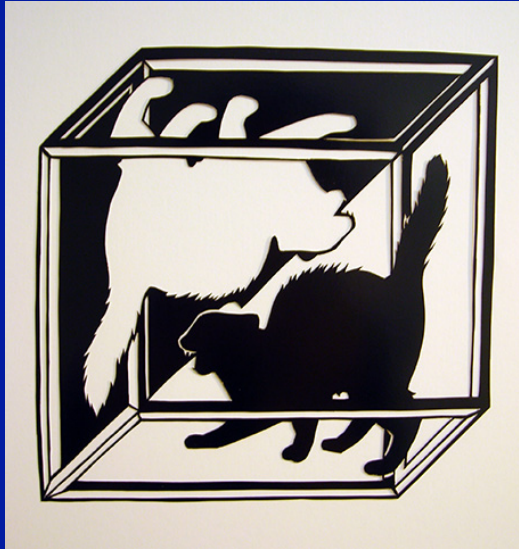


Schrodinger's Economy: IPE and the Financial Crisis

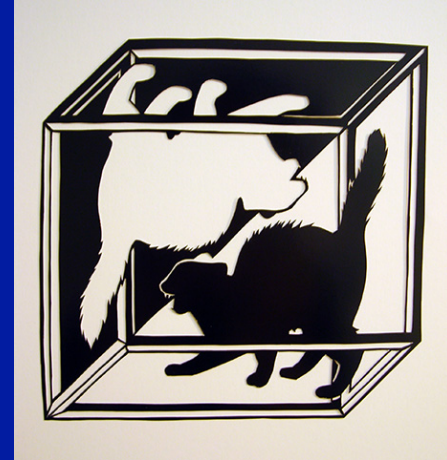


Guest Lecture – International Affairs Cornerstone
Professor Stephen B. Kaplan
George Washington University
November 1, 2016

Schrödinger's Cat

- Thought Experiment

- Describe quantum physics.
- Nobel prize-scientist Erwin Schrödinger in 1935.
 - Theoretical experiment: cat is placed in a box, with a vial of poison that will break open at a random time.
 - Since no one knows when or if the poison is released until the box is opened.
 - The cat can be thought of as both alive and dead (50-50 chance)!
 - Only by opening the box (observation), can you find out which one it is!
 - This is also the basis for the multiverse, a set of alternative possible universes.



Schrödinger's Economy

- Two Schools of Thoughts
 - British (Keynes) vs. Austrian (Hayek) schools.
 - Each confirmed by their own observations.
 - Interpretations live in parallel.
 - A multiverse of ideas about markets and society.
 - The liberal tension.
 - Inequality is a by-product of money and private property.
 - State must police inequities produced by the market.
 - How fund? With public debt.



Schrödinger's Economy

- Two Schools of Economic Thoughts
 - The British School – a more active state leads to higher inflation and debt, but beneficial social investments.
 - The Austrian School – reject the indebted state; cure the binge of debt financing with austerity. The boom and the bust allows for *creative destruction*, or liquidation of failing enterprises as an economic panacea.
 - Andrew Mellon – “purge the rottenness out of the system.”
- Systemically, under what conditions does one or the other school prevail globally? How does that shape the roots and consequences of crises?



IPE and the Financial Crisis: Ideational Factors

- *Constructivism*

- Emphasizes how economic ideas influence the policy making process.
- Key factor – the dominance of the Washington Consensus and its focus on austerity.
- Liberalization is well-entrenched (Drezner).
- The economic pain associated with the Great Depression and the Smoot-Hawley tariff underscores the U.S.'s commitment today to being the international lender of last resort in contrast to its tight-fisted reluctance to lend during the inter-war years.
 - Most countries took their cue from the U.S. and stimulated their economies early in the crisis.
- After crisis stability achieved, austerity becomes the focal point based on the idea that too much debt can impede private sector activity.



IPE and the Financial Crisis: Structural Factors



- *Realism*
 - The structure of global economy could cause of the crisis.
 - Key factor – risk of crises between global power transitions.
 - Hegemonic Stability Theory – liberal global regimes associated with dominant power.
 - Transitions between hegemonies (lack of a world leader) during inter-war period explains lack of coordination against protectionism and the Great Depression.
 - More difficulty explaining Great Recession, where U.S. influence and commitment to liberal system is still very strong despite some national tensions over coordination.
 - Drezner sees U.S. leadership as buttressing global liberal response.
 - Doesn't say much about governance strategies (British vs. Austrian school).

IPE and the Financial Crisis: Institutional Factors

- *Liberalism*

- Key question reflects institutions, and whether or not states have crafted institutions with the capacity to sustainably contain crises.
- Drezner – global economic governance, embedded in Keynesianism, responded effectively to crisis. Institutions (IMF, WTO, BIS, G20) preserved liberalism amid protectionist threat.
 - Most important, the Fed's emergency credit to foreign central banks (i.e. currency swaps), and the U.S. governments' bank bailouts (i.e. Troubled Asset Relief Program) helped avoid a Depression 2.0. Do not allow systematically important institutions to fail.
- But, institutions could have better regulated economies through financial system supervision.
 - Basel III (BIS global voluntary regulatory framework) – stronger capital ratios for banks moving forward.



IPE and the Financial Crisis: Institutional Factors

- *Liberalism (Bottom-Up)*

- The effectiveness of institutions is constrained by interest groups that capture the policy making process that distort regulations.
- Kirshner – agrees with Drezner that the global economic system staved off collapse, but suggests that global governance did not effectively address key roots of the crises through reform.
 - Success was not due to routinized behavior of international institutions (the liberal view), but rather ad hoc emergency measures.
 - Public bailout did not confront power, but instead socialized its losses. Financial industry still “prizes short-term profits over long-term prudence, perpetuating systemic risk.”
 - Financial reforms, from Basel III to Dodd-Frank, diluted by financial sector lobbying, and did not address fundamental weaknesses in the system.



REGULATORY
CAPTURE

IPE and the Financial Crisis: Stability vs. Change

- *Distorted Keynesianism*

- Economic stimulus helps stave off the crisis, but lack of reforms (due in part to power of domestic interest groups) perpetuates the system's weaknesses. Not only in the U.S., but also globally.
- Vulgarization of Keynesianism (Jiang) - China's massive deficit spending is captured by SOEs, creating infrastructure and industrial overcapacity, high indebtedness, and a failure to sustainably boost consumption.
- How reform such political capture? Counterfactually, both US and China would have had to allow much greater economic disruption during the crisis to achieve reform, creating massive unemployment.
- Starker tradeoff than characterized by Kirshner. Global liquidity stabilizes the international economy, but achieving more sustainable reforms and eliminating interest group capture would have likely necessitated bank and SOE failures with severe economic dislocations.
- To analyze this tradeoff further, let's look at the **U.S. case**, but first a few definitions.

What is Austerity?

- *Austerity*
 - Government budget discipline.
 - Not spending more than you have.
 - *Fiscal Policy* – government budget tells us about the government's priorities, just like a household balance sheet conveys family's priorities.
 - Purge of debt, elimination of deficit financing can grow private activity.



What is Fiscal Policy?

- *Fiscal Policy*
 - Expansionary vs. contractionary.
 - *Fiscal Deficit*: Spending minus taxation.
 - Today's small government political rhetoric is a misnomer if you are cutting taxes without cutting spending or raising other sources of tax revenues!
 - Fiscal deficit is expansionary when the fiscal deficit expands from one year to the next.



An Epic Intellectual Battle

- *Governments and Markets Today*

- *Monetarists*- traditionally skeptical of government's role in the economy; advocate a laissez-faire market approach to organizing society.



- “There’s only one place inflation is made; that’s in Washington!” –*Milton Friedman*

- “Government doesn’t solve problems; it subsidizes them.” –*Ronald Reagan*



An Epic Intellectual Battle

- *Governments and Markets*

- *Keynesians*- more benevolent view of governments' role in economy; governments can overcome market failures.

“Leave it up to the free market, and in a few generations Florida will be underwater!”

—*Paul Krugman*

“Governments can err. Presidents do make mistakes...better the occasional fault of governments that lives in a spirit of charity than the consistent omissions of a government frozen in the ice of its own indifference.”

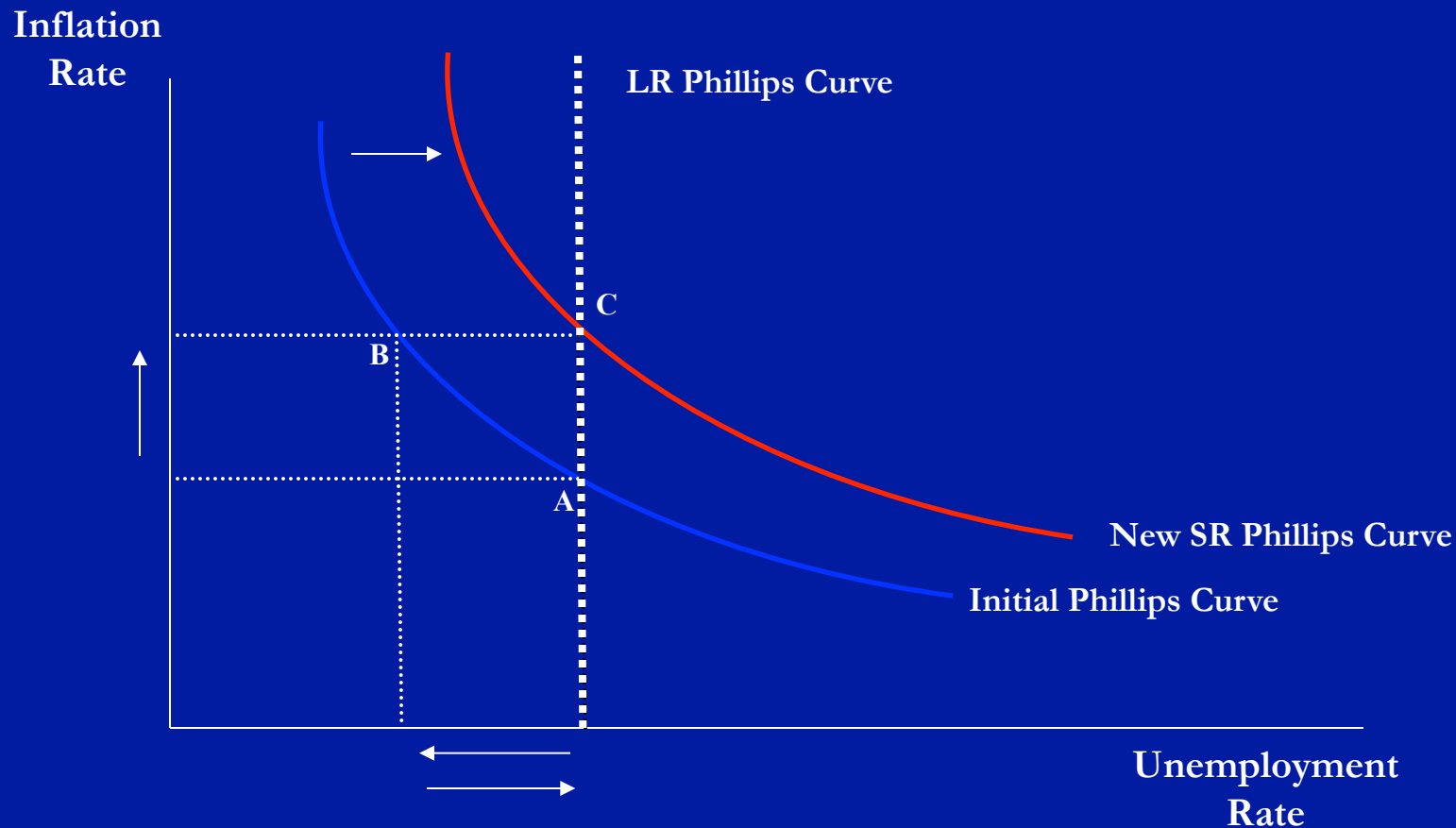
—*Franklin D. Roosevelt*



Keynesianism vs. Monetarism

- *Differences in viewpoint about how sticky prices and wages are over time.*
 - *Keynesians-* believe that prices and wages are sticky, meaning that the the government can expand budgetary policy and credit -- and thereby stimulate jobs and growth -- without creating inflation.
 - *Monetarist-* believe that prices and wages are flexible, meaning that if the government expands fiscal and monetary policy, inflation expectations will undermine any attempts at creating jobs and growth. Firms will increase their goods prices, and laborers will raise their wage demands because they expect that the stimulus will create inflation.

The Phillips Curve Tradeoff



The figure above shows the tensions between Keynesian and Monetarist views. Keynesians suggest that policymakers can readily trade off unemployment and inflation. Monetarists, however, claim that this trade-off is only short-term. Moving from point A to point B, policymakers can reduce the unemployment rate below its natural level with expansionary policy, but only temporarily. Expansionary policies breed higher inflation expectations, shifting the Phillips curve rightward. Moving from point B to point C, the unemployment rate returns to its natural equilibrium, but inflation is permanently higher.

The U.S. Financial Crisis

- Keynes vs. Monetarism – response to crisis.
 - Keynesian universe: views government as the key to offsetting slump in private demand.
 - Government's deficit spending necessary to stimulate the economy, and alleviate severe financial instability, or *systemic risk* that jeopardizes the collapse of entire financial system.
 - Inflation may occur in long run, but in “the long run we are all dead.”
 - Drezner championing success of Keynesianism (Kirshner skeptical).
 - Monetarism: balks at using government spending in response to economic and financial crises.
 - Frets that large deficits will lead to inflation, higher interest rates, and a crowding out of private economic activity.
 - Concerned about *moral hazard*, with government bailouts institutions will not bear the full consequences of their actions.
 - Boom and bust needed for economic recovery.
 - Would Kirshner accept steeper economic and political costs?

Diagnosing the U.S. Financial Crisis: The Key Actors, Concepts, and Events

Household
s



E.g.
Prime Mortgage Owners
Subprime Mortgage Owners

Wall
Street



E.g.
Bear Stearns
Lehman Brothers
Goldman Sachs
JP Morgan

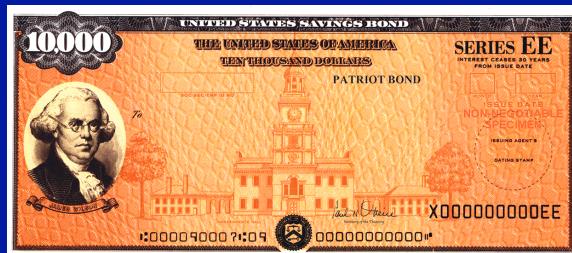
Financial
Investors



E.g.
Pension Funds
Mutual Funds
Insurance Companies
Sovereign Wealth Funds

The US Credit Crisis

US Treasury Bonds



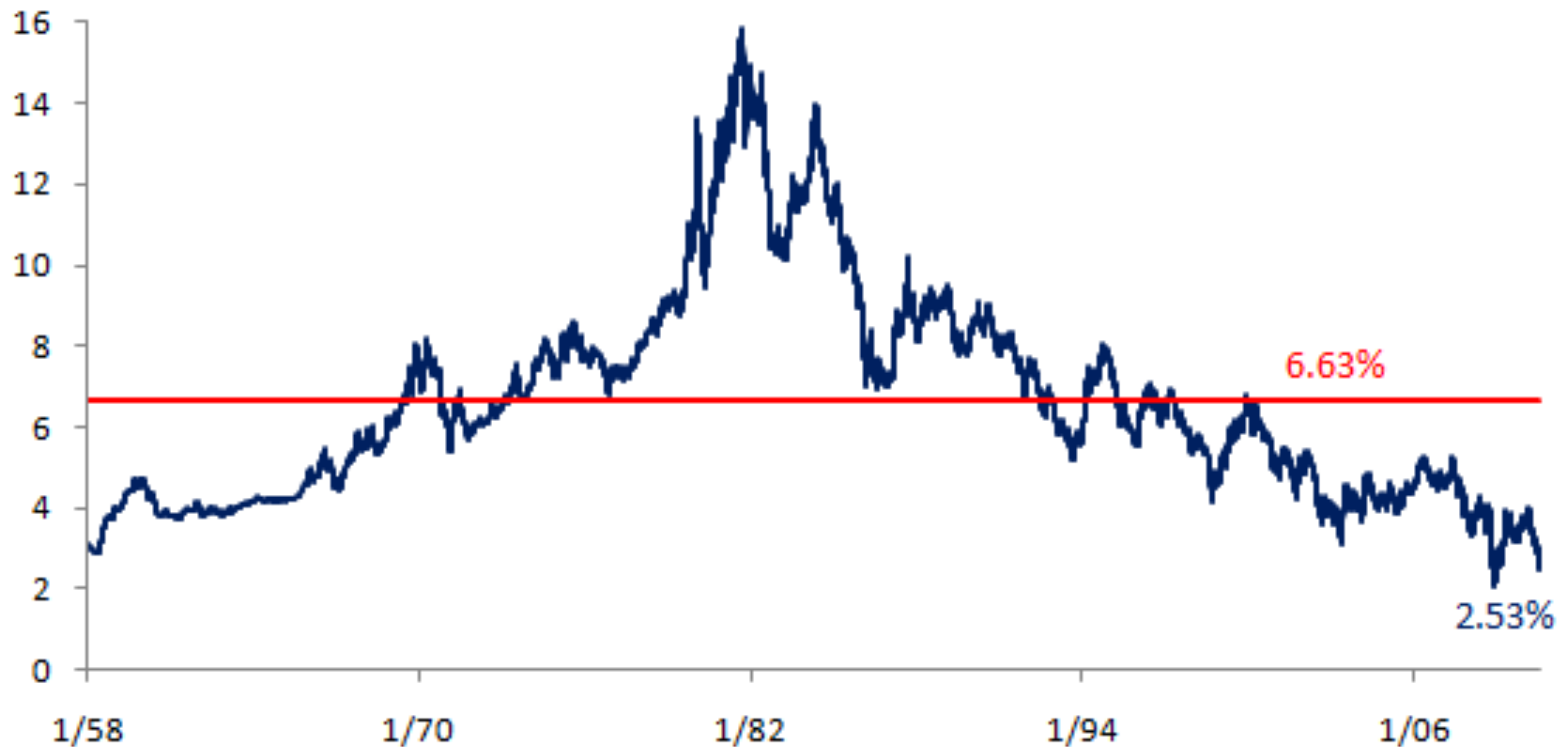
Financial Investors



Institutional investors
funnel funds from IRAs,
401ks, pensions, and
endowments

US Government Debt: Low Return on Investment

Ten-Year US Treasury Yield: 1962 - 2010



Low Interest Rate Environment

- Demand Side
 - Investing in U.S. Treasuries becomes unattractive.
 - Financial investors seek higher returns.
- Supply Side
 - U.S. banks benefit from low interest rates.
 - Create new higher yielding financial products.

Leverage: The Financial Wizard's Wand



- *How Leverage Works*
 - A Normal Deal
 - *Best Buy* has \$10,000
 - Purchases 20 iPads for \$500 each
 - Sells them to consumers for \$550 each, earning \$11,000
 - *Best Buy* nets a \$1,000 profit.



Leverage: The Financial Wizard's Wand



- *How Leverage Works*
 - A Leveraged Deal
 - *Best Buy* has \$10,000
 - *Borrows* another \$90,000 at 1 percent
 - Total money ‘in hand’ is \$100,000
 - Purchases 200 iPads for \$500 each
 - Sells them to consumers for \$550 each, earning \$110,000
 - *Pays back* \$900 in interest
 - *Best Buy* nets a \$9,100 profit.



Leverage: The Financial Wizard's Wand



- *Wall Street Investment Banks make \$ in a similar fashion*
 - They borrow, invest in great in projects with high rates of return, and pay back their loans.
 - Investment banks create collateralized debt obligations from mortgages to market to institutional investors.
 - Offer higher rate of return than US Treasuries.

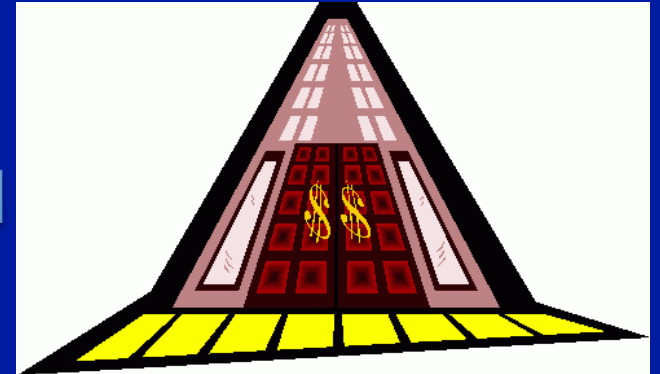
The Traditional Mortgage (Direct Lending)



Mortgage Owners



Mortgage Broker



Mortgage Lender
E.g. Countrywide
Well Fargo and Company

Are You Kidding Me?

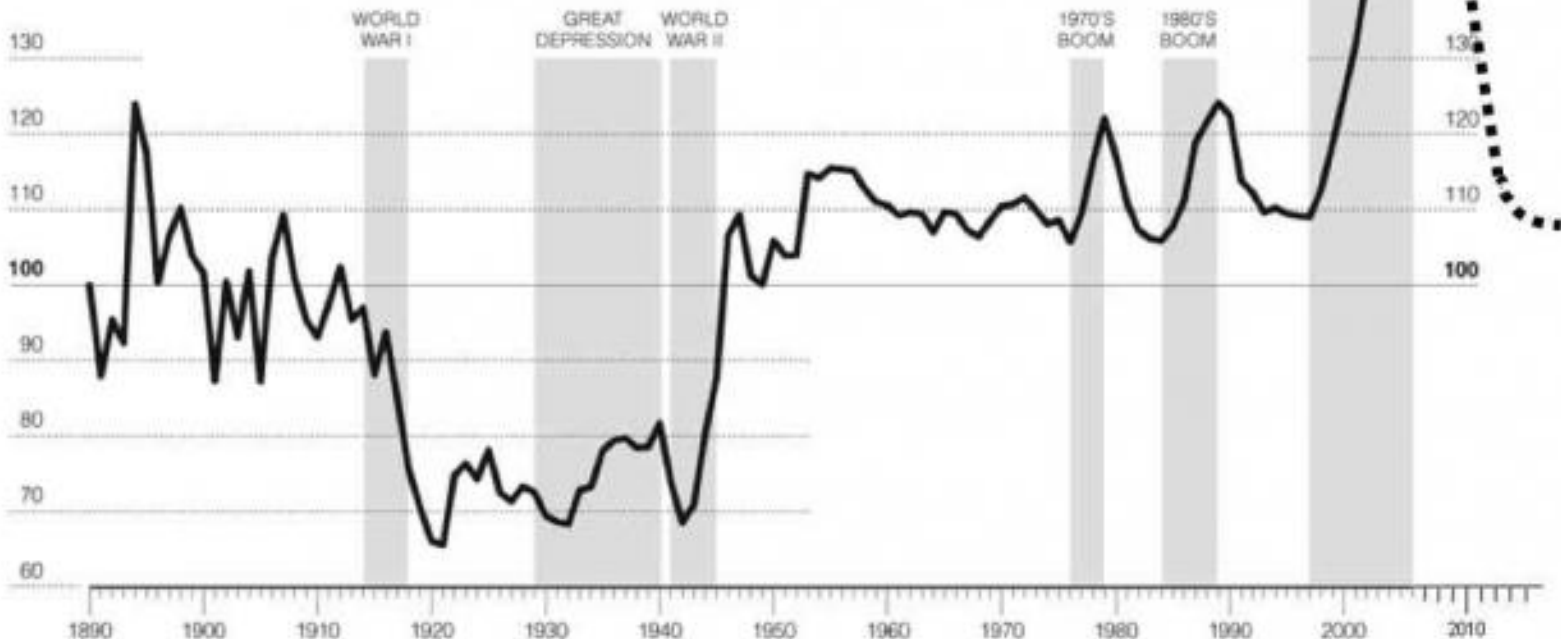
A History of Home Values

The Yale economist Robert J. Shiller created an index of American housing prices going back to 1890. It is based on sale prices of standard existing houses, not new construction, to track the value of housing as an investment over time. It presents housing values in consistent terms over 116 years, factoring out the effects of inflation.

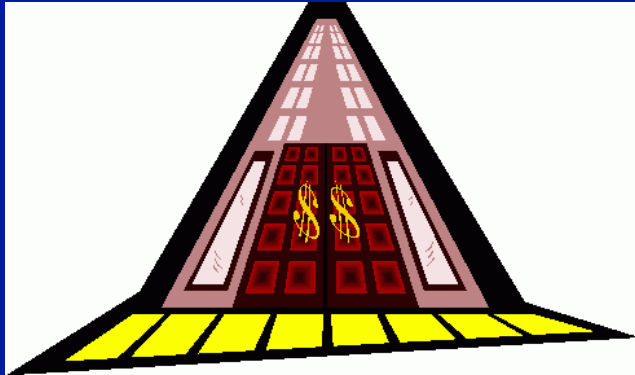
The 1890 benchmark is 100 on the chart. If a standard house sold in 1890 for \$100,000 (inflation-adjusted to today's dollars), an equivalent standard house would have sold for \$66,000 in 1920 (66 on the index scale) and \$199,000 in 2006 (199 on the index scale, or 99 percent higher than 1890).

DECLINE AND RUN-UP Prices dropped as mass production techniques appeared early in the 20th century. Prices spiked with post-war housing demand.

BOOM TIMES Two gains in recent decades were followed by returns to levels consistent since the late 1950's. Since 1997, the index has risen about 83 percent.



Commercial Banking Becomes Investment Banking (Market Securitization)



Mortgage Lender

Mortgages



Investment Banks

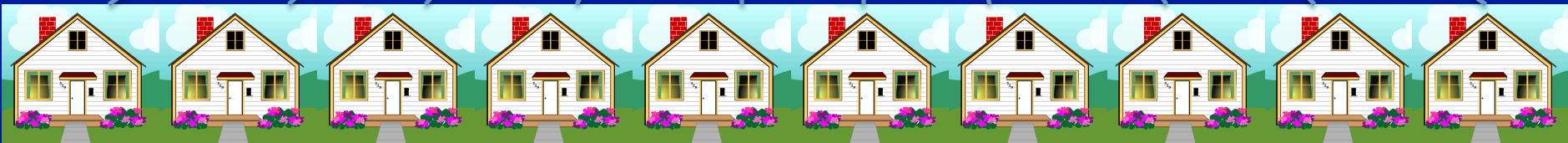


Investment Banks Uses
Leverage to Buy Millions
of Dollars Worth of
Mortgages

Mortgage Backed Securities (Market Securitization)



Investment Bank Receives
Monthly Mortgage
Payments



Mortgage Backed Securities (Market Securitization)

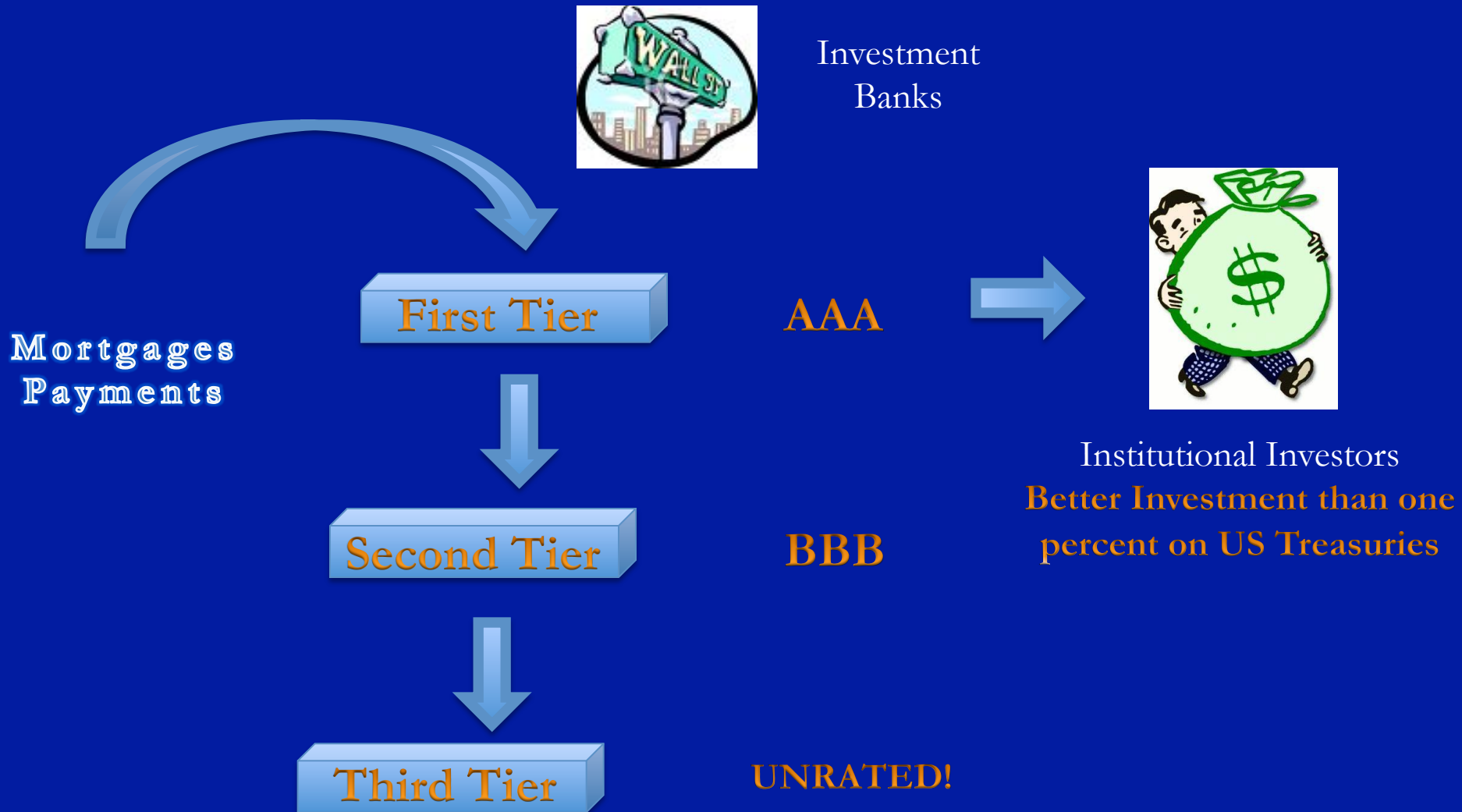


Investment Bank Bundles Mortgage Payments
into AAA-rated Mortgage Backed Securities

Investors Gain a Higher Yield than US Treasuries

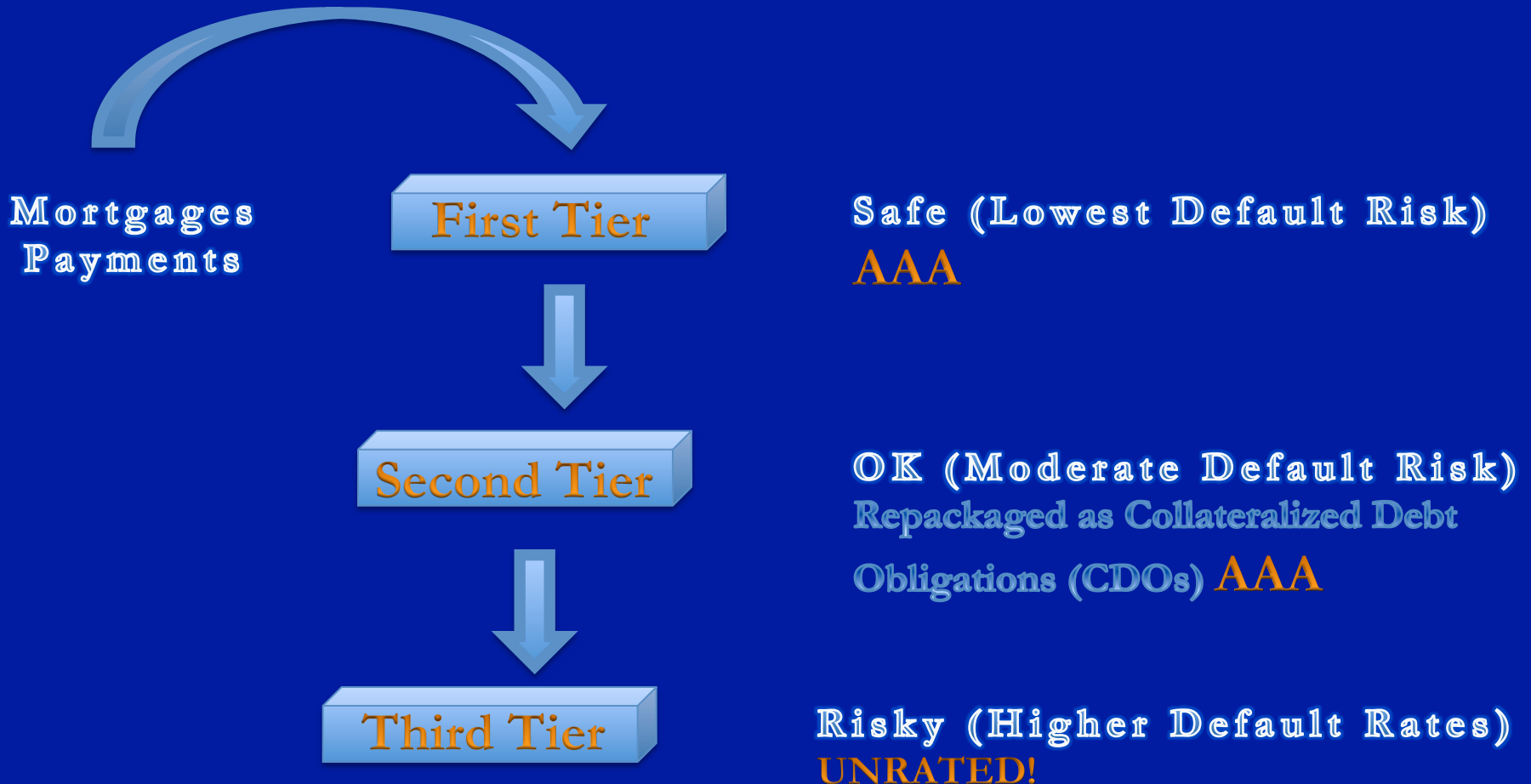
...Yet Rating Agencies' AAA-rating Deems them
Safe for Institutional Investors

Mortgage Backed Securities



Mortgage Backed Securities

Higher-Risk Subprime Mortgage Securities
Also Receive **AAA** ratings!



The Trickle Down Payment Scheme Erodes Borrower Autonomy



- Asset-backed securities remove the lines of communication between the borrower and original lender.
 - Larger investors—with little stake in the solvency of borrowers—control the collateral.
 - Negotiations bypassed for “direct to foreclosure” model of cutting investment losses.
 - *Vicious Financial Cycle* (*‘Household Sudden Stop’*)- Housing price slump leads to rising delinquency and foreclosure rates; asset sales prompt higher interest rates that further erode asset values.

Housing Market Collapses

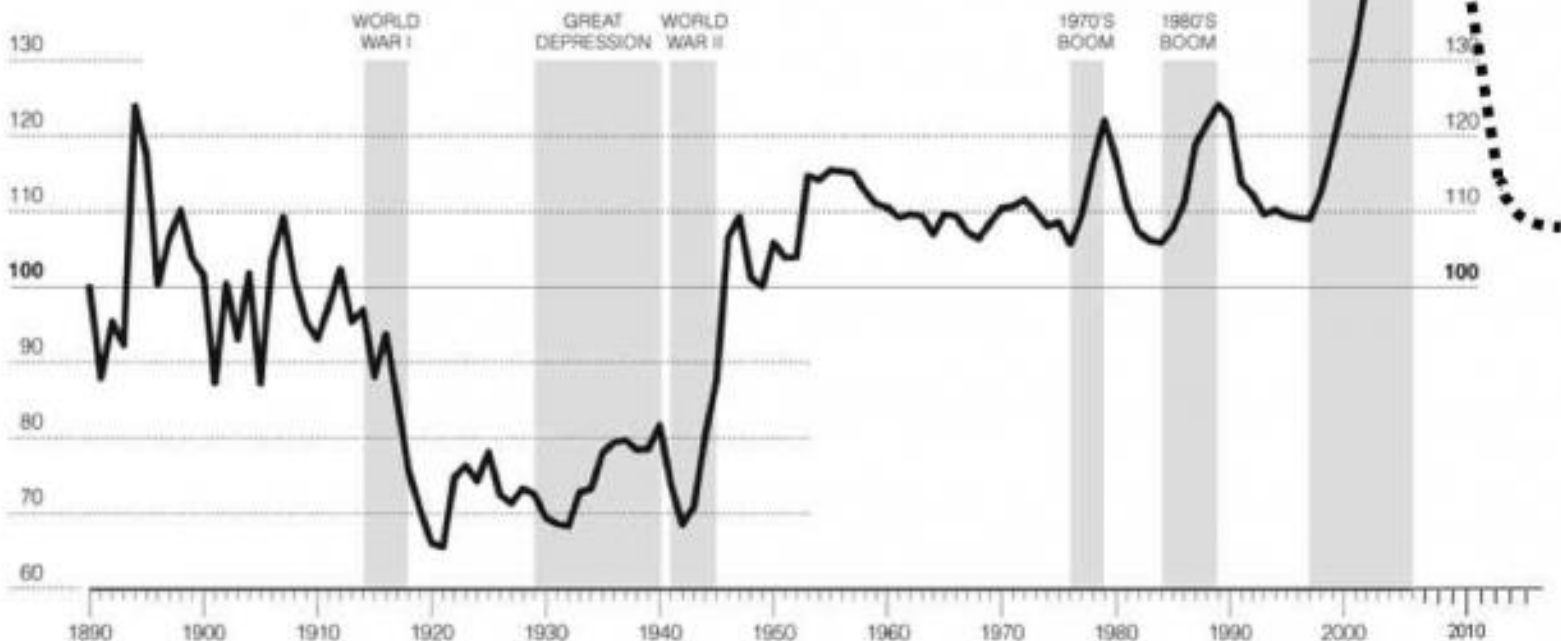
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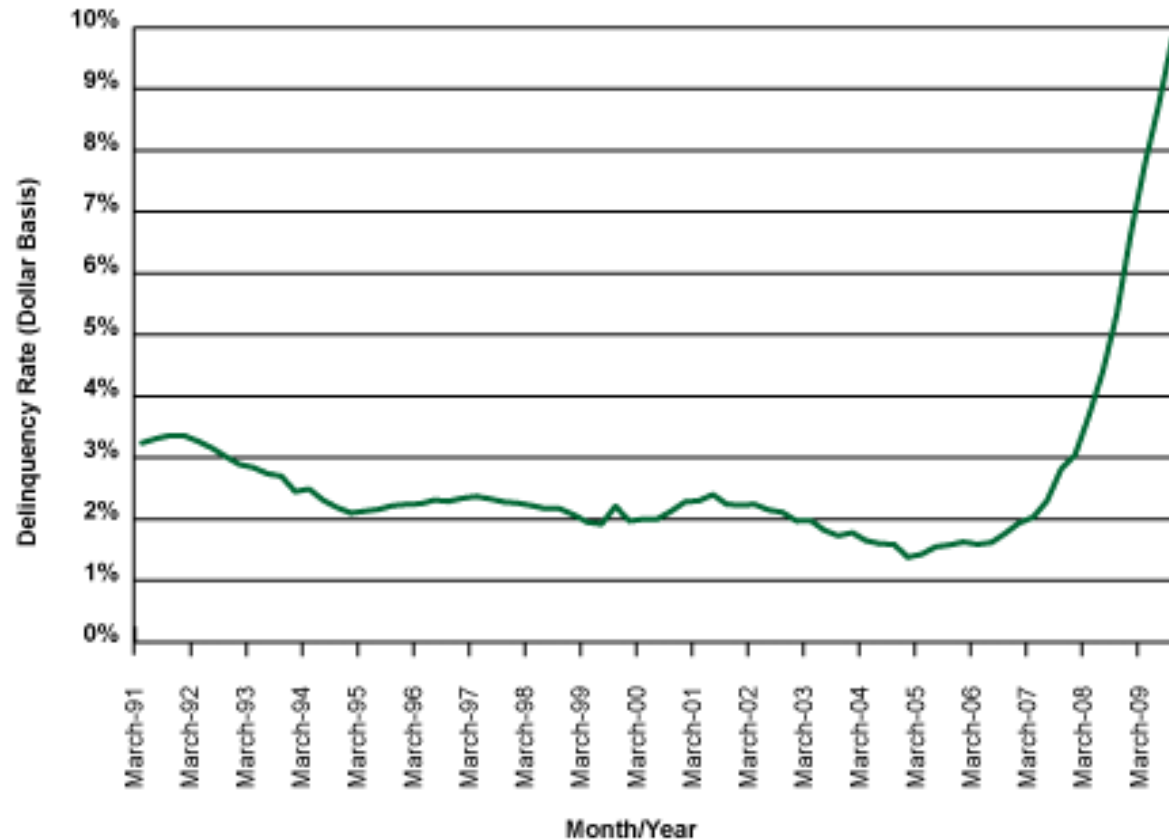
BOOM TIMES Two gains in recent decades were followed by returns to levels consistent since the late 1950's. Since 1997, the index has risen about 83 percent.



Home Delinquency Rates Spike!

Delinquency Rate on U.S. Residential Mortgages:

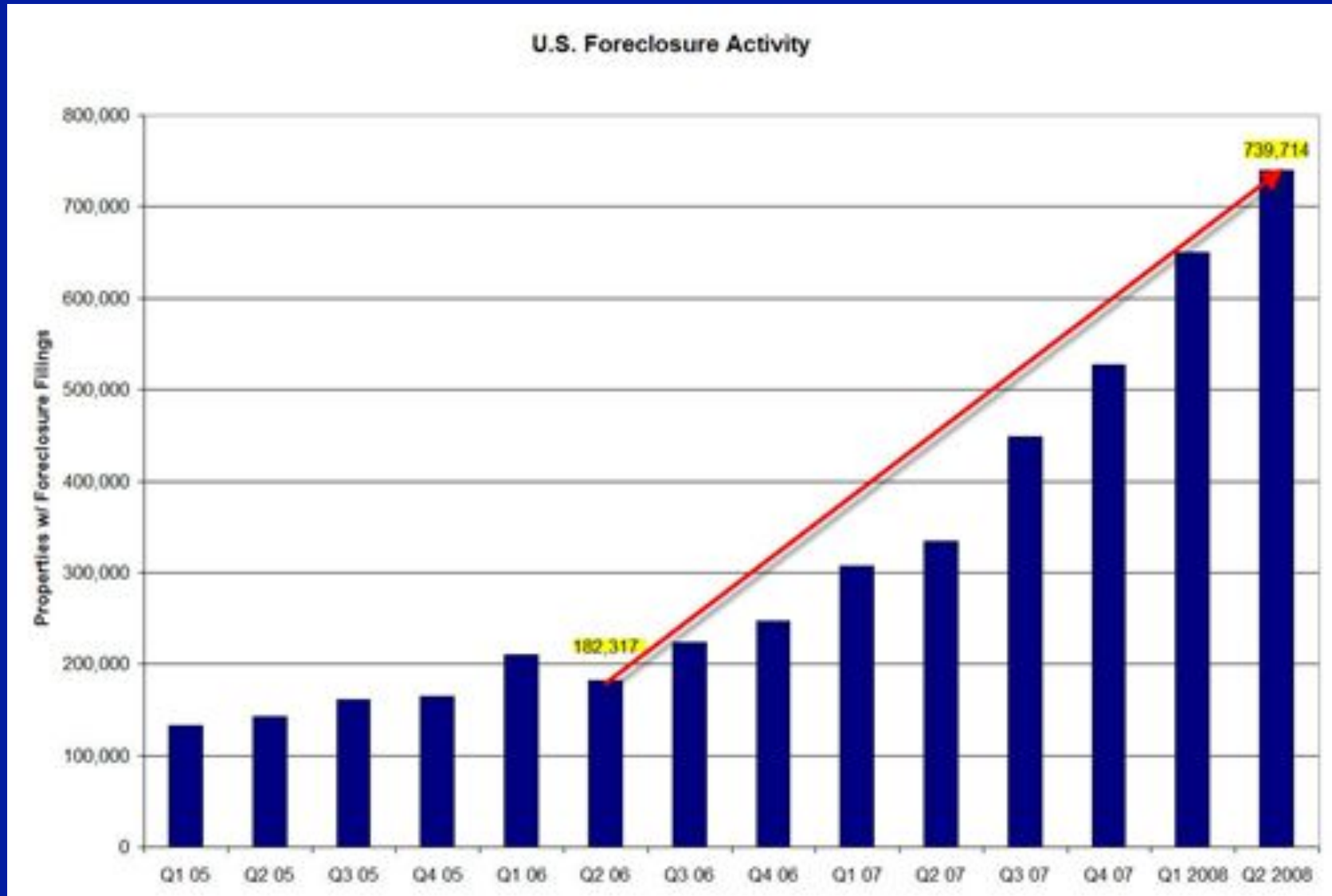
March 1991 to November 2009



Note: A delinquent loan is any mortgage where the payment is past due for 30 days or longer. The delinquency rate is based on the aggregate dollar value of delinquent mortgages divided by the total value of mortgages on these properties outstanding. Because this ratio is based on values (not count), both the numerator and denominator are sensitive to changes—such as declines in the denominator and increases in the numerator.

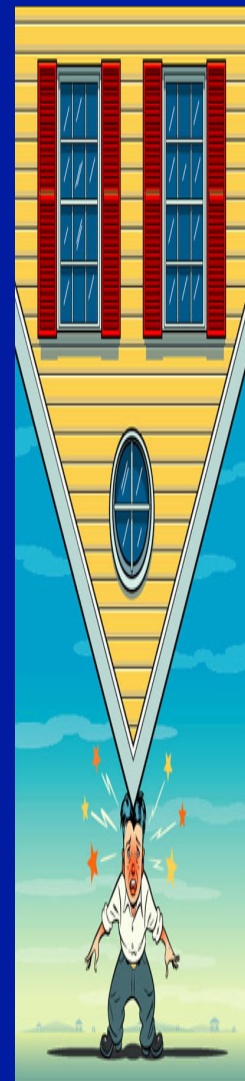
Source: U.S. Federal Reserve: Delinquency Rates on Residential Mortgages with Commercial Banks

US Foreclosures Spike!



Stop: Credit Crunch!

- **Mortgage Lenders** can no longer sell mortgages to investment banks; many lenders declare bankruptcy (i.e. New Century Financial)!
- **Financial investors** dump high-risk mortgage-backed securities; funnel safe-haven flows to US treasury bills.
- **Investment banks** cannot sell their collateralized debt obligations; nervous banks reduce their credit lines, forcing them to sell other assets, including stocks and bonds; **Lehman Brothers** files for bankruptcy in September 2008!
- Falling asset prices and higher interest rates translate to the real economy; raising the cost of borrowing on business loans, educational loans, car loans, and credit cards. Businesses reduce new investment; unemployment increases; consumers retrench spending.
- US, Japanese, and European central bank add massive amounts of liquidity to ease credit crunch and stabilize financial markets.



Markets vs. Society

How Respond to the Crisis?

- **Schrodinger's Economy** (Quantum Economics):
Economic reality depends on your observations.
 - British universe (Keynesians):
 - The lack of government regulation led to private sector excess.
 - Demands government intervention to offset the downturn with fiscal stimulus.
 - Government bailouts also necessary to avoid *systemic risk* (severe financial instability that jeopardizes the collapse of entire financial system)
 - Drezner sees international Keynesian response as successful. Would Kirshner be willing to purge interest group influence through a bust?

Markets vs. Society

How to Respond to the Crisis?

- **Schrodinger's Economy** (Quantum Economics):
Economic reality depends on your observations.
 - Austrian universe (Monetarists):
 - Excess government regulation led to the financial crisis.
 - Avoid fiscal stimulus in response to crisis.
 - At most, let central bank add liquidity to alleviate credit crunch.
 - Budget deficits and government bailouts only lead to higher inflation, higher interest rates, and crowding out private activity.
 - Rescue packages for Bear Stearns and AIG, and recapitalization of banking institutions including Citibank, Bank of America, and JP Morgan create *moral hazard* (i.e. financial management/behavior does not change).

The British Universe: Financial Crisis Solutions



- Problem: The lack of government regulation.
 - The repeal of the Glass-Steagall Act (the Banking Act of 1933).
 - Removed the wall between commercial banking business and securities business in the wake of the Great Depression.
 - Gramm-Leach-Bliley Act of 1999 - signed by President Clinton
 - Eliminated the separation of these two business lines.
 - Increases commercial bank exposure to highly-leveraged securities business.
 - Liberalism sees crisis prevention in greater institutionalism.

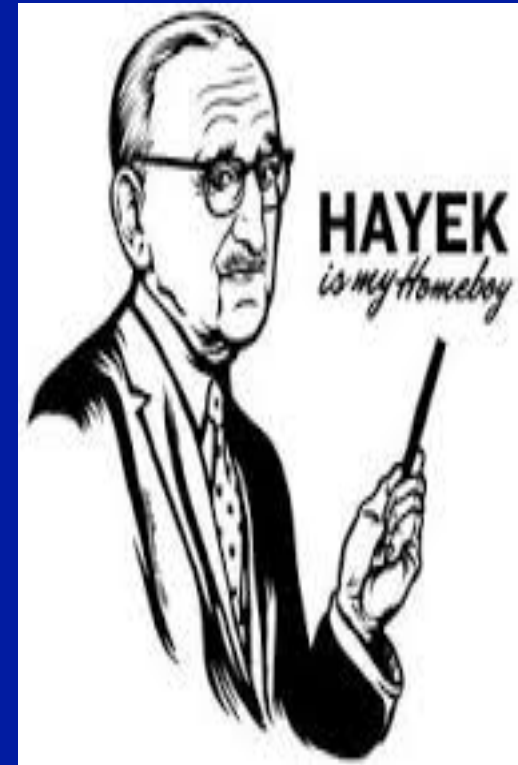
The British School: Financial Crisis Solutions

- President Obama signs **2010 Dodd-Frank Financial Reform Bill** into law on July 21, 2010.
 - Increased capital to asset ratios.
 - Limitation on financial leverage.
 - New hedge fund regulations, formalize ‘shadow banking industry.’
 - ‘Volcker Rule’ limits banks from owning greater than 3% of hedge fund/private equity funds.
 - Mortgage originators have to hold at least 5 percent of mortgage loans on their books.
 - Creates *consumer financial protection bureau*.
 - Orderly funeral plans for large bank insolvencies.



The Austrian School: Financial Crisis Solutions

- Aimed to dilute financial regulations:
 - Lobbied against regulations on hedge funds, the mortgage industry, and most notably the 'Volcker Rule' which sought to restore wall between commercial banking and securities businesses.
- Roots of crisis:
 - Government intervention / regulation encouraged expansion of risky mortgages.
 - The Fed's historically low interest rates.
 - The Federal Housing Administration (FHA) – government insurance of private mortgages
 - Shifts down-payment from 20 to 3 percent.
 - The Community Reinvestment Act (CRA) – expand credit to low-income communities.
 - Non-prime share of mortgages grows from below 10 percent in 2001 to 23 percent by 2006.



Conclusions: IPE and the Financial Crisis

- Schrodinger's Economy:
 - Ongoing polarization of economic ideas reflection of ideological observations.
 - Like any perfect storm, the causes of the crisis were multiple, and likely to reflect both public and private sector behavior.
 - Economic solutions should be grounded in contemporaneous economic conditions, rather than ideological prisms, or policymakers risk sub-optimal responses.
 - If global liberal response to crises risks perpetuating interest group capture, how can the system be reformed without allowing for a systemic shock, and a deeper crisis? That's the million dollar IPE question!



“Every society must be protected from too facile thought.”
– John Kenneth Galbreath