On the Political Economy of the Financial Crisis and Bailout of 2008-09,

An American Perspective

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Abstract: This lecture provides an overview of the political and economic decisions that helped to create the financial crisis of 2008-09. It begins with an overview of U.S. efforts to promote home ownership and how those policies, along with banking regulatory decisions in the late 1990s and early 2000s, helped to create a highly leveraged and risky international portfolio of mortgage-based securities. Declines in the price of housing, consequently, had major effects on the balance sheets and portfolios of financial institutions throughout the world, because the risk of mortgage-backed securities was under priced.

The political response to the "crisis" of 2008 has been rapid and large. The response has been partially accomplished through new legislation (TARP) and partly through standing agencies with authority to address credit and housing issues. In general, the differences in the effectiveness of policy responses shows the advantage of standing institutions at crisis management relative to innovative legislation.

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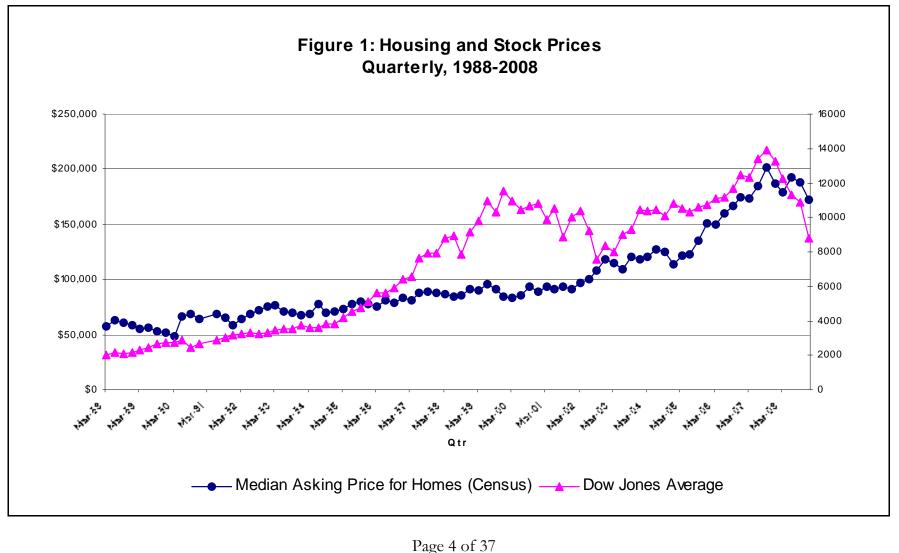
I. Introduction: Housing Prices, Bubbles, and the Current Recession

- A. The median householder's wealth in the United States consists largely of his or her home, so it is not surprising that all levels of governments within the United States adopt policies that tend to increase the value of existing homes.
 - The most obvious of these policies is the deductibility of home mortgages, which tends to increase the demand for mortgages and has been part of the federal tax code since it was first adopted in 1913.
 - Other long-standing policies include recorded deeds, zoning, and building codes, which tend to increase the value of existing housing by reducing various kinds of risk and somewhat discouraging new construction.
- B. Mortgages themselves are further encouraged through various regulations and other policies that increase the supply of mortgages. These policies, together with rising family incomes, have induced home prices to rise fairly steadily since the end of the Great Depression.
 - The median value of a single family home rose from \$30,600 in 1940 to \$119,600 in 2000 (in 2000 dollars).¹ This more or less steady rise in home values continued into the twenty-first century and, indeed accelerated.

¹ <u>http://www.census.gov/hhes/www/housing/census/historic/values.html</u>.

- C. Home prices are economically important, because homes are by far the largest component of personal wealth for most households and a major component of national wealth.
 - For example, in 2004 personal portfolios of private homes and stocks were worth \$19.1 and \$3.7 trillion (net), respectively, out of a total of \$50.2 trillion of assets held by households in the United States.
 - About two-thirds of the net wealth owned by the lowest 95% of the distribution of wealth owners is equity in homes (Kennickell 2006, table 11a).
 - Microeconomics implies that personal wealth is a major determinant of personal spending and investment.
 - Macroeconomics implies that consumption and investments are major determinants of national income and economic growth.
- D.Figure 1 plots time series for median home values and the Down Jones Average from 1988 through 2008.
 - The graphs suggest that both home prices and stock prices rose at an unusually brisk pace from early 2004 until 2007 and then fell at unusually brisk rates.
 - Real median house prices rose 50% in value and the Dow Jones Average rose 34% in 2.5 years from the first quarter of 2004 through the third quarter of 2007, well above their average real growth rates (2.75%/year and 4.42%/year) from 1950 to 2000.

 The 17% fall in housing prices and 37% fall in stock prices through the end of 2008 has reduced personal wealth and increased uncertainty, which in turn, has produced a relatively deep recession, with estimated real gross domestic product (RGDP) at the end of 2008 of about a half percent below that of the third quarter of 2007 and nearly 1.5% below its quarterly peak earlier in 2008.



- E. In microeconomic terms, a decrease in personal wealth caused consumers to reduce their expenditures on normal and superior goods, which reduced cash flow for firms selling such goods and services and for suppliers of intermediate goods.
 - Demand for inferior goods increased, but not as much as demand for superior and normal goods decreased.
 - With reduced demand for inputs of all sorts, employees have been fired faster than they have been rehired elsewhere.
 - Unemployment, consequently rose from 4.7 to 7.6% during 2007-08, which is the highest U.S. unemployment rate since January 1993.
- F. It was the collapse of prices in another less familiar asset market, however, that led Secretary of the Treasury Paulson to warn Congress in September of 2008 that another Great Depression might occur in 2009 unless extraordinary steps were immediately taken by the U.S. government.
 - In the past few decades a new, very large, market for mortgage-backed securities had emerged.
 - These and similar credit-backed securities are not directly held by many private investors, but they play important roles in the portfolios of banks, finance firms, insurance companies, pension funds, and sovereign wealth funds.
 - Government policies also played a role in the size of those markets and in their collapse.

II. Government Provided Supply-Side Support for Mortgage Markets

- A. In the "good old days," mortgages were held by the banks that made loans; so, if there were any problems with mortgages, they tended to be concentrated in the banks located in regions with declining housing prices, unemployment, and net out-migration.
 - This changed in 1932 and 1938, when Hoover founded the Federal Home Loan Banks (FHLBs) and Roosevelt founded the Federal National Mortgage Association (FNMA or "Fannie Mae").
 - The FHLBs initially provided short-term loans to savings and loan (S&L) banks, whose liquidity was reduced by bank runs and mortgage defaults at the beginning of the Great Depression.
 - Fannie Mae initially purchased and held mortgages from banks and also insured mortgages, which allowed banks to create more mortgages at lower prices because the risks associated with mortgage defaults were shifted to Fannie Mae.
 - The Housing Act of 1949 authorized the Federal Housing Administration (FHA) to insure home mortgages and to construct 810,000 public housing units.
- B. Between the various housing policies of the Federal and state governments and the rising incomes associated with renewed economic growth after World War II, home ownership rates increased from 43.6% in 1940 to 61.9% in 1960.

- C. Evidently the 61.9% ownership rate of 1960 was not "enough," and the federal government took additional steps to encourage further home ownership.
 - In 1968 Fannie Mae was privatized, which meant that a new management company was created to manage the great portfolios of mortgages that Fannie Mae had already assembled.
 - In 1970 the Federal Home Loan Mortgage Corporation (FHLMC or "Freddie Mac") was established to make loans and loan guarantees and to create a market for mortgage-backed securities.
 - Freddie Mac pooled the mortgages that it purchased and sold mortgage-backed securities to investors on the open market.
 - This essentially created a new financial market in mortgage-backed securities, which further increased the supply of mortgages by introducing a new more indirect means of mortgage finance.
 - The guarantees and pooling of mortgages by Freddie reduced the risk associated with the purchase of mortgage-backed securities and induced more investors to hold them. Again, the purpose was to increase the demand for mortgages, which would encourage banks to make more loans for housing.²

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² The Congressional Budget Office estimated that in 2000, about 22.7% of fixed-rate single-family mortgages were held by Fannie Mae and Freddie Mac, but had issued about 71% of all mortgage-backed securities (Crippen 2001: 5).

- D. After initial periods of government support, these government-sponsored enterprises (GSEs) became more or less private entities.
 - None had formal backing from the U.S. Government, although they were managed partly through government appointees and subject to different forms of government oversight than other firms in financial markets.
 - Most investors consequently believed that U.S. taxpayers would back up the GSEs after they were "privatized," if need be, which proved to be correct in September 2008.
 - These implicit subsidies to housing (the implicit insurance risk) were not on the Federal government's balance sheets, nor were the risks associated with the implicit guarantees of the Federal government.
 - Consequently, no fees were charged for this insurance and no insurance reserves were accumulated.
 - This further increased Fannie and Freddie's profits, which were passed onto their shareholders.
 - The mortgage-backed securities created by Fanny and Freddie are normally "insured" by them, which "guarantees" to purchasers that both principal and interest will be paid regardless of whether the persons who financed their house purchase continued their mortgage payments or not.³

³ The underpricing of risks was evidently compounded by incentives facing the various asset rating services of Standard and Poor's and Moody's. Much of their revenues came from their rating services and security issuers could shop among the top firms for the best ratings. AAA ratings were consequently achieved for many asset bundles that were only of low risk as long as housing prices continued to rise or at least did not decline very much (Jenkinson 2008).

- E. The loans purchased and resold by Fanny Mae and Freddie Mac initially met more or less ordinary standards for mortgages and had a maximum size, although both constraints were relaxed during the past two decades.
- F. This changed in 1992, as a consequence of the Federal Housing Enterprises Financial Safety and Soundness Act:
 - "(7) The Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation *have an affirmative obligation to facilitate the financing of affordable housing for low- and moderate-income families* in a manner consistent with their overall public purposes, while maintaining a strong financial condition and a reasonable economic return."
 - The same 1992 act assigned oversight responsibility for the GSEs to an agency of HUD.
 - With "affordable housing" in mind, the U.S. Department of Housing and Urban Development (HUD) established annual targets for extending loans to "underserved areas" and for "low- and moderate-income housing."
 - These goals for Fannie Mae and Freddie Mac were gradually increased, from 30% in 1993 to 55% in 2007.
 - Both Fannie Mae and Freddie Mac normally met or exceeded their targets, and so the affordable housing targets helped to create a new market in "sub-prime" (e.g., sub-standard) mortgages and mortgage-backed securities.

- G. Fannie Mae and Freddie Mac had essentially created the market in mortgages and mortgage-backed securities and remained major players in those markets, even as private firms of various kinds entered the market.
 - Together Fannie Mae and Freddie Mac issued more than 70% of mortgage-backed securities in 2000 and 60% of mortgage-backed securities in 2002.⁴
 - Indeed, in 2008, the newly created Federal Housing Finance Agency reported that "as of June 2008, the combined debt and (MBS) obligations of these GSEs totaled \$6.6 trillion, exceeding the total publicly held debt of the U. S. [government] by \$1.3 trillion. The GSEs also purchased or guaranteed 84% of new mortgages."
- H. The mortgage-backed securities (MSBs) created by Fannie Mae and Freddie Mac were **used to purchase mortgages from banks**, which held them as capital, instead of their mortgages, because Fannie and Freddie's MSBs were considered to have r (pooled and insured) risks associated with them.
- I. The pool of mortgages and mortgage-backed securities, thus, increased rapidly and became significant elements in investment portfolios and capital reserves of investors and firms worldwide.
 - Fannie and Freddie had remained major players in the mortgage market even as they approached bankruptcy in 2007-08.

⁴ See OMB (2001) or *The Economist* (July 18, 2002) (http://www.economist.com/finance/displaystory.cfm?story_id=E1_TNPVJRV) Page 10 of 37

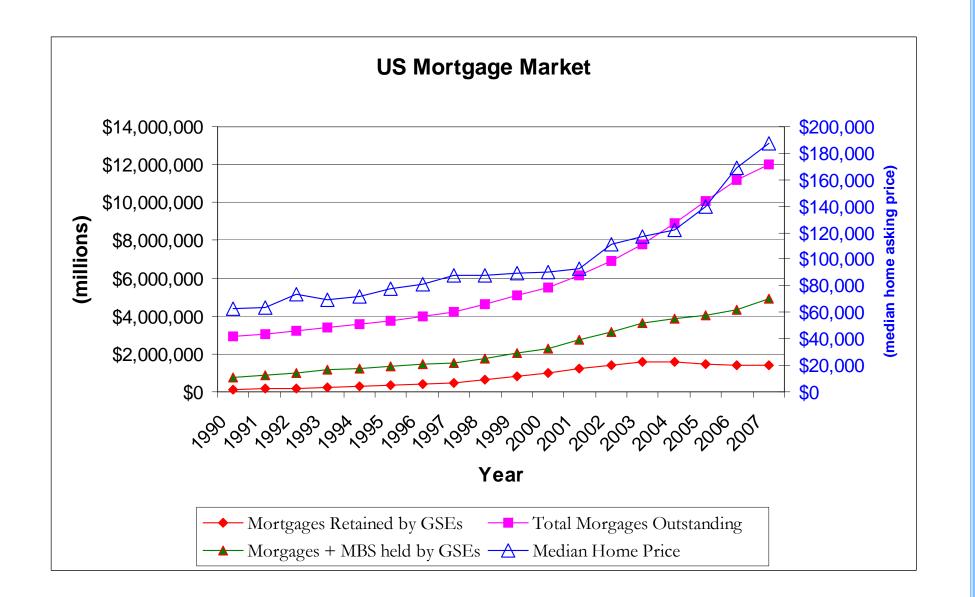
- J. The supply of funds for credit in general and mortgage-backed securities in particular was also increased by the large trade deficits that the United States had run for many years and by a series of banking regulatory reforms that allowed the emergence of large national and international banking-insurance conglomerates.
 - The Riegle-Neal Interstate Banking Act of 1994 allowed bank holding companies to own banks in several states and allowed the merger of banks from different states.
 - The Gramm-Leach-Bliley Act of 1999 effectively repealed the Glass Steagall Act of 1935 by allowing bank-holding companies to hold insurance and security companies as well as banks.
 - In 2004 a **special ruling** of the U.S. Securities and Exchange Commission (SEC) allowed the five largest investment banks in the U.S. to reduce their capital reserves.
 - This SEC ruling allowed those already less regulated "banks" to become far more highly leveraged enterprises, which allowed them to increase the pool of assets under their control. Within a few years, they jointly controlled \$4 trillion in financial assets, but with relatively little net equity.

III. Voters, Interest Groups, Regulators, and the Risk of Mortgage Default

- A. The politics of government interventions in the mortgage market differs from interventions in many other markets, because of the size of the market and its relative importance to ordinary voters and investors throughout the world.
 - For example, the President of the United States selects about a third of Fannie Mae's and Freddie Mac's boards of directors (five of 17 and five of 18, respectively); the rest are elected by stockholders.⁵
 - Their size and importance have also produced an unusual amount of political and news attention.
 - The archives of *The New York Times* include nearly 10,000 pieces reporting on the regulation of Fannie Mae.
 - Indeed, *The Financial Times* (of London) includes more than 500 articles on similar topics in the past five years.
- B. Nonetheless, government intervention in the supply side of the mortgage market has never risen to the point of being a central issue in national election campaigns; so, the details of that intervention are normally worked out within Congress and HUD, with the assistance of various lobbying groups.

⁵ *Fannie Mae 2007 Annual Report* (p. 40) mentions that the terms of the five presidential appointments had expired in 2004, but no replacements had been appointed through 2007.

- Among the most prominent lobbyists are the GSEs themselves and organizations representing commercial banks and realtor groups, which have roughly opposing interests in the extent to which these GSEs should be subject to more or less regulation and/or receive more or less implicit support from taxpayer guarantees.
- C. Before the housing bubble burst in 2006–07, it could be argued that the various housing policies of the federal government **had broadly advanced the interests** of the median voter (who is a home owner) at the same time that it balanced the interests of an assortment of economic interest groups.
 - Median house prices rose steadily, with only minor downturns, during the entire postwar period. And, after 2000, median house prices rose at a much faster rate than usual: nearly 10% a year.
 - In 2004, home ownership rates peaked at 69.2%.
 - As long as "it works," why should voters worry about the details?



IV. Warnings About the Market in Mortgage-Backed Securities

- A. There were, however, increasing concerns expressed by experts inside and outside government, who feared that the now-global system of mortgage finance had become overextended, in part, because housing prices were rising at unsustainable rates and it appeared that the risks associated with mortgage-backed securities and their derivatives were underpriced.
 - A variety of congressional hearings were held regarding sub-prime mortgages and regulations designed to limit their terms were adopted by Congress, although many believed that such regulations had not gone far enough (Gramlich 2000).
 - Concerns were also expressed about the viability and oversight of Fannie Mae and Freddie Mac.
 - Several proposals were made to strengthen and depoliticize their standing regulator (OFHEO) and to increase capital requirements, but none were able to secure majorities in Congress, in part, because of successful lobbying efforts by Fannie Mae and Freddie Mac and, in part, because promoting home ownership was a popular cause.
 - Such pressure, however, induced Fannie Mae and Freddie Mac to register (voluntarily) with the SEC in 2003, which required them to file the same quarterly and annual financial reports as other stockholder-owned firms. (Fannie Mae and Freddie Mac had been exempt from the 1933 Securities Act as GSEs).

- This required Fannie and Freddie to meet conventional accounting standards in their annual reports, which they had not done previously.
- B. At about this time and for much the same reason, the Office of Federal Housing Enterprise Oversight (OFHEO) conducted a thorough investigation of Fannie Mae and filed a 200-page report, in which it stated, for example, that:
 - "We have determined that Fannie Mae, in developing policies and practices in these critical areas, has misapplied Generally Accepted Accounting Procedures (GAAP), specifically Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases ("SFAS 91") and Accounting for Derivative Instruments and Hedging Activities ("SFAS 133")."
 - The misapplications of GAAP are **not limited occurrences**, but are pervasive and are reinforced by management. The matters detailed in this report are serious and **raise concerns regarding the validity of previously reported financial results, the adequacy of regulatory capital, the quality of management supervision**, and the overall safety and soundness of the Enterprise. (Emphasis is in the original report, p. 6; C.H. Dikerson, chief compliance examiner, "Report of Findings to Date, Special Examination of Fannie Mae," OFHEO, 2004, Washington D.C.)
- C. Of course, similar accounting irregularities that overstated profits may have been present in other large financial enterprises, which can shop around for pro-management accounting and rating firms.

- Those filings, however, had long been reviewed by the SEC and were subject to the GAAP standards.
- Private firms also faced somewhat higher and more binding rules for capital requirements.

D.Fannie Mae Mac and Freddie are, in principle, monitored by both stockholders and voters (through their agents) as well as HUD.

- Monitoring failures are, however, evident throughout the OFHEO report.⁶
- E. In February of 2004, Federal Reserve Chairman Alan Greenspan urged Congress to address the financial basis and possible bankruptcy of Fannie Mae and Freddie Mac.
 - In sum, the Congress needs to create a GSE regulator with authority on a par with that of banking regulators, with a free hand to set appropriate capital standards, and with a clear process sanctioned by the Congress for placing a GSE in receivership.
 - However, if the Congress takes only these actions, it runs the risk of solidifying investors' perceptions that the GSEs are instruments of the government and that their debt is equivalent to government debt. The GSEs will have increased incentives to continue to grow faster than the overall home mortgage market. Because they already purchase most conforming mortgages, they, like all effective profit-maximizing organizations, will be

⁶ Several very well-paid top officials of Fannie Mae, including its CEO, were "encouraged" to resign as a consequence of the OFHEO report and other investigations undertaken by the SEC. The SEC and OFHEO subsequently fined Fannie Mae \$400 million in 2006 for manipulating its accounts to enrich its senior management from 1998–2002 (*Washington Post*, May 24 2006).

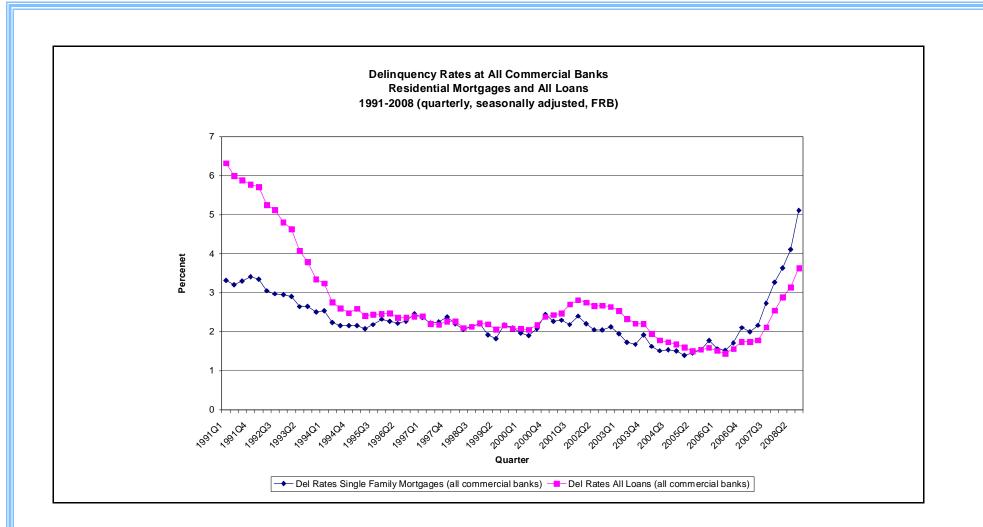
seeking new avenues to expand the scope of their operations, assisted by a subsidy that their existing or potential competitors do not enjoy. Thus, GSEs need to be limited in the issuance of GSE debt and in the purchase of assets, both mortgages and nonmortgages, that they hold.

- F. Indeed, by 2006 even the Annual Report of Fannie Mae mentions increased risks in the housing finance market. For example, regarding its own portfolio of sub-prime mortgages, the 2006 report notes that:
 - The proportion of higher risk mortgage loans that were originated in the market between 2003 and mid-2006 increased significantly. As a result, our purchase and securitization of loans that pose a higher credit risk, such as negative-amortizing adjustable-rate mortgages...interest-only loans, and sub-prime mortgage loans, also increased, although to a lesser degree than many other institutions. In addition, we increased the proportion of reduced documentation loans that we purchased to hold or to back our Fannie Mae MBS (page 23). [emphasis added]
- G. That housing prices were at relatively high levels and that the mortgage market portfolios included many risky mortgages was not a surprise.
- H. There was, however, far less analysis of the global markets for mortgage-backed securities in general, which were widely presumed to be efficient in the sense of

stock markets, although those relatively new markets lacked equivalent regulation and transparency.

I. The End of "Risk-Free" Mortgage-Backed Securities

- Delinquencies on residential mortgages were moderate in the period after the 1992 recession and, if anything, exhibited a slight downward trend through 2005.
- Delinquencies on residential real estate loans had more than doubled by the beginning of 2008 and continued to climb. Nearly 25% of sub-prime mortgages were 90 days delinquent or in foreclosure in 2008 (Bernanke 2008).



- J. There were \$10.4 trillion of outstanding mortgages on one- to four-family homes in 2006, of which \$7 trillion worth were held in mortgage pools and trusts supporting mortgage-backed securities.
 - The value of the mortgage-backed securities supported by those mortgage pools would have initially exceeded the value of the mortgage pools themselves, because of the lower

risk premiums paid for securitized mortgages than for the mortgages themselves, as noted above.

- K. As insurer losses accumulated, the stock prices of insurers naturally fell, which meant that they could not raise new money to make their "guaranteed payments" to mortgage-backed security holders by selling stock.
 - At the same time, Freddie Mac, Fannie Mae, and other insurers saw their credit ratings rapidly decline as the credit-rating agencies revised their estimates of expected insurance losses. Insurers could no longer borrow to pay claims in the short run.
 - Losses accumulated as payments to those insured exceeded payments from those holding the mortgages, and several major insurers went bankrupt, as their insurance obligations exceeded their assets (Bear Stearns, Fannie Mae, Freddie Mac, etc.).
 - The standard asset pricing models could no longer be used to assess the value of mortgage-backed securities, because house prices continued to fall at unusually high rates and bankruptcy risks rose to unusual levels for even the safest mortgage insurance companies.
- L. Ex post, it is clear that the insurers of mortgage-backed securities had assumed (or hoped) that housing prices would rise forever (or at least not fall very much), which essentially meant that they needed only sufficient reserves to carry properties through bankruptcy courts, after which the house would be resold and interest payments would be resumed (from new buyers, whose mortgages were also likely to be purchased).

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- The bubble in MBSs was also magnified by of a variety of mistakes made by credit rating agencies (Jenkinson 2008).
- Some newspaper accounts place the total loss of market value of mortgage-backed securities at 70%–80%, which if true, implies that something on the order of \$5 trillion of financial wealth disappeared from the world's financial system from that one market alone.
- These losses were about the same magnitude as the reduction in homeowner equity, but they had larger effects on the real economy, because they were concentrated in one very important sector of the economy, rather than spread out among households.
- That concentration increased both its economic and political consequences, in part for Olsonian (1965) reasons.

V. Political Responses to the "Financial Meltdown" and the Threat of Recession

- A. There are a variety of standing government procedures for reducing the downside risks of mortgages and recessions in the United States.
 - Some of these, such as mortgage and unemployment insurance, are automatic and require no new policy decisions by government officials.
 - Others require a variety of more or less routine decisions within standing government agencies.

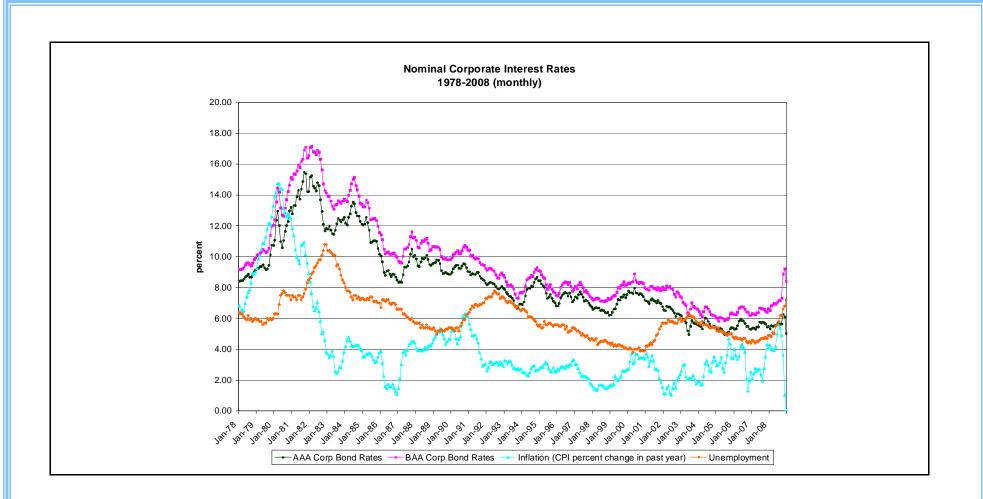
- The FDIC and Federal Reserve have responsibility for looking after the solvency of banks, the extent of the money supply, and the extent of bank credit.
- so, the FDIC arranged for mergers of failing banks with stronger banks,
- and the Federal Reserve Bank stepped in to provide liquidity, at first with more or less routine adjustments to the Federal funds rate,
- which were quietly followed by a variety of policy innovations in 2007-08 to reach financial firms (and divisions) that were normally beyond the Fed's regulatory turf.⁷
- Target Federal funds rates were gradually reduced from 5.25% in early 2007 to 0.25% in late 2008.
- The range of assets purchased in open market operations and used to secure short term loans from the Federal Reserve were expanded to include relatively safe corporate bonds and mortgage-backed securities, which allowed a wide range of monetary base–expanding purchases of securities to take place.
- As a consequence of these and related actions, the monetary base has effectively doubled from November 2008 through January 2009 and the credit crisis has been far milder in the banking sector than in the non-banking finance sector, although substantial new support was also provided for latter.
- B. Other responses, however, require new legislation to be adopted. For example, Keynesian responses to recessions beyond those provided by social insurance require acts of Congress with respect to budget and/or tax law.

⁷ The St. Louis Fed's "The Financial Crisis, A Timeline of Events and Policy Actions" includes a long list of policies adopted by the Federal Reserve in response to recessionary pressures and problems in the non-bank portion of the financial market.

- Addressing an unusually large wave of bankruptcies outside the banking sector would require new legislation.
- There is no equivalent to the FDIC for most non-bank financial institutions, beyond the usual civil laws that govern bankruptcy.

C. Great Depression Warnings Are Sounded

- Responses from the Treasury, however, required new legislation, which required significant lobbying of Congress by top officials from the executive and from large financial firms.
- The terms "financial crisis" and "credit meltdown" were frequently used by those advocating new legislation to address the unusually large number of bankruptcies (and potential bankruptcies) in the non-bank portion of the financial sector.
- D. At the time these terms were first invoked, there was no publicly available evidence of a broad credit "meltdown," nor of unusual recessionary pressures.



- Indeed, credit expanded throughout 2007 and most of 2008 and unemployment remained at relatively low levels, although many financial firms were in dire straights, because their asset base had collapsed.
- E. Nonetheless, in response to those great depression warnings, new legislation was adopted to reduce recessionary pressures.

- A Keynesian stimulus program of tax rebates adopted on February 13, 2008.
- The government's implicit guarantees for Fannie Mae and Freddie Mac were made more explicit, with new lines of credit from the Treasury and the Federal Reserve in late July.
- The *Housing and Economic Recovery Act of 2008* authorized the Treasury to purchase GSE obligations and merged the various GSE regulators in HUD to form a new Federal Housing Finance Agency.
- On September 7, 2008 both Fannie Mae and Freddie Mac were placed under conservatorship, as both privately held GSEs were in effect (re)nationalized.
- F. Later in September, Treasury Secretary Paulson made a strong case (with new threats of a looming Great Depression) to persuade Congress to provide \$700 billion to purchase other mortgage-backed securities (the so-called "toxic" or "distressed" assets).
 - The International Monetary Fund's *World Economic Outlook* of April 2008 had noted that the *financial shock* was the worst *since* the Great Depression, a significantly milder claim.
- G. The strong "Great Depression" arguments used, naturally persuaded many investors that things were worse than they had thought, the risks were higher; and, so, stock markets continued to decline, even as capital and liquidity was liberally added to financial markets.

VI. Public Choice Lessons from the Fiscal Crisis

- A. The process of passing the bailout bill in early October and the kinds of arguments used to secure passage both shed a good deal of light on the incentives that individual Congressmen and Senators work under.
 - Public support for the bailout was never strong, but public opinion can shift rapidly, and an election was to take place in November.
 - An enormous "all-or-nothing" offer of the Niskanen (1971) variety was presented to Congress, in which there was a strong presumption that the Secretary of the Treasury and the Chairman of the Federal Reserve knew more than the general public, Congress, or outside experts (as in Breton and Wintrobe 1975).
 - They presumably had access to data that no one else did and strongly argued that the world economy was about to collapse.
 - (This in spite of the fact that such a collapse had not happened since the first years of the Great Depression, and that institutions had subsequently been given responsibilities for preventing such a collapse.)
- B. The original Paulson proposal of September 20 was a "back of the envelope" idea, only three pages long, that requested a \$700 billion line of credit for Treasury to use as it saw fit to purchase "troubled securities."

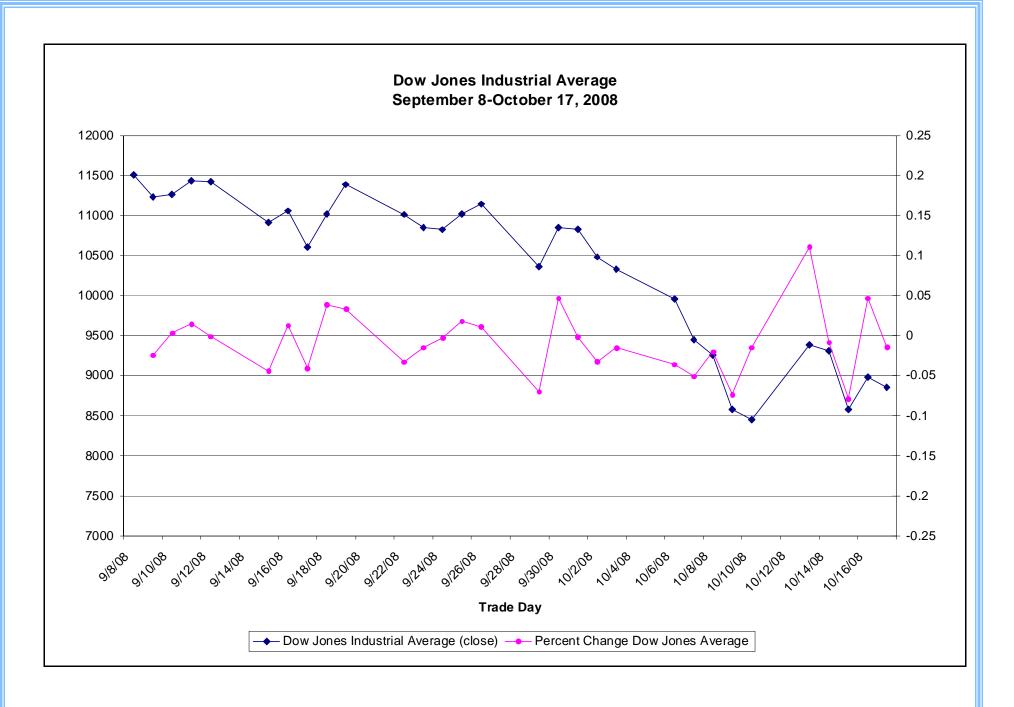
- No other number was seriously discussed as Paulson used his authority to focus attention on a single, large Troubled Asset Relief Program (TARP), which would purchase mortgage-backed (and similar) securities, whose complexity, it was argued, had made them more difficult to price in the new riskier environment and had induced an unreasonable sell off (panic).
- The amount proposed was about 10% of the (pre-collapse) market for mortgage-backed securities and about 20% of that not already supported through the nationalization of Fannie Mae and Freddie Mac, so the amount was large enough to make a difference in a very large financial submarket.
- The proposal, however, required a 25% increase in the Federal budget and a significant increase in national debt ceilings.
- The U.S. national debt in 2008 was approximately \$10 trillion, so the Paulson plan required about a 7% increase in the total debt of the United States. This would require an extraordinary issue of new Treasury bonds. The deficit in the previous year (2007) was about \$240 billion (down from >\$400 billion a few years earlier).
- C. Naturally, the Congress was initially skeptical of the proposal, although after 10 days of testimony and a decline in the stock market, both chambers of Congress deferred to Treasury's expertise on the matter.
 - The House of Representatives added a variety of oversight provisions, reduced by half the initial resources available to the Treasury, added a new insurance program, and also

provided for a temporary increase in the accounts eligible for FDIC insurance (from \$100,000 to \$250,000).

- The bill also added provisions for resources to be used to "keep persons in their houses," where possible, and for the purchase of preferred shares, an option discussed only in passing in Congressional hearings.
- The new 110-page document, however, failed to secure a majority in the House on September 29 (205 to 228).
- D. The stock market fell 6.98% on the day a majority in the House disapproved of their version of the Paulson plan.
 - The news media widely attributed the loss to the House vote, although the stock market rebounded 4.7% the following day.
- E. The Senate took up the (unpassed) House version of the TARP bill and added a variety of provisions unrelated to the stated purpose of the bill, including extension of environmental and other tax credits, and minor tax reforms.
 - About two-thirds of the now 450-page-long bill had nothing to do with the financial crisis, but the "sweeteners" allowed the bill to secure overwhelming approval by the Senate (75 to 25).
 - The House, chastened by the stock market decline of September 29 and evidently attracted by the Senate sweeteners, passed the Senate bill two days later (263 to 171), largely on the basis of Democratic support.

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- President Bush signed the bill into law the same day, October 3, 2008.
- Polls in late September of 2008 showed only a slight plurality in favor of the bailout.
- However, the stock market did not rebound as many television analysts had predicted, but rather continued to decline.
- Indeed, the largest percentage decline in the period immediately before and after the TARP deliberations occurred on October 15, some 12 days after the augmented TARP plan was adopted (-7.87%).



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VII. Crisis Management or Agency Costs

- A. Given the Congressional hearings and testimony by Treasury Secretary Paulson, one might have expected large-scale purchases of non-GSE issues of mortgage-backed securities to have begun immediately, with the Treasury paying well-above market prices. Instead, the U.S. Treasury announced on October 14 that the TARP funds would be used to purchase preferred shares in a subset of finance institutions, using authority added by Congress without much public discussion. The press release stated that:
 - Companies participating in the [capital purchase] program must adopt the Treasury Department's standards for executive compensation and corporate governance, for the period during which Treasury holds equity issued under this program.
 - Nine large financial institutions already have agreed to participate in this program, moving quickly and collectively to signal the importance of the program for the system. *These healthy institutions* have voluntarily agreed to participate on the same terms that will be available to small- and medium-sized banks and thrifts across the nation. (Department of Treasury Press Release October 14, 2008).
 - According to the October 14 press release, the preferred shares were to qualify as "Tier 1 capital" and pay a dividend of 5% a year for the first five years, followed by a dividend of 9% a year until the shares are repurchased from the Treasury.⁸

⁸ Tier 1 capital is defined by the Basel I and Basel II capital accords and is sometimes called the core capital. It is interesting to note that U.S. bank regulations had to be adjusted to allow this particular type of preferred share to count as Tier 1 capital.

- B. Although the first announcement explicitly states that capital "injections" were to go to "healthy institutions," **few of the first recipients could be regarded as healthy.**
 - The largest recipients of TARP funds were clearly not healthy firms. Among the nine large financial institutions listed on the November transaction reports were two investment banks, Morgan Stanley and Goldman Sachs, who received some \$10 billion of capital each (through purchase of preferred shares). The latter was the firm formerly headed by Treasury Secretary Paulson. Merrill-Lynch was also in line for \$10 billion, but was in the process of being acquired by Bank of America, because Merrill-Lynch management evidently feared bankruptcy even more than merger.
 - Citibank soon was authorized to receive an additional \$20 billion purchase of preferred stocks (on November 23) and obtained other government guarantees for some of its troubled assets. On January 15, similar new support was authorized for the Bank of America.
 - Purchases of preferred shares from AIG (\$40 billion) were authorized on November 10, although it is far from a healthy firm.
 - Many of the investment banks and large commercial banks evidently had so many mortgage-backed securities on their capital accounts that they were formally bankrupt, and "shorting" the stocks of several of the bailout recipients was profitable throughout 2008.
 - TARP funds were also used to support nearly-bankrupt auto companies through purchases of shares in their credit divisions.

- Perhaps surprisingly, many of these capital purchases were not listed on the Treasury's TARP transactions reports released in December and January.
- C. The extent to which such shifts of Treasury's policy and the lack of transparency were agile adaptations to rapidly changing circumstances or reflect agency costs and mistakes associated with the enormous discretion delegated to the Department of Treasury is not obvious.
- **D.Many of Treasury's allocative decisions appear to be consistent with Stigler's** (1971) model of regulatory capture, because they benefit the recipient firms far more than taxpayers.
 - Weak banks are unlikely to use their new capital for loans, because doing so would violate their capital reserve requirements.
 - Indeed, about 3.6 billion dollars of bonuses were paid to Merrill-Lynch employees, even though the company had losses of 27 billion dollars and was in line to receive 10 billion dollars of TARP funds.
 - That significant government transfers to finance firms took place as a result of TARP funds has recently been affirmed in Congressional testimony.⁹

⁹ See Elizabeth Warren's testimony on February 5, 2009. Elizabeth Warren, chairman of the TARP oversight panel, testified on February 5, 2009 that \$250 billion were paid for \$176 billion of assets (the preferred shares); the latter was an estimated value of the preferred shares purchased (taking account of risk of bank failure).

E. Both the cost and the cost-effectiveness of the purchase of preferred stocks in major financial firms depends on the viability of the specific firms in which shares are purchased, which is partially determined by the length and depth of the associated recession.

VIII. Lessons for Constitutional Political Economy

- A. The results to date highlight both the costs and advantages of standing institutions and rules for dealing with business cycles and for constraining financial market risk taking.
 - On the one hand, the problems were partly caused by long-standing quasi-government institutions and policies that attempted to subsidize housing for the middle class and poor, although the proximate cause was largely produced by agency problems between and within private firms.¹⁰
 - On the other hand, the most ambitious efforts to address the financial problems associated with a 20% decline in national wealth were undertaken by the Federal Reserve System.

¹⁰ Congressional testimony suggests that many mortgage originators exaggerated the quality of their mortgages, that the private rating companies underestimated those risks and subsequent risks of mortgage-backed securities, and that too many trusted other persons in the market to do the risk assessment(s) for them. These resulting overassessments of the value of the mortgage-backed securities generated the great "meltdown" of portfolios grounded in those securities as housing prices fell. Jenkinson (2008) argues that the lack of transparency in the risk assessments as well as some of the techniques used made it difficult for others to double check their assessments and reduced the accuracy of risk appraisals in a manner that was difficult for outsiders to know.

- B. Given a perceived crisis, the government responds rapidly with policies that are largely consistent with public choice predictions.
 - Voter concerns (and expected concerns) induce Congress and Presidential action.
 - The bureaucracy, in turn, makes use of its bargaining power to secure discretion over resources, while addressing (at least somewhat) the perceived problems of the day.
 - Crisis management, however, remains as problematic as ever, because decisions must be made quickly in poorly informed circumstances.
- C. Reducing the likelihood of such future "credit crises" associated with asset-price bubbles requires regulatory and risk assessment regimes that:
 - (1) establishes some less risky and more transparent method of subsidizing housing markets
 - (2) takes greater account of the internationalization of financial markets and its greater speed and interconnectness,
 - and (3) produces greater transparency about the nature of the assets in various derivatives, about the size of these markets, and their capitalization.
 - Markets cannot do their information aggregating magic, unless at least accurate information is widely available about risks and returns for all the assets in the market. Even honest "insiders" cannot do it all.

- D. The crisis in mortgage-backed securities and other similar assets also implies that some more aggressive application of antitrust law in the financial sector might also be contemplated for the future.
 - When a few firms with poor management or mistaken theories can cause the world's entire financial system to become dysfunctional, it becomes prudent to diversify "our" portfolio of managers by shrinking the average size and increasing the number of financial firms.
- E. Some institutionalized method of formally reviewing long-term policies that expose us to major risks would also be useful, so that long-standing policies can be revised in the light of day without facing a crisis.