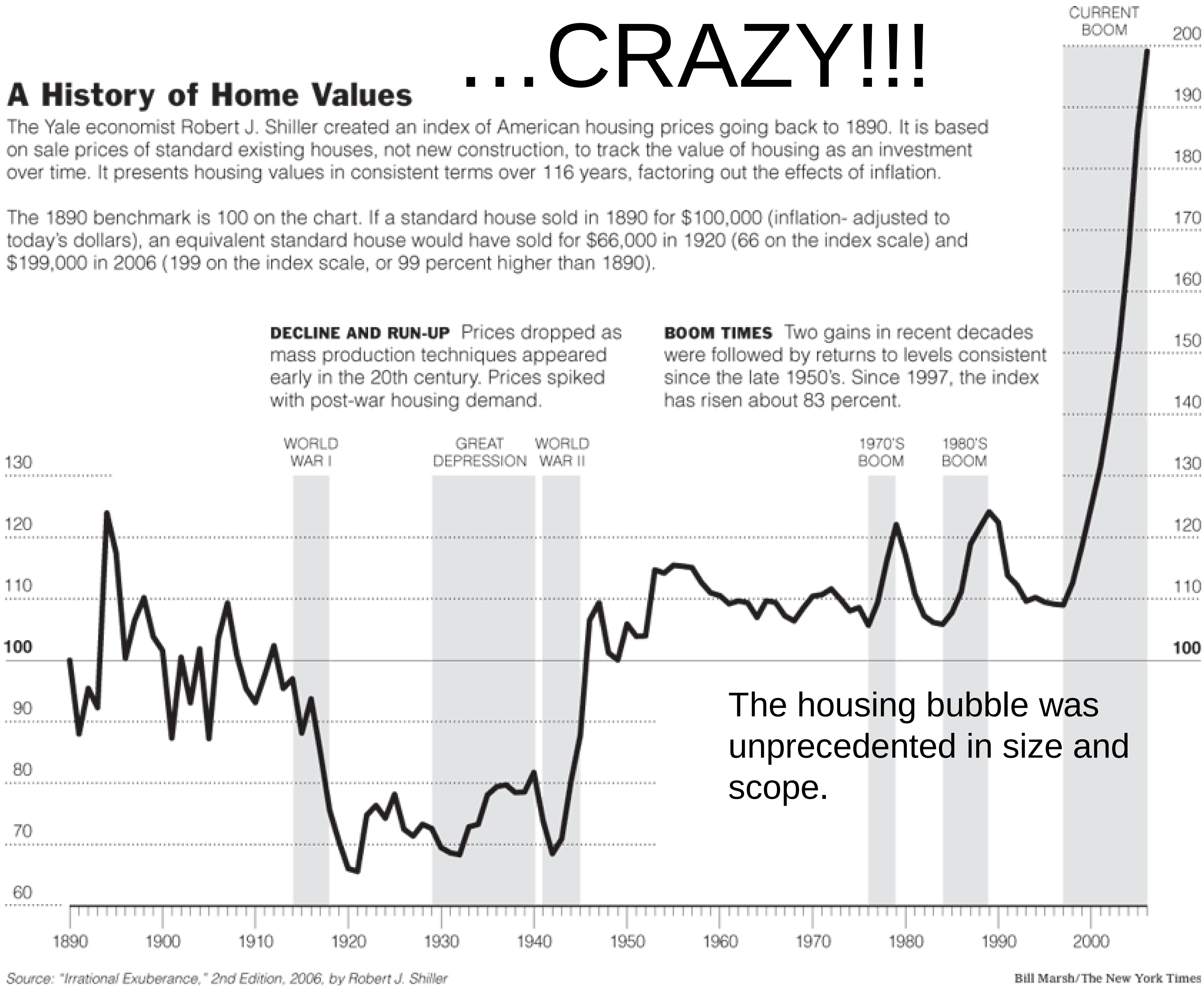
Jonathan R. Surridge

May 25th, 2008

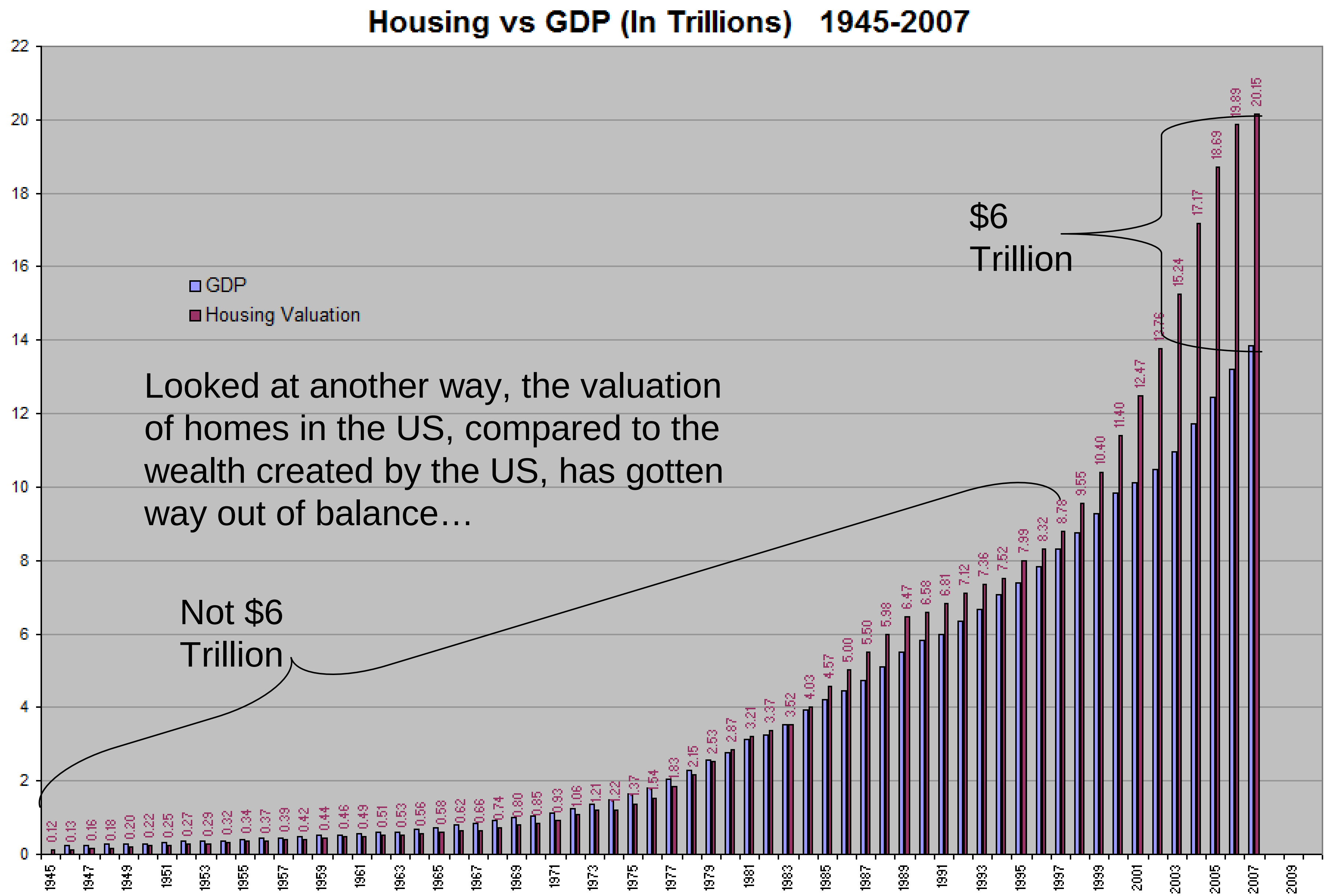
Was there really a housing bubble?

- Homes typically cost what a population can afford to pay
  - Rule of thumb: your home should cost 3 to 4 times your gross annual salary
  - There is a fairly liquid market for homes, both rented and purchased
  - Our population has grown relatively smoothly over the past few decades, and homebuilding has kept pace
- From 1890 to 1990, US homes stayed within about a +/- 25% price band, adjusted for inflation
- As recently as the Summer of 2007, some people questioned whether real estate in the US was overvalued
  - Those people are called REALTORS or MORTGAGE BROKERS
  - They sell houses for a living, so they'll ***always*** tell you it's a great time to buy, even if it's clear that prices have gone…

...CRAZY!!!



The housing bubble was unprecedented in size and scope.

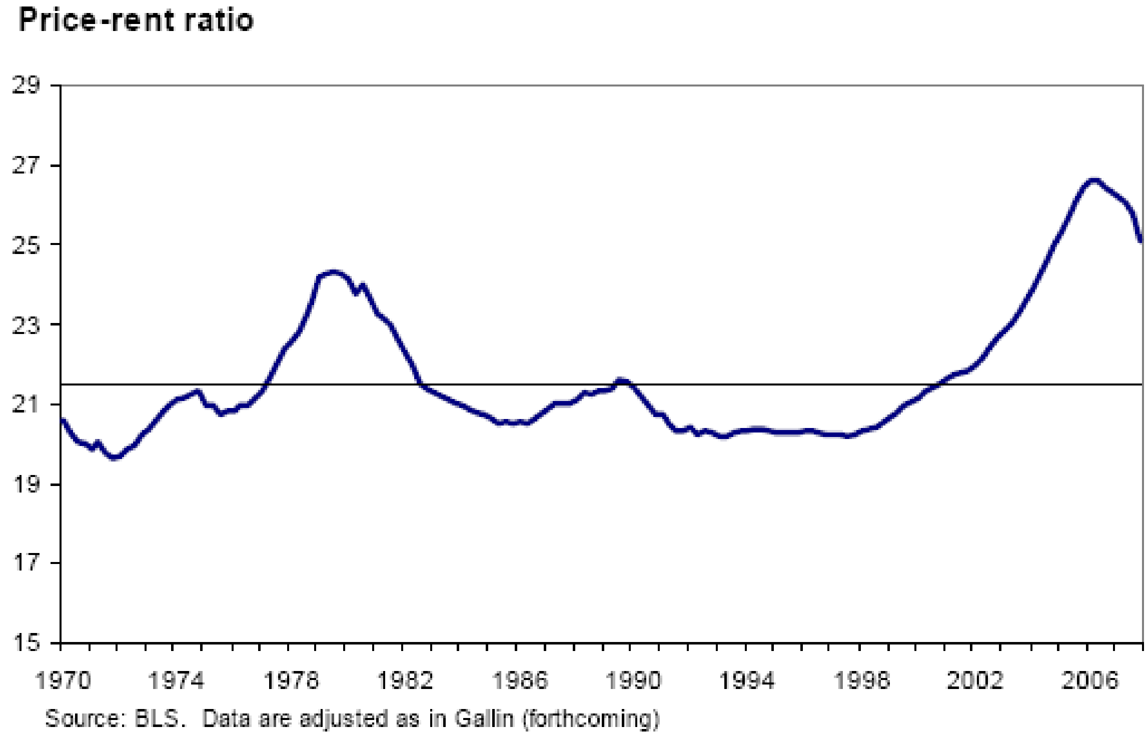


Source: I forget where I got this, but it’s totally reputable. Who would lie about this?

How much should a house cost?

- It should cost more to rent something than buy it
  - You should pay a premium for the freedom to pick up and move at will
  - Landlords only buy properties that cash flow, or they go bankrupt
- Buy vs. Rent = Price to Earnings Ratio
  - P/E ratios are used in financial analysis to compare how expensive assets are in relation to one-another
  - Homes, because they can be either rented or purchased, can be compared similarly

Really, prices compared to rent are higher than ever before



Buy vs. Rent Model Has Broken Down

Personal Example:

- I rent a townhouse in California for $1,800 per month
  - That rent payment equates to about a $350,000 mortgage (back of the envelope)
  - Similar townhouses in my neighborhood sold at the peak (Summer 2006) for $700,000
- As a renter, I'm living here for 50% off
  - I rent month-to-month, so I have flexibility
  - In addition, I don't have to pay to fix anything, and I break a lot of stuff
- My landlord is either a genius or a chump
  - If he bought the townhouse for less than $350K (a price not seen here since 1998), he has a high cash flow asset – GENIUS!
  - If he bought it for more than $350K (anytime after 1998), he's losing money monthly – CHUMP!
- If you bought your house in the Bay Area anytime after 1998, what does that make you?
  - If you can still sell it before the price drops below where you bought it plus transaction costs, you might argue that you're not a chump
  - However, you'd be forgetting the fact that you could have lived in a comparable home for less by renting. This is as true for condos as for mansions (I've priced many of both).
    - Home maintenance can run 1-2% of the cost of the house annually
    - Interest rate tax deduction for owners involves spending a dollar to save 35 cents, not a great deal

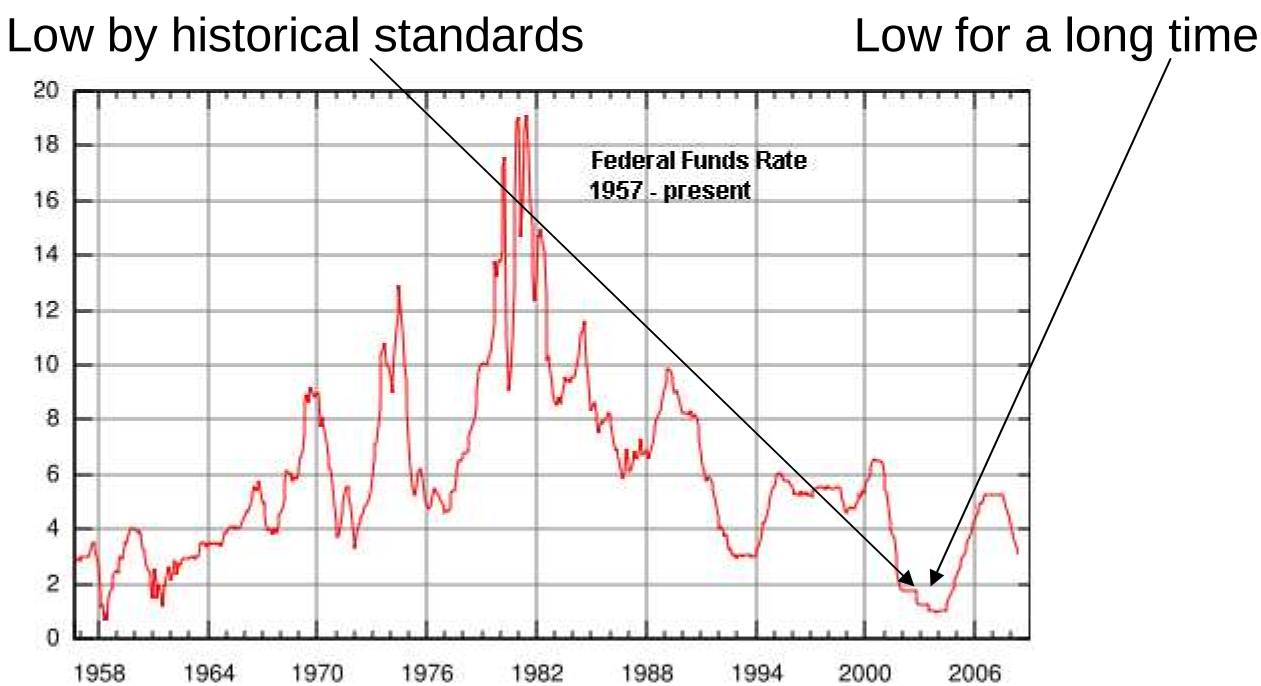
What caused this bubble?

- Low interest rates
- Loose lending standards
- Financial chicanery disguised as innovation
- Herd mentality
- A self-reinforcing upward cycle

Interest Rates Too Low Too Long

"With the benefit of hindsight — and the importance of the word 'hindsight' should be emphasized — it is not hard to argue that the [Fed] was too slow to raise the federal funds target after taking the target down to 1% in 2003," **Federal Reserve Bank of St. Louis** President **William Poole**

- The Fed held rates below 2% for over 3 years in the early 2000s in an effort to bolster the economy in the aftermath of the dotcom bust and the 9/11 attacks
- The US economic recovery in 2003 and 2004 was largely credited to the "wealth effect" attributed to rising housing prices
  - A house typically accounts for one-third of all household wealth
  - Two-thirds of US households own their homes, so this had a big impact



Source: The Fed, I bet.

Why do low rates matter?

Personal example*:

- In 2001, I asked a mortgage broker how much house I could afford**
- Then I got laid-off in the post-dotcom, post 9/11 Wall Street downturn
- In 2003, I got a new job and asked again

Year	Base Salary	Fed Funds Rate	Down Payment	House Price the Broker said I could "afford"
2001	85,000	6.25%	20% required	$440,000
2003	85,000	1.50%	20% not required	$770,000

- THIS IS A HUGE CHANGE
  - Only two years had passed, so the supply of houses hadn't really changed
  - The population hadn't changed much either, which is a big component of demand (the frenzy for houses was just starting up then)
  - The primary determinant of housing prices was FINANCING RATES
  - Note that the down payment requirement was loosening, which leads to…

This is what convinced me there was a bubble.

* Numbers in this anecdote are as I recall them, but won't stand up to HP-12c scrutiny. But neither could a realtor.

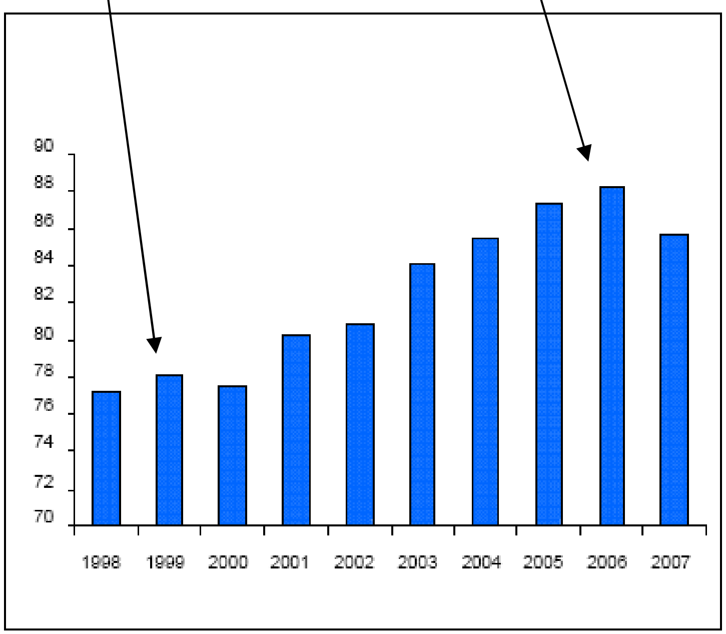
** Notice, nobody ever asks how much dinner they can afford. Houses are different because they involve financing, which scares people. That fright causes them to seek the comforting advice of experts, who in this case have a vested interest.

…Deteriorating Underwriting Standards

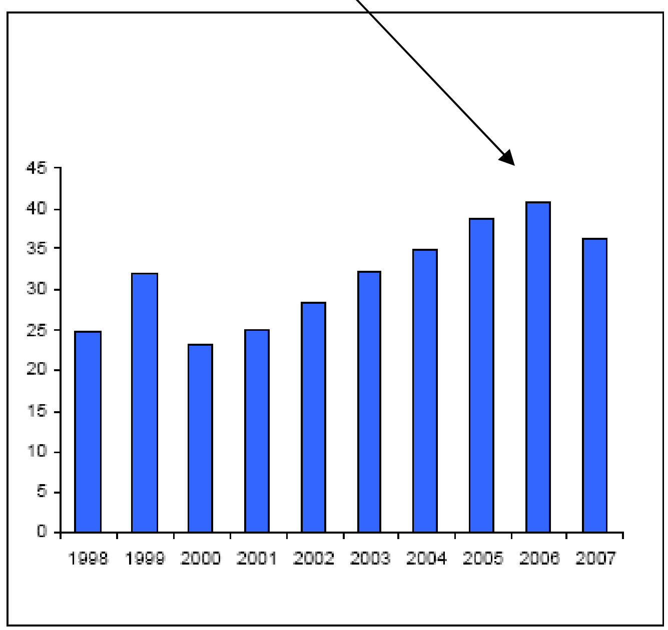
20% down, which used to be the rule, became the exception.

Banks got very careless during the bubble about whether you actually earned what you said you did

Combined Loan-to-Value Ratios
(2/28 Subprime Mortgages)



Percent without Full Documentation
(2/28 Subprime Mortgages)



Charts for prime and Alt-A (near prime) mortgages would show similar trends, if only I could find some after midnight on a Saturday.

Source: Federal Reserve Bank of San Francisco

And Very Creative Mortgages

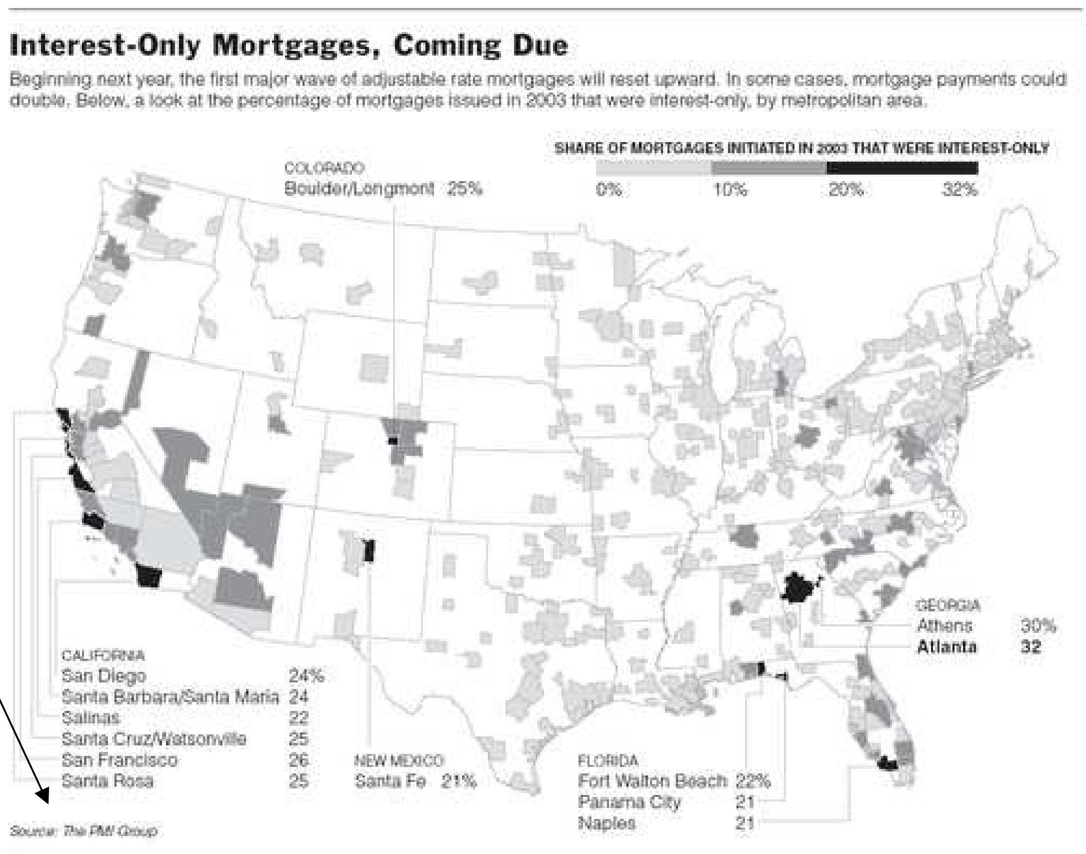
- Interest Only
  - Don’t build equity, just rent the money to buy the house and pretend you’re a homeowner
- No doc loan
  - The “Liar Loan, enabled a vegetable picker in Salinas, CA with $14K in annual income to get a $750K mortgage*
- NINJA
  - No Income, No Job or Assets, enough said
- Negative Amortization
  - Use if you can’t afford even the interest-only payment
  - The ultimate Ponzi loan; impossible to refi, so you can only get out if you find a chump to buy it for WAY more than you did

* I also read a report in the UK’s Business Times of a 102 year old man getting a 25 year mortgage.

California went wild for I/O

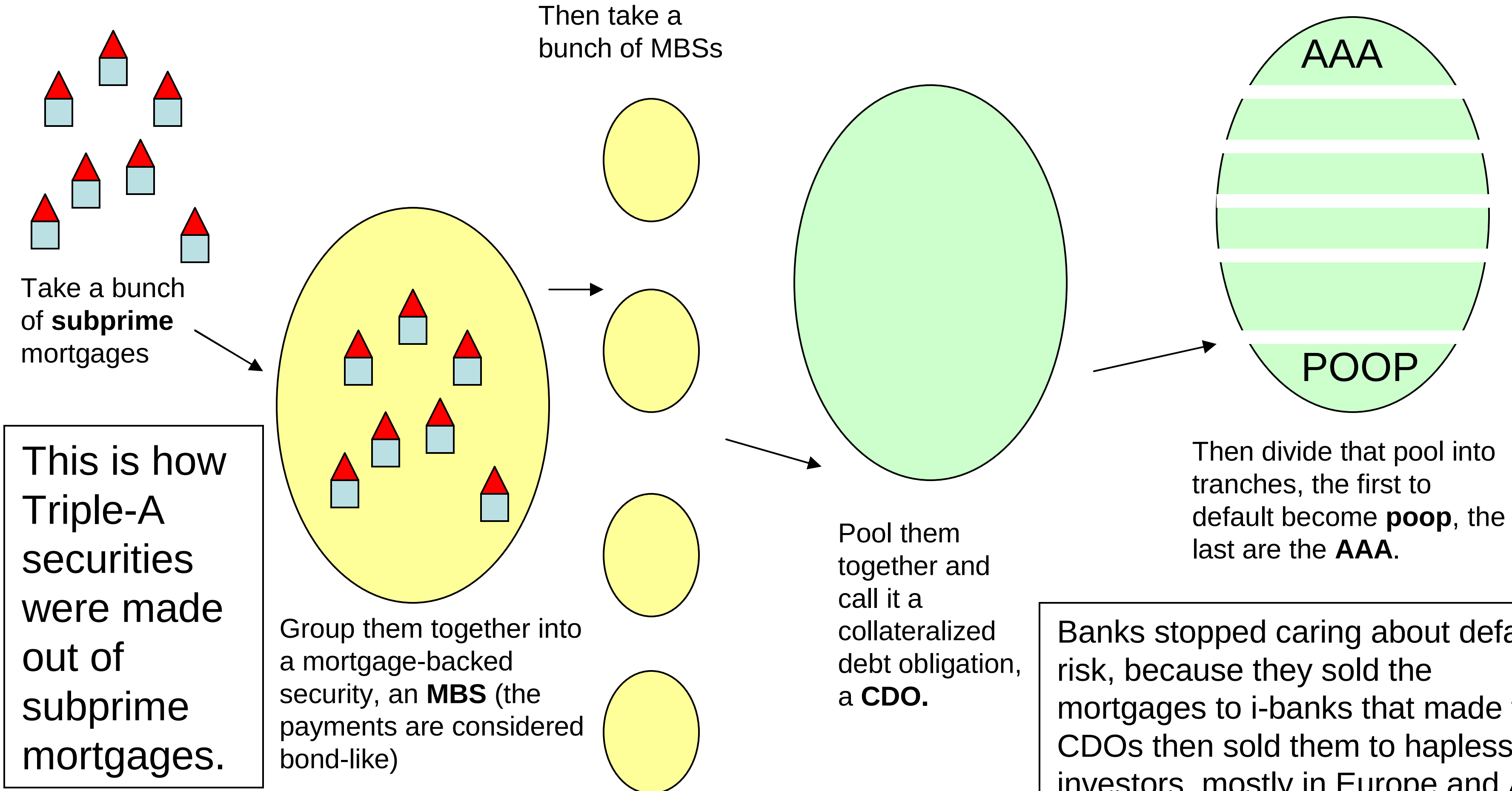
- This is an old chart (2003); by 2006, 67% of mortgages in California had interest-only structures

BTW – The PMI Group sells insurance against mortgage default. Their stock dropped about 90% in 2007, and I made a pile of money because I had seen this all coming and bought put options on them and others.



Why did banks get so reckless?

- Securitization – the old “slice and dice”



This is how Triple-A securities were made out of subprime mortgages.

Banks stopped caring about default risk, because they sold the mortgages to i-banks that made the CDOs then sold them to hapless investors, mostly in Europe and Asia.

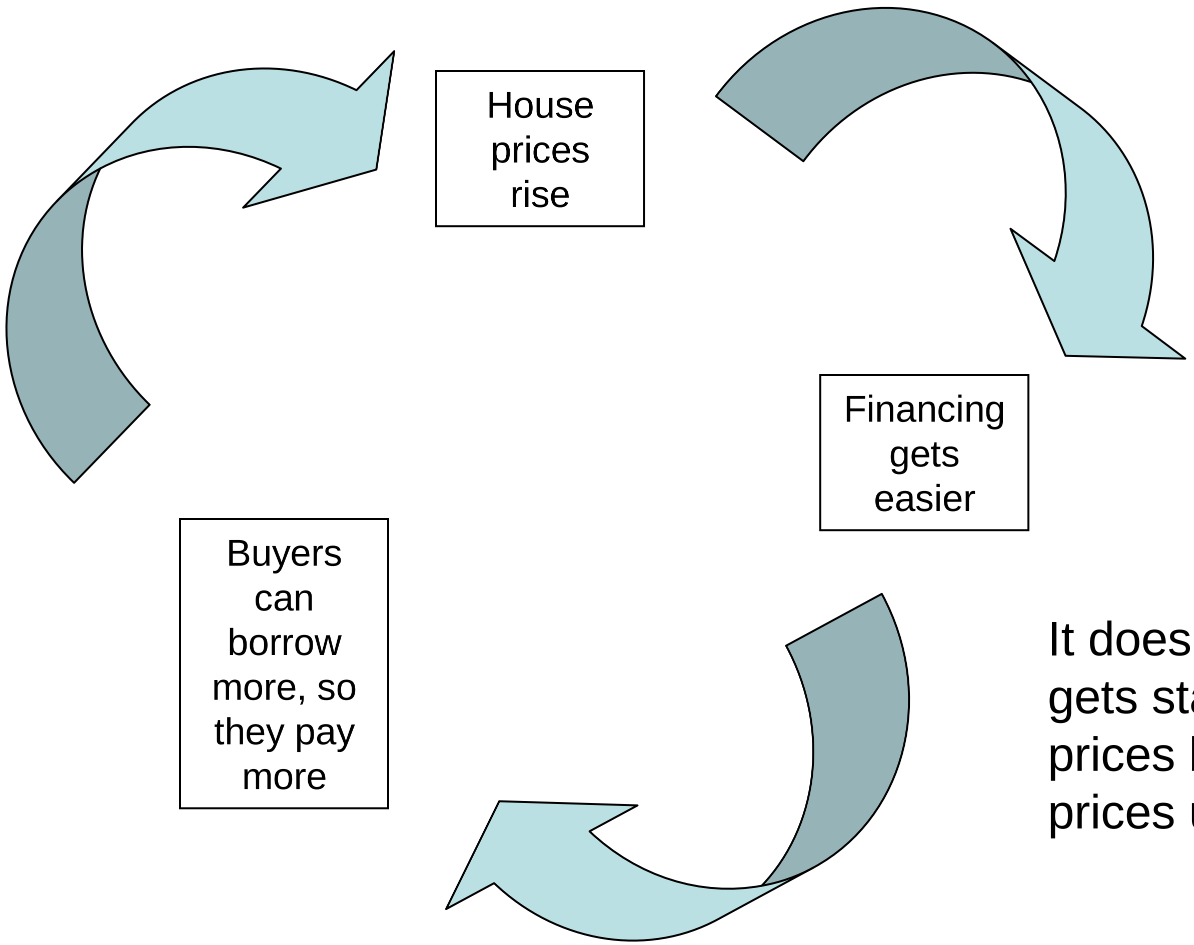
Source: Made it myself.

Herd Mentality, here’s how it works:

1. I'm a smart person with a job, I should own a house.
2. That idiot down the street makes less than I do, but he just bought a cool house. He's a homeowner!
3. I wonder how much house I can afford.
4. I don't know much about real estate. It sounds complicated, so I'll talk to someone who does it for a living.
5. Realtors and mortgage brokers know what they're talking about! (No conflict of interest there, right?) They tell me to spend as much as possible, because housing prices always go up. I don't have to even research that; it's so darn obvious!
6. I will take out the biggest mortgage the broker will give me. I'm not worried, because they wouldn't loan me the money if they didn't know I could afford it. They're professionals after all.
7. Everybody else is doing the same thing, so I have to be as aggressive as possible. They're not making any more land and there's a shortage of housing (again, it's so obvious!), so I have to get into a house now or the prices, which never go down, will rise out of reach.
8. I make $100,000 per year, which makes me way above average, some might consider me rich. The median price of a house in my area is $700,000. I don't care if that's seven-times my income (the rule of thumb is that your house should cost 3 to 4 times your annual income), I'm a rich guy so I should get an $850,000 house. I deserve it!
9. Cool! I just bought my house. It cost me $928,000. I had to bid aggressively because some other jerks were trying to get it and we really love this house. I got it with an interest only adjustable rate mortgage, because the rates on ARMs are one whole percentage point lower than a fixed-rate mortgage (yes, rates are currently at 40-year lows, but I needed that extra percentage point to make the monthly payment).
10. My interest rate doesn't reset for 5 years anyway, and I'll totally be making more than I am now in five years. (Even though on average, people are making less than they were 5 years ago right now).
11. The interest-only part of the mortgage also ends in 5 years, so I'll just refinance the mortgage. The broker told me that should be no problem. (Unless, of course, there's a massive global credit crunch bigger that causes the biggest tightening of credit since the 1970s, but that won't happen).
12. I'm a smart person who owns a house. All is right with the world.*

*It is sheer coincidence that this turns out to be a 12-step program.

The Virtuous Circle



It doesn't matter how it gets started, rising prices beget ever rising prices until…

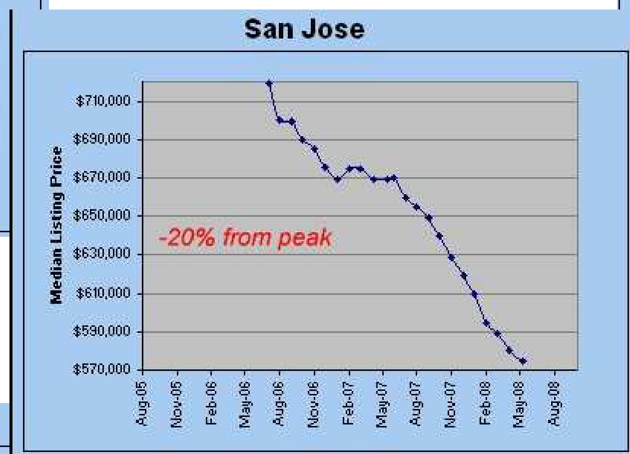
Kaboom!!!

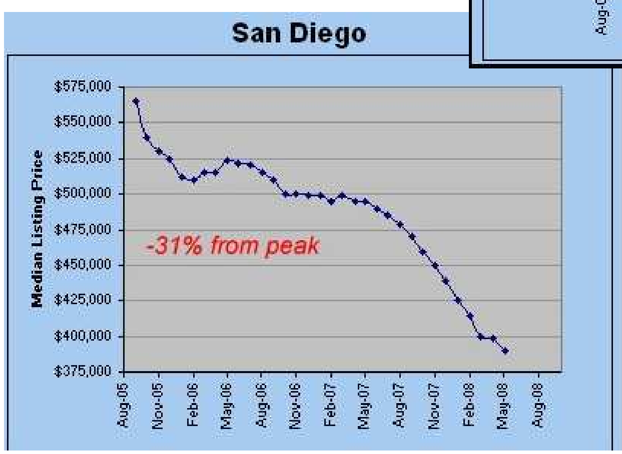
With the caveat that this is a long, drawn out Kaboom.

What caused the bubble to pop?

- Prices got so high that:
  - Buyers had to pay way more than they could afford on their incomes
  - Lenders had to loan way more than they should have
- The Ponzi scheme ran out of suckers
- Many buyers failed to make their first mortgage payments
  - This triggered “claw back clauses on some MBSs
  - Investors that had purchased CDOs began to fear and then realize that their investments were worthless
  - The staggeringly complex and interconnected global financial system seized up, shutting off the flow of credit

But housing prices never go down in California!!!





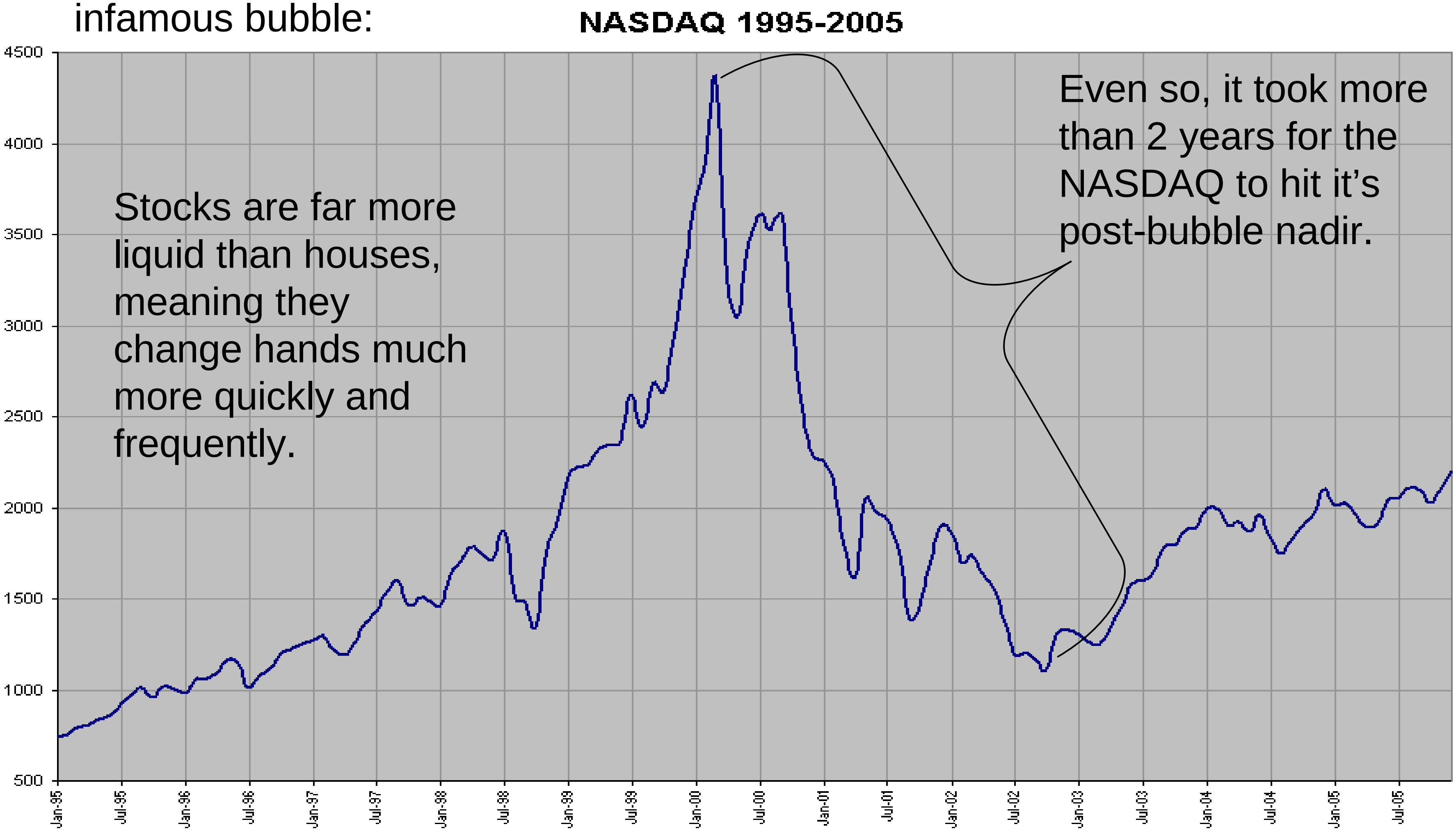
* Source: http://patrick.net/housing/crash.html

But if housing prices have already fallen, shouldn't I buy now?

- A fair question, so weigh the risks
  - Risk #1 – You buy too soon, values fall further
  - Risk #2 – You wait, prices start rising again
- Right now, the obvious trend is down, so Risk #1 is severe
- For Risk #2 to come into play would require:
  - The economy to be strong
  - Financing to be easy to come by
  - As we shall see, neither condition is likely to prevail for quite a while

How long will this last?

Let’s look at another infamous bubble:

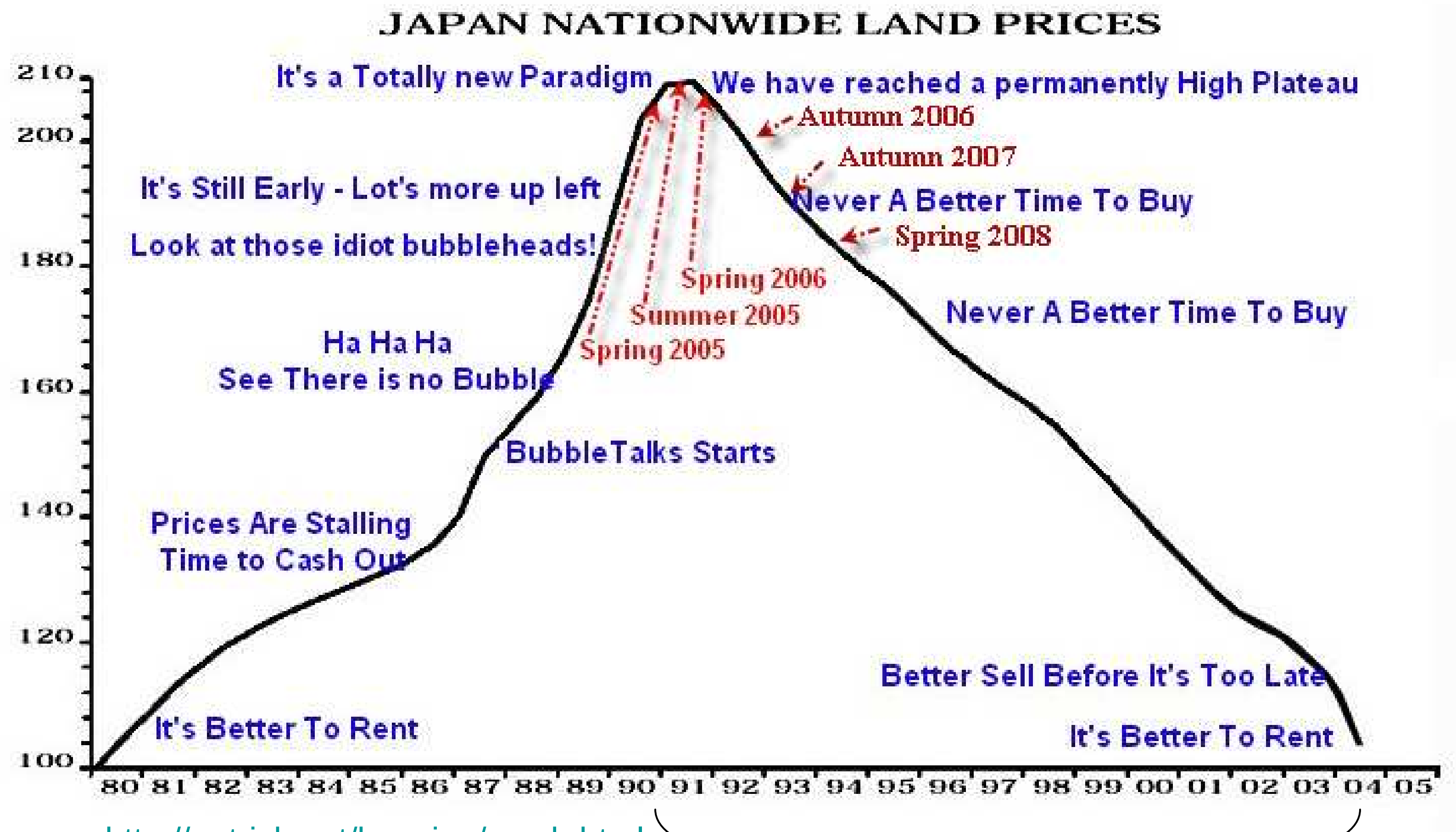


Stocks are far more liquid than houses, meaning they change hands much more quickly and frequently.

Even so, it took more than 2 years for the NASDAQ to hit it’s post-bubble nadir.

Source: Some financial website. No big deal.

Here's another notorious real estate bubble



!!!!!!!!!!

Source: http://patrick.net/housing/crash.html

14 years of declining prices and still dropping. What's even more alarming is that Japan cut interest rates to try to fix the problem, just like our Federal reserve is doing right now!!!

We’ll Hit Many False Bottoms On the Way Down

David Lereah, Former Senior Economist, National Association of Realtors

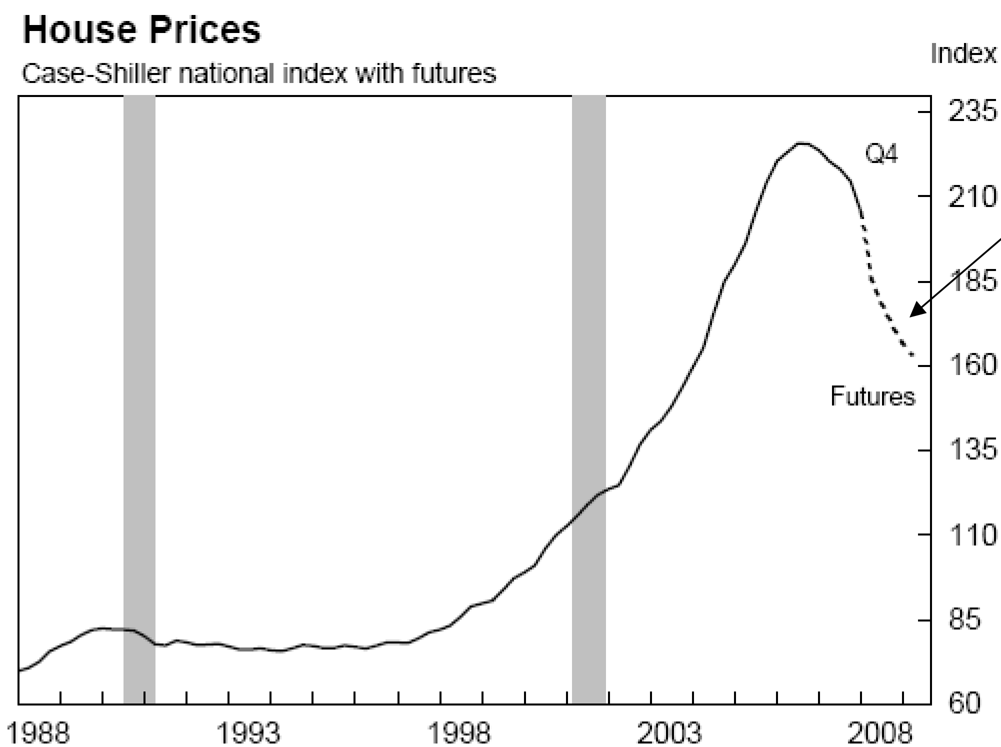
- May 25, 2006: "This may be the bottom. It appears May is a little better." (Real Estate Journal)
- September 25, 2006: "We've been anticipating a price correction and now it's here. The price drop has stopped the bleeding for housing sales. We think the housing market has now hit bottom." (Bloomberg)
- Dec 29, 2006: "It appears we've hit bottom, the price drops are necessary to stir sales. It is working." (Globe and Mail)
- This buffoon finally called a bottom every month for a year until he gave up and quit his job at the NAR

Lawrence Yun, Senior Chief Economist, National Association of Realtors

- July 31, 2007: "We are encouraged that home prices, at least for now, have stopped declining.“ (MarketWatch)
- This buffoon declared we were at the bottom every month for nearly a year; now he’s slowed down to once a quarter

Bottom line: Pay no attention to statements from the NAR. They are trying to sell you something.

Housing Prices are still heading down, according even to the Fed



Anyone want to go skiing?

Source: Federal Reserve Bank of San Francisco

Notices of Default are Rising Rapidly

The number of California homes (both houses and condos) going into foreclosure jumped last quarter to its highest level in more than 15 years.

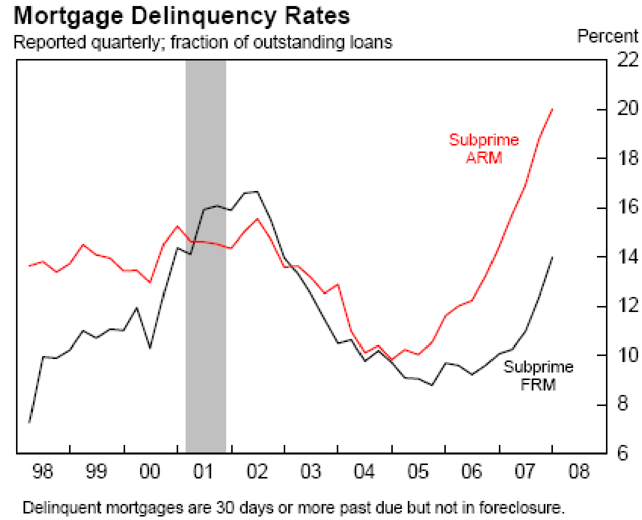
County	Q1 2007	Q1 2008	Yr/Yr %
San Francisco	216	420	94.4%
Alameda	1,578	3,194	102.4%
Contra Costa	1,969	4,718	139.6%
Santa Clara	1,058	3,074	190.5%
San Mateo	382	911	138.5%
Marin	118	314	166.1%
Solano	914	2,091	128.8%
Sonoma	407	1,392	242.0%
Napa	88	284	222.7%

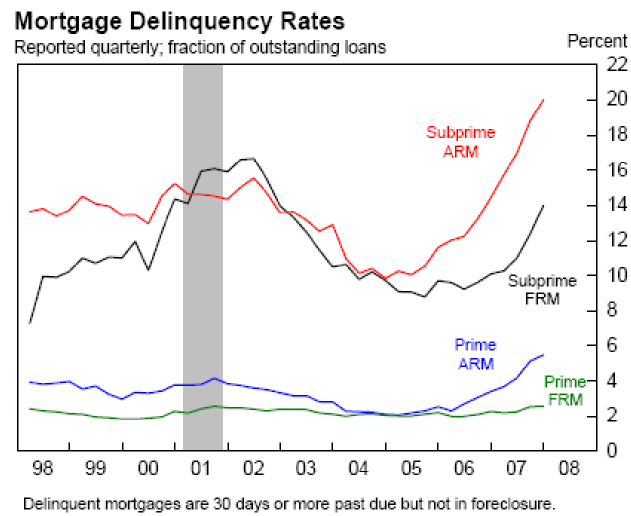
Defaults lead to foreclosures which in turn lead to price declines which in turn lead to credit tightening which in turn lead to foreclosures which…

Source: DataQuick Information Systems

Delinquencies are rising rapidly

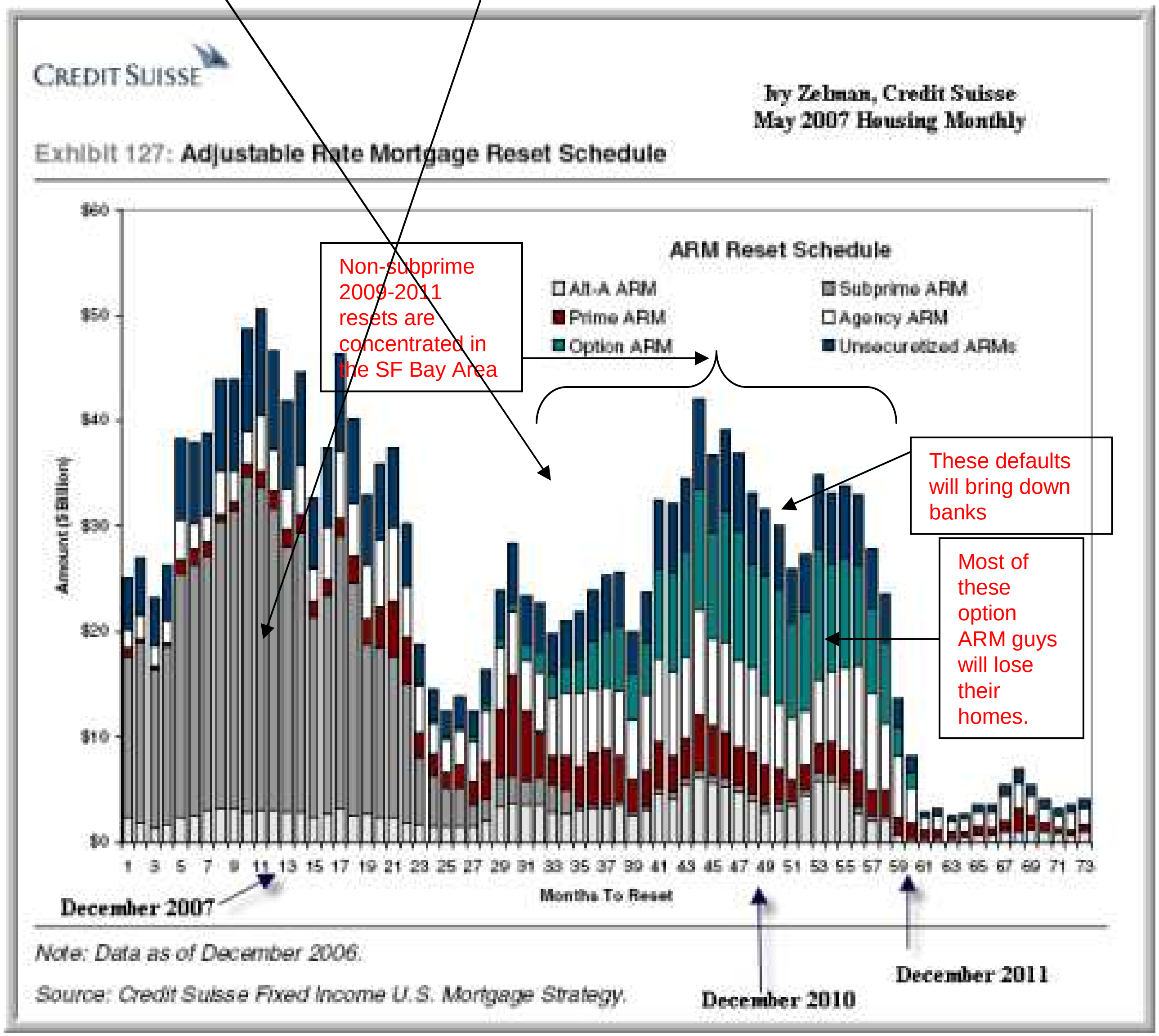
- Okay, but subprime isn't a big problem in the Bay Area, right?
  – There are no $1MM subprime mortgages
  – Subprime is for lower income folks
- Well, problems are arising in non-subprime (prime, alt-a)…





Source: Federal Reserve Bank of San Francisco

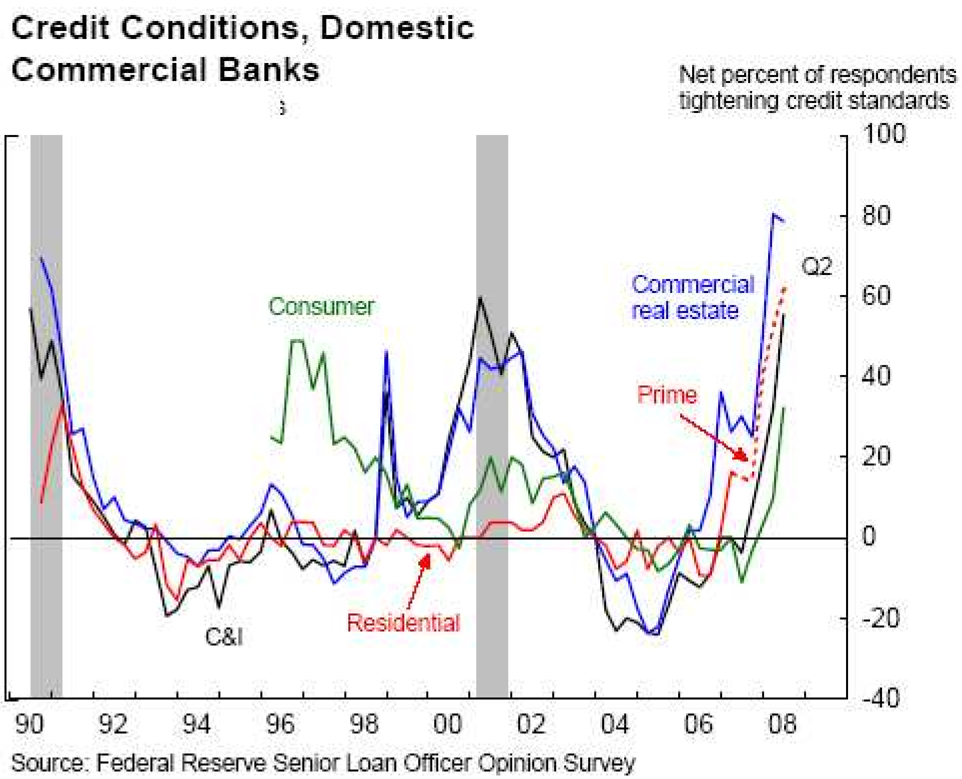
Non-subprime defaults are looming



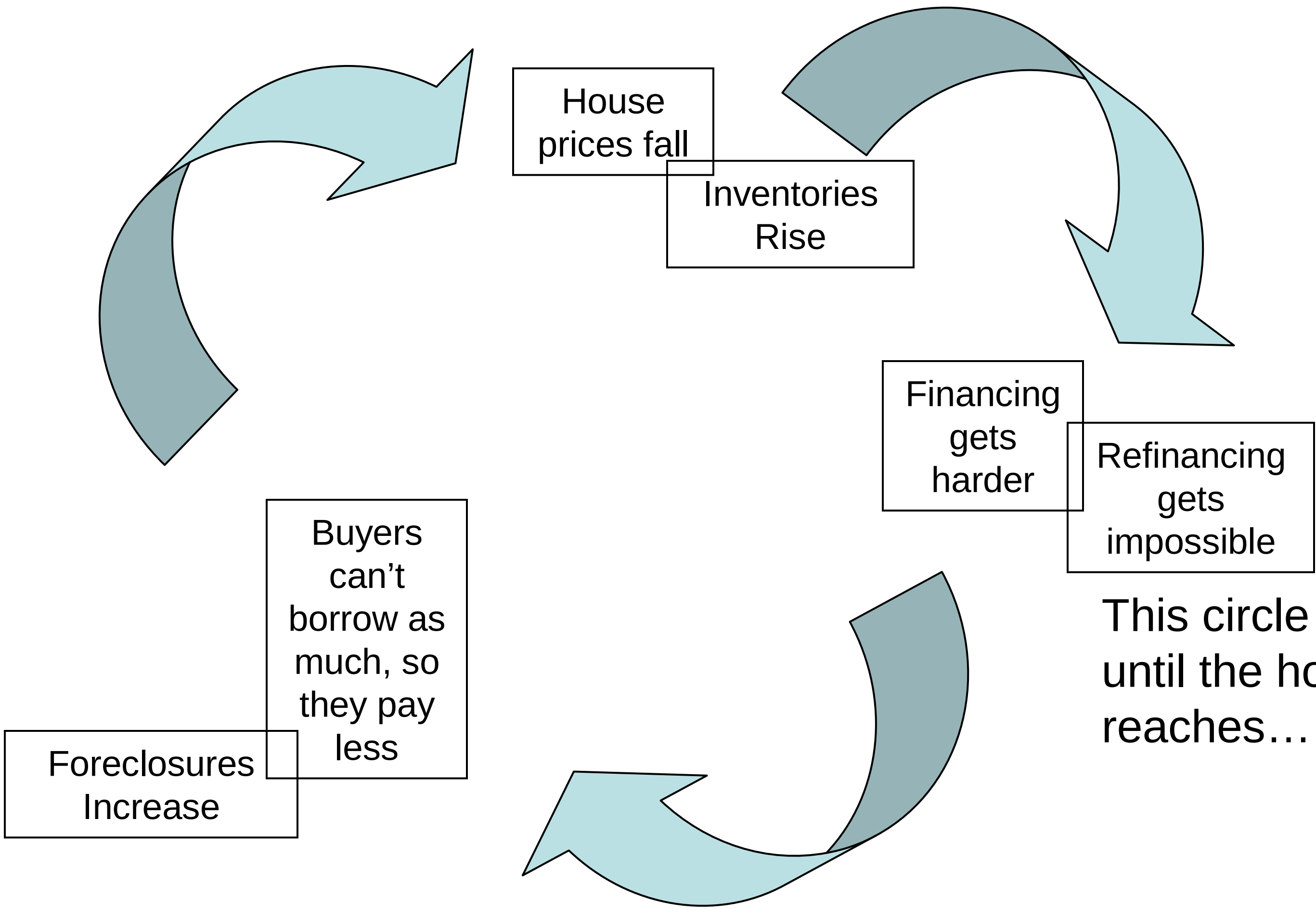
- When an ARM resets, the mortgage payment rises significantly
- Defaults typically happen quickly after resets, with foreclosure taking up to a year after the first Notice of Default
- The credit crunch, which started in mid-2007 and is still going, is just beginning to feel the effects of these resets
- This will last a long time, and the Bay Area is just getting warmed up

Banks are tightening credit standards

- Gone are the days of the NINJA



The Vicious Circle



This circle will continue until the housing market reaches…

EQUILIBRIUM!!!

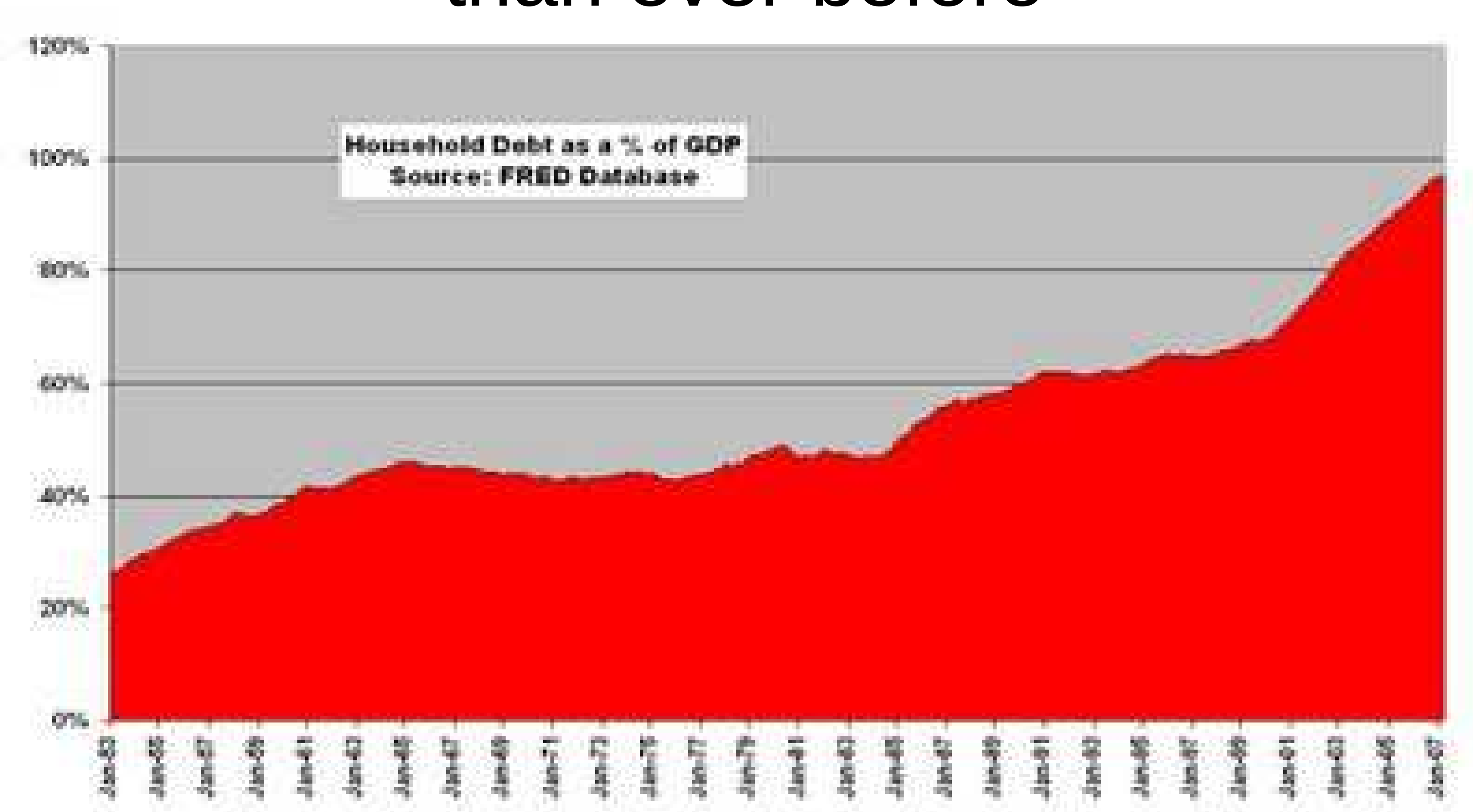
- Rent vs. Buy model works again
- Prices are in-line with incomes
- Debt levels return to Earth

But Wait, there's more!!!

- Some, like Ben Stein*, will point out that housing only makes up 7% of GDP
  - The economy is still strong, they say
  - Housing will bounce back, they claim
- Ding-dong, they're wrong
  - This problem is so big, it will drag the economy down with it, FURTHER HURTING HOUSING PRICES
  - It's already happening, let's see how…

* Read this: http://www.alleyinsider.com/2008/1/ben_stein_is_an_idiot

Americans have a bigger debt burden than ever before



High debt levels were predicated on a strong economy that would support payments. That's all fine if the economy stays strong and continues to grow.

Source: A little place I like to call the Internet. Check it out.

OOPS!!!

As bad as this is, it's actually worse. The govt has been monkeying with the numbers to paint a rosier picture. Really.

And what’s this I’m hearing about a credit crunch?

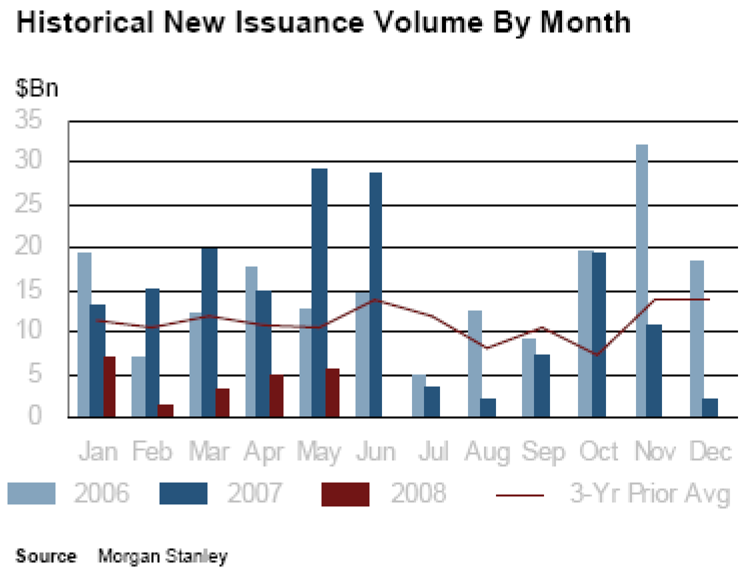
- The housing bust and the credit crunch are like peas and carrots
  - Those first subprime defaults triggered disruptions (collapses) in asset-backed securities
  - Contagion spread to municipal bonds and other ABS markets
- Banks and investment banks got scared and stopped lending money to each other

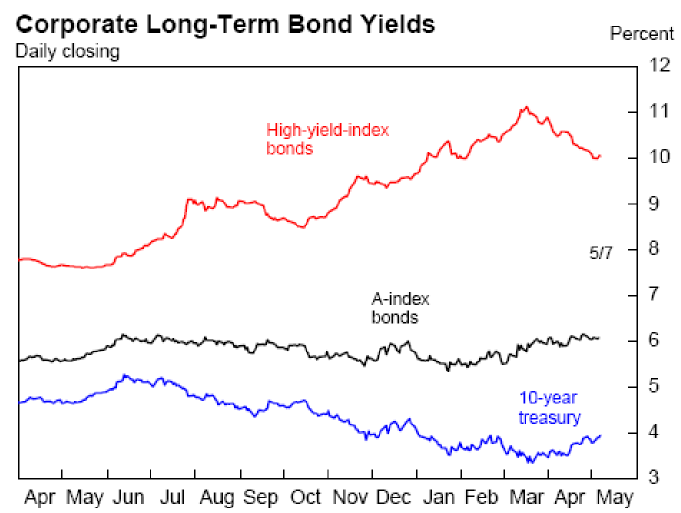
Is a credit crunch bad?

- Financial institutions are losing money and shrinking
  - US investment banks have written down over $200 billion since August 2007
  - They are reducing lending to consumers, businesses, other banks, guys named Phil, everybody
- Bear Stearns, the 5th largest investment bank in the world completely blew up
  - The Fed stepped in and forced JPMorgan to “buy” it for $2 per share, had been $170 per share a year before
  - The Fed’s action was unprecedented and of questionable legality
  - Bear Stearns is far from being the only financial institution in trouble. In fact many view the bailout of Bear Stearns as actually having been a bailout of JPMorgan, because BSC was counterparty to JPM on many trades. UGLY!

The High Yield Market is Way Down

- High yield (or junk) bonds are one of the primary sources for growth financing in the US economy
  - When it's not growing, neither are companies
  - For several months in the past year, the high yield market was shut down completely
  - When it's open, the market is considerably more expensive than it had been before the crunch



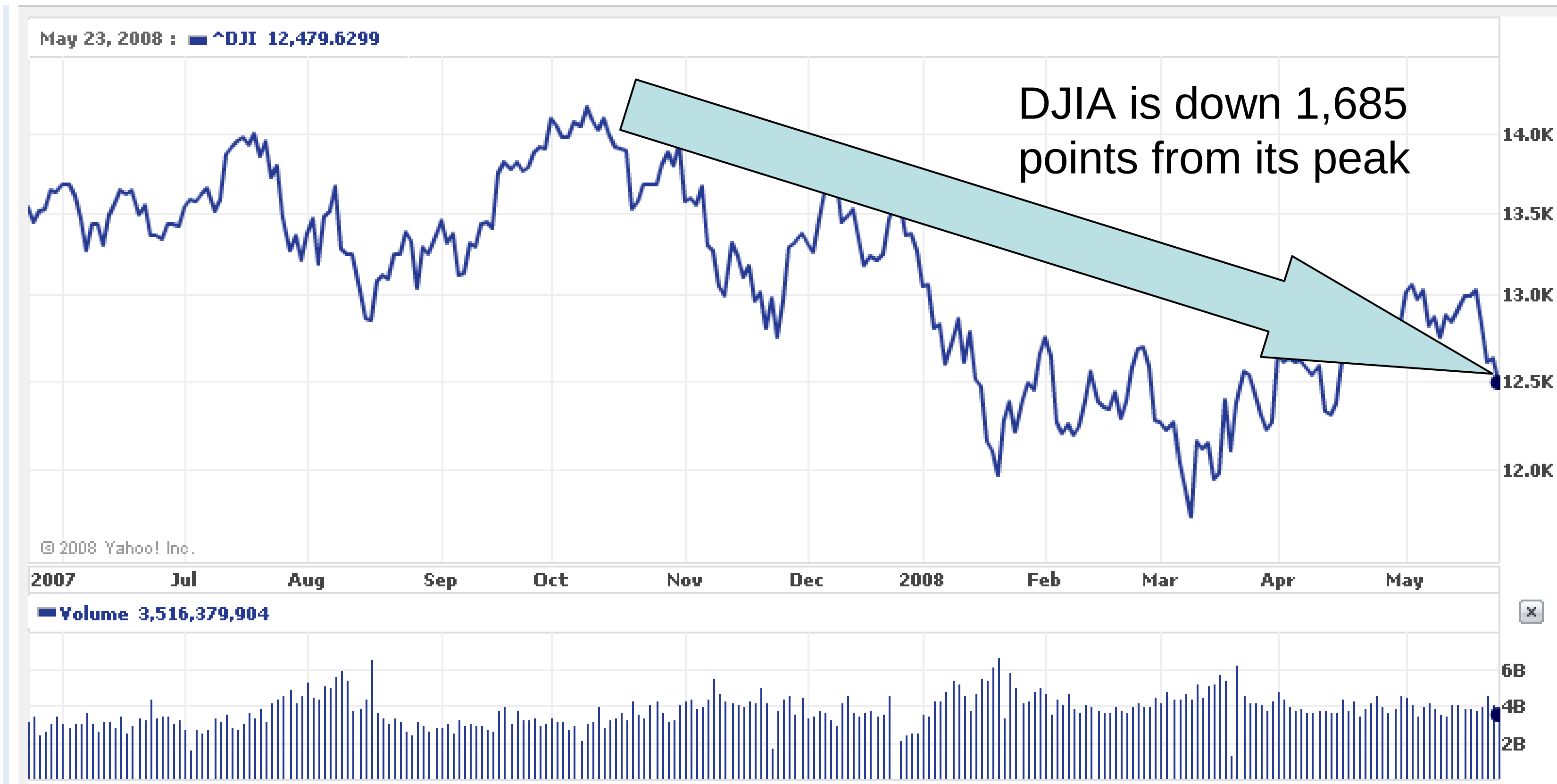


Source: Morgan Stanley (top) and the Federal Reserve Bank of San Francisco

M&A Dormant, LBO Dead

- Mergers and acquisitions have declined in the US by 90% versus last year
- Leverage buyout transactions, heavily dependent upon debt financing are down 99%
  - No LBOs over $5 billion since July 2007
  - LBO market is actually running in reverse this year, with deal announcements giving way to deal collapses
- But the stock market is still okay, right?

Yeah, sure. Whatever.



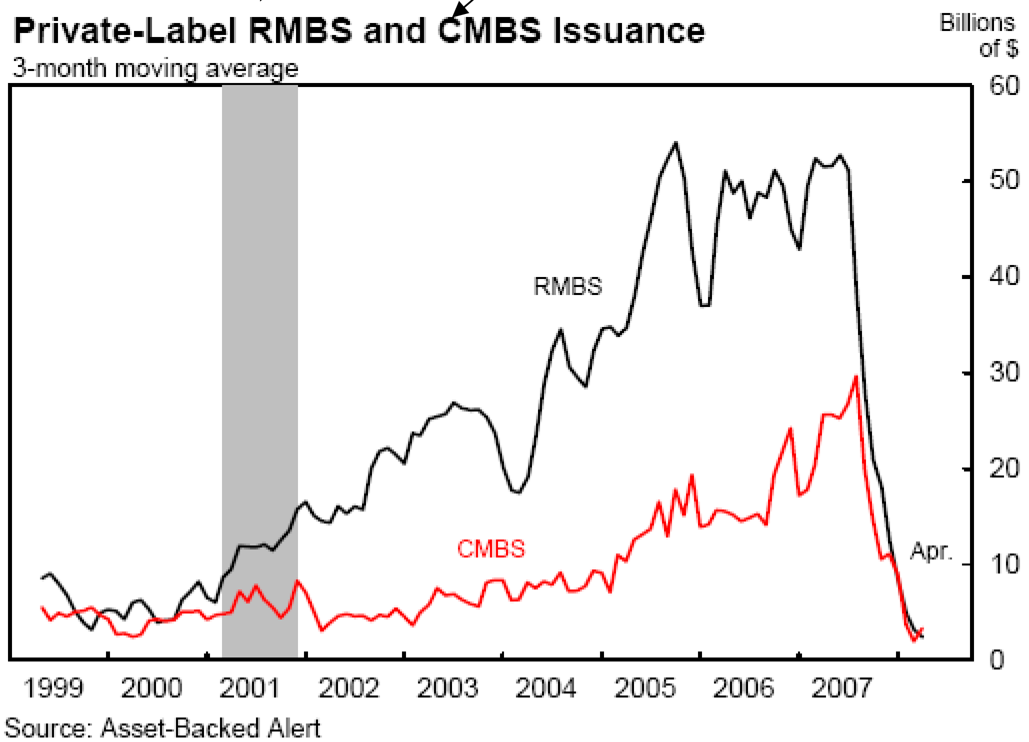
Source: Yahoo! Finance

Securitization is DEAD

- The engine of ever loosening credit has seized up

Residential

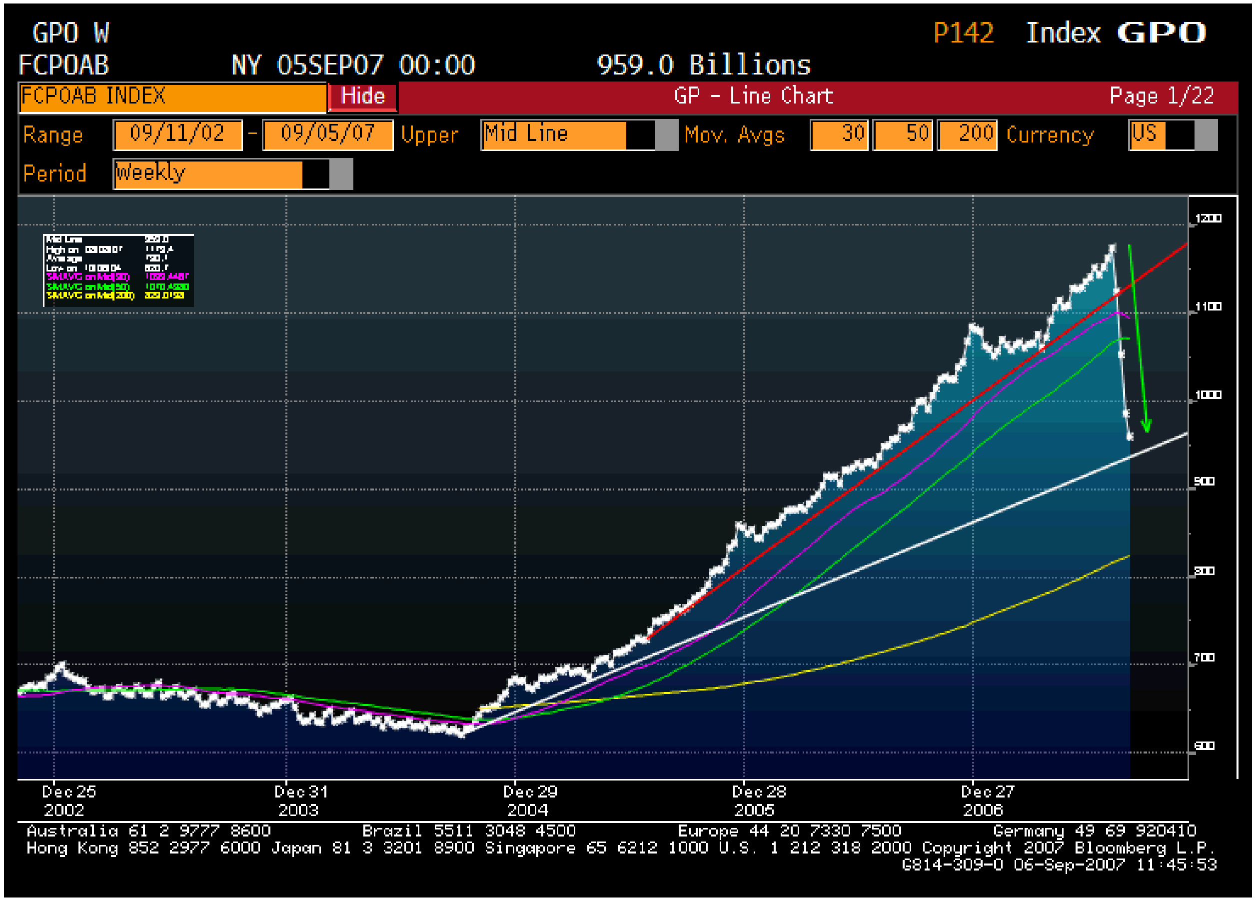
Commercial



Source: Federal Reserve Bank of San Francisco

Markets you never heard of are falling victim to the credit crunch

- Asset-backed Commercial Paper? Dying



This looks like that game with the hiker on The Price is Right

Source: Looks like Bloomberg, doesn't it? It is!

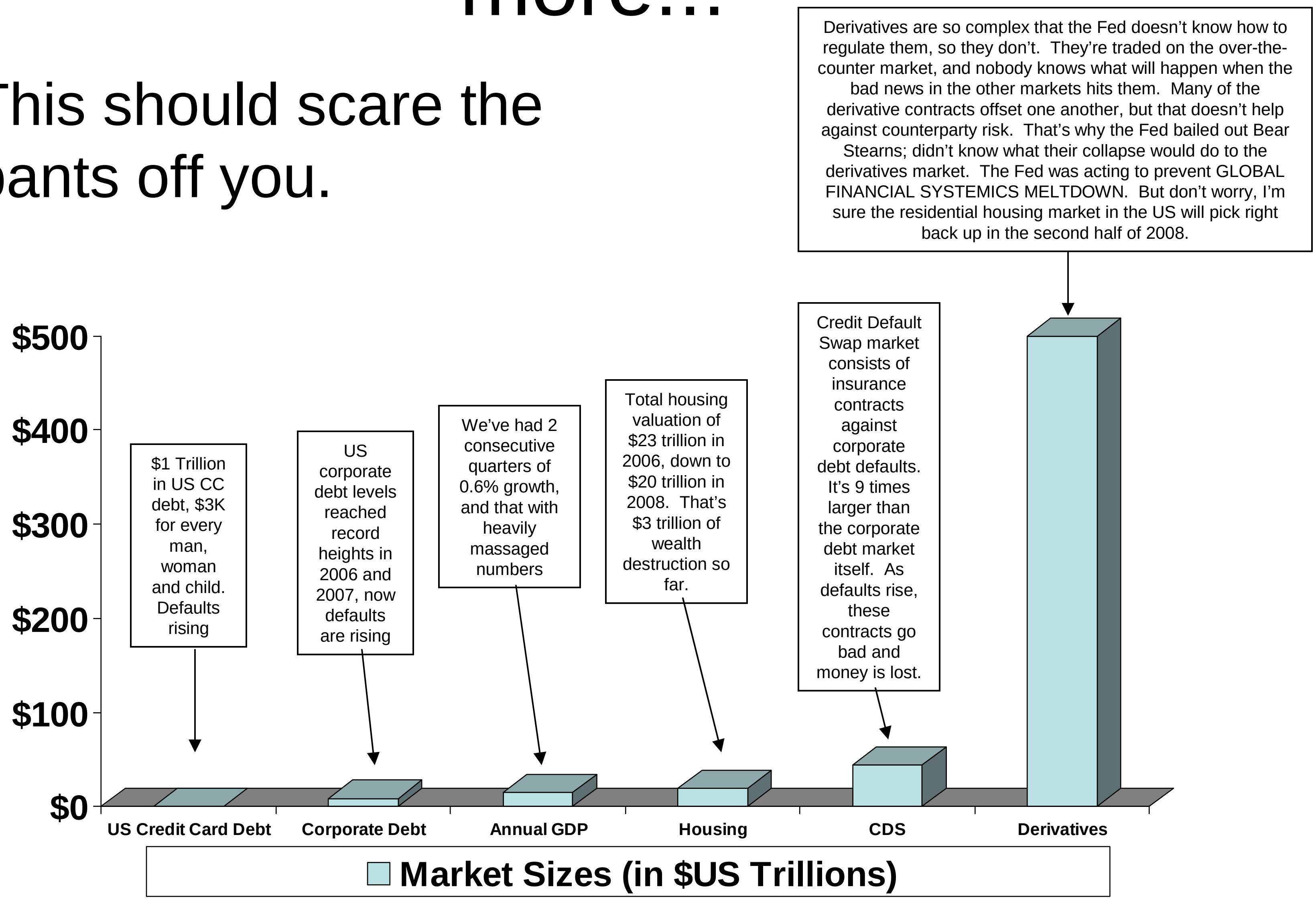
Markets I had never heard of are falling victim to the credit crunch

- Auction Rate Securities? Dead
  – These are used by large entities, such as public transportation authorities, to manage their cash hoards
  – The $330 billion auction-rate securities market will ``cease to exist'' after it collapsed in February when Wall Street firms stopped using their own capital to buy unwanted bonds, according to Citigroup Inc.*

* Source: Bloomberg

Had enough? Too bad, there's more!!!

- This should scare the pants off you.

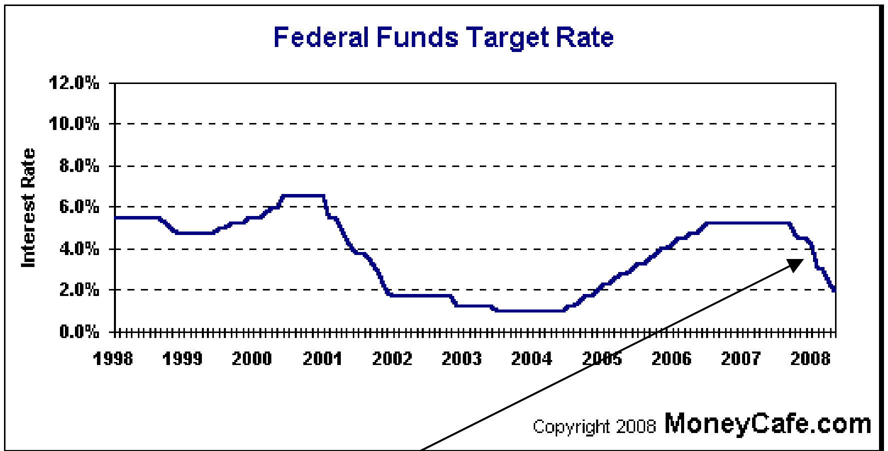


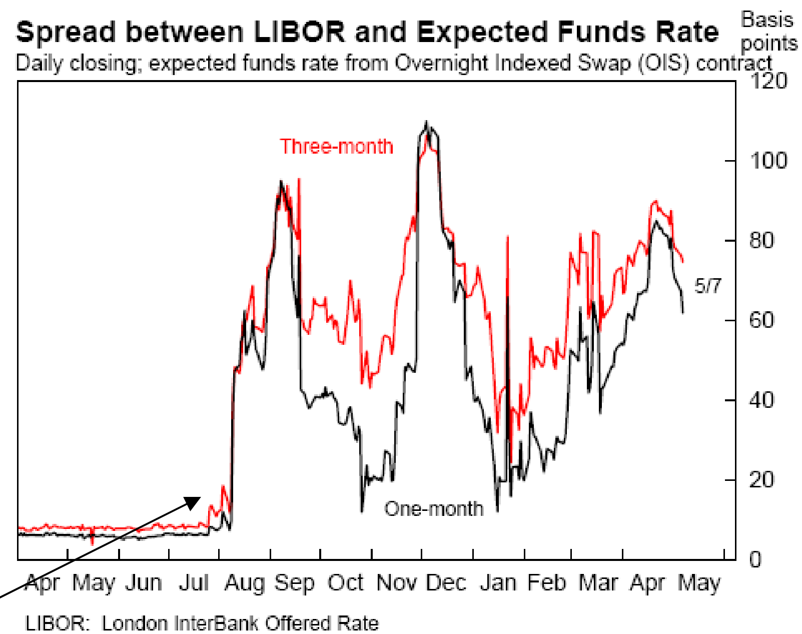
Note: I made this chart myself. Pretty sweet, huh?

But we have the Federal Reserve, they can fix this, right?

- Aren’t they the guys that caused this mess in the first place?
  - If they couldn’t see this coming, what are the odds they can fix it?
  - Didn’t they cause this mess by lowering interest rates and then turning a blind eye to out of control mortgage lending practices?
- So how are these geniuses planning to fix this?
  - BY LOWERING INTEREST RATES!!!
  - And by taking possession of worthless asset-backed securities!!!
  - I love these guys.

The Fed is pushing on a string





So they've lowered rates precipitously since August 2007, and the problems have just gotten worse

Look how expensive (tight) interbank lending has gotten since August 2007

- **Lowering rates has not encouraged banks to start lending again**
- **The Fed is leading financial institutions to the water, but it can't make them drink**

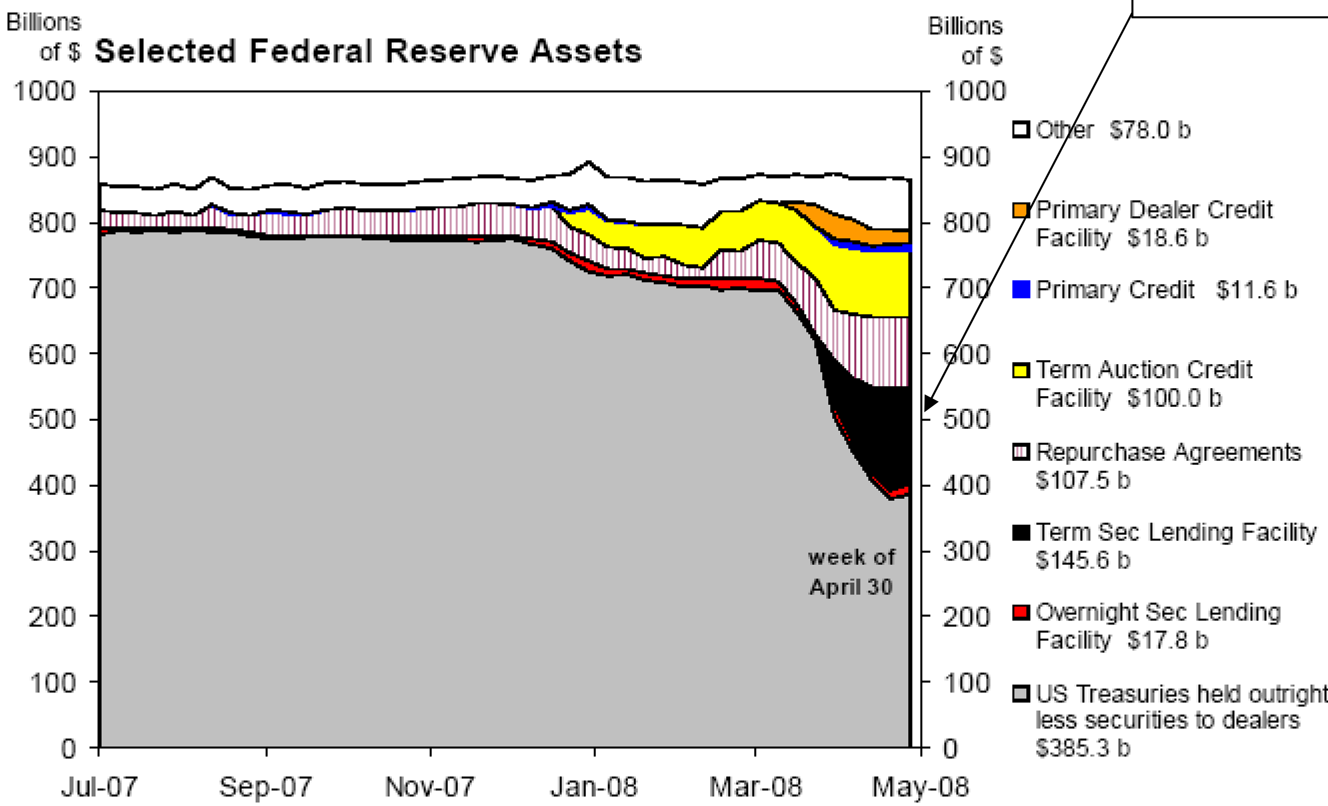
Oh, but the Fed has been doing more than just raising rates

- **Enhanced discount window lending**
  - Reduced rate spread and lengthened term of lending
- **Established Term Auction Facility (TAF)**
  - Term discount window loans at auction rate; $150 billion
- **Initiated term repurchase (repo) transactions**
  - Agency debt accepted as collateral for 28-day repos; $100 billion
- **Established Term Securities Lending Facility (TSLF)**
  - Lends Treasuries for highly rated ABS; up to $200 billion
- **Provided financing for acquisition of Bear Stearns**
  - Term financing to support purchase by JP Morgan; $29 billion
- **Established Primary Dealer Credit Facility (PDCF)**
  - Overnight borrowing from discount window by primary dealers

But those have ***TRASHED*** the Fed's balance sheet

- And the problems persist!

Investment banks have borrowed over $145 billion from the Fed since BSC fell. They are technically insolvent!

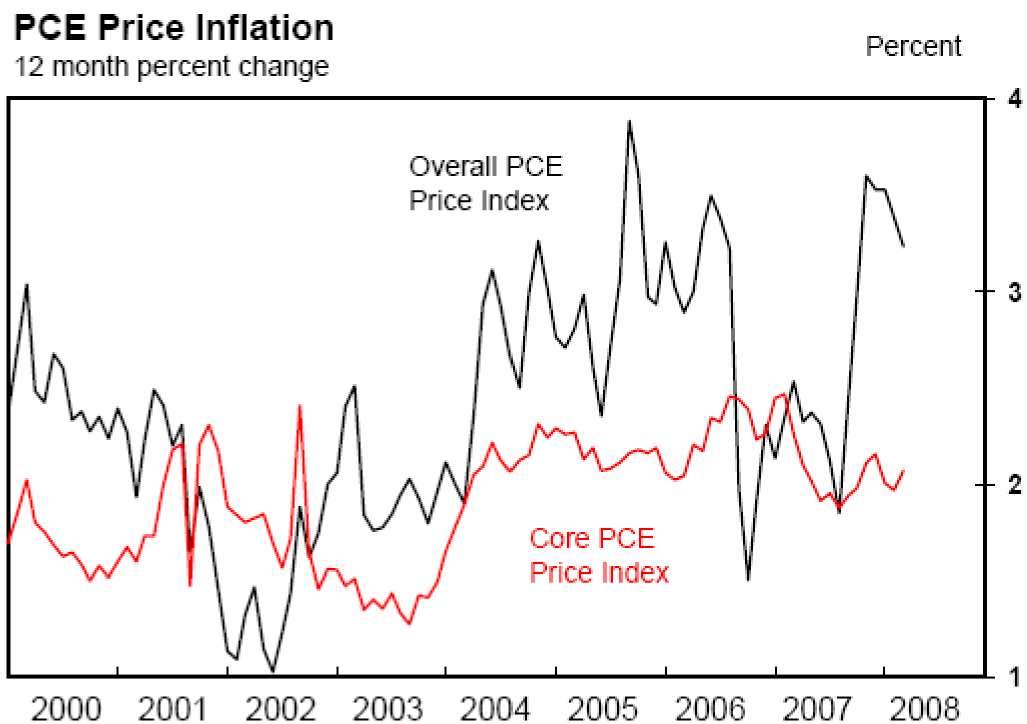


The Fed's assets have been cut in half! Once those run out, the Fed will have no choice but to print money, which means…

Source: Federal Reserve Bank of San Francisco. Those guys have everything. Too bad they're killing the economy.

INFLATION!!!

- I know you've been hearing about this lately.

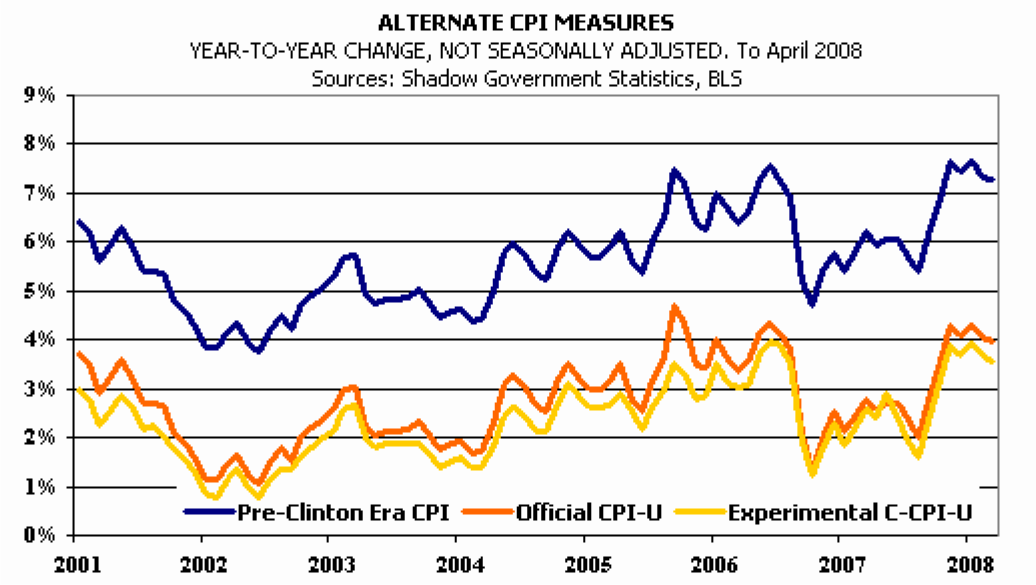


Source: Federal Reserve Bank of San Francisco

"Paul A. Volcker [former Fed chairman] warned that the United States could face a 1970s-style period of skyrocketing inflation if investors lost confidence in the buying power of the dollar." (NYT, 5/15/08)

And those were the Fed’s numbers

- Remember, I told you the govt is monkeying with the numbers
  - If they don’t like the inflation figures, they just adjust their methodology

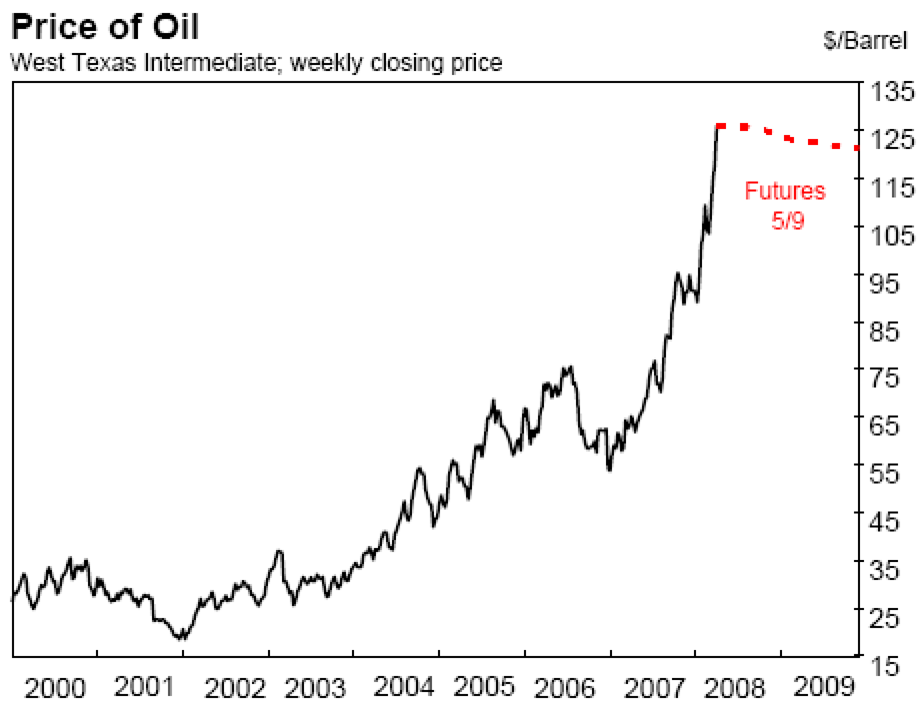


Source: John Williams’s Shadow Government Statistics

Have you bought gas lately?

•The Fed cuts rates, the dollar falls in value versus other currencies

•Oil is priced in dollars, the price of oil for us goes up



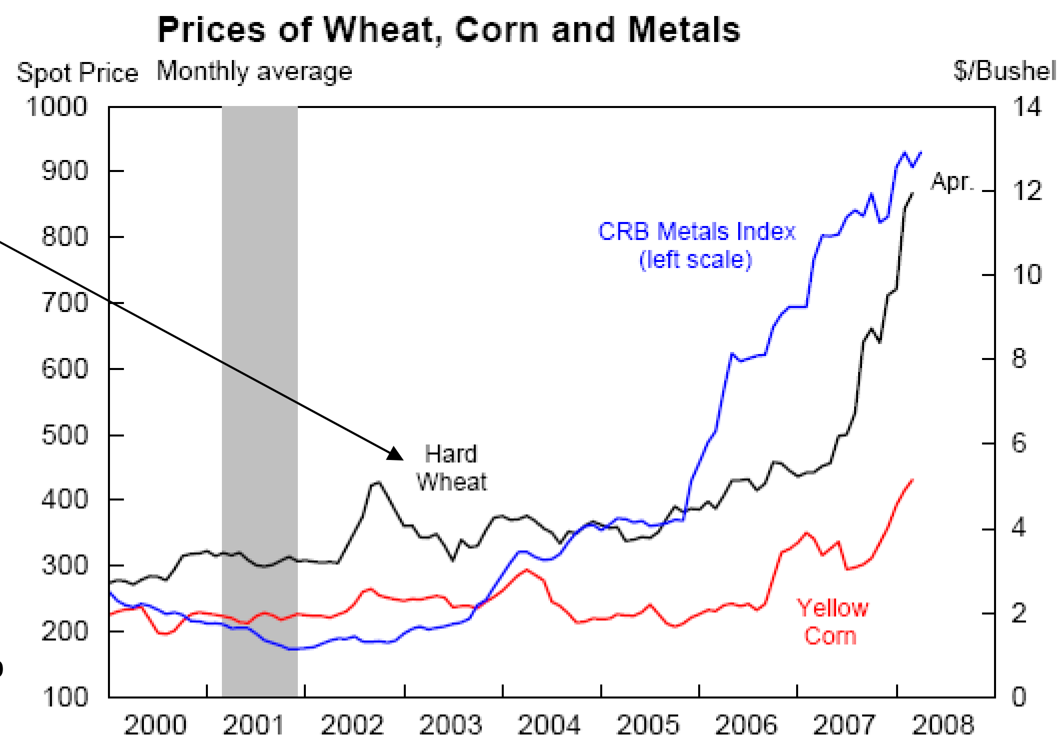
Source: Federal Reserve Bank of San Francisco

What about food?

- There have been food riots in 34 countries so far
- Costco in California is limiting customers to one bag of rice per visit

Don’t ask. I have no idea

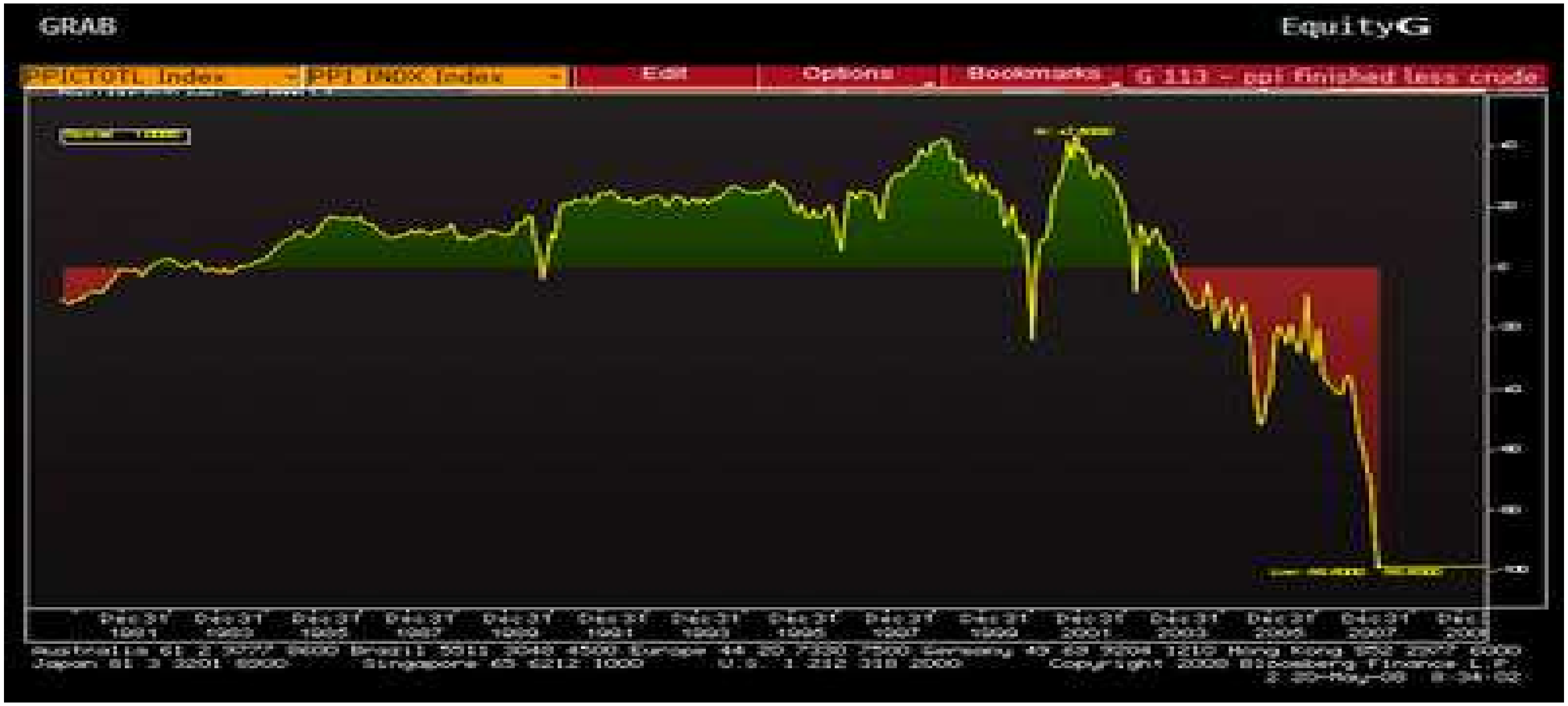
Yes, Deathanol has exacerbated commodities prices, but this is primarily a monetary phenomenon



Source: Federal Reserve Bank of San Francisco

Inflation is hurting corporate profits

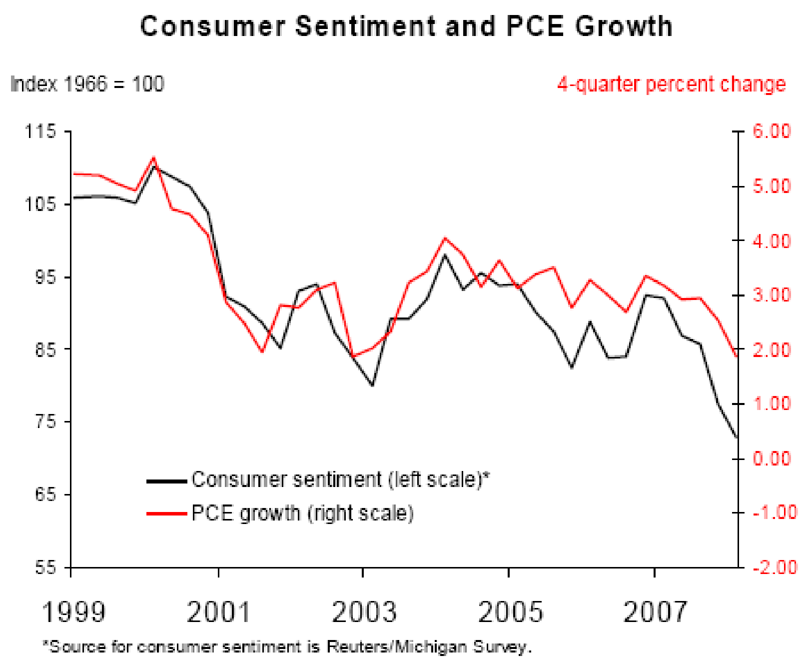
- This chart shows the difference between the Producer Price Indexes for Finished Goods minus Crude Goods
- The red area shows that companies are having difficulty passing higher input costs on to consumers
    - Their profits are suffering and we’ve actually been catching a break



* Source: Bloomberg

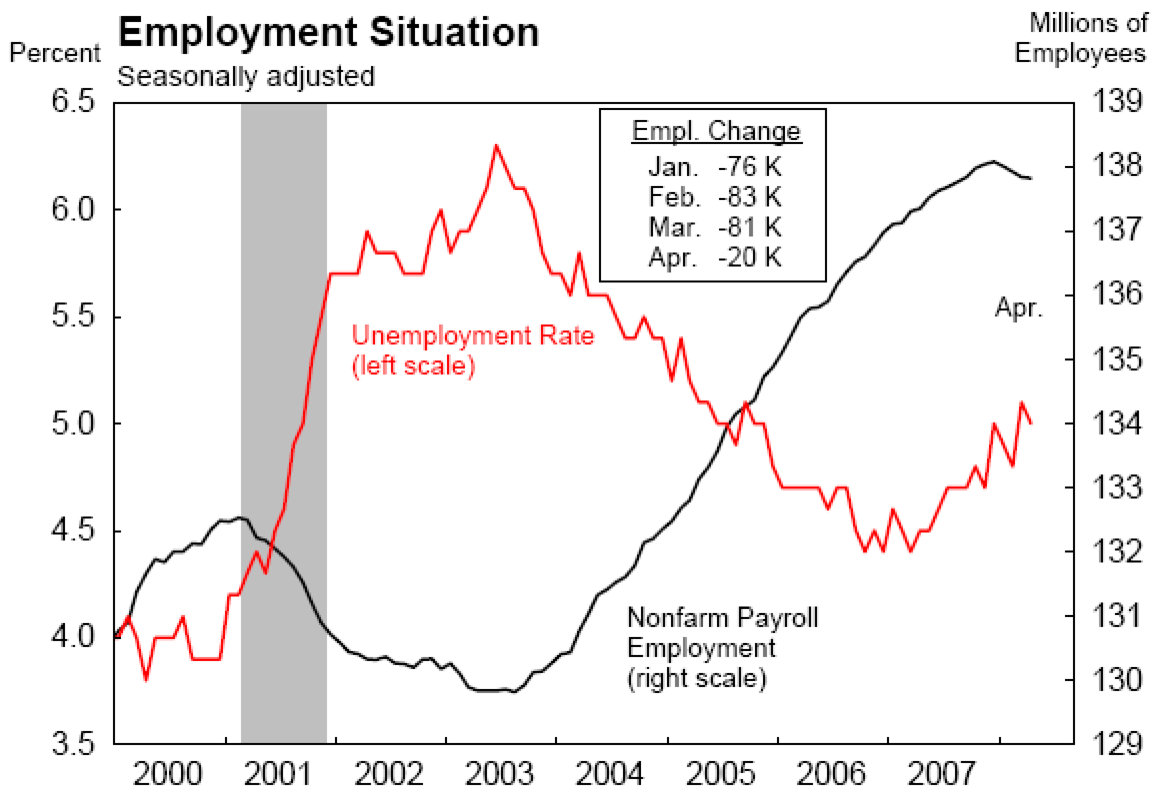
Consumer spending growth and sentiment are down

- Falling home prices make people feel poorer and worried about the future
- So do higher gas and food prices



Employment is shrinking and unemployment is rising

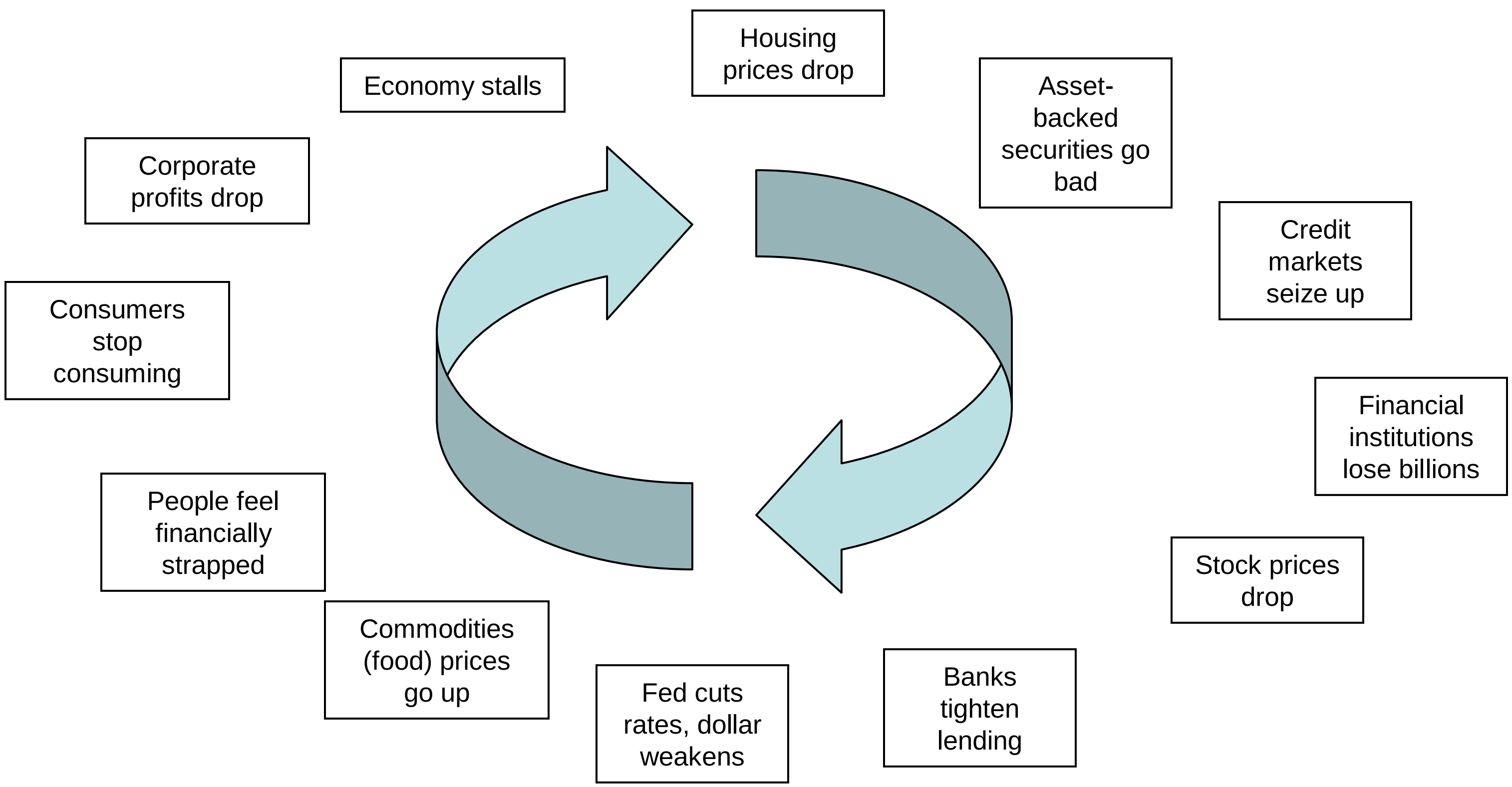
- This can't be good for the economy, more pressure on homeowners, more defaults



Source: Federal Reserve Bank of San Francisco

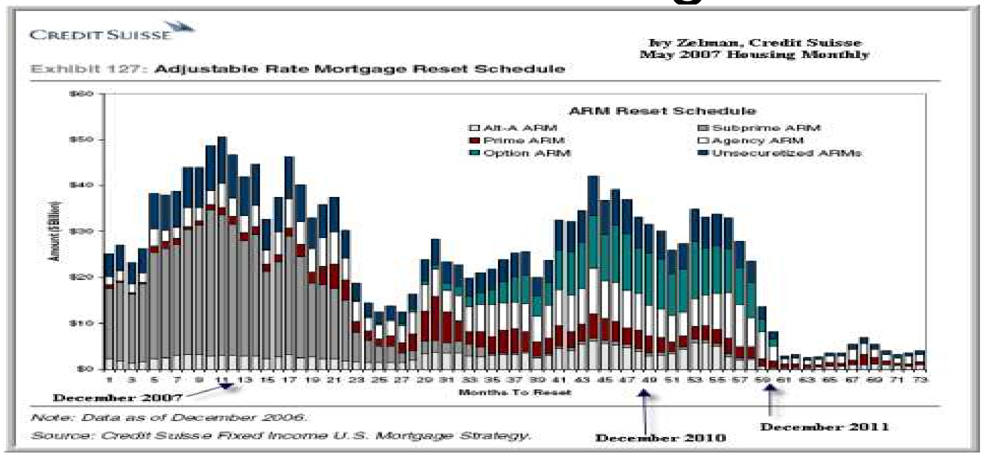
But I just want to buy a house!!!

- What does all of this have to do with me?
- All of this is interconnected



Where does it end?

- Remember that chart showing the ARM resets?



- We at least have to wait to see what happens to a significant portion of these lousy mortgages and the surrounding economic environment, say until 2011 or so

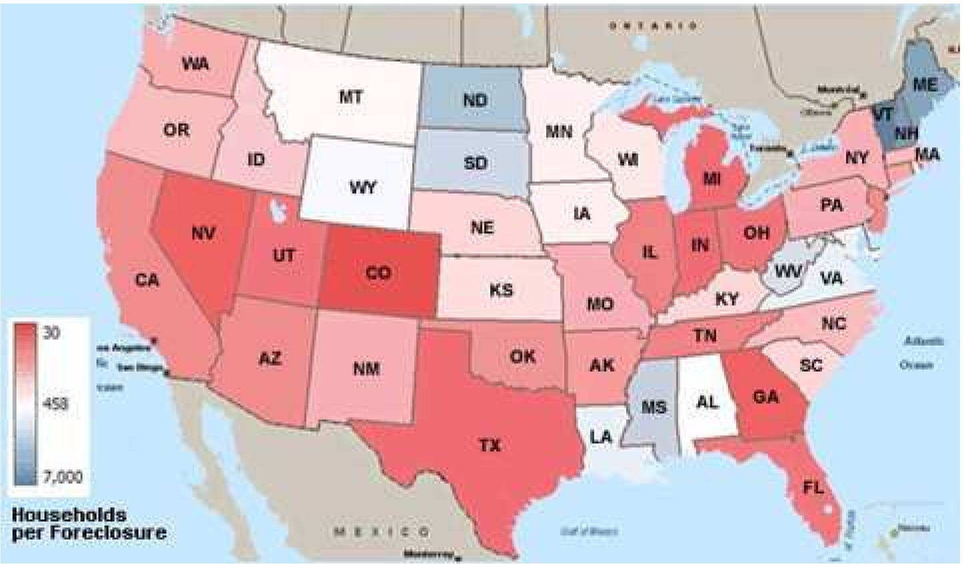
Fine, but that’s a complicated tale. How do I answer the man in the street?*

- Houses always increase in value in the long run.
  - FALSE. House prices cannot increase more than incomes in the long run. This is obvious if you think about it. If house prices go up more than people can afford to pay, buying stops, like it has stopped now.
- Renting is just throwing money away.
  - FALSE, renting is now much cheaper per month than owning. If you don't rent, you either:
    - Have a mortgage, in which case you are throwing away money on interest, tax, insurance, maintenance, costs that increase forever.
    - Own outright, in which case you are throwing away the extra income you could get by converting your house to cash, investing in bonds, and renting a similar place to live for much less money.

* Shamelessly stolen from the best housing blog on the web: http://patrick.net/housing/crash.html

More pedestrian arguments

- There are great tax advantages to owning.
  - FALSE. You don't get rich spending a dollar to save 30 cents!
- All real estate is local.
  - Really?*



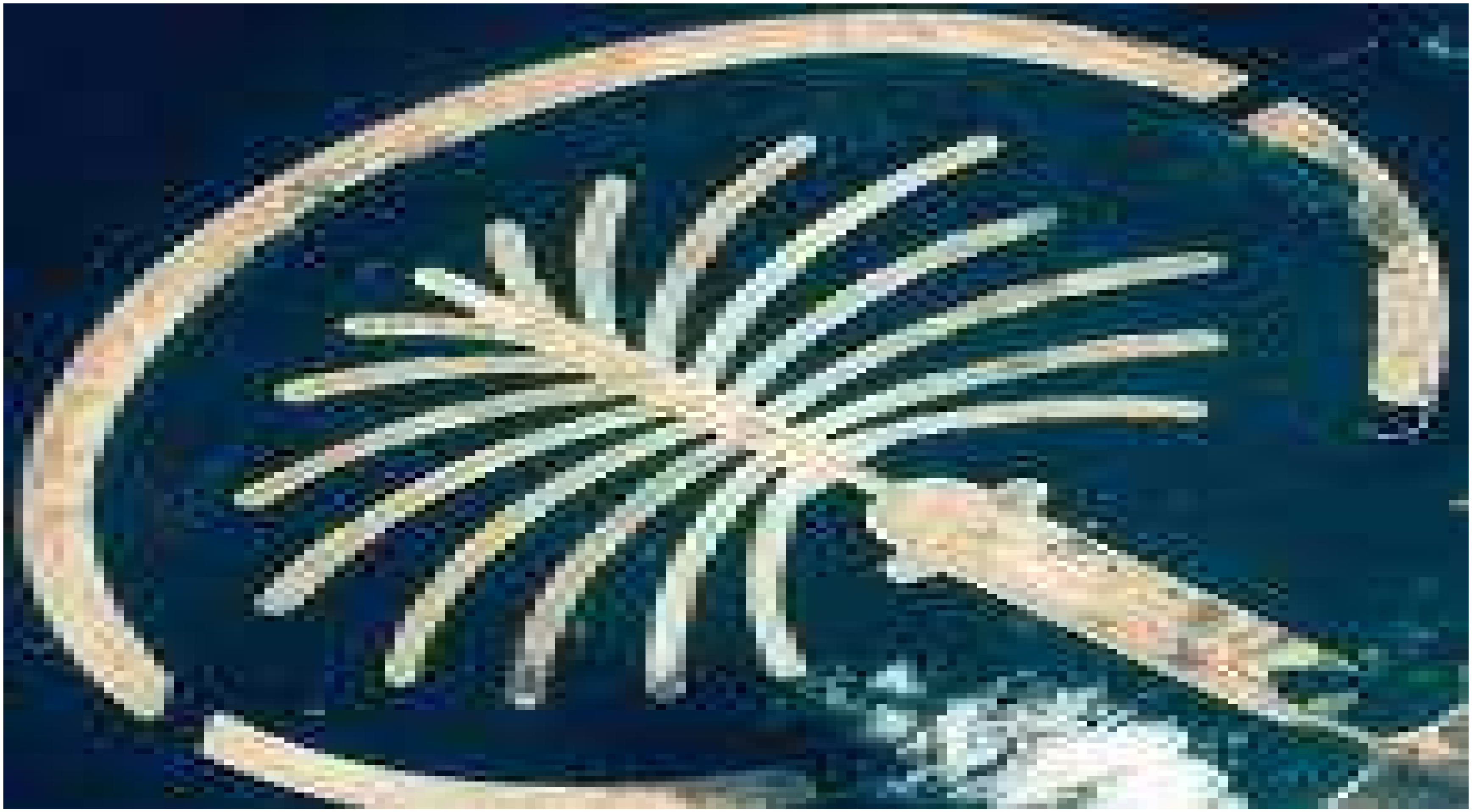
* Source: RealtyTrac, a business that tracks foreclosures and is having a banner year.

Another Tired Argument

- House prices never fall in the Bay Area.*
  - FALSE. San Francisco house prices dropped 11 percent between 1990 and 1994. Buyers in San Francisco in 1990 did not break even in dollar amounts until about 1998. So those buyers effectively loaned their money to the sellers for 8 years at no interest, losing all the while to inflation. With inflation, 1990 buyers truly broke even only about the year 2000, ten years after buying.
- They aren't making any more land.
  - Japan has a severe land shortage, but that hasn't stopped prices from falling for 14 years straight. Prices in Japan are now at the same level they were 23 years ago.
  - And besides…

* Also shamelessly stolen from the best housing blog on the web: http://patrick.net/housing/crash.html

As a matter of fact, they are!



The Palm Islands are technically artificial peninsulas constructed of sand dredged from the bottom of the Persian Gulf by the Belgian company Jan De Nul and the Dutch company Van Oord.

The Final Word

- So what should I do?
  - I strongly recommend you not buy a house right now
  - Rent a place, put your feet up, open a bag of chips and watch the housing market crash
- When will I know it’s time to buy?
  - We’re not going to bounce at the bottom, we’ll stay there a while, so it’s not something you’ll miss
  - Just ask me. I’ll tell you.