S. HRG. 110–845

THE ECONOMIC OUTLOOK

HEARING

BEFORE THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

SEPTEMBER 24, 2008

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE

46–552 PDF WASHINGTON : 2009

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

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[Created pursuant to Sec. 5(a) of Public Law 304, 79th Congress]

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WEDNESDAY, SEPTEMBER 24, 2008

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met at 10:00 a.m. in room SD–106 of the Dirksen Senate Office Building, The Honorable Charles E. Schumer (Chairman) presiding.

Senators PRESENT. Bingaman, Klobuchar, Casey, Webb, Brownback, Sununu, DeMint, and Bennett.

Representatives PRESENT. Maloney, Hinchey, Hill, Cummings, Doggett, Saxton, English, Brady, and Paul.

Staff Present: Christina Baumgardner, Heather Boushey, Nate Brustein, Gail Cohen, Nan Gibson, Colleen Healy, Marc Jarsulic, Aaron Kabaker, Michael Laskawy, David Min, Aaron Rottenstein, Justin Ungson, Ted Boll, Connie Foster, Chris Frenze, Bob Keleher, Tyler Kurtz, Robert O'Quinn, Jeff Schlagenhauf, Christina Valentine, Colm Willis, and Jeff Wrase.

OPENING STATEMENT OF THE HONORABLE CHARLES E. SCHUMER, CHAIRMAN, A U.S. SENATOR FROM NEW YORK

Chairman Schumer. Let's clear out. Okay, good morning. Our hearing will open.

First, let me just make a little housekeeping note here. Because of the time constraints on Chairman Bernanke's schedule, he has to testify in front of House Financial Services this afternoon and must be gone by 12:30.

We're going to limit opening statements today to the Chair, Vice Chair, Ranking Member and the Senior Senate Minority Member. I generally like to give everyone a chance to do opening statements, but, instead, what we've done, is given seven minutes of question period, instead of five, and we encourage members, if they wish to make—use part of that time to make a statement, to feel free to do so.

We'll also, without objection, enter all other members' opening statements into the record.

[The prepared statement of other members appears in the Submissions for the Record on page 89.]

Chairman Schumer. Before I get into my statement, I'd like to acknowledge the service of one of our colleagues on this Committee, Congressman Jim Saxton. He's retiring at the end of this Congress.

Jimmy and I have been friends since he came to the House. He's been a distinguished Member of this Committee for 15 years; he's been chair of this Committee three times; Vice Chair three times.

Jim, thanks for your service, and we'll miss you.

Mr. Saxton. Thank you very much. [Applause.]

Chairman Schumer. Okay, to begin, of course, I'd like to welcome you to this hearing, Mr. Chairman, and I'd like to thank you for appearing before this and the two other Committees you're testifying in front of.

I think we all know how grueling this can be, but it's an important part of the process, and, frankly, sunlight is a great cleanser and disinfectant.

If the Administration's plan can't withstand public scrutiny, we cannot make our case to the American taxpayers we represent, and I think hearings like those that began in the Senate Banking Committee, under the leadership of Chairman Dodd, and continuing in Financial Services this afternoon, have been important.

Over the last 24 hours, I've seen greater signs of cooperation among my colleagues in the Congress, who, despite many of their well-founded reservations, recognize the magnitude of the problems we face and the importance of getting something done.

So the hearings are part of this process, the so-called sausage-making. We're doing them under speedy circumstances this time, because of the worries we all have about the financial markets, but they're a necessary and important part of the process, and they help move things along.

As I said, I think we're better off today in terms of getting this bill done, than we were yesterday, because of your and your colleagues' testimony.

Now, when you were last before this Committee, Mr. Chairman, in April—and this was a regularly scheduled hearing of the Committee, where you always appear before us twice a year, and this was scheduled long before the crisis—the crisis we were facing then was the collapse of Bear Stearns.

And I can say that most of us thought that we had just witnessed an event that we were never likely to see again in our lifetimes, and yet here we are, six months later, and we're discussing a crisis many orders of magnitude greater.

Mr. Chairman, I believe you have been eloquent and impassioned in your warnings of the dangers we face, and that we must try to do all we can to resolve the threat to our financial system.

And I will reiterate what I said yesterday at the Banking Committee: I do believe we must act and we must act soon.

But let us be clear. Americans are furious. I am sure that every single one of my colleagues on both sides of the aisle has heard what I have heard from my constituents: Amazement, astonishment, and intense anger.

And they are right to be astonished and very angry. Over the last eight years, we were told that markets knew best, that financial alchemy had reduced risk to an afterthought, and that we were entering a new world of global growth and prosperity.

Instead, what we have learned, is that we now have to pay for the greed and recklessness of those who should have far known better.

Unfortunately, that truth doesn't solve the crisis that confronts us, and while Wall Street may have caused these problems, if we do nothing, Main Street will also pay a severe price.

Pension funds, money market mutual funds, and 401(k) plans will be negatively impacted. Credit is already tightening, which impacts households, as well as businesses large and small throughout the country.

The lock down in lending has widespread consequences. I've heard from car manufacturers that it's virtually impossible to get an auto loan right now, unless you have a very high credit score.

This year alone, they are likely to sell six million fewer cars than they otherwise would, if credit remains as tight as it is today.

So, even though the workers in Buffalo and Detroit and St. Louis are blameless, they will suffer. It's not fair; it's not right, but, unfortunately, that's the world we live in today, and, to put our heads in the sand like ostriches and ignore it will not serve the interest of those workers very well.

It's the reality we face and I think we, on both sides of the aisle here in Congress, recognize it.

I want to assure the markets once again—and I think I speak for all of us—that we will no be dilatory and we will not add extraneous amendments; we will not Christmas-tree this bill, and we will work in a bipartisan way to act and act soon.

In the last day, it has become clear to me that with the exception of a few outliers on either side, there is clear recognition among members of both parties, that we must act and act soon.

And it has been good to hear from both Senators Obama and McCain, that they believe we must act, though, like us, they believe changes must be made in the Administration plan.

Still, as I said yesterday, as well, we must beware that in taking actions, we do not choose a bad solution. The markets want action; we understand that, but if we act so quickly that we create an ineffective solution without adequate safeguards, then we risk the plan failing, which would be an even worse outcome for the markets, for the economy, and for our country.

Even on Wall Street, $700 billion is a lot of money, and none of the thousands of money managers would invest that sum without appropriate due diligence. These hearings and the discussions that are happening as we speak, are our Congressional due diligence, and we take that responsibility seriously and we will make intelligent and relevant improvements to the Administration plan.

We owe nothing less than that to the taxpayers who have put us in office to safeguard their economic well being. It is a sacred trust and I can say that it's a responsibility that all my colleagues, both Democrats and Republicans, whatever our philosophical differences, hold very dear.

As I have said, I believe there are three essential components that must be part of this plan: THO, taxpayers, homeowners, and oversight.

There can be no question—and this nonnegotiable—that we must put taxpayers first. They must come ahead of bondholders, shareholders, and executives, and we need to add to the Administration's legislation those types of protections.

I think we must consider seriously, putting this program in place, in tranches or installments, so that we do not limit the Secretary's ability to act, as necessary, but are able to evaluate the effectiveness of these expenditures over time.

If the program is working, Congress will certainly ratify continuing expenditures by the Treasury, but if it's not working, then we will need to review it before we once again find ourselves on the brink.

I look forward to hearing your thoughts on that possibility, Mr. Chairman.

Another idea I've proposed, is an insurance fund, modeled on the FDIC and paid for by the financial industry, that can defray some of the long-term costs of the Administration plan.

It clearly cannot cover the entire cost, but it seems only fair that the industry that will receive the vast benefit of this taxpayer-funded program, pay for some share of it themselves.

Both Secretary Paulson and you seemed positively disposed to that idea yesterday, and, again, I look forward to hearing further from you today, as well.

Finally, on the taxpayer side, I remain puzzled by the resistance you and Secretary Paulson have offered to proposals that Senator Jack Reed and many of my colleagues have made about the need for equity being part of the process we are discussing.

My constituents are asking me about it, as do many of the business people and many of your fellow economists who I've spoken to about this.

This morning, Warren Buffett got an equity share in Goldman Sachs and it didn't stop Goldman Sachs from making the deal with Warren Buffett. It seems only fair that we reward taxpayers, if, as we hope, this plan succeeds.

We also must do something to help homeowners. Chairman Bernanke, you, yourself, have repeatedly stated that until we find a floor in the housing markets—and foreclosures are directly related to finding this floor—we will not solve the problem.

And that affects not just those who made bad mortgages and not just those who will lose their homes through no fault of their own—the second group should be protected, the first should not—but it affects every homeowner. The number of foreclosures and the price of the average American's home, are intrinsically related to one another and can't be separated.

As we've seen the complications of securitization, where mortgages are placed into pools and then broken up into a large number of securities, has created an enormous problem, it seems to me that any voluntary program does not work, and the only mandatory program that's available, is bankruptcy, and I would also like to discuss that with you, as well.

Finally, this is the last of what I call the three THO principles: There must be greater oversight as part of this plan. The Administration is simply asking for trust. However much we may like Secretary Paulson or you, Mr. Chairman, no sane person would put $700 billion in your hands on trust alone.

I cannot in good faith, tell my constituents that "it's fine; we know they'll do the right thing." Strict oversight is a sine qua non, and I think that this will be the easiest part of the three, taxpayers, homeowners, oversight, to accomplish.

To close, I'd like to add a few words about something I worry has gotten lost in our focus on this crisis. As I have said, I do believe that we will fix the financial crisis we face, but that will not, in and of itself, fix many of the other problems that continue to bedevil American families.

The economy of the past eight years, has hammered the American middle class; their incomes have declined, their healthcare coverage has weakened, the price of their gas and food has skyrocketed, the value of their homes has plummeted, and now many of them find their jobs threatened.

The plan the Administration has put forward, with certain modifications, will, I hope, resolve this current mess, but many other obstacles remain ahead of us. It is not enough to maintain the status quo. We must find a way once again to make the American economy the engine of prosperity it once was for all Americans, and not a casino where we let some earn extreme rewards by taking excessive risks while the rest of us get stuck with the bill.

[The prepared statement of Senator Schumer appears in the Submissions for the Record on page 50.]

Chairman Schumer. Congressman Saxton?

OPENING STATEMENT OF THE HONORABLE JIM SAXTON, A U.S. REPRESENTATIVE FROM NEW JERSEY

Mr. Saxton. Mr. Chairman, I'd like to join in welcoming Chairman Bernanke, and before I begin my statement, I would like to thank you for the kind words at the outset.

I've enjoyed very much being a Member, Chairman and Vice Chairman of the Joint Economic Committee. It's been a pleasure, and I hope that Members of Congress in both parties have benefitted from the discussions that we've had with the Administration, with regulators, and with representatives of the financial community, as well.

I would like to say also that, little did I know, in all the years that I've been a Member and Chairman of this committee that my tenure would end on such a serious note.

This is a serious problem for our economy and it's a serious problem for Wall Street. But, most of all, my heartstrings tug when I get telephone calls from my constituents, and from people all across the country, for that matter who call and ask, what's going to happen to their nest egg, what's going to happen to their savings, what's going to happen to their money market, what's going to happen to their hometown bank? Those are questions that are certainly important for them to ask and for us to help solve.

The main cause of the financial turmoil in the market, as I see it, is the collapse of the housing bubble, inflated by various government policies over many years.

Government policies supported in Congress, encouraged the expansion of the subprime and other risky mortgages that fueled the housing bubble. I've been a student of housing prices over the years, and it was clear to me over the past three years or so, that as we saw the housing bubble escalate, that there was sure to be a correction and here it is.

In exchange, despite warnings for many years that both Fannie and Freddie were excessively leveraged to a degree that was dangerous, they continued to inflate the housing bubble, undeterred by accounting scandals.

Now the country will have to pay a very high price for lending policies highly influenced by political and not economic objectives. Given their financial problems, created by politicization of decision making, Fannie and Freddie have essentially been taken over by the Federal Government.

In another startling development over the last several weeks, a distinct investment banking industry, established by the provisions of the well-meaning Glass–Steagall Act, has essentially ceased to exist.

The independent investment banking business model proved unable to withstand the stress in the financial markets, wracking the entire financial structure of our economy.

These investment banks were highly leveraged and relied on short-term funds to finance longer-term investments. Unfortunately, many of these investments were mortgaged-backed securities whose value has plunged over the last year.

The fact that the investment banking industry, created by government regulation, has proven unsound, is a reminder that government policies do not always provide effective solutions, but can, in fact, create problems.

As a result, many investors are rightly concerned about the safety of their savings and their investments, and I'm not talking about big investors; I'm talking about mom and dad, who go to work every day and put some of their earnings in a savings account and that are now scared to death about what's going to happen to those nest eggs.

Some action by government is now needed to recapitalize the banks and other financial institutions, either by injections of equity or removal of toxic investments.

In this financial meltdown, there is plenty of blame to go around, but, ultimately, the American people expect action to deal with this crisis. One good place to start would be guaranteeing the safety of transaction accounts, checking accounts, and money market accounts, that is, to assure savers and small businesses, that their basic financial needs can be met without disruption.

Thank you again, Mr. Chairman, and I yield back.

[The prepared statement of Representative Saxton appears in the Submissions for the Record on page 52.]

Chairman Schumer. Thank you, Congressman Saxton. Vice Chair Maloney?

OPENING STATEMENT OF THE HONORABLE CAROLYN B. MALONEY, VICE CHAIR, A U.S. REPRESENTATIVE FROM NEW YORK

Vice Chair Maloney. Good morning. I'd first like to thank Chairman Schumer for holding this timely hearing to examine the economic outlook, especially in light of these sobering developments in our financial markets in recent days and months, and I want to welcome Chairman Bernanke.

What started out as a subprime crisis last summer, has completely changed the face of Wall Street and created a tinderbox that poses a significant threat to our financial system.

Treasury Secretary Paulson's $700 billion proposal for the Federal Government to buy toxic assets, is the equivalent of one-quarter of the entire federal budget in 2008, more than the total amount we spent this year on either the defense of our country—and we are in two wars—or the entire Social Security system.

American taxpayers are being asked to pour more of their good money after bad, while not being provided with any alternatives. Your Senate testimony yesterday, made the distinction between the market price, the fire sale price, and the higher, hold-to-maturity value, which is the price the government would pay under your plan.

Your critics have called this a multi-billion-dollar subsidy, and I would like you to clarify it further. Just a fraction of this money could be used to help millions of Americans avoid losing their homes.

I am confused by the fact that the Paulson Plan prefers government intervention instead of the private sector acquiring these assets. Yesterday, it was announced that Berkshire Hathaway intends to invest $5 billion in Goldman Sachs. Morgan Stanley sold a portion of their firm to the private sector over the weekend.

One could say this is in response to government actions and a backstop to the markets, but also it was reported that AIG had private offers, as did Lehman.

The idea that the private sector does not want to buy these assets, and, instead, our government should pay a premium and that this is somehow good for the taxpayer, seems dubious.

Upon receiving this taxpayer money, large multinational firms have three choices: They can provide credit in America, they could invest in other countries, or they could conserve it to replenish their capital, which is what happened in the Japanese banking crisis.

Some critics have said that we are taking a big chance in not knowing where this money will end up.

The other issue that has been repeatedly raised, is the daisy-chain reaction of one firm bringing down the system. One solution that has been proposed, would be to allow government to seize the assets and do an orderly sale, before default and the ensuing need for taxpayer-funded bailout.

Perhaps you can explain why this alternative is not addressed in the Paulson program.

When management of so-called too-big-to-fail firms, have a liquidity crisis that could be avoided, if they'd just accept a buyout offer, wouldn't it serve the public interest, if the Fed briefly guaranteed such firms' short-term obligations, eliminating systemic risk and then force the auction of the firm to the highest bidder? Isn't that better than effectively nationalizing the firm, as in the AIG case; letting it fail and damage the system, like Lehman; or worse, having the taxpayers buy only the very worst assets, as the plan proposes to do?

These are questions that our constituents deserve to have answered. We all recognize the need to do what is best for the American economy, as a whole. We all recognize that the time will come for an investigation of how we came to this crisis, but any plan to use taxpayer funds, must require that the businesses using the plan, make sacrifices, just as we are asking current and future generations of Americans to do.

I look forward to your testimony.

[The prepared statement of Vice Chair Maloney appears in the Submissions for the Record on page 88.]

Chairman Schumer. Senator Brownback?

OPENING STATEMENT OF THE HONORABLE SAM BROWNBACK, A U.S. SENATOR FROM KANSAS

Senator Brownback. Thank you very much, Mr. Chairman.

Mr. Chairman, we're at a crossroads. We face the most monumental economic decisions in modern times. This is not the time to posture in pursuit of political advantage.

Two things, I believe, are certain: Inaction is not an option, and we have to get this right.

To date, we've dealt with symptoms of the crisis and we now deal with the cancer itself. The American people are angry and they certainly have every right to be.

To most, this looks like just one more example of the government making them pay for someone else's failures, and to paraphrase President Reagan, they want the government to walk by their side and stop riding on their back.

This is, at its core, I believe, about the interaction of Wall Street and Main Street. Absent action, there's a prolonged period in which credit stops flowing, there is a severe adverse threat to the financial conditions of every household, every American family, every American business, small and large.

This is certainly not an abstract fear. I'm sure that everybody on this Committee has heard real-world examples of how this crisis is hitting the real economy of their constituents.

For example, a major automobile seller was unable to obtain funding at workable rates to finance sales of its automobiles. Since August 2007, 87 lenders have exited or temporarily stopped making student loans backed by the Federal Government.

If your child is counting on a student loan for next semester's education, it could be tough, if this continues, tough to find.

Sixty-seven percent of our small business owners, who are the engines of job creation in our economy, report that their businesses have been affected by the credit crunch. If we have a prolonged period in which credit flows virtually dry up, we can count on failures of businesses to be able to make payrolls, to employ workers, and to continue operations.

Failure to act can result in severely depressed economic conditions. So I believe that it would be irresponsible to not act.

But I also believe that we must act responsibly. Acting responsibly includes looking out for taxpayers as we consider devoting large amounts of taxpayer funds to resolve matters in credit markets.

First, Chairman Bernanke, I would like you to explain in your testimony, what you feel would happen, if we did not act and credit flows remain frozen for a protracted period of time. Second, I'd like you to explain how you think Treasury's proposal would find true hold-to-maturity prices of the distressed assets that are now being valued in illiquid or nonexistent markets at fire sale prices, at best.

If Treasury pays too much for the assets, taxpayers lose. If it doesn't pay enough, then banks end up taking severe write-downs and must seek more capital and moving toward selling more assets at fire sale prices.

Third, I'd like you to help me understand why it would not be prudent to protect taxpayers by inserting into Treasury's plan, requirements that those who sell troubled assets, provide the taxpayers with preferred stock warrants.

Why, for example, could we not have Treasury buy troubled assets at fire sale prices, inject capital into troubled institutions, and obtain preferred stock warrants? We used warrants when the Federal Government backed the Chrysler debt.

Fourth, I'd like you to help me understand why we should consider Treasury's proposal of up to $700 billion of value. Would there not be merit in considering an initial set of purchases of certain classes of troubled assets, in the amount of, say, $100 billion?

Then we could evaluate results and move on with $100 billion of purchases of other classes of troubled assets. It seems to me that's only prudent, that an investor wouldn't just say, well, here's $700 billion, but, rather, let's work at this in tranches, and I'd like to understand why we couldn't go at it that way, as a prudent investor would go at this.

Fifth, I'd like to know whether you believe that Treasury's proposed plan has any room for loan modifications by the Treasury, on troubled mortgages.

We have a crisis in confidence in financial markets and we have a crisis of confidence of the American people in their government.

When an American family seeks to borrow money to improve their home or start a business, or when a small business looks to borrow to expand operations, they have to explain in detail, what they are going to do with the money, what the collateral is, and how they are going to pay it back.

I don't think the American people are unreasonable in asking the same questions of this proposal.

I appreciate the help that I anticipate that you will give us and the country, in understanding how best to resolve the stresses in the financial markets that pose a very real adverse threat to our overall economy.

Again, I believe it would be irresponsible not to act, but I also believe that we must act responsibly and get this right, including protecting the taxpayers. Thank you, Mr. Chairman.

[The prepared statement of Senator Brownback appears in the Submissions for the Record on page 90.]

Chairman Schumer. Thank you, Senator Brownback.

Chairman Bernanke, the podium is yours.

STATEMENT OF THE HONORABLE BEN S. BERNANKE, CHAIRMAN, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM; WASHINGTON, DC

Chairman Bernanke. Thank you. Chairman Schumer, Vice Chair Maloney, Representative Saxton and other Members of the Committee, I appreciate this opportunity to discuss recent developments in financial markets, and to present an update on the economic situation.

As you know, the U.S. economy continues to confront substantial challenges, including a weakening labor market and elevated inflation. Notably, stresses in financial markets have been high and have recently intensified significantly.

If financial conditions fail to improve for a protracted period, the implications for the broader economy could be quite adverse.

The downturn in the housing market has been a key factor underlying both the strained condition of financial markets and the slowdown of the broader economy.

In the financial sphere, falling home prices and rising mortgage delinquencies have led to major losses at many financial institutions, losses only partially replaced by the raising of new capital.

Investor concerns about financial institutions increased over the summer, as mortgage-related assets deteriorated further, and economic activity weakened. Among the firms under the greatest pressure were Fannie Mae and Freddie Mac, Lehman Brothers, and, more recently, the American International Group (or AIG).

As investors lost confidence in them, these companies saw their access to liquidity and capital markets increasingly impaired and their stock prices drop sharply.

The Federal Reserve believes that, whenever possible, such difficulties should be addressed through private-sector arrangements, for example, by raising new equity capital, by negotiations leading to a merger or acquisition, or by an orderly wind-down.

Government assistance should be given with the greatest of reluctance and only when the stability of the financial system, and, consequently, the health of the broader economy, are at risk.

In the cases of Fannie Mae and Freddie Mac, however, capital raises of sufficient size appeared infeasible, and the size and government-sponsored status of the two companies precluded a merger with or acquisition by another company.

To avoid unacceptably large dislocations in the financial sector, the housing market, and the economy as a whole, the Federal Housing Finance Agency placed Fannie Mae and Freddie Mac into conservatorship and the Treasury used its authority granted by the Congress in July to make available financial support to the two firms.

The Federal Reserve, with which FHFA consulted on the conservatorship decision, as specified in the July legislation, supported these steps as necessary and appropriate.

We have seen benefits of this action in the form of lower mortgage rates, which should help the housing market.

The Federal Reserve and the Treasury attempted to identify private-sector solutions for AIG and Lehman Brothers, but none was forthcoming. In the case of AIG, the Federal Reserve, with the support of the Treasury, provided an emergency credit line to facilitate an orderly resolution.

The Federal Reserve took this action because it judged that, in light of the prevailing market conditions and the size and composition of AIG's obligations, a disorderly failure of AIG would have severely threatened global financial stability, and, consequently, the performance of the U.S. economy.

To mitigate concerns that this action would exacerbate moral hazard and encourage inappropriate risk-taking in the future, the Federal Reserve ensured that the terms of the credit extended to

AIG imposed significant costs and constraints on the firm's owners, managers, and creditors.

The Chief Executive Officer has been replaced. The collateral for the loan is the company itself, together with its subsidiaries.

Insurance policyholders and holders of AIG investment products are, however, fully protected.

Interest will accrue on the outstanding balance of the loan, at a rate of three-month LIBOR plus 850 basis points, implying a current interest rate over 11 percent.

In addition, the U.S. Government will receive equity participation rights corresponding to a 79.9 percent equity interest in AIG, and has the right to veto the payment of dividends to common and preferred shareholders, among other things.

In the case of Lehman Brothers, a major investment bank, the Federal Reserve and Treasury declined to commit public funds to support the institutions. The failure of Lehman posed risks, but the troubles at Lehman had been well known for some time, and investors clearly recognized—as evidenced, for example, by the high cost of insuring Lehman's debt in the market for credit default swaps—that the failure of the firm was a significant possibility. Thus, we judged that investors and counterparties had had time to take precautionary measures.

While perhaps manageable in itself, Lehman's default was combined with the unexpectedly rapid collapse of AIG, which, together, contributed to the development last week of extraordinarily turbulent conditions in global financial markets.

These conditions caused equity prices to fall sharply, the cost of short-term credit, where available, to spike upward, and liquidity to dry up in many markets.

Losses at a large money market mutual fund sparked extensive withdrawals from a number of such funds. A marked increase in the demand for safe assets, a flight to quality, sent the yield on Treasury bills down to a few hundredths of a percent.

By further reducing asset values and potentially restricting the flow of credit to households and businesses, these developments pose a direct threat to economic growth.

The Federal Reserve took a number of actions to increase liquidity and stabilize markets. Notably, to address Dollar funding pressures worldwide, we announced a significant expansion of reciprocal currency arrangements with foreign central banks, including an approximate doubling of the existing swap lines with the European Central Bank and the Swiss National Bank, and the authorization of new swap facilities with the Bank of Japan, the Bank of England, and the Bank of Canada, among others.

We will continue to work closely with colleagues at other Central Banks to address ongoing liquidity pressures.

The Federal Reserve also announced initiatives to assist money market mutual funds facing heavy redemptions, and to increase liquidity in short-term credit markets.

Despite the efforts of the Federal Reserve, the Treasury, and other agencies, global financial markets remain under extraordinary stress. Action by the Congress is urgently required to stabilize the situation and avert what otherwise could be very serious consequences for our financial markets and for our economy.

In this regard, the Federal Reserve supports the Treasury's proposal to buy illiquid assets from financial institutions. Purchasing impaired assets will create liquidity and promote price discovery in the markets for these assets, while reducing investor uncertainty about the current value and prospects of financial institutions.

More generally, removing these assets from institutions' balance sheets will help to restore confidence in our financial markets and enable banks and other institutions to raise capital and to expand credit to support economic growth.

I will now turn to a brief update on the economic situation. Ongoing developments in financial markets are directly affecting the broader economy through several channels, most notably, by restricting the availability of credit.

Mortgage credit terms have tightened significantly and fees have risen, especially for potential borrowers who lack substantial down payments or who have blemished credit histories. Mortgages that are ineligible for credit guarantees by Fannie Mae or Freddie Mac, for example, non-conforming jumbo mortgages, cannot be securitized and thus carry much higher interest rates than conforming mortgages.

Some lenders have reduced borrowing limits on home equity lines of credit. Households also appear to be having more difficulty of late in obtaining non-mortgage credit. For example, the Federal Reserve's Senior Loan Officer Opinion Survey reported that, as of July, an increasing proportion of banks had tightened standards for credit card and for other consumer loans.

In the business sector, through August, the financially strongest firms remained able to issue bonds, but bond issuance by speculative-grade firms remain very light.

More recently, however, deteriorating financial market conditions have disrupted the commercial paper market and other forms of financing for a wide range of firms, including investment-grade firms.

Financing for commercial real estate projects, has also tightened very significantly.

When worried lenders tighten credit, then spending, production, and job creation slow. Real economic activity in the second quarter, appears to have been surprisingly resilient, but, more recently, economic activity appears to have decelerated broadly.

In the labor market, private payrolls shed another 100,000 jobs in August, bringing the cumulative drop since November to 770,000. New claims for unemployment insurance are at elevated levels and the civilian unemployment rate rose to 6.1 percent in August.

Households' real disposable income was boosted significantly in the Spring by the tax rebate payments, but, excluding those payments, real after-tax income has fallen this year, which partly reflects increases in the prices of energy and food.

In recent months, the weakness in real income, together with the restraining effects of reduced credit flows and declining financial and housing wealth, have begun to show through more clearly to consumer spending.

Real personal consumption expenditures for goods and services declined in June and July, and the retail sales report for August suggested outlays for consumer goods fell noticeably further last month.

Although the retrenchment in household spending has been widespread, purchases of motor vehicles have dropped off particularly sharply.

On a more positive note, oil and gasoline prices, while still at high levels, in part reflecting the effects of Hurricane Ike, have come down substantially from the peaks they reached earlier this summer, contributing to a recent improvement in consumer confidence.

However, the weakness in the fundamentals underlying consumer spending suggest that household expenditures will be sluggish, at best, in the near term.

The recent indicators of the demand for new and existing homes hint at some stabilization of sales, and lower mortgage rates are likely to provide some support for demand in coming months. Moreover, although expectations that house prices will continue to fall, have probably dissuaded some potential buyers from entering the market, lower house prices and mortgage interest rates are making housing increasingly affordable over time.

Still, home builders retain large backlogs of unsold homes, which continue to restrain the pace of new home construction. Indeed, single-family housing starts and new permit issuance dropped further in August.

At the same time, the continuing decline in house prices reduces homeowners' equity and puts continuing pressure on the balance sheets of financial institutions, as I have already noted.

As of midyear, business investment was holding up reasonably well, with investment in nonresidential structures particularly robust. However, a range of factors, including weakening fundamentals and constraints on credit, are likely to result in a considerable slowdown in the construction of commercial and office buildings in coming quarters.

Business outlays for equipment and software also appeared poised to slow in the second half of this year, assuming that production and sales slow as anticipated.

International trade provided considerable support for the U.S. economy over the first half of the year. Economic activity has been buoyed by strong foreign demand for a wide range of U.S. exports, including agricultural products, capital goods, and industrial supplies, even as imports declined.

However, in recent months, the outlook for foreign economic activity has deteriorated amid unsettled conditions in financial markets, troubled housing sectors, and softening sentiment.

As a consequence, in coming quarters, the contribution of net exports to U.S. production is not likely to be as sizeable as it was in the first half of the year.

All told, real gross domestic product is likely to expand at a pace appreciably below its potential rate in the second half of this year, and then to gradually pick up as the financial markets return to more normal functioning and the housing contraction runs its course.

Given the extraordinary circumstances, greater than normal uncertainty surrounds any forecast of the pace of activity. In particular, the intensification of financial stress in recent weeks, which will make lenders still more cautious about extending credit to households and business, could prove a significant further drag on growth.

The downside risks to the outlook thus remain a significant concern.

Inflation rose sharply over the period from May to July, reflecting rapid increases in energy and food prices. During the same period, price inflation for goods and services other than food and energy also moved up from low rates seen in the Spring, as the higher costs of energy, other commodities, and imported goods were partially passed through to consumers.

Recently, however, the news on inflation has been more favorable. The prices of oil and other commodities, while remaining quite volatile, have fallen, on net, from their recent peaks, and the Dollar is up from mid-summer lows.

The declines in energy prices, have also led to some easing of inflation expectations, as measured, for example, by consumer surveys and the pricing of inflation-indexed Treasury securities.

If not reversed, these developments, together with the pace of growth that is likely to fall short of potential for a time, should lead inflation to moderate later this year and next year.

Nevertheless, the inflation outlook remains highly uncertain. Indeed, the fluctuations in oil prices in the past few days illustrate the difficulty of predicting the future course of commodity prices. Consequently, the upside risks to inflation, remain a significant concern, as well.

Over time, a number of factors should promote the return of our economy to higher levels of employment and sustainable growth with price stability, including the stimulus being provided by monetary policy, lower oil and commodity prices, increasing stability in the mortgage and housing markets, and the natural recuperative powers of our economy.

However, stabilization of our financial system is an essential precondition for economic recovery.

I urge the Congress to act quickly to address the grave threats to financial stability that we currently face. For its part, the Federal Open Market Committee will monitor economic and financial developments carefully, and will act as needed to promote sustainable economic growth and price stability.

Thank you, Mr. Chairman.

[The prepared statement of Hon. Ben S. Bernanke appears in the Submissions for the Record on page 92.]

Chairman Schumer. Thank you, Mr. Chairman. I appreciate, once again, your erudite testimony.

All right, now, as you know, yesterday, because you were sitting there, I asked Secretary Paulson why this entire plan needed to be implemented at once, why we couldn't provide the authority for some portion of that, say, $150 billion now, and authorize the rest later.

He said he was strongly opposed, but he didn't really give the reasons why. Authorizing this money in installments will give the Secretary the ability he needs to deal with this financial crisis, and

$150 billion, is a lot of money, still. Who would have thought we would think of it as a very low amount, a couple of weeks ago?

But it would also ensure that taxpayers' interests are being protected, and allow us in Congress to evaluate the effectiveness of these expenditures over time.

Clearly, we have a financial crisis, but if the program is working, Congress can certainly continue ratifying expenditures by the Treasury, and if it's not working, then we'll need to review it before, once again, we find ourselves on the brink.

So I want to ask you, Mr. Chairman, what are your thoughts on this idea, and I want to stress that this is just an idea, one of many that we in Congress are considering, as we try to responsibly respond to this dire situation, of providing this money in tranches or installments—some money now, some money later.

In your estimation, do you need all of this money now, how much do you need right now, can you explain why, if you disagree with this idea, why $700 billion is needed immediately?

And just let me say that I called up some people with knowledge of the markets, and most of them thought—they said to me, well, there might be greater confidence with $700 billion, but they didn't see—the consensus—and I only spoke to a handful of people—was, it wasn't essential, in other words, providing $150 billion with Congress's commitment to come back and continue this, if the program is working, would deal with the problem, certainly more than adequately.

Chairman Bernanke. Mr. Chairman, first—and this would apply to the whole hearing—as you know, I'm neither part of the Executive Branch nor the Legislative Branch, and so I have no standing to negotiate this proposal——

Chairman Schumer. Correct. I'm just asking your opinion.

Chairman Bernanke [continuing]. And, therefore, I'm just giving views.

I think the concern is that the markets need to have confidence that this problem will be attacked with sufficient force and addressed. Insufficient measures could be perceived as drips and drabs and may not have the sufficient force to address the confidence issue.

That being said, I think this is an issue you should take up with Secretary Paulson. One alternative, of course, would be to have close and continuous oversight of what's happening, and, of course, if things are not working well, then, the Congress can always intervene at an intermediate junction, if it's really felt that things are not working.

Chairman Schumer. But just from your knowledge as an economist, you're not going to use the full $700 billion in the first three months or six months, and, by definition, if the President's proposal passes, there certainly is Congress's agreement, acquiescence, maybe, to go along with it, we're not going to pull it back for no reason.

But I think it would assure the American people and we, as their representatives, that there would be a constant eye on this, that there wasn't such a huge outlay at once, which is a huge pill for people to swallow.

So let me ask you the question just one other way: Even if $700 billion would be advisable and probably a trillion would be better than $700 billion, do you think that $150 billion is insufficient to assure the markets that Congress is serious and the government is serious about addressing this problem?

It certainly gives you what you need in the first several months.

Chairman Bernanke. Senator, you ask me my opinion as an economist, but, unfortunately, this a matter for psychology.

Chairman Schumer. Right.

Chairman Bernanke. And the question is, what signal, what information would the market get about the government's commitment to addressing this problem, and the details of what the commitment really was. Therefore, I would urge you to discuss that with Secretary Paulson.

This is a very big problem. As I mentioned yesterday, just to take one metric, the outstanding U.S. mortgages in commercial real estate and residential, is about $14 trillion.

Chairman Schumer. Right.

Chairman Bernanke. Therefore, $700 billion, which is, of course, an enormous amount of money, is about five percent of that amount outstanding, and so it is a very big problem and we don't want to undershoot.

Chairman Schumer. Understood, and let me just say, obviously, if we're convinced it's not sufficient, this proposal will not stand. I would say this, that $550 billion is an awful lot for psychological reassurance, when $150 billion is a pretty good amount.

Let me go to my second, and, I guess, my last question: At yesterday's hearing, I also brought up the idea of a fund. These are all aimed with trying to limit the involvement of the taxpayers, at least protect the taxpayers as much as we can.

This would be a fund like the FDIC's Deposit Insurance Fund. It would collect, over time, fees, from large financial institutions, those maybe that might be too big to fail, across the board, not just banks, but all of them. They are all going to benefit from this, being financial institutions, and it would offset some of the costs.

That would serve the purpose of assuring the taxpayer that the financial institutions, which are at the eye of the storm here, are shouldering some of the burden, and it's not, hey, we make the mistakes, you pay the bill.

So, let me—yesterday, both you and the Secretary thought this would be a good idea. We are beginning to explore it with the Banking Committees here, both sides of the aisle, and Treasury. You've had a little time to sleep on it. Can you elaborate on your thoughts on whether this might make some sense?

Chairman Bernanke. Well, again, I think it should be on the list of things that are discussed with the Administration and with the Congress. Let me make a couple of comments about it, in two contexts:

The first is—and I recognize that this doesn't address your problem—we don't want to impair, in the near term, the earnings and capital of financial institutions, to the extent that it affects their lending and capacity to support the economy. So, perhaps doing something with a longer horizon, might be worth considering.

The other—and, again, I'm not negotiating for the Secretary.

Chairman Schumer. Understood. I just want your opinions.

Chairman Bernanke. The second point, I think, is something which I really would like the Committee to take away, which is that the Federal Reserve and the Treasury have engaged in a number of extraordinary activities over the last year, with Bear Stearns and AIG and so on, and this takes us very far, of course, as you know, from the Federal Reserve's main mission, and was done with great reluctance.

The reason we undertook these events was because we felt that the institutions involved were too big to fail, in the sense that their failure would have significant implications for the world economy.

The problem is that, unlike banks, for these non-bank institutions, there was no clear set of resolution rules, regimes, and so on, to address this problem.

I think, going forward, there are a lot of ways to address it. First, it's important to have a resolution regime that we can use in non-bank situations.

Secondly, that resolution regime needs financing, and that might involve some kind of deposit insurance type payments.

But, thirdly, we also—and I think this is very important—we were shocked, given the context of this financial stress, that too-big-to-fail widened. The number of firms in that net widened more than we would have anticipated, and we need to take a number of steps—and I have suggested some in other contexts—to reduce the number of firms in that category and to make it possible for a large firm to fail without huge adverse consequences to the whole system.

Chairman Schumer. Right. Well, thank you for that, and I'm glad that you're open to this idea. I think this could help a great deal in gaining passage of the legislation.

Congressman Saxton?

Mr. Saxton. Thank you, Mr. Chairman. Mr. Chairman, asking Congress to authorize the expenditure of $700 billion, is, I think, by anyone's account, a heavy lift.

It's almost five percent of GDP to bail out financial institutions, to use this money to bail out financial institutions, is controversial, to say the least.

It would be nice if we could go down to Treasury and there was a big safe down there with $700 billion in it and we could take the money and use it for this worthwhile plan. However, Treasury doesn't have $700 billion in a big old safe, and we have to go borrow it, and that has raised concerns on the part of many lawmakers in both houses.

But relieved of the burden, financial institutions would be able to get back in business, and if Treasury were to acquire the impaired financial assets that are a result of subprime mortgages, based on what is called mark-to-market accounting, which means these assets are discounted, the Treasury may be able to repay this debt and perhaps even earn a profit for the taxpayers as we dispose of these assets down the road.

On the other hand, if we reject the Administration's plan, the Treasury will not borrow $700 billion, not immediately, anyway, because, if we don't do something to solve this problem, it will intensify the probability of triggering a deep and perhaps long recession.

If a recession were to occur, countercyclical outlays and lower tax receipts would boost the federal budget deficits and Treasury would have to borrow money to meet those needs. So, my question is, would you walk us through your assessment of the costs and risks we face, if we approve the plan, and could you talk to us also about the likely consequences, if we disapprove it?

Chairman Bernanke. Yes, Congressman, thank you.

First, let me address the question of prices. Vice Chair Maloney asked me about this, as well, and I think my comments yesterday might have been slightly misunderstood. Let me try to address that:

Many of these assets are now currently being sold only under distressed circumstances to illiquid markets, and that leads to very low pricing, pricing which I refer to as fire-sale pricing. It's that fire-sale pricing and the markdowns it creates for banks that is one of the sources of why capital is being reduced and why banks are unable to expand credit.

A big part of the program that the Treasury is proposing would involve the Federal Government going out, and, through various market-based mechanisms, buying some of these assets from various financial institutions.

Now, the presence of a large buyer would obviously raise prices above the fire-sale level. However, I am not advocating that the government intentionally overpay for these assets; rather, it's possible for the government to buy these assets, to raise prices, to benefit the system, to reduce the complexity, to introduce liquidity and transparency into these markets, and still acquire assets which are not being overpaid for in the sense that under more normal market conditions and if the economy does well, most all of the value could be recouped by the taxpayer.

So, again, I do think that the program will involve increases in the prices from the current fire-sale values, but not necessarily increases above levels which would be sustainable in a more normal market and economic environment.

With respect to the fiscal implications, you're absolutely right that $700 billion is an enormous amount of money, but it's not an expenditure; it is an acquisition of assets that does expose the taxpayer to significant risk.

We don't know exactly what the long-term cost or benefit may be, but it is certain, to my mind, that if there is a loss, it will be much, much less than $700 billion; it will be some percentage of that.

And with respect to the fiscal effects, again, you're exactly right, that people have been concerned of what about the effects on the government budget, and I think those concerns are very serious.

But it's really a question of alternatives. If we don't act and we have a more severe and protracted downturn in the economy, that will obviously affect tax revenues and increase government expenditures to address the problems that that will bring.

And so both approaches have fiscal implications, and my view is that to protect the economy from what otherwise might be a much more severe episode, that it's important that we take steps to significantly address this financial situation.

Mr. Saxton. Thank you. Mr. Chairman, over last weekend, Secretary Paulson announced two changes to the initial plan: One is that foreign-based financial institutions with substantial U.S. operations, would be eligible to participate, and, second, the Treasury would be authorized to purchase other impaired financial assets, not just impaired mortgages and mortgage-related securities.

Can you help us with why these changes were made and whether you think they're appropriate?

Chairman Bernanke. Yes, I'll give you the logic. Again, I think it's very important to distinguish what is the primary goal of the plan that the Treasury Secretary has talked about, which is to restore normal functioning to markets, by providing liquidity to those markets, and helping to establish prices for these impaired assets.

You asked a moment ago about how the Treasury would set prices and how we would be assured of not overpaying. Clearly, the more competitors we have offering these assets, competing with each other to sell those assets to the Treasury, the better the protection that the Treasury has against overpaying.

And so for the purpose of trying to introduce liquidity into markets, the wider the range of participants we have in the auction or the other mechanism, the better the chance that the Treasury will get a good price and the better the chance that the market's functioning will be improved by these activities.

That's very different from a situation where an institution is failing, the government comes in and injects capital, and wipes out the shareholders—all those sorts of steps, like we did with Fannie and Freddie, for example. That's not what we're contemplating, at least for the biggest part of this program.

The biggest part is to try to improve market functioning rather than to help individual institutions. Which is why it's a mistake, I think, to punish or single out those firms which sell the assets, because all firms will be benefitting, even if they don't sell the assets, if they hold those or similar assets.

Chairman Schumer. Vice Chair Maloney.

Vice Chair Maloney. Thank you. Before the Senate Banking Committee yesterday, you testified that under this plan, and I quote, "Liquidity should begin to come back to the markets when the credit markets unfreeze. New credit will become available."

Moving forward, is it more important that the plan focuses on buying up existing assets, or should we focus on creating new credit? Some critics have argued that our involving a middle man and risk, when we could directly inject credit into the economy with new mortgages, new loans, new auto loans and other sluggish areas in our economy.

Chairman Bernanke. Well, two comments, Vice Chair: First, the intermediaries, the financial intermediaries, need to be able to make new credit available, and if their balance sheets are so gummed up that they can't attract capital, they can't even attract funding because counterparties don't know what they're worth, then that's a problem.

So this program would help to try to create more transparency and less uncertainty about those balance sheets, giving institutions a chance to make new capital and new credit available.

But let me also say that I agree with you that there is some scope for supporting new lending, and, in particular, one example of that is the initiative by the Treasury to use both Fannie and Freddie and the Treasury's authorities to buy new mortgage-backed securities, which would support the new mortgage market and help create mortgage credit for home buyers.

Vice Chair Maloney. Returning to the pricing argument, some economists suggest that a preferred stock option would avoid the pricing challenge, which is really huge in some people's minds, and protect taxpayers by putting them in a senior position, relative to the financial institutions we're helping.

What's your position on preferred stock as a better choice than just common stock? It wouldn't dilute the common stock value, so the companies can raise capital and the government gets paid first.

Chairman Bernanke. Vice Chair, so the preferred stock or capital injection approach, has, in fact, been one of the favorite approaches in previous bank crises, like the S&L crisis, or the Japanese or Scandinavian crises and others.

Those were situations, however, where the government was dealing with institutions on the brink of failure, or had already failed. In that case, the only way to keep the institution going—if it's viewed as being appropriate to do so, for systemic or other reasons—is to inject capital, wipe out the existing shareholders, and impose many conditions on the firm.

We're facing a somewhat different situation, which is, firms that are valid, going concerns. While we may have a few companies in trouble, which might be addressed in the way you describe, companies that are strong, going concerns, we don't want to take the risk that if the private markets perceive the government injecting capital into these ongoing concerns is going to wipe out other shareholders or take over the firm or otherwise make it difficult for them to raise new capital.

Now, all different kinds of options should be discussed, and I don't want to negotiate for the Treasury. You should discuss lots of different ideas, but I think that is one concern, that putting capital into healthy or at least reasonably functioning banks might frighten off private money that could come in, if we were just able to clean up their balance sheets enough that private investors could understand the risk/reward return better.

Vice Chair Maloney. Could you walk us through how you and Secretary Paulson arrived at the $700 billion figure? How will these funds affect the real economy? Will this act as a large infusion of cash and affect future inflation?

Chairman Bernanke. Well, it's not science to figure out how much is going to be needed to stabilize the firms and the markets, but there are various metrics one can use, and one that I mentioned yesterday, which I think is useful, is to note that there's about $14 trillion outstanding of residential and commercial mortgages, so $700 billion is about five percent of that amount, which is similar to some of the loss rates we've seen in some of these categories.

Likewise, the assets of U.S. commercial banks are in a similar $10 to $12 trillion category, again, so it seems an appropriate size, relative to the scale of the problem.

One could argue for slightly different numbers, but, clearly, we need a strong response.

Vice Chair Maloney. But the real question is, will this affect inflation, and do you think the Fed will have to raise interest rates in order to float so much new debt?

Chairman Bernanke. No, this is not a fiscal stimulus; this is not going to directly serve like a stimulus plan, for example. If it does, in fact, strengthen the financial markets, increase credit extension, and help the economy grow, then the Fed would have to respond perhaps sooner raising rates than otherwise, perhaps, but that would be part of the normal process of recovery, as the economy goes back to a normal growth pace, and then the Fed would want to return interest rates back to a more normal level.

Vice Chair Maloney. And the effect on inflation?

Chairman Bernanke. I don't expect any effect on inflation, other than the fact that we just want to stabilize the overall economy.

Vice Chair Maloney. Okay, great. My time has expired.

Chairman Schumer. Thank you, Vice Chair Maloney. Senator Brownback?

Senator Brownback. Thank you very much, Mr. Chairman. Chairman Bernanke, I want to take you back to this preferred stock issue and the warrants, because you were discussing this.

I think this is a key point in the discussion. Why couldn't you condition the entry into this program upon the financial institutions' willingness to put up preferred stock as a way of saying to them, you know, you're getting rid of this bad paper, this toxic paper, and the taxpayers deserve to be in on the up side, if there is some up side, so we have less exposure?

And couldn't you condition it such that if we're not losing money on what we're buying from you, we're not taking the stock, but if we do and you're surviving, we are taking the stock? That seems to me to be a fair offer in the type of situation we're going into, one that's so extraordinary and where we've got to protect the taxpayer at the same time we're trying to get these institutions working again?

Chairman Bernanke. Senator, again, I think it's important to distinguish two situations: The first is a situation where a bank is failing and it needs injection of capital to continue to operate, and the government decides that, for various reasons, it wants the bank to continue to operate.

In that case, the injection of capital, taking warrants, every other condition, is entirely appropriate. In the second situation that I described, we're trying to return liquidity to these markets.

As I mentioned to Congressman Saxton, if you want to have auctions or other mechanisms to purchase these assets, to protect the taxpayer, you want as wide a participation as possible.

And, in fact, if you do succeed in making these markets more liquid and raising prices in those markets, you'll be benefitting everyone who holds that mortgage or that asset, not just those who participate.

So, if you impose that condition, you have the risk of just no one will want to participate, but will say, well, let somebody else do it and I'll benefit indirectly from the higher prices.

Then no one will participate, there will be no competition in the auction, and this won't work.

Now, as I said, you may wish, if you prefer to do other approaches, like injecting capital, that's a different matter, but this approach to bidding up for assets, requires a broad participation.

Senator Brownback. It just seems to me that we're all talking about trying to protect the taxpayer, and here is a way to better protect that taxpayer. I recognize you're saying that it may not have as broad of an effect on the economy, but I think, you know, we've got to look towards the taxpayer, who is just very mad about this overall situation.

Chairman Bernanke. Another way to protect the taxpayer, is to pay a lower price, a better, more reasonable price.

Senator Brownback. There've been proposals pushed about that we should reform the bankruptcy code to allow bankruptcy judges to reset the financial—reset home mortgages.

In looking at this, this seems like to me, that this would actually raise mortgage rates on individuals. Do you have a thought on that particular piece of a proposal that's been out there?

Chairman Bernanke. Senator, I agree that the implications of that change are very hard to know. They could be very complex, they could be beneficial or they could restrict credit.

The Federal Reserve did not take a position on the bankruptcy reform a couple of years ago, and we've tried not to take a position on this one, because we do view it as a very complicated issue and one that we are not comfortable predicting the outcome.

Senator Brownback. Could it have the potential of raising mortgage rates?

Chairman Bernanke. It could, it's possible, yes.

Senator Brownback. It looks like to me, with what you've described as the current financial situation that we're looking at a very tough quarter right now, with the good possibility even of a negative quarter that we're in already and maybe even substantially, from what I heard you say based on the current numbers you're getting back.

I would hope the Fed wouldn't be looking at raising interest rates, and, if anything, would look at cutting interest rates, moving forward. Exports have been one of our key drivers. Low interest rates are important for to be able to be competitive internationally as much as we can, even in a slowing global marketplace.

So, I thought, on the current conditions, you sure wouldn't want to raise interest rates, you'd sure want to be taking those down.

Chairman Bernanke. Well, the Fed has to look at both its mandate to maximize employment, as well as its mandate for price stability, and we'll have to continue to evaluate how those two factors evolve.

I do think that a sine qua non for a health recovery would be trying to stabilize the financial situation. I think that's very important.

Senator Brownback. I think that's far more important than an inflationary concern at this point in time.

Chairman Bernanke. Well, again, Senator, you know, we will look at the risks and the expectations on all aspects of this, including both growth and inflation.

Senator Brownback. Finally, you're a student of the Great Depression and a scholar on that. When you back up and look at this situation, versus your knowledge of what led into that, what circumstances, just as you overview it, cause you the most pause of what we're entering into in this phase right now, with your knowledge as a scholar on that period of U.S. history?

Chairman Bernanke. Well, Senator, certainly there are very marked differences in terms of the underlying size and sophistication and diversification of our economy. I would also say that someone from 1929 would not recognize our financial system. It is enormously more sophisticated and interconnected and complex than it was in the 1930s, when basically it was just banks and bonds and stocks. I mean, essentially, that was all there was.

I think the one lesson I would draw from that experience, but also from other international experiences, is that when there are major dislocations in the financial sector and in the credit creation process, it can have significant effects on growth and employment in the economy, and that's been true, not just in the United States, but in a number of other countries, both emerging-market and industrial countries, and that would be the main lesson I would take from that experience.

Senator Brownback. Thank you.

Chairman Schumer. Thank you, Mr. Chairman. I know we have a lot of people here, and I know your time constraints, so I'm going to try to get everybody in, and that's why I'm going to try to stick to the seven minutes. I'm just going to read the order, so people can plan their schedules.

This is an order of people coming in: Congressman Cummings, Senator Sununu, Congressman Doggett, Congressman Paul, Senator Klobuchar, Congressman Brady, Senator Bingaman, Senator DeMint, Congressman Hinchey, Congressman English, Congressman Hill, Senator Bennett, Webb, and Casey, and Congresswoman Sanchez.

Congressman Cummings?

Mr. Cummings. Thank you very much, Mr. Chairman. Chairman Bernanke, it's good to see you again.

As I sit here and I listen to my colleagues, I'm reminded of something that my mother used to say, that we have to be careful that we don't have motion, commotion, emotion, but no results.

And as I think about what has happened here, I realize that there's a very—there is something that seems to be going through all of us, and definitely, the people on Main Street where I live, 40 miles away from here in Baltimore, and that is whether the—and it goes to the question of trust.

People are beginning to get a bit upset as they see their money being spent, and they're trying to figure out what that has to do with them. They see estimates of various things, that the government is spending money on, but then later on, they find out that it's going to cost a lot more.

As I listened to the hearings yesterday, the Senate hearings, I know that there is a question up in the air, as to how much this is going to eventually cost. I know we're talking about $700 billion today, but the reports are saying—I mean, you hear on the news it could be $1.3 trillion. It's questionable as to what—how much success we will have with all of this, but I, for one, am convinced that we must do something; I've got that.

But I also believe that we have to do something with regard to make sure that we are not just shoring up the market and what have you, but do some things with regard to Main Street.

And so I want to just ask you a few questions on that. Clearly, the housing bubble, in my opinion, has burst. In my home state of Maryland, it currently has approximately 21,500 vacant homes this year, and 431 homes in Baltimore City that have been subjected to foreclosure filings.

And can you tell me the types of conditions that would imply that we have reached the bottom? Are we seeing the upturn in the housing market? Again, because people are—the experts are telling us that this housing market has a lot to do with what is taking place today.

Chairman Bernanke. That's absolutely correct. The housing market has been central to this whole situation.

As I said in my testimony, there are a few signs of some stabilization in the demand for housing, although I would say that's quite tentative, because, particularly if the credit markets freeze up and mortgage availability declines, that would take a big chunk out of what demand there is for housing.

I do think that we will see, reasonably soon, some bottoming out of the construction, it has come down so much already, we're getting to the point that we will see some at least slower decline in residential construction.

The issue which I think remains uncertain is house prices.

There are large inventories of homes, both new and existing, in foreclosure, as you know. Those inventories put downside pressure on house prices. As prices fall, we see both a weakening economy because consumers have less equity in their homes, and because firms, banks have weaker balance sheets and therefore less willingness to extend credit. So I think house prices are an important issue.

This I think is a bread-and-butter point that I would make, which is that if the financial system freezes up and mortgage credit and other kinds of credit are not available to Main Street, one of the many adverse consequences would be a longer and deeper decline in house prices and in housing activity, which would be obviously a real effect on people.

Mr. Cummings. Now I notice, I note that when you were here only a month prior to the passage of our stimulus package I asked you specifically what recommendations you had for us with regard to a stimulus package.

The reason why I bring up the stimulus package is that the stimulus package affects—I mean this bailout affects my constituents, but the stimulus package was direct. It is an immediate effect. It has an immediate effect on them. And indeed it was at that time that I pressed that an economic stimulus be equated to rebuilding our infrastructure, boosting food stamp support, increasing tax credits to families that have children in college or daycare, extending Medicaid funding to states that continued to be overburdened by increasing Unemployment benefits well beyond those offered in the original package back then.

Mr. Chairman, a bailout on Wall Street must also bring with it a safety net to those on Main Street. You have this opportunity, and you will be before the Financial Services Committee in the House in a few minutes, and I am just wondering what you—and I have said it before; I have a tremendous amount of respect for you and Secretary Paulson. I say you are the super star experts. That is what the taxpayers pay you to do.

The question is: How do you say to the people on Main Street, the ones that are looking at you right now looking for some comfort, just as the Stock Market folks are looking for comfort to be able to invest, what do you say to them, regular mom and pop that got up—they may not be watching because they got up at five o'clock this morning to go to work and they will not get home until this evening, but they will catch you on the news—what do you say to them, the super star that you are, what effect will this have on them?

Because that is why counts. And that is who is going to vote for all these people who are sitting up here.

Chairman Bernanke. Yes, sir, you are absolutely right.

The effects I think are very direct. If the credit markets remain in their current condition, or if they worsen, then increasingly credit conditions which are already very tight are going to worsen as well, which means that small businesses that want to get a loan and create jobs in the community will not be able to do so; people who want to buy a car—and we have already seen a drop in auto financing—will not be able to get a loan to do so. That means also the auto workers will not have as much employment.

The housing market, as I mentioned, will continue to come under stress. House prices will continue to fall. So these things will affect jobs. They will affect housing and house prices. They are going to affect small business creation.

The credit system is like the plumbing. It permeates throughout the entire system, and our modern economy cannot grow, it cannot create jobs, it cannot provide housing without effectively working credit markets. And my only concern here today is to try to find a solution that will stabilize the credit markets so that they can do their job, which is to support our economy and help us get back into a strong growth path that the underlying strengths of our economy would otherwise support.

Mr. Cummings. Thank you, Mr. Chairman.

Chairman Schumer. Senator Sununu.

Senator Sununu. Thank you.

Chairman Bernanke, you described the most important function of this Treasury proposal as restoring a normal functioning to the credit markets. And I agree very much with the point you just made, that the most important aspect of it is restoring normal operation to the credit markets that consumers depend on because that is such an important part of our overall economy: student loans, home loans, automobile loans. Those are the pieces of the credit market, whether you are a family in New Hampshire, or a small business anywhere in America, that is what keeps our economy going.

But it is unclear I think to a lot of people who do not have your experience what the relationship is behind the mortgage-backed securities that would be the principal securities purchased under this Treasury Fund, and these consumer credit markets.

I think it is important, and it would be very valuable for you to describe in as much detail as you can how it is that $10 billion, or $20 billion of mortgage-backed securities that are held in a firm today—it might be a Wall Street firm, it could be a bank, it could be a savings and loan—affect the consumer credit markets for school loans, auto loans, and home mortgages that people across America are really worried about today?

Chairman Bernanke. Senator, an excellent question.

Our system is a very large and complex one, but our banks, commercial and investment banks still play a very central role in our credit markets, either by making direct loans, by originating loans, by supporting other markets like the commercial paper market, and so on.

So banks are critical to the health of the overall credit system. Now banks, in order to make loans, must have capital. They have to have some net worth that allows them to expand, make loans, and extend credit to average people and to businesses.

These losses from mortgage delinquencies and foreclosures have caused global financial institutions to write down their capital on the order of $500 billion. So that capital has shrunken very considerably and has only been partially replaced by raising new capital in the private sector.

If banks do not have enough capital, they do not have the capacity to increase their lending. In fact, what they have to do is contract their lending. They have to try to get rid of the loans they have, and they certainly are not going to be interested in making new loans to individuals or businesses.

So we need to find a way for banks to have more capital so that they can make more loans to the economy. Now the way this works to create more capital is a couple of ways.

First of all, by taking these assets off the balance sheets, it takes some of these loans off, that burden capital and gives more space for banks to make loans.

But more importantly, by getting these markets moving again, by figuring out what the prices should be of these complex securities, it is going to reduce considerably the uncertainty about the value of these banks. And if that uncertainty is reduced, then private equity will come in and increase the capital and allow those banks to make more loans.

I realize that is a very complicated story. The bottom line, though, is that banks are holding all of these complex, hard-to-value securities and their capital is low. Those two things together do not allow them to make adequate loans. We need to address that problem, and this approach is one way to address that problem.

Senator Sununu. Thank you. It is a complicated story, but it is a direct relationship and it is one that I think is very important for you to describe as much as you can, as clearly as you can, not just to the Committee but to the American people, because they are the ones that are going to be affected and hopefully benefit by any action that we might take.

Along those lines, you have talked about protecting the taxpayers' interests. Many Members of the Committee have talked about the importance of putting taxpayers first, and I very much agree with that priority.

We can do that by adding strong oversight measures, which you referred to, and I think we should do that. I think it is important that we make sure that this is a temporary facility; that it is not going to be a permanent part of our bureaucracy.

I think we should add provisions to make sure that if there are any taxpayer gains from any of these programs we use that money to pay down debt, not to increase the size of government spending.

But you mentioned one additional way that we can protect the taxpayer, and that is by making sure that the government, or the Treasury, ultimately pays an appropriate price.

You describe the fire sale price where distressed firms have been selling some of these securities recently, and you have previously described a hold-to-maturity price which is the value that would be received if these securities were held to the point where all the mortgages have either been paid or dispensed with.

We want to make sure that the facility purchases at an appropriate price. If the taxpayers, through the actions of the Treasury pay above the hold-to-maturity price, we lose.

Now some people have said, well look, no one is going to participate unless you are buying at or above the hold-to-maturity price, and that would mean that the taxpayer loses money.

My question is: Are there participants in the marketplace that would be willing to sell their securities at a price below the hold-to-maturity price? Would they find benefit from that transaction, even if they thought it was less than the hold-to-maturity price, would they still make the sale to the Treasury facility?

Chairman Bernanke. Certainly if they have assets on their books at fire sale prices then they are better off. And indeed in some kind of auction or market-based mechanism, which is one approach and you can combine it with other kinds of safeguards and checks—we would be sure that we would be able to get the prices between the hold-to-maturity price and the fire sale price.

There are very good ways to make sure that you are not overpaying for that.

Senator Sununu. Would there be firms that even had an incentive to sell if the price that was being offered was below the price that they held it on their books? Even if it meant an additional write down, would there be market participants that would even find that price beneficial to the way they operate in the marketplace?

Chairman Bernanke. Well some would be worried about the accounting issue, that's right, because they would have to mark down. But even so, from an economic perspective they look at the economics and over time there is no way to hide the real value of an asset. If it is really impaired, that is going to show up at some point in reserves or elsewhere.

I think many institutions would be willing to sell to get it off their books and to get a reasonable price.

Senator Sununu. That would allow them to raise more capital. That would then obviously help restore confidence in their structure?

Chairman Bernanke. That's the idea.

Chairman Schumer. Thank you. Congressman Doggett.

Mr. Doggett. Thank you, Mr. Chairman.

Mr. Chairman, am I correct that the first time that you and Secretary Paulson brought your bailout needs to the attention of the Congressional leadership was last Thursday evening in the United States Capitol?

Chairman Bernanke. I believe that is correct.

Mr. Doggett. When did you first bring it to President Bush's attention?

Chairman Bernanke. That afternoon.

Mr. Doggett. In any of the visits with President Bush or any of the discussions that you have had with Secretary Paulson, any of these negotiations, at any point along the way right up until today has anyone asked the question: Who is going to pay for this? Is there any way to pay for it other than taking the standard approach of the Bush Administration which is, borrow and spend?

Have there been any other alternatives considered?

Chairman Bernanke. Well we have discussed a variety of alternatives. The Secretary worked with a private-sector approach early on.

Mr. Doggett. Oh, I understand you looked—but once you went public, the only approach that this Administration has considered is to borrow all the money that you need and increase the debt ceiling, right?

Chairman Bernanke. The only one considered? No. We have looked at all kinds of alternatives throughout, and we have tried to do our best using all the powers we have to try to keep the markets functioning and to try and maintain stability.

Mr. Doggett. I am just focusing—I understand, and I applaud your efforts to do that. I agree with much of what you have done in the past. But in terms of how to finance this massive bailout, you concluded, or the Secretary and President Bush concluded that the way to pay for it was to borrow all the money to do it, right? That's what you have asked Congress to do, is raise the debt ceiling and borrow the money?

Chairman Bernanke. That is what we have asked Congress to do, that's correct.

Mr. Doggett. You know, it wasn't that long ago that we were trying to see that children in this country got health insurance in a comprehensive way. And if you look at the President's web site today, or at least last night, you will see that he rejected the notion of $35- to $50 million over five years because it just costs too much to do that.

And yet, over night—not over five years—we are asked to come up with $700 billion. You testified not just in answering my questions in front of the House Budget Committee but in numerous other places about the dangers of soaring national debt.

We have added $3 trillion, I think even before this we were on the way to $4 trillion, money borrowed, more money borrowed from overseas, foreign creditors by President Bush than all the Presidents in American history put together.

We were headed up before this request, but now you are going to add even more debt on top of that. At some point doesn't there become a limit where the dollar continues to decline, the price of oil continues to go up, and we jeopardize and mortgage the future of this country from over-borrowing?

Chairman Bernanke. Well, first of all, this is a very bad situation, and I very much regret being the bearer of bad news in this situation.

From a fiscal perspective, just a couple of comments. I understand and share your concern. The first is that the net fiscal cost to the taxpayer will certainly be much less than $700 billion. This is an acquisition of assets——

Mr. Doggett. Just to be sure, you've asked us to raise the debt limit, once again as this Administration has done so often, a full $700 billion. Right?

Chairman Bernanke. That's correct, but I think that the debt markets will recognize that much of the $700 billion is being offset, or all of it is being offset by acquisition of financial assets. So it is quite a different situation from a pure expenditure of $700 billion.

Mr. Doggett. But these are assets you are acquiring because we've been told they are toxic and no one really knows what their value is, so that is why we are having the taxpayer buy them.

Chairman Bernanke. Well the objective would be to buy them at prices that are consistent with their economic value in a more normal market.

The other comment, if I may, very quickly——

Mr. Doggett. Surely.

Chairman Bernanke [continuing]. Is simply, what is the fiscal implication of doing nothing? It is my belief that if we do nothing——

Mr. Doggett. I don't want to interrupt you, but I will because I understand you want to talk about inaction. I think all of us want to take responsible action to address this problem.

My questions have focused on how we pay for it, and the dangers of adding another $700 billion to the debt limit. You know, as I look over the work you have done just in the last few weeks, I think Bear Stearns was about $30 billion of public money, Fannie Mae and Freddie was about $200 billion, AIG is about $85 billion. And now $700 billion more. About $1 trillion. I think it works out to about $3000 for every man, woman, and child in this country or, with my limited math, $12,000 for a family of four.

That is a tremendous expenditure, all on borrowed money once again. The solution that this Administration used to finance the War in Iraq, the solution it uses for every fiscal challenge, every public challenge is borrow more money.

You know, if you look back even to the savings and loan debacle, if you look at the history of that we at least asked the Federal Home Loan Banks—and they are still paying—to pay 20 percent of the interest on bonds that were issued to finance the recovery.

Why isn't it reasonable to ask Wall Street to pay for a little bit of the cost of cleaning up the mess that the Bush Administration policies permitted Wall Street to engage in instead of shifting all that cost to future generations of Americans who did not have anything to do with this?

Chairman Bernanke. I think you ought to raise those questions with Secretary Paulson.

Mr. Doggett. Well I certainly plan to do so, and that is one of the reasons why we want to move expeditiously. We do not want to move overnight. This notion that we would approve this bailout, $700 billion, today or tomorrow is irresponsible. And we need to move expeditiously, but we need to look carefully at this question of why we would shift all the cost to the people that weren't at the party.

I think President Bush did properly diagnose it down in Houston at a fund raiser a few months ago when he said the problem was Wall Street got drunk and has a hangover.

The problem is, the people that are asked to clean up all the broken furniture, they didn't get invited to the party. And I think that is why so many of the people that are contacting me—and I expect it is true of every one of my colleagues—are not just against this bailout, they are very angry they are even being asked to contribute to the bailout.

Let me just say in my concluding eight seconds, in Texas we would say that the chickens have come home to roost. This is not the result of just bad luck, it is the result of bankrupt ideology.

In this case the vultures have come home to roost, and I think we need to look very critically at this giant bailout before we place all the burden on the people who did not benefit from what went wrong here.

Thank you for your service.

Mr. Saxton. Mr. Chairman——

(The chairman bangs the gavel.)

Mr. Saxton. Early in the——

Chairman Schumer. Congressman, if we are going to let everyone get a chance——

Mr. Saxton. No, no——

Chairman Schumer.—we cannot have a dialogue.

Mr. Saxton. He asked the Chairman a question, and the Chairman never got a chance to answer the question. Could Chairman Bernanke just speak for a moment about the fiscal implications of not doing a program? I think it is a very important point.

Chairman Bernanke. If we do not do it, then the economy will do worse and tax revenues will be significantly affected. And so it is not evident that it is more expensive to take action than not to take action. You said of course you want to take action, so I understand that, and I appreciate it.

And let me just say that I think that this program ought to meet three criteria:

First, it has to be big enough and aggressive enough to solve this problem which is threatening our economy.

Second, it needs to protect the taxpayer as well as possible.

And third, it should not benefit anybody unduly who was involved in creating the problem.

So I think those are some principles we might try to take as we design this program.

Chairman Schumer. Thank you. Congressman Paul.

Mr. Paul. Thank you, Mr. Chairman.

I appreciate the comments by the gentleman from Texas, but actually you have confused me a little bit because now I do not know who the conservatives are and who the liberals are. [Laughter.]

Mr. Doggett. It is hard to tell here sometimes. [Laughter.]

Mr. Paul. Anyway, I am going to keep trying to figure it out, but we obviously have a serious problem on our hands, and it is something that I have been talking about for quite a few years.

Earlier on the Senator brought up the subject of the Depression, and you did allude to the fact that dislocations and credit creations are a problem and can add fuel to this fire. But at times I don't think you follow those rules very well.

I mean, even though you recognize that is the case, because I think, understanding the Depression is one of our problems, or the lack of understanding of the Depression. Because generally most of what people are taught these days is that it was a lack of credit in the 1930s that caused the prolongation of the Depression. They never talk about the excessive credit and the misallocation and the malinvestment of the 1920s that precipitated the bubble that had to be corrected.

Then in the Depression what did we try to do? We tried to fix prices, which is exactly what we are doing now. We would not in the Depression allow wages to go down, and we said the price of farm products has to stay up. So in doing that, we plowed crops under and people were starving.

And I do not think we have gained a whole lot of wisdom since we were plowing under crops to keep prices up, because now we are talking about illiquid assets, and we are talking about price fixing, and we are talking about somebody in the government, in the Federal Reserve and Treasury, who does prices.

Now the Austrian School of Economics, which has been around a long time—they predicted the Depression, they predicted the 1970s, the breakdown at Bretton Woods, they predicted all that is happening today—their key point is: Do not mess around with prices. Because if you do you become socialistic.

This is why Mises predicted the failure of socialism, and why it did fail. But here we are in price fixing again. You say that part of your mandate is price stability. But I hardly think price stability comes by price fixing.

But the idea of you taking illiquid assets, for the most part illiquid assets are illiquid because they are not worth anything. And if somebody has a house that they bought for $4 million and it goes up to $5 million and he wants to sell and nobody buys it, that is really not an illiquid asset. If he takes it down to $1 million he might sell it.

But people are not smart enough. The Federal Reserve is not smart enough. Treasury is not smart enough. Congress is not smart enough. To know what prices are. So I think that is the greatest danger of what we are doing here, is we are price fixing and that is what I am convinced that prolonged the Depression in the 1930s because we got into that.

This whole idea of credit creation. We have already created $700 billion worth of credit because of the interference and the involvement in the markets, and here we are coming along with another $700 billion. The real question is: Where does it come from?

We are surely not going to tax the economy $700 billion. Nobody would even consider this. But are we going to borrow it? Well, we could go to our bankers, our friends in China, they might come up with $700 billion and loan it to us, but I doubt it.

But where will it come from? They are going to come to you. They are going to come to you to create credit. But I don't even know where you get the authority to create credit out of thin air. There is certainly no authority in the Constitution for you to have endless authority to create money and credit out of thin air, which is the basic problem that we have.

This is why we are here today, that we have not understood that. All the blame is put on the fact that there is a downturn in housing. Well that means they were overpriced. So all our efforts right now are to keep the prices up, but the prices should come down. That is what the market is saying. But to fix prices at a higher level than they should be I think just compounds our problem.

But I would like to just see if I can get an opinion from you on where all this authority comes from. My estimation now is that there are probably only about 15 percent of the people in this country who really care about the Constitution and the rule of law. Sometimes I think there are less here in Washington.

But where does this authority come from for this unlimited amount of money? At least the $700 billion is being appropriated on this new, but the other is not. But you are going to have to monetize a bunch of this, and quite frankly I would have trouble finding anything in the Constitution that said, ah, this is it. You know, this particular paragraph says, oh, the Congress has the right to buy up illiquid assets.

Could you comment on this authority and the basic fundamentals of when we are going to address this? If we do not, we cannot solve the problem of inflation with more inflation.

Chairman Bernanke. Thank you, Congressman.

First of all, I actually agree with you about the price fixing in the Depression. I think there is a pretty wide consensus that the National Recovery Act and the fixing of wages and prices was a counterproductive step, and I agree with you there.

On whether prices are being fixed for these securities, the intention is to use market-based mechanisms, auctions and other things, to try to discovery what the true prices are, or at least something approximating a market price. It is not going to be price setting in that respect, as I understand it.

I would note about the Depression that one has to balance concerns about intervening in financial markets with concerns about macroeconomic stability. In the case of the Depression, the Federal Reserve essentially took no action as the banking system collapsed. About a third of the banks in the country failed.

The Fed, following the advice of Secretary Mellon, liquidated the banks, liquidated labor, and so on, and that did not work out so well.

With respect to your other questions—and I want to respond also again to Vice Chair Maloney. There is no need for the Federal Reserve to monetize any of this borrowing. The Federal Reserve has independent instrument, its management of monetary policy. I do not expect additional inflationary consequences from this.

As to our authority, of course the Constitution gives the Congress the right to coin money and regulate the value thereof——

Mr. Paul. "Coins."

Chairman Bernanke. And that has been delegated to the Federal Reserve through the Federal Reserve Act, and everything we have done is directly based on that Act.

Now if you disagree with the Act, that is a different issue, but we certainly have the authority from Congress.

Chairman Schumer. Senator Klobuchar.

Senator Klobuchar. Thank you very much, Mr. Chairman.

I said the other day, Chairman Bernanke, that basically my view of this is that the Administration has allowed Wall Street to operate like a casino, and unfortunately for you, you and Secretary Paulson have been called in as the house managers at the 11th hour to shut it down.

My concern, as you look at changing this and restructuring it, and as we look at longer term regulations that need to be put in place, that we minimize the exposure to the taxpayer.

I want to follow up on Congressman Doggett's questions about the debt and the deficit. I know last time you appeared before us in April I asked you about the danger of one out of every twelve dollars of our federal tax money is to go pay interest on the debt for individual taxpayers, and you responded that it is crucial that we get control of the deficit and that we find solutions before it gets so imminent that it becomes very, very difficult to balance the budget.

Well this week a columnist named Nick Coleman in the Minneapolis Star Tribune wrote an article about the share of the debt, not just the increase that Congressman Doggett was talking about, but if our debt is in fact raised to $11.3 trillion according to him every man, woman, and child would carry about $38,000 of that debt, and in his case for a family of five $190,000.

How will this hurt our long-term economy?

Chairman Bernanke. Well not to get into the weeds here too much, but the $1.3 trillion includes lots of things like debt held by the Federal Reserve, which is not really net debt to the government.

That being said, I agree that it is critically important that we have a stable, sensible, responsible fiscal plan going forward. We have a lot of implicit obligations, for example, to entitlements, to Medicare and Social Security, which are not fully funded. The GSEs were not fully funded. That was always an issue that the Federal Reserve pointed out.

I think that our economy will be fine. I think it will be a strong economy in the medium term. I am obviously very unhappy about the fiscal implications of this. I bring it to you because I think the alternatives are even worse. But if your complaint is that this will have adverse fiscal consequences and make it harder to balance the budget and address other needs, you are absolutely right and I agree with you on that.

Senator Klobuchar. What I am trying to search for here, along some of the comments that Senator Schumer made and others, is ways to pay for this that we can look at besides putting it on the backs of the middle class. Because you know how their wages have gone down $2000 a year average in the last eight years, and their expenses have gone up $4500.

One of the issues that Senator Schumer raised was some kind of charge on Wall Street, or some kind of charge that could be made there. There has also been a proposal to put some kind of surcharge on people that make over a million dollars a year, and I would personally not really have proposed something like this, but you keep talking about how we are in such an extraordinary time and such an extraordinary crisis.

Why couldn't we actually be open to doing something like that? What would the fiscal implications be? Because it could collect like, there's one proposal, 10 percent on people making over a million dollars a year, that could collect $300 billion and we would not be putting it on the backs of the middle class.

Why couldn't we do something like that? And what would the fiscal implications be if we did?

Chairman Bernanke. $300 billion over what——

Senator Klobuchar. Over the time of this thing. It is just trying to get at some kind of help and backing for this, aside from on the backs of the people who have been suffering for so long.

Chairman Bernanke. You know, I think that Congress needs to make decisions about how it wants to manage its spending and its taxing, and I am not going to tell you "yes" or "no." It is your decision to make.

I would say this—and here I intrude very slightly, I hope into your legislative decision-making, since I think it is very important that we address this issue in some way relatively soon and in particular before Congress leaves town—I hope that it will not be involved in a whole list of other issues that will prevent something from being done. That is my main concern.

But in terms of the fiscal issues—taxes, spending programs, all those things—that is Congress's job and that is your decision. The point I have made is that we need sane fiscal programs. And again I am very unhappy about this development.

Senator Klobuchar. And Secretary Paulson has not been very open to this idea of doing something about executive pay. Here the idea is, because these people who have benefitted directly from this and gotten these huge severance packages, $20 million, $40 million, do you understand why we would want to structure something in this deal where, if they are taking money, a company is taking money, a firm is taking money, that the government then can get something in return to say there has to be some limits about what you can make when you are taking our money?

Chairman Bernanke. There are obviously legitimate issues. Those include executives who walk away from companies with large golden parachutes even though they did not perform well. They include issues of corporate governance. Are the shareholders in fact being appropriately represented?

There are issues of incentives for risk taking. I think it may be a supervisory issue to ask whether these packages are structured in a way that leads to excessively risky decisions. So there are a lot of legitimate issues here, and I agree with you about that, and there are tax issues, too, as you already mentioned.

But one thing I would strongly ask you to consider. For this to work we need very wide participation from a range of financial institutions. This is not a handout to individual institutions. This is trying to make the market as a whole work by getting many institutions to participate in auctions and other market-based processes.

If you particularly stigmatize the individual institutions that participate, you are going to guarantee no participation. So you should think about this as part of a longer term reform for the overall system, not just for the individual firms that are participating.

Senator Klobuchar. Okay, one last question. I know you are an expert on the Depression and those things. Norman Ornstein has suggested this week this idea of using the whole idea that they had during the Depression when they bought the mortgages that were going under, and I think they ended up for the mortgages in default getting like 46 percent of them they rejected, they got the rest, it went over 18 years, and it worked for the most part.

Have you thought about doing something like that here?

Chairman Bernanke. Well this is related in some ways, but there are some important differences. One is the HOLC took mortgages off failed institutions, not buying them in the market, as we are discussing here.

Secondly, those were simple mortgages, not these complex securities that are creating such a problem in the markets today. So I do not think it is exactly analogous, although I would point out, as others have, that the HOLC made a profit over time. Though I certainly do not guarantee anything like that here, and there is a lot of risk being taken here which we need to minimize, it does not mean that $700 billion of taxpayer money is going to disappear.

I mean, there are risks but certainly a very substantial part of it will be recouped as these assets are sold, and as the economy recovers.

Senator Klobuchar. Thank you, very much.

Chairman Schumer. Congressman Brady.

Mr. Brady. Thank you, Mr. Chairman.

Can you be more specific about the economic consequences if Congress does not act?

Chairman Bernanke. Yes. I see the financial markets as already being quite fragile. The credit markets are not working normally. For example, there has already been a tightening up of lending. Corporations are not able to finance themselves through commercial paper.

The money market mutual funds and other parts of the financial system are not performing in the normal way. I would think that even if the situation stayed about where it is today that it would be a significant drag on the economy because of the effects both on savers through asset values, but also on the broad economy through the availability of credit.

If credit is not available for small businesses to create jobs, for companies to finance their payrolls, for people to buy cars, that in turn affects production of automobiles, for student loans, for mortgages—which is affecting the housing market and house prices—all those things. If those things are all cut back and unavailable, it is going to have significant adverse effects on our economy.

Now what I said was, if there was no change. I think without any action it is very possible that we might see a significant deterioration in financial conditions from here, which would make the problems for the broader economy even worse.

So I do think that this is quite consequential. I think that this is the most significant financial crisis in the post–War period for the United States, and it has in fact a global reach. So it has implications for other countries, as well. So I do think it is extraordinarily important that Congress take action.

I understand how difficult this is, and how complex, and I hope that you will take the time to think through your options and consider all the issues, but I do believe it is very important to take action.

Mr. Brady. Look forward, do you have a range of what that loss of GDP or increase in unemployment—the range. Obviously you are having to eyeball that. But do you have a range?

Chairman Bernanke. It is very difficult. But if you look at historical examples, in many cases it has been quite significant. The case of Japan was a case where growth was suboptimal for a decade.

In Scandinavia, they acted relatively quickly to restore capital to the banking system, and they still had a fairly severe recession after that.

So there have been very few cases where you have had this kind of financial disruption without a significant effect on the economy. We have already seen a lot of that effect, and I am just trying to argue that we should do what we can so it does not get worse.

Mr. Brady. The reason I asked that is I think it is important in this debate. A lot of us are being asked to walk away from every principle we have had on government control and free markets.

We understand the severity of the crunch we have today, but when we listen to folks back home—and I do not think we always give our constituents the credit for the smarts they have as we should—and their point is simply that they do not want to reward this risky behavior.

The feeling many of them have is, and I agree to a great extent, why don't we allow the free market system to correct itself and accept the consequences to avoid that risky behavior in the future?

I think there is a general sense that we are living in a financial house of cards; that action like this may only be a temporary solution to it; that we need to return to firmer, less complex, more financially sound, so that in the long run those consequences are better for taxpayers.

How would you talk directly to them?

Chairman Bernanke. My response is that the pain would be very significant. It would be very difficult for Main Street if this credit system broke down. It would be very costly to average people.

Here is a better solution: A better solution is to recognize that things went wrong. We have a problem now that we can solve if we address it with enough force. We can protect taxpayers in doing that.

The second part of the program, though, is we need to come back and look at our financial regulatory system, and look at our financial markets, and ask, how could this have happened? How can we make sure it does not happen again?

That is a much better way to prevent recurrence than by letting things fall apart and letting that serve as an object lesson to future market participants.

Mr. Brady. Thank you. Let me conclude with this. Are there some other things Congress ought to be looking at to increase capital flows in the United States? They are focused on credit. Capital is important, too. Such as a holiday on the capital gains tax might unlock some of those assets in the country.

Or Mr. English's proposal that I had the opportunity to work with three years ago to temporarily lower the repatriation roadblock that we have some estimated $350 billion of U.S. profits stranded overseas that are simply too expensive to bring back under the current tax rate.

When we lowered that barrier temporarily three years ago, it brought in just about $300 billion. Is it time for Congress—and it does not make sense at this point to be blocking any of those capital inflows into the United States—should Congress also be examining, in conjunction with this, or parallel to this, some of those actions to increase, to raise that capital flow?

Chairman Bernanke. Well there are ones that could be positive. I think as I responded to Ms. Klobuchar that that is Congress's determination to make. I would make the assessment that by themselves those kinds of actions would not address the larger problem that we are currently facing.

Mr. Brady. But in conjunction they might be helpful?

Chairman Bernanke. Congress certainly obviously can discuss those issues and come to its own determination.

Mr. Brady. Thank you, Mr. Chairman.

Thank you, Mr. Chairman.

Chairman Schumer. Thank you, Congressman.

Senator Bingaman. Thank you, very much.

Thank you, Mr. Chairman, for your service at this very difficult period. Let me just state a broad concern that occurs to me.

I have heard your testimony that what is needed to get credit markets functioning again is to get more capital into these financial institutions. And the proposal that we have been given by the Secretary of the Treasury is that the way to do that is to essentially have the government come in and take these so-called troubled assets off the books of these companies by buying them up at whatever price, and that will allow these companies to then be in a better position to perform the function they need to perform in providing credit and otherwise assisting the economy.

I am struck with the other way, the other obvious way, in which capital is provided to these financial institutions. When Warren Buffet invests $5 billion and gets preferred stock in Goldman Sachs, or when Mitsubishi invests a little over $8 billion and gets, I'm not sure exactly, I assume some type of preferred stock in Morgan Stanley, that is seen as a good thing for those firms. It is an infusion of capital. It is welcomed by the stockholders of those firms, presumably.

It is not wiping out the stockholders; it is helping the stockholders of those firms. And it is a good investment for Warren Buffet and for Mitsubishi, presumably.

So I guess my concern is that the way this thing is being characterized and presented to the Congress, we are being asked to endorse a bailout where we basically take the assets that these companies, these firms cannot otherwise dispose of at a reasonable price and take them off their hands, instead of us, instead of being characterized as a recapitalization of these firms.

If instead of a Resolution Trust Corporation, which we had in the S&L crisis, we—at this point we are talking about a Recapitalization Trust Corporation—where the taxpayer was essentially putting up funds, or committing whatever number, hundreds of billions of dollars of taxpayer money, but it was for purposes of recapitalizing the financial sector so that the financial sector can once again perform the function it needs to, and the taxpayer would come away from that presumably just like Warren Buffet does or Mitsubishi does with some ownership and some ability to benefit once the financial sector is back on its feet.

It seems to me that is a much better way to characterize things. It gets you somewhere to the same point. It gets the money into the system. It is much better for the taxpayer. But for some reason this thing has been described and structured as the taxpayers' job is to buy the assets that these firms no longer want.

That is the reason there is so much pushback on this thing. I think you get much better support, or much better acquiescence at least by many of the folks I represent if they thought that the government was going to go ahead and have something in the way of an investment here once the dust settled.

So what is your reaction to that? Am I not thinking about this right?

Chairman Bernanke. No, it is a very good comment. As I mentioned before, perhaps this is not a completely compelling objection. There is a concern that investors might view this as a prelude to forcible capital injections that would, as in the case of Fannie or Freddie, wipe out common shareholders, or at least put them at some risk in that respect.

I think that is one of the concerns that is underlying that approach. But if it were possible to convince the markets that in fact the government were going to act like Warren Buffet and make investment banking deals based on negotiations and approval by the common shareholders and the board, et cetera, I think that is something that is probably worth discussing with the White House to see if they see any benefit in that.

But, again, the concern that I have heard from a number of people is: Does this open the door to effective nationalization, as opposed to simply putting capital into the banks?

Senator Bingaman. Well what if we were to say, okay, we are going to set up this Recapitalization Trust Corporation. We are going to start with a tranche of a couple hundred billion dollars, and we are going to have a board that will operate this, and we will ask Warren Buffet to volunteer his services to head the board.

Now what is wrong with something like that, where he would have clear instructions that we are looking out for the taxpayer here but we also want to get this system functioning again and get these financial institutions operating?

Why would that not be a much more politically and substantively preferable course than this idea of us just buying these troubled assets?

Chairman Bernanke. Well you are a better judge of the politics than I am. I do not know whether that would be more popular or not. I told you what I think is viewed as the concern about it, but I certainly think that there is nothing wrong with discussing this option with the Treasury.

Again, I am not empowered to negotiate for the Treasury.

Senator Bingaman. Thank you very much, Mr. Chairman.

Chairman Schumer. Thank you.

Congressman Hinchey.

Mr. Hinchey. Thank you very much, Mr. Chairman——

Mr. Saxton. Mr. Chairman——

Chairman Schumer. Well Hinchey came in before English, but we usually try to go back and forth, so we will go to English and then Hinchey.

Mr. English. Mr. Chairman, it is always a privilege to have a couple of New Yorkers deferring to me. Thank you, sir. [Laughter.]

Mr. English. Mr. Chairman, following up actually on a point that Senator Bingaman made, and maybe approaching it from a different angle, one of the concerns that I have is that the architecture that has been outlined here gives extraordinary power to the Treasury, to people who are unelected, to make extraordinary interventions in the economy. And I do not think that we can contemplate this without considering the political implications.

Secretary Paulson has reportedly agreed that the Treasury would be authorized to take an equity stake in financial institutions that sell impaired financial assets to the Treasury.

I have to wonder, Mr. Chairman, do we risk politicizing credit decision making by giving the Federal Government equity stakes in a whole array of banks and other financial institutions?

And as a couple of commentators have gestured at, is there a real danger here that we go down the path to crony capitalism?

Chairman Bernanke. Well your question comes after Senator Bingaman's question, which was on the other side of the same issue.

I am not aware that the Treasury Secretary has agreed to what you just indicated for the reasons I said before, that we do not want to stigmatize those who participate in the asset sales.

It would be a different matter if a firm was failing and obviously needed some infusion of cash in that respect. I may just be behind the discussions, but I am not aware that that has been agreed to.

In any case, let me just say that I think it is very appropriate, indeed essential, for Congress to have very tough oversight over this program, and that there be a set of principles under which the program operates, and that there be close oversight by however Congress sees fit to structure that.

And I think that should give some comfort to taxpayers and to others that indeed this program is being run in a serious and fair way.

I think what would create some concern would be if too much of the details of how this would be done, whether there is an auction mechanism or something else, is written into the legislation, then that would take away the flexibility that might be necessary to deal with unexpected circumstances. So that is a concern.

But from an oversight perspective, I absolutely agree with you.

Mr. English. Very good. As we look at the recent market turbulence, one of the things I have been concerned about is the presence of new and unusual products of the market that may have contributed to it.

It has been suggested that the value of complex derivatives related to mortgages and credit fell further and faster than investors and bank regulators thought likely. How does the Fed view the role of these derivatives in contributing to the turmoil recently in financial markets?

Chairman Bernanke. Well I think they played an important role. Many factors have been involved—not just the housing market, but the structure of financial markets, the structure of financing, the structures of risk transfer such as these derivatives that you are referring to.

I think at the time the argument for them was, by putting all these things together and chopping them up different ways we would spread risk more effectively. What we learned instead was that, first, that risk was not always spread as well as was thought, and that banks did not always realize what their exposures were to different types of assets.

But secondly, transparency is a big issue. And investors are not going to come in and buy incredibly complex instruments at a time of serious financial stress because they have essentially no way to value them under these circumstances, which is one of the reasons for trying to get the market going again.

But I agree that the opacity and complexity of these instruments has been a factor, and that that needs to be addressed going forward, as does the role of the credit rating agencies who would bless them, and then investors did not have to look at what was inside because they had a AAA rating.

So both of those things need to be looked at as a part of the reform.

Mr. English. Where do you see the current failure of transparency? Is this a case where our existing oversight entities do not have the competence, or the resources, or perhaps the focus to pursue these particular products? Or is this a case where you mentioned the rating agencies, have the rating agencies been from your perspective too casual in making their assessments?

Where does the blame fall? Is this a regulatory failure? Is this a—since we throw around a lot of blame right now—is this a failure of Congressional oversight? Where do you see the most immediate failings here?

Chairman Bernanke. Well I think there is a lot of blame to go around. There have been a number of international and domestic studies of the crisis that have tried to diagnose it and point to different aspects or causes of the crisis, and all the things you mentioned are in the list.

The credit rating agencies which did not really anticipate the decline in housing prices, or that possibility, and had problems with their methodologies, which have been discussed, and they are trying to improve those now.

Secondly I think the regulators were not sufficiently attentive to the risks of these derivative instruments, or off-balance-sheet instruments in general, and we and our fellow regulators are trying to remedy that. But I think that was an issue.

And third I think the private sector in its zest for financial innovation under-estimated the problems that might arise in a situation of financial distress. Why it is hard to value these assets at this point is really for two reasons. One is simply that they are extraordinarily complex. But also, there is an awful lot of uncertainty about the economy. We just do not know where house prices are going to end up, where the economy is going to end up, and that would make even a simple security harder to value. Those two reasons affect the securities' valuation.

Mr. English. Thank you, Mr. Chairman.

Chairman Schumer. Congressman Hinchey.

Mr. Hinchey. Thank you very much, Mr. Chairman.

Thank you very much, Mr. Chairman, for being here, for your testimony, and for the very direct and honest answers I think you have given to the statements that have been made and the questions that have been asked. So I very much appreciate what you are doing.

You said that you and the Secretary of the Treasury went to the White House and spoke to the President on Thursday. I can imagine, however, that both your operation and the Treasury operation were focused on this issue for a lot longer than just Thursday.

I wonder if you would kindly tell us how long that has been, and what you have been doing together or independently to try to deal with this situation up until Thursday?

Chairman Bernanke. Well as you may know, both the Treasury and the Fed have been extraordinarily active over the last year through a wide range of mechanisms—discount window lending, the creation of new lending facilities, international swaps, and a whole other range of activities that we have done—to try to stabilize markets and to maintain as much stability in the financial system as we can.

Our hope was that the actions that we took, together with the natural healing process some stabilization in housing, would allow us to get through this difficult period without any extraordinary intervention from Congress. And we certainly did not want to come to Congress prematurely and say do something large when it was not yet evident that action was necessary.

However, in recent weeks market conditions have deteriorated quite significantly. We are continuing to do what we can to support markets, to increase liquidity, and so on, but our judgment at this point is that Congress needs to act, and only Congress can take the actions necessary to stabilize the financial system.

Mr. Hinchey. Well I think there is no question you are absolutely right. Congress needs to act, and the financial system needs to be stabilized, but there are other elements of this economy that need to be dealt with as well. Not just the financial system.

In other opportunities that you and I have had to be together we have asked questions and talked about the way in which the economy was working. The last time that you were here before this Joint Economic Committee in April, I believe it was, the general response to the question was that everything was going to be okay; that the economy was generally strong, and everything was running fairly well.

I was very skeptical about that, and I think that there was very good reason for it. It was very interesting in a question that I asked Secretary Paulson, his answer was that our economy was growing, unemployment levels were fine, there was housing downturn and turmoil in capital markets, but all major institutions are fundamentally healthy.

The fact of the matter is that that was not true. And I understand that that did not mean that he might have been focused on trying to deal with the issue, but I think that there was some motivation here to try to keep this under cover and try to present that the kind of things that were going wrong were not really happening.

I understand the situation that we have been talking about mostly here with regard to the mortgage market, but we are also seeing something here about the way in which the mortgage market has been manipulated; how it has been twisted and distorted in order to engage in speculation, and the desire there, the objective there is to make larger profits, and that has been for a lot of people very successful.

Isn't that some aspect of this problem that we have to deal with?

Chairman Bernanke. Thank you for the question. A couple of comments. First, I do not recall exactly what I said in April, but in January we made a number of sharp interest rate cuts, and I think that was indicative of the fact that at that point I was certainly, and the FOMC was quite concerned about the economy. I think, looking back, that policy was justified.

On your second question, you are absolutely right. There are a lot of problems, a lot of issues. I believe that the Congress ought to look at a substantial reform of our regulatory structure and of the financial markets to try to assure that these kinds of problems do not occur again.

I think that is very important. You could think of this as a one-two punch. First, stabilize the situation. Secondly, fix it so it does not happen again.

My only concern is that, just given the realities of the Congressional schedule and so on that doing the complete regulatory reform is going to take awhile. It is going to take a lot of thought, and hearings, and discussions, and so my advice and my request is that you take step one today, but with a strong promise for step two.

Mr. Hinchey. Well I appreciate that, and I am still skeptical about engaging in it in that way because I think that the situation has to be addressed more broadly. But I understand that the main focus of your attention, because of your responsibilities, has got to be on the financial market. And I very much appreciate that.

I think that that is true, but there is a lot more to deal with here. There is a lot of concern that a lot of people have with the general operation that is going on, the way in which this economy has been going down for more and more people.

When I talk to you I can't help but remember what an authority you are on the Great Depression, and it seems to me that there are so many aspects of this economic situation that we are confronting today which are so similar to the situation that we confronted during the Great Depression, I know that the financial markets are much more complex, much more different than they were back then, but in terms of that complexity there's a lot more openness in terms of manipulation as well within the financial markets.

But now you have a situation where you have a greater concentration of wealth in the hands of fewer and fewer people that we have had since 1929. You have an increase in poverty. You have a shrinking of the middle class. You have a downgrading of the Gross Domestic Product because the income of working people is going down, going down particularly with regard to the cost of living that is going up.

Aren't these things that this Congress must focus its attention on, as well?

Chairman Bernanke. I would hope Congress would be focusing attention on those issues on an ongoing basis. The things you mention are related, for example, to education and workplace skills, energy, a whole set of issues, and I assume the Congress would be looking at those.

Mr. Hinchey. Some of us in Congress have been for some time looking at these things. And what I am thinking about, as you and I are talking now, is you might have an opportunity to go back to the White House and say to the President: Maybe you, Mr. President, need to focus on these aspects of the economic circumstances that we are confronting, because he has been adamantly opposed to any increase in spending for domestic investment, infrastructure, health care, education, all the things that are needed across this country have been rejected by this Administration because they did not want to spend the money. But they are very happy to spend $700 billion now to deal with the circumstances in the financial market.

That inconsistency just does not make any sense.

Chairman Schumer. Congressman Hill.

Mr. Hill. Thank you, Mr. Chairman.

Chairman Bernanke, in this town it is hard to get the facts, and it is very difficult to determine what reality is. I want to take you through the last seven days in my life as a Member of Congress, and then return to a question that Congressman Cummings asked, because I thought it was very significant, your answer.

Last week I was under the impression that the Administration felt like the economy was fairly strong. I disagreed, of course, but that was the message that was coming to me and other Members of Congress before Thursday.

And then Thursday we adjourn, and suddenly we have a crisis on our hands. I learn over the weekend that we are going to be asked to appropriate $700 billion to try to get us out of this jam.

I am wondering, at the time that I heard all of this over the weekend, where have people been? Why is this suddenly a crisis? What has triggered all of this?

I get back here on Monday and we are now discussing it among ourselves as Members of Congress, and there is great angst out there among Members of Congress about whether or not we should be doing this.

In the last couple of days I have received over 200 telephone calls telling me: Don't do it.

Now, I, as a Member of Congress, am trying to make a determination of whether or not we should be doing this or not. But I will have to be quite frank with you—your answer to Congressman Cummings' question of how this affects the Main Street people, our constituents back home, was rather stunning.

Because what you are in fact asking us to do is to appropriate $700 billion to make car loans more accessible, and for small business people to have better credit. And quite frankly, if I went home and had a town hall meeting and told my constituents that we had to bail out Wall Street to the tune of $700 billion so they could find an easier time to get a car loan, or for small business people to get better credit so they could build their businesses, they would laugh me out of that town hall meeting, Mr. Chairman. There has got to be a better answer than just that.

Can you give a better answer?

Chairman Bernanke. Yes, sir, I can try to give you an answer on two fronts.

The first is, I recognize that this is always viewed as a $700 billion program, but again the fiscal cost of it is going to be much, much less than that because it is an acquisition of assets which will be resold. So I think that needs to be kept in mind.

With respect to the second part, which is very important, in the first instance credit will be restricted further for home ownership, for small business, for individual consumers and so on, but that is not just an inconvenience.

What that is going to do is affect spending and economic activity, and it will cause the economy as a whole to decline and be much weaker than it otherwise would be. It will affect the unemployment rate. It will affect job creation. It will affect real incomes. It will affect everybody's standard of living.

So it is much more than car loans. It is really about the overall performance of the U.S. economy over perhaps a period of years. So I think it is extraordinarily important to understand that, as we have seen in many previous examples of different countries and different times, choking up of credit is like taking the lifeblood away from the economy. The economy will not function in a healthy way without availability of credit for business creation, job creation, and the like.

Mr. Hill. But are we talking about the threat of a depression here? I talked to two economists yesterday who said, yes, we are talking about a depression. Today, I am getting a different feel for what the results are if we do not do anything.

Warren Buffett invested $50[sic] billion yesterday, and I read in the paper from several economists who say Congress would be crazy to do this.

Chairman Bernanke. Warren Buffett said on the TV this morning that he did it because he thought Congress was going to do the right thing, and if Congress didn't act that we would go over a precipice, quote, unquote.

So I think that it is important to do something. I don't want to make comparisons to the Depression. That was an extraordinary event. It lasted for many years. It was a different time and place. But certainly there are going to be very negative implications for our economy if the credit markets are not functioning.

Mr. Hill. Is it fair to tell my Main Street people back home that their stock portfolios are going to decrease dramatically?

Chairman Bernanke. Very likely.

Mr. Hill. And their 401Ks, and retirement programs?

Chairman Bernanke. Very likely.

Mr. Hill. Okay. I yield back, Mr. Chairman.

Chairman Schumer. Thank you, Congressman Hill.

Senator DeMint.

Senator DeMint. Thank you, Mr. Chairman.

I appreciate, Mr. Chairman, you being here today. I know you are doing what you think is best for our country, and I think you know it is our job to question that, particularly something of this significance.

You just indicated that the $700 billion is for stopping a short-term problem, and that we need to get about really fixing the problem afterwards. And it seems you are suggesting that fix includes a lot more regulations.

My biggest concern at this point is that the casualty of all of this is going to be our belief in the free enterprise system, and that unbridled capitalism is being blamed for this problem.

I learned after 25 years in business that you really cannot solve a problem unless you understand the root causes. It is hard for me to look at this and trace it back over the years without recognizing that this is a problem that was clearly caused by government.

Obviously, easy and cheap money from the Fed, government requirements that banks make subprime loans, the implied government guarantees behind Fannie Mae and Freddie Mac which everyone, with a "wink and a nod" knew was an explicit government guarantee.

Essentially what we did by trying to use the markets to put more people in houses is we removed the accountability of risk from the free enterprise system. And it only works when there is a good balance between risk and reward.

I do not think anyone could question that that is what the government did. We created a low risk, big reward environment in which to sell a lot of these mortgages and move them around as securities. Now they are embedded in all areas of our credit market, and free markets are being blamed for this without any criticism of bad government policies.

Now my question to you is—and I said this on a conference call the other day and I am not sure I have gotten a straight answer—Do you believe this is a failure of the free enterprise system, or another example of how government intervention destroys the dynamics of a free market system?

Chairman Bernanke. Well, we can discuss the origins of the situation. I think there are different points of view on that. I think that there were elements of the financial system—and let me amplify in just a second—such as the inadequate risk management and other things that amplified the problem and have created the crisis we see now.

Historically, precisely because the financial system has such a critical function in the economy, and because of the too-big-to-fail problem, and the problem of runs on banks, and those sorts of things, there has always been Deposit Insurance, supervision, some regulation of the financial system.

What I was saying, I don't think I used the word "heavier regulation" or anything like that. What I had in mind was reform. I think our regulatory system now is a patchwork system. It is not well structured. In some places it is too heavy, and in other places it is nonexistent.

So I do think the financial system needs to be regulated, and there are deep historical and economic reasons for that. But it is important that it be done in a way which on the one hand protects the safety of the economy and avoids crises of the type we are currently having, but on the other hand allows for innovations and the contributions that the financial sector can make to growth and diversification of the economy.

So I think there is a lot of blame to go around, to make a long story short, but I do think that part of the problem is that the regulatory system we have is needing of reform, which may involve in some cases less regulation but smarter regulation.

Senator DeMint. I am not suggesting we do not need a good regulatory structure for our financial markets. It just is very clear to me that the accountability of risk was removed, and the too-big-to-fail was primarily the government-created entities of Fannie Mae and Freddie Mac. They were major players in all of this.

I am concerned that that is being left out of a lot of the word coming from the Administration and the Federal Reserve. None of these proposals would actually support more free market activity, and seemed to have actually taken the burden of taxes and regulations off of our economy.

It would seem the Administration, while looking short term with this immediate bailout, would insist on some long-term changes in tax structure such as lowering our corporate tax rate, or eliminating the capital gains.

We created this Sarbanes-Oxley monster in order to tell us when Bear Stearns was going to go out of business but it didn't. It didn't do anything it was supposed to do, but we know it chased capital offshore. However, there's not advocacy from the White House or the Federal Reserve that we need to fix these things that are running capital out of our markets.

And so it is very frustrating for me, as someone who believes in free markets and free enterprise, that the blame of all this is being laid at the fact that we didn't have enough regulation and oversight. As somebody who has been in business, I know there is no amount of government regulation that can stop the corruption in a system if you take the risk out of it.

Chairman Bernanke. Senator, first of all, on Fannie and Freddie the Federal Reserve has long raised the issue of the systemic risk there. And I think you are absolutely right on that case.

With respect to regulatory reform, the Federal Reserve contributed to, but of course Treasury took the lead in the presentation of the blueprint that Secretary Paulson presented before the crisis began, and that was in response to this issue of capital moving offshore, as you put it.

His objectives in that blueprint were to try to simplify the system, remove redundancies, reduce costs, and make the regulatory system more industry friendly in that respect.

So again I reiterate that I am not sure that what is needed necessarily is heavier, more regulation, but better, cleaner, more efficient regulation.

Senator DeMint. Do you agree that insulating the market from natural risk creates a problem?

Chairman Bernanke. Well what we have is a problem where the financial system, because of too-big-to-fail, or just because of other instabilities like runs on banks, historically has had the potential to have very widespread effects on the rest of the economy if it becomes unstable, more so than other industries.

And so there has been a view—back to the introduction of deposit insurance, or before—a long-term view that some regulation is needed of the financial system. And given that, and you said yourself that it is needed, I think we just need to do it as well as possible.

Senator DeMint. Thank you, Mr. Chairman.

Chairman Schumer. Well thank you, Mr. Chairman.

We said we would try to get you out at 12:30, and we went through a lot of questions. We very much appreciate your calm nature here, but also the knowledge that you have. I think most of us on either side of the aisle believe you look at these things dispassionately without a particular axe to grind.

I just want to say, in conclusion, that the hearing reinforces my view of two things:

That we do have to act, and act relatively quickly. And at the same time we need some changes in the legislation proposed, and I am glad to hear that you are open to the kinds of changes that I have talked about on reducing the burden to the taxpayers.

Thanks for being here.

Chairman Bernanke. Thank you, Mr. Chairman

Chairman Schumer. The hearing is adjourned.

(Whereupon, at 12:34 p.m., Wednesday, September 24, 2008, the hearing was adjourned.)

SUBMISSIONS FOR THE RECORD

JOINT ECONOMIC COMMITTEE
SENATOR CHARLES E. SCHUMER, CHAIRMAN
REPRESENTATIVE CAROLYN B. MALONEY, VICE CHAIR

PREPARED STATEMENT OF SENATOR CHARLES E. SCHUMER, CHAIRMAN

To begin, I'd like to welcome you this hearing Mr. Chairman. And I'd like to thank you for appearing before this and the two other committees you are testifying in front of. I know how grueling this can be. But like it or not, it is important part of the process. If the Administration plan cannot withstand scrutiny, we cannot make our case to the American taxpayers we represent.

I think these hearings—beginning in the Senate Banking committee yesterday under the leadership of Chairman Dodd and continuing in the House Financial Services Committee this afternoon under Chairman Frank, have been important. Over the last twenty-four hours, I've seen signs of greater cooperation from my colleagues in Congress, who, despite many of their well-founded reservations, recognize the magnitude of the problems we face and the importance of getting something done.

When you were last before this committee, in April, the crisis we were facing was the collapse of Bear Stearns, and I can say that most of us thought we had just witnessed an event that we were likely never to see again in our lifetimes. And yet, here we are, only six months later, and we are discussing a crisis many orders of magnitude greater.

Mr. Chairman, I believe you have been eloquent and impassioned in your warnings of the dangers we face, and that we must try to do all we can to resolve the threat to our financial system. And I will reiterate what I said yesterday, I do believe we must act and we must act soon.

But let us be clear—Americans are furious. I am sure that every single one of my colleagues has heard what I have heard from my constituents—amazement, astonishment and intense anger. And they are right to be astonished and very angry. Over the last eight years, we were told that markets knew best, that financial alchemy had reduced risk to an afterthought, and that we were entering a new world of global growth and prosperity. Instead, what we have learned is that we now have to pay for the greed and recklessness of those who should have known far better.

Unfortunately that truth does not solve the crisis that confronts us. While Wall Street caused these problems, if we do nothing, Main Street will also pay a severe price. Pension funds, money market mutual funds, and 401(k) plans will be negatively impacted. Credit is already tightening, which impacts households as well as businesses large and small throughout this country. The lock down in lending has widespread consequences. I've heard from car manufacturers that it is virtually impossible to get an auto loan right now unless you have a very high credit score. This year alone they are likely sell six million fewer cars than they otherwise would. So even though the workers in Buffalo, Detroit and St. Louis are blameless, they will suffer. It's not fair, it's not right, but that's the world we live in today.

That is the reality we face, and we in Congress recognize it. I want to assure the markets once again—and I think I speak for all of us—that we will not be dilatory and we will not add extraneous amendments. We will not Christmas tree this bill. And we will work in a bipartisan way to act, and act soon. In the last day it has become clear to me, that, with the exception of a few outliers in either party, there is a clear recognition among members of both parties that we must act and act soon. And it has been good to hear from both Senators Obama and McCain that they concur we must act, though like us, they believe changes must be made to the Administration plan.

Still, as I said yesterday as well, we must beware that in taking actions, we do not choose a bad solution. The markets want action. We understand that. But if we act so quickly that we create an ineffective solution, without adequate safeguards, then we risk the plan failing, which would be an even worse outcome for the markets, for the economy, and for our country.

Even on Wall Street, $700 billion is a lot of money, and none of the thousands of money managers would invest that sum without appropriate due diligence. These hearings, and the discussions that are happening as we speak, are our Congressional due diligence, and we take that responsibility seriously and will make intelligent and relevant improvements to the Administration's plan. We owe nothing less than that to the taxpayers who have put us in office to safeguard their economic well-being. It is a sacred trust, and I can say that it is a responsibility that all my colleagues, both Democrats and Republicans, whatever philosophical differences, hold very dear.

As I have said, I believe there are three essential components to that must be part of this plan—T H O—taxpayers, homeowners, and oversight. There can be no question—and this is non-negotiable—that we must put taxpayers first. They must come ahead of bondholders, shareholders and executives and we need to add to the Administration's legislation those types of protections. I think we must seriously consider putting this program in place in tranches, or installments—so that we do not limit the Secretary's ability to act as necessary, but are able to evaluate the effectiveness of these expenditures over time. If the program is working, the Congress will certainly ratify continuing expenditures by the Treasury. But if it is not working, then we will need to review it before we once again find ourselves on the brink. I look forward to hearing your thoughts on that today, Mr. Chairman.

Another idea I've proposed is insurance fund modeled on the FDIC and paid for by the financial industry that can defray some of the long-term costs of the Administration plan must also be part of this legislation. It clearly cannot cover the entire cost. But it seems only fair that the industry that will receive the vast benefit of this taxpayer-funded program pay for some share of it themselves. Both Secretary Paulson and you seemed positively disposed towards that idea yesterday, and again, I look forward to hearing further from you today on this as well.

I remain puzzled by the resistance you and Secretary Paulson have offered to proposals that Senator Jack Reed and many of my colleagues have made about the need for equity being part of the process we are discussing. My constituents ask me about it, as do many of the business people and many of your fellow economists who I've spoken with about this. It seems only fair that we reward taxpayers if, as we all hope, this plan succeeds.

We must also do something to help homeowners. Chairman Bernanke, you yourself have said repeatedly until we find a floor in the housing markets—and foreclosures are directly related to the housing markets—we will not solve this problem. And that affects not just those who made bad mortgages, not just those who will lose their homes through no fault of their own, but every homeowner. The number of foreclosures and the price of the average American's home are intrinsically related to one another and cannot be separated. As we've seen, the complications of securitization—where mortgages are placed into pools and then broken up into a large number of securities, has created an enormous problem. Unlike in the old days, homeowners can no longer go the local bank, where they got their mortgage, to try to negotiate terms beneficial for both sides. Instead, since their mortgage has been sold into a pool with others, they find themselves trapped by servicing agreements they were never party to in the first place. And that's to say nothing of the complications presented by second lien holders, who can often hold entire pools of mortgages hostage because they have nothing to lose by not co-operating. I remain convinced that judicial loan modifications, which would allow judges leeway in helping homeowners facing foreclosure, are an essential step that we must consider to resolving these problems, and the housing crisis.

Finally—this is the last of what I call the three THO principles—there must be greater oversight as part of this plan. This Administration is asking simply for trust. However much we may like Secretary Paulson or you, Mr. Chairman, no sane person would put 700 million dollars in your hands on trust alone. I cannot in good faith tell my constituents that "it's fine, we know they'll do the right thing." Strict oversight is a sine qua non. And when we return next year, we must develop a regulatory system that fits today's financial system. While we cannot do that this week, it has become crystal clear that our system of regulation is broken and must be repaired, if not entirely replaced.

To close, I would like to add a few words about something that I worry has gotten lost in our focus on this crisis. As I have said, I do believe we will act, and I do believe we will fix the financial crisis we face. But that will not in and of itself fix many of the other problems that continue to bedevil American families. The economy of the past eight years has hammered the American middle class. Their incomes have declined, their healthcare coverage has weakened, the price of their gas and food have skyrocketed, the value of their homes has plummeted, and now many of them find their jobs threatened. The plan the Administration has put forward, with certain modifications, will, I hope, resolve this current mess, but many other obstacles remain ahead of us. It is not enough to maintain the status quo. We must find a way to once again make the American economy the engine of prosperity it once was for all Americans, and not a casino where we let some earn extreme rewards by taking excessive risks while the rest of us get stuck with the bill.

PREPARED STATEMENT OF REPRESENTATIVE JIM SAXTON

I would like to join in welcoming Chairman Bernanke before the Joint Economic Committee this morning. Given the recent financial turmoil, his testimony comes at a critical juncture in economic policy.

The main cause of the financial turmoil is the collapse of the housing bubble inflated by various government policies over many years. Government policies supported by many in Congress encouraged the expansion of subprime and other risky mortgages that fueled the housing bubble. Strong Congressional support of Fannie Mae and Freddie Mac depended on their investment in high risk mortgages for their own investment portfolios.

In exchange, both Fannie Mae and Freddie Mac showered their Congressional patrons with generous campaign contributions that seriously corrupted the political process. Despite warnings for many years that both Fannie and Freddie were excessively leveraged to a degree that was dangerous, they continued to inflate the housing bubble undeterred by their accounting scandals. Now the country will have to pay a very high price for lending policies highly influenced by political, not economic, objectives. Given their financial problems created by a politicization of decision making, Fannie and Freddie have essentially been taken over by the federal government.

In another startling development, over the last several weeks a distinct investment banking industry, established by the provisions of the well-intended Glass-Steagall Act, has essentially ceased to exist. The independent investment banking business model proved unable to withstand the stress of the financial market instability wracking the entire financial structure. These investment banks were highly leveraged and relied on short-term funds to finance longer term investments.

Unfortunately, many of these investments were mortgage backed securities whose value had plunged over the last year. The fact that the investment banking industry, created by government regulation, has proven unsound is a reminder that government policies do not always provide effective solutions, but can in fact create further problems. As a result, many investors are rightly concerned about the safety of their savings and investments.

Some action by government is now needed to recapitalize the banks and other financial institutions either by injections of equity or removal of toxic investments. In this financial meltdown there is plenty of blame to go around, but ultimately the American people expect action to deal with the crisis. One good place to start would be guaranteeing the safety of transactions accounts to assure savers and small businesses that their basic financial needs can be met without disruption.

JOINT ECONOMIC COMMITTEE

CONGRESSMAN JIM SAXTON
RANKING REPUBLICAN MEMBER

RESEARCH REPORT #110-26
September 2008

GOVERNMENT POLICY BLUNDERS LARGELY CAUSED THE GLOBAL FINANCIAL CRISIS

Macroeconomic and microeconomic policy blunders by both the U.S. government and foreign governments inflated an unsustainable housing bubble in the United States and other developed economies. When this bubble inevitably popped, a global financial crisis ensued. Although misaligned private incentives, methodological errors in rating structured credit products, and the recklessness of some private financial institutions and investors did play a contributory role in the recent financial turmoil, individuals and firms could not have created and sustained such a large housing bubble over so long a time without major macroeconomic and microeconomic policy mistakes. These policy mistakes were:

1. The exchange rate policy of the People's Republic of China (PRC) and the shadow exchange rate policies of governments in other Asian economies caused large and persistent international trade imbalances, suppressed price increases on tradable goods and services, and channeled monetary inflation in the United States and other developed countries with floating exchange rates disproportionately into housing prices;
2. The Federal Reserve pursued, at least in retrospect, an overly accommodative monetary policy after 2000 that kept U.S. interest rates too low for too long. Moreover, central banks in the PRC and other Asian economies invested most of their surging foreign exchange reserves in U.S. Treasury, Fannie Mae, and Freddie Mac debt securities, flatting the long-end of the yield curve in the United States. These policies combined to produce extremely low long-term interest rates that stimulated housing demand.
3. Financial regulators in the United States and other developed economies failed to exercise adequate prudential supervision over highly leveraged non-depository financial institutions in the alternative financial system;
4. Regulations mandating the use of value-at-risk models to determine the capital adequacy of financial institutions (1) caused both these institutions and their regulators to underestimate risk exposure, and (2) encouraged these institutions to increase their leverage;
5. Regulations mandating the use of "fair value" accounting (also known as "mark-to-market" accounting) for illiquid financial assets exacerbated liquidity problems at financial institutions after the housing bubble burst.
6. The strengthening of affordable housing regulations governing Fannie Mae and Freddie Mac in October 2000 had the unintended consequence of creating a large regulatory-induced demand for subprime residential mortgage loans that mortgage banks proceeded to satisfy.[1]

Macroeconomic Policy Factors. During the last decade, the governments of the world's major economies have pursued two different exchange rate policies: freely floating exchange rates and pegged exchange rates. In the "floating zone," the United States along with Australia, Canada, the European Union member-states using the euro, and the United Kingdom allowed market forces to determine the foreign exchange value of their currencies. In the "pegging zone," the People's Republic of China (PRC), Indonesia, India, Japan, South Korea, Malaysia, Taiwan, and Thailand intervened heavily in the foreign exchange market by buying dollars and selling their currencies to maintain politically determined, below market exchange rates pegged to the U.S. dollar to give their manufactured exports a price advantage in American and European markets.

Pegged exchange rates produced persistent distortions in relative prices around the world. Over time, these price distortions exacerbated imbalances in the global economy, especially large, persistent current account surpluses in the PRC and large, persistent current account deficits in United States.

Consequently, the governments of these Asian economies added $2.7 trillion to their foreign exchange reserves between December 31, 2000 and December 31, 2007. About 70 percent of this increase in foreign exchange reserves was invested in the United States, mostly in U.S. Treasury debt securities and U.S. Agency debt securities (e.g., Fannie Mae and Freddie Mac).

The exchange rate-induced price distortions influenced macroeconomic policy decision-making around the world. In the United States and other economies in the floating zone, central banks pursued, at least in retrospect, overly accommodative monetary policies that expanded the availability of credit at low interest rates. In turn, these policies inflated unsustainable housing price bubbles. In the PRC and some other economies in the pegging zone, macroeconomic policy errors caused price inflation in goods and services to surge.

After these housing bubbles popped, massive overinvestment (i.e., the accumulation of assets in excess of the demand for these assets) and malinvestment (i.e., the accumulation of the wrong types of assets) was revealed in the housing sectors of the United States and most of the other major economies in the floating zone. This triggered a global financial crisis that began on August 9, 2007.

Specifically:

1. Low-cost imports, especially labor-intensive manufactured goods from the pegging zone, intensified competition for tradable goods in the United States and other economies in the floating zone. Because of this competition, various indices used to measure changes in the prices of goods and services registered very low inflation rates in the United States and other economies in the floating zone.
2. The Federal Reserve and other central banks in the floating zone were using inflation-targeting either by rule or in practice to guide their decision-making. Low reported inflation rates persuaded officials at the Federal Reserve and other central banks to pursue relatively accommodative monetary policies throughout most of the last decade.
3. Because asset prices are generally excluded from inflation indices, higher housing prices did not increase reported inflation rates and did not trigger more restrictive monetary policies in the United States or other economies in the floating zone.
4. At least in retrospect, the Federal Reserve and other central banks in the floating zone pursued overly accommodate monetary policies during most of the last decade. This fed a rapid expansion of credit relative to GDP. In the United States, total credit outstanding (including total debt securities outstanding in U.S. credit markets and total loans and leases outstanding at U.S. depository institutions) grew from $17.1 trillion (equal to 205.8 percent of GDP) on December 31, 1997 to $38.3 trillion (equal to 276.8 percent of GDP) on December 31, 2007.
5. Central banks in the pegging zone invested a large portion of their accumulation of foreign exchange reserves in medium- and long-term U.S. Treasury debt securities and U.S. Agency debt securities. These investment decisions flattened the yield curve in the United States, pushing medium- and long-term U.S. interest rates below what they would have otherwise been. Of course, the housing sector is especially sensitive to changes in long-term interest rates.

Microeconomic Policy Factors. During the last three decades, an alternative financial system has developed to the traditional bank-centric financial system. This alternative system is based on (1) the securitization of loans, leases, and receivables into structured credit products (e.g., residential mortgage-backed securities), and (2) the purchase of these structured credit products by highly leveraged non-depository financial institutions (e.g., investment banks, financial government-sponsored enterprises including Fannie Mae and Freddie Mac, hedge funds, and off-balance sheet entities).

Highly leveraged non-depository financial institutions now perform the same economically vital, but inherently risky functions of (1) intermediation[2] and (2) liquidity and maturity transformation[3] that banks, savings institutions, and credit unions have historically performed. In the United States at the end of 2007, highly leveraged non-depository financial institutions held $12.7 trillion of financial assets compared with $13.5 trillion of financial assets in depository institutions.

However, this alternative system, which developed largely outside of the regulatory and supervisory structure that has been necessary to contain financial contagion, proved vulnerable to a modern version of 19th century bank runs. Instead of depositors "running" to banks to withdraw their deposits, unleveraged financial institutions such as money market mutual funds that lose confidence in highly leveraged non-depository financial institutions (e.g., Bear Stearns) refuse to rollover their overnight repurchase agreements while banks curtail their secured lines of credit, forcing such troubled institutions to either declare bankruptcy or seek government assistance in a matter of hours.

Unintended Consequences from Financial Regulations. Federal regulatory policies that addressed legitimate problems (i.e., inconsistent capital regulations for multinational banks, and inadequate accounting standards that allowed Enron to conceal its true financial condition before its collapse in 2001) had the unintended consequences of encouraging excessive leverage and risk-taking especially among these highly leveraged non-depository financial institutions. In particular, two policies encouraged financial institutions to behave pro-cyclically:

1. Promoting the use of value-at-risk models to determine the risk exposure in financial institutions without sufficient consideration of the inherent limitations in these models, especially the lack of sufficient historical data to draw statistically valid conclusions about (a) the credit performance of new products, and (b) institutional liquidity under rare episodes of financial stress; and
2. Requiring financial institutions to use fair value (also known as mark-to-market) accounting for illiquid financial assets that such institutions intend to hold.

Reliance on value-at-risk models caused both financial institutions and their regulators to underestimate the risk exposure at these institutions. This underestimation encouraged aggressive lending and underwriting practices at financial institutions during upswings.

Small changes in the price factors that econometric models use to estimate the fair value of illiquid financial assets can cause large drops in the recorded value of these assets during downturns, forcing financial institutions to take large write-downs. These write-downs can trigger "fire sales," in which financial institutions rush to sell similar financial assets at any price, possibly reducing the value of these assets well below what they actually fetch during orderly sales. Widespread illiquidity may force financial institutions to contract the availability of credit and increase its cost.

Unintended Consequences from Housing Policies Promoting Home Ownership. The shift from FHA-insured mortgage loans to subprime mortgage loans among low income and minority households in the United States and the widespread issuance of subprime mortgage-backed securities by investment banks during the first half of this decade is, in large part, the unintended consequence of well-meaning, but poorly conceived federal policies to increase the home ownership rate among low income and minority households. On October 31, 2000, the U.S. Secretary of Housing and Urban Development issued affordable housing regulations for Fannie Mae and Freddie Mac during the years 2001 to 2004. These regulations significantly increased the goals at Fannie Mae and Freddie Mac for purchasing residential mortgage loans to low income and minority households. To meet these goals, Fannie Mae and Freddie Mac stepped-up their purchases of privately issued AAA-rated tranches of subprime mortgage-backed securities beginning in 2001. Responding to this regulatory-induced demand, mortgage banks greatly increased their extension of subprime mortgage loans, while investment banks placed these loans into subprime mortgage-backed securities.

Misaligned Private Incentives. Misaligned private incentives encouraged excessive risk-taking in financial institutions:

1. Unlike the originators of other loans, leases, or receivables, the originators of residential mortgage loans were not required to retain an equity interest, known as "skin in the game," in (a) the loans which were sold or (b) the mortgage-backed securities into which these loans were placed. Thus, originators such as mortgage banks had no incentive to apply sound credit standards when underwriting residential mortgage loans.
2. The "issuer pays" business model of credit rating agencies made them financially dependent upon a few investment banks whose structured credit products the agencies were assessing. These agencies pressed their analysts to give favorable ratings to maintain or increase market share with these banks.
3. Banks had "up-front" incentive compensation packages for investment bankers that did not adjust their compensation for the long-term profitability of their deals for the banks or their customers.

Methodological Errors. Credit rating agencies employed flawed methodologies to evaluate structured credit products. These methodologies did not fully account for the likely correlation of delinquency and default rates for similar loans, leases, and receivables that constitute the collateral in structured credit products. This error caused credit rating agencies to give higher ratings to many structured credit products than they deserved.

Conclusion. Macroeconomic policy errors both here and abroad combined with regulatory policy deficiencies and misaligned private incentives to inflate unsustainable bubbles in housing prices in the United States and most of the other major economies in the floating zone. After these bubbles popped, the alternative financial system proved vulnerable to a modern version of 19th century bank runs. This sparked a global financial crisis that is ongoing.

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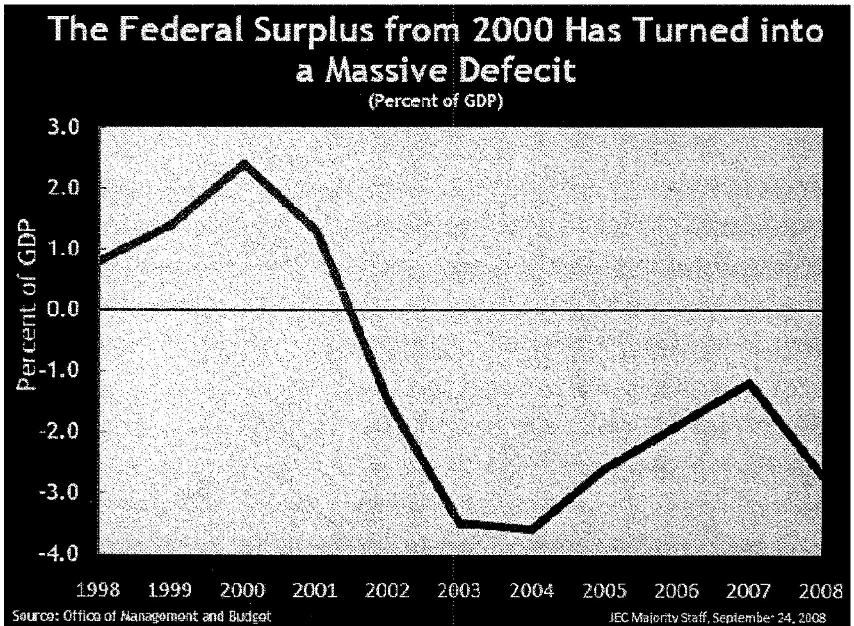
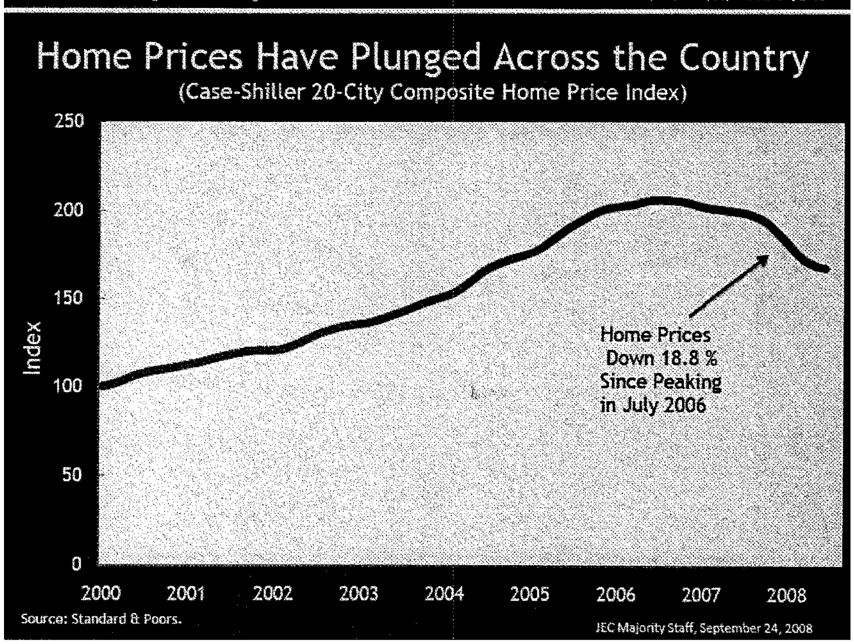
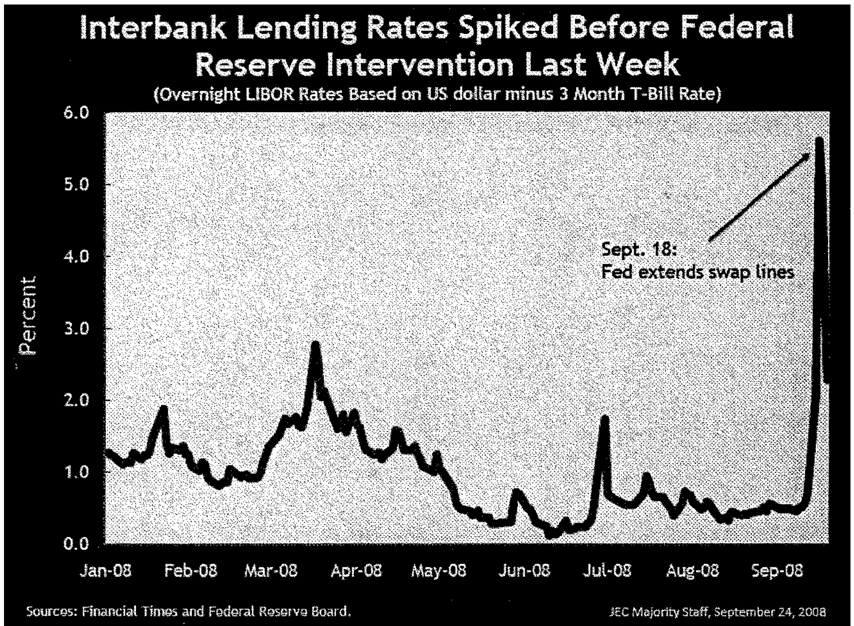
[1] For more detailed analyses, see: Robert P. O'Quinn, *Chinese FX Interventions Caused International Imbalances, Contributed to the U.S. Housing Bubble*, Prepared for the Joint Economic Committee (110th Cong., 2nd sess., March 2008); Robert P. O'Quinn, *The U.S. Housing Bubble and the Global Financial Crisis: Housing and Housing-Related Finance*, Prepared for the Joint Economic (110th Cong., 2nd sess., May 2008); and Robert P. O'Quinn, *The U.S. Housing Bubble and the Global Financial Crisis: Vulnerabilities of the Alternative Financial System*, Prepared for the Joint Economic Committee (110th Cong., 2nd sess., June 2008).

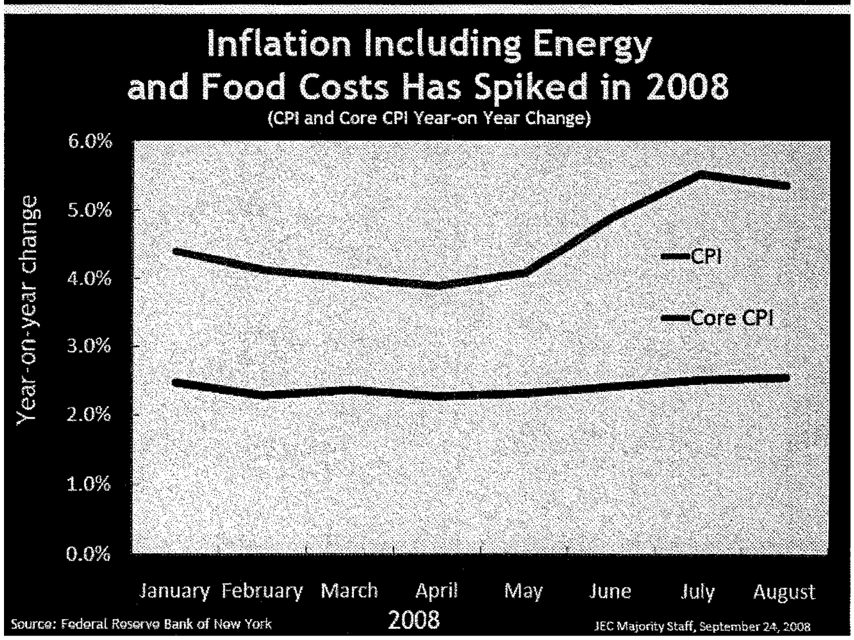
[2] Intermediation refers the economic function of channeling funds from savers to borrowers.

[3] Liquidity and maturity transformation refers to the economic function of turning illiquid financial assets such as term loans to households and firms into liquid financial assets such as deposits payable on demand or marketable securities.


The Federal Surplus from 2000 Has Turned into a Massive Defecit
(Percent of GDP)
Percent of GDP
3.0
2.0
1.0
0.0
-1.0
-2.0
-3.0
-4.0
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Source: Office of Management and Budget
JEC Majority Staff, September 24, 2008


Home Prices Have Plunged Across the Country
(Case-Shiller 20-City Composite Home Price Index)
Index
250
200
150
100
50
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
Home Prices Down 18.8 % Since Peaking in July 2006
Source: Standard & Poors.
JEC Majority Staff, September 24, 2008


Interbank Lending Rates Spiked Before Federal Reserve Intervention Last Week
(Overnight LIBOR Rates Based on US dollar minus 3 Month T-Bill Rate)
Percent
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Jan-08
Feb-08
Mar-08
Apr-08
May-08
Jun-08
Jul-08
Aug-08
Sep-08
Sept. 18:
Fed extends swap lines
Sources: Financial Times and Federal Reserve Board.
JEC Majority Staff, September 24, 2008


Inflation Including Energy and Food Costs Has Spiked in 2008
(CPI and Core CPI Year-on Year Change)
Year-on-year change
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
CPI
Core CPI
January
February
March
April
May
June
July
August
2008
Source: Federal Reserve Bank of New York
JEC Majority Staff, September 24, 2008

THE U.S. HOUSING BUBBLE AND THE GLOBAL FINANCIAL CRISIS: HOUSING AND HOUSING-RELATED FINANCE

Ranking Republican Member Jim Saxton (R-NJ)

Joint Economic Committee
United States Congress

May 2008

Executive Summary

An unprecedented bubble in U.S. housing prices began to inflate in the first quarter of 1998 and then popped in the second quarter of 2006. This study examines the causes of this bubble and the effects of its deflation on U.S. housing and housing-related finance by applying a seven-stage framework for analyzing asset bubbles developed by economist Charles P. Kindleberger. Future studies will analyze the global financial crisis that this bubble ignited on August 9, 2007 and offer lessons learned for policymakers.

The most important cause of the housing bubble was a massive credit expansion. An overly accommodative U.S. monetary policy from the second quarter of 2002 through the third quarter of 2006 when compared with the Taylor rule encouraged financial institutions to expand credit aggressively by reducing their short-term funding costs. At the same time, stable inflationary expectations and the exchange rate policies in the People's Republic of China and other Asian economies restrained long-term U.S. interest rates. U.S. housing prices soared as low long-term interest rates further stimulated the already strong demand among households for housing, while financial institutions enthusiastically supplied the necessary residential mortgage credit.

A number of well-meaning federal policies had the unintended consequence of encouraging financially marginal households that could not qualify for traditional fixed-rate fully amortizing residential mortgage loans to take out riskier alternatives (including adjustable-rate subprime residential mortgage loans with interest-only periods or negative amortization features) to buy homes just as housing prices neared their peak. Essentially, both these borrowers and their creditors were relying on rising housing prices rather than the borrower's income to repay these loans. After the bubble popped, delinquency and default rates increased to alarming levels among these borrowers.

The IMF forecasts housing-related credit losses will be $565 billion, while total credit losses will be $945 billion. As a result, the IMF concludes that the combination of the aftermath of the housing bubble and the credit crunch arising from the global financial crisis has tipped the U.S. economy into a recession. Whether or not this IMF forecast proves correct, economic growth in the United States has slowed dramatically during the last two quarters.

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U.S. HOUSING BUBBLE AND THE GLOBAL FINANCIAL CRISIS: HOUSING AND HOUSING-RELATED FINANCE

I. INTRODUCTION

An unprecedented U.S. housing bubble began to inflate in the first quarter of 1998 and then popped in the second quarter of 2006. The subsequent deflation of housing prices caused the delinquency and foreclosure rates for subprime residential mortgage loans to soar. As the performance of these loans deteriorated, investors grew uncertain about the value of the residential mortgage-backed securities (RMBS) and the collateralized mortgage obligations (CMOs) into which many subprime residential mortgage loans had been placed. Consequently, the market liquidity for these subprime-related derivative securities shriveled.

A number of well-intentioned, but often misguided federal policies and macro-economic supply factors in U.S. credit markets inflated an unsustainable bubble in U.S. housing prices:

- In retrospect, the Federal Reserve's monetary policy was overly accommodative from the second quarter of 2002 through the third quarter of 2006 when compared with the Taylor rule. By lowering the cost of funds for banks, other depository institutions, and highly leveraged non-depository financial institutions, this monetary policy encouraged these financial institutions to expand credit aggressively by extending loans and investing in debt and derivative securities.
- At the same time, macro-economic supply factors in U.S. credit markets reinforced this overly accommodative monetary policy by restraining medium- and long-term U.S. interest rates during the first half of this decade. Housing is the most interest rate-sensitive sector of the U.S. economy. Along with micro-economic factors relating to financial services, low long-term interest rates further stimulated the already strong demand for housing among households, while financial institutions enthusiastically supplied the necessary residential mortgage credit.
    - Globalization greatly intensified the price competition among tradable goods and services in the United States. This helped to channel the inflationary effects of monetary policy away from the prices of goods and services and into asset prices, especially housing. The inflation-suppressing effects of globalization on the prices of goods and services as recorded by the Consumer Price Index (CPI), the GDP Deflator, and the Personal Consumption Expenditure (PCE) Deflator combined with the Federal Reserve's successful disinflationary monetary policy during the 1980s and early 1990s to foster stable inflationary expectations. In turn, stable inflationary expectations dissuaded U.S. lenders from seeking high inflation premiums in medium- and long-term interest rates when monetary policy deviated from the Taylor rule.
    - After the Asian Financial Crisis of 1997-98, the People's Republic of China (PRC) intervened heavily in foreign exchange markets to maintain a fixed exchange rate between the Chinese renminbi and the U.S. dollar through July 20, 2005 and to suppress the appreciation of the renminbi relative to the dollar thereafter. Other Asian governments mimicked the PRC's foreign exchange to maintain the price competitiveness of their manufactured exports with China's. By buying U.S. dollars and selling their currencies simultaneously, central banks in the PRC, India, Indonesia, Japan, Malaysia, South Korea, Taiwan, and Thailand added $2.06 trillion to their foreign exchange reserves from December 31, 1997 to the peak of the U.S. housing bubble on June 30, 2006. About 2/3 of

these foreign exchange reserves were invested in U.S. dollar-denominated debt securities, mainly U.S. Treasuries and U.S. Agencies. By bidding-up the prices of U.S. debt securities, these massive purchases by Asian central banks helped to suppress medium- and long-term U.S. interest rates.[1]

- Federal policymakers adopted a number of policies to promote home ownership especially among financially marginal and minority households without regard to the suitability of home ownership for their economic circumstances or the conditions in the housing market;
- Federal policymakers failed to warn the public that the housing bubble was unsustainable and to discourage financially marginal households from taking on excessive non-conventional mortgage debt to buy homes as housing prices inflated.

Estimates for the global credit losses associated with subprime residential mortgage loans are staggering. In April 2008, the Organization for Economic Cooperation and Development (OECD) forecast that the global subprime-related credit losses will be $422 billion (which is equivalent to 3.05 percent of U.S. GDP in 2007).[2] This OECD forecast is line with similar estimates from the International Monetary Fund and private economists.

This study applies a seven-stage framework for analyzing asset bubbles developed by economist Charles P. Kindleberger to the U.S. housing bubble. Part one of this study examines stage one – displacement of existing expectations, stage two – credit expansion (monetary policy and other macro-economic factors), stage three – new economy, stage four – swindles, and stage five – overtrading, revulsion, and discredit – as they apply to the inflation and popping of the U.S. housing bubble. Moving beyond a narrow focus on housing and housing related finance, part two will analyze stage two – credit expansion (micro-economic factors relating to financial services) and stage six – financial panic and crisis management – as they apply to the resulting global financial crisis that arose on August 9, 2007 from the popping of the U.S. housing bubble. Part three will discuss stage seven – aftermath and then will offer some lessons learned to policymakers.

II. KINDLEBERGER'S FRAMEWORK FOR ASSET BUBBLES

Reviewing asset bubbles from 1720 through 1999, Charles P. Kindleberger identified the seven stages common to all asset bubbles:

1. **Displacement of established expectations**. Asset bubbles begin when significant, sudden, and unexpected events displace previous expectations about the future returns from certain assets. Through the centuries, various assets (e.g., bonds, commodities, currency, equities, and real estate) have become objects of speculation.
2. **Credit expansion**. Asset bubbles require a modern financial system to provide credit to households and firms to purchase the object of speculation. Displacement of established expectations causes financial services professionals to assume less uncertainty and more profits from investing in this object. Consequently, commercial banks and other depository institutions generously extend loans, while investment banks aggressively

[1] For an extensive discussion, see: Robert P. O'Quinn, *Chinese FX Interventions Caused International Imbalances, Contributed To U.S. Housing Bubble* (Prepared for Joint Economic Committee, 110th Cong., 2nd sess., March 2008). Found at: http://www.house.gov/jec/studies/2008/Chinese%20FX%20Interventions%20Caused%20International%20Imbalances%20Contributed%20to%20U%20S%20%20Housing%20Bubble%20(2).pdf.

[2] *The Subprime Crisis: Size, Deleveraging, and Some Policy Options* (Paris: Organization for Economic Cooperation and Development, April 2008), pg. 2.

underwrite new debt and equities securities related to this object. Insurance firms, mutual funds, pension funds, and individual investors eagerly purchase these new securities. The rapid expansion of credit to invest in the object of speculation causes its price to rise – slowly at first and then increasingly rapidly. Paradoxically, the rising price of the object increases the demand for it. As commercial banks and other depository institutions extend more and more loans related to the object of speculation, the credit quality of the assets on the balance sheets of these financial firms may deteriorate as marginally qualified or even unqualified borrowers undertake debt to invest in this object.

3. **New economy**. As the object's price begins to rise, economists, government officials, financial services practitioners, and journalists proclaim that a new economic era has begun. Old valuation models are cast aside in favor of new valuation models that appear to have official sanction.

4. **Swindles**. As the object's price accelerates, market participants become euphoric, diminishing their skepticism of exaggerated claims. Spying opportunities, swindlers take advantage of market participants while their guard is down.

5. **Overtrading, revulsion, and discredit**. Ignoring the underlying fundamentals regarding an object's long-term profitability, market participants purchase additional units of the object based solely on its price momentum and often incur heavy debts to fund such purchases. As the existing market participants profit from their trades in the object, individuals and firms that do not normally trade in this object may undertake such purchases. Together these factors create a mania for the object. As the peak of the asset bubble approaches, expectations about the future profitability of trading in this object reach their zenith. This is the overtrading phase. Then, some unrelated events or sales of the object by insiders trigger a reappraisal. This is revulsion phase. Credit for additional purchases of this object may be curtailed, and interest rates may rise. Market participants that have borrowed heavily to invest in this object face growing financial difficulties because of high debt service costs. As the price of this object falls, highly leveraged market participants may be forced to sell their holdings of this object in "fire sales" to meet margin calls. This is the discredit phase.

6. **Financial panic and crisis management**. Market participants want to sell their holdings of this object at any price, but find few buyers. In extreme cases, asset markets may "seize up" and suspend trading. Financial services firms that lent to or bought debt and equity issues from participants in the market for this object will incur significant losses in their portfolios. If the losses are sufficiently large, some financial services firms may fail. Credit to individuals and firms unrelated to the object may become scarce and expensive. As economic damage from the collapsing price of this object spreads to other sectors, the financial panic may morph into a recession or even a depression.

7. **Aftermath**. Once the crisis abates, the public demands that firms and government make institutional reforms to make asset bubbles less likely in the future and to mitigate their economic damage.[3]

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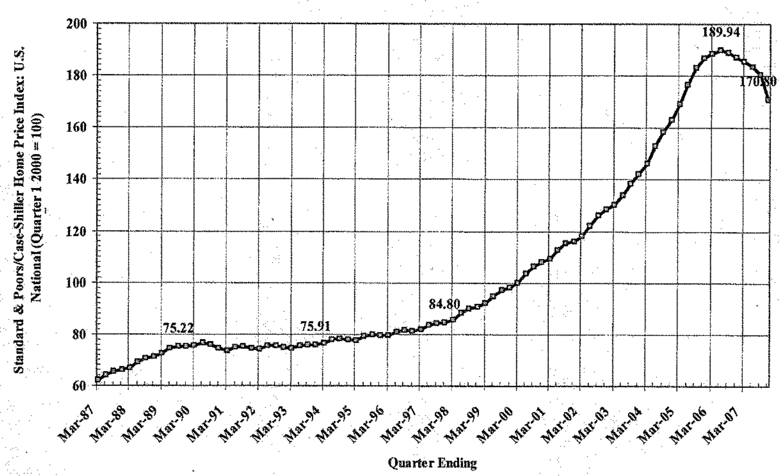
[3] See generally, Charles P. Kindleberger, *Manias, Panics, and Crashes: A History of Financial Crises* (1978; 4th ed., New York: John Wiley & Sons, 2000).

Graph 1.1 - Nominal U.S. Housing Prices Q1-1987 to Q4-2007



III. APPLYING KINDLEBERGER'S FRAMEWORK TO THE U.S. HOUSING BUBBLE

III.A. DISPLACEMENT OF EXISTING EXPECTATIONS

Some factors that had inflated the high-tech stock bubble during the late 1990s contributed to the housing bubble between 1998 and 2006. The Great Moderation, which refers to the combination of long and strong expansions, short and shallow recessions, and low inflation since 1983, increased the propensity for risk-taking throughout the U.S. economy.[4] Elevated rates of return on shares during the high-tech stock bubble conditioned many individuals to expect similar rates of return from other investments. After the high-tech stock bubble popped in the first quarter of 2000, many households turned to housing as a "safer" alternative that could still produce a high rate of return.

In testimony before the JEC, financial economist Robert J. Shiller, who authored *Irrational Exuberance*, observed, "The U.S. has, since the late 1990s, had its biggest national housing boom in history."[5] By all available measures, housing prices ballooned from 1998 to the second quarter of 2006. According to the Standard & Poor's/Case-Shiller U.S. National Home Price Index, nominal housing prices edged up by 0.9 percent from a peak in the third quarter of 1989 to the trough in the fourth quarter of 1993. When adjusted for inflation, however, real housing prices declined by 13.9 percent. During the next four years, nominal housing prices grew by 11.7 percent, while real housing prices edged up by 0.9

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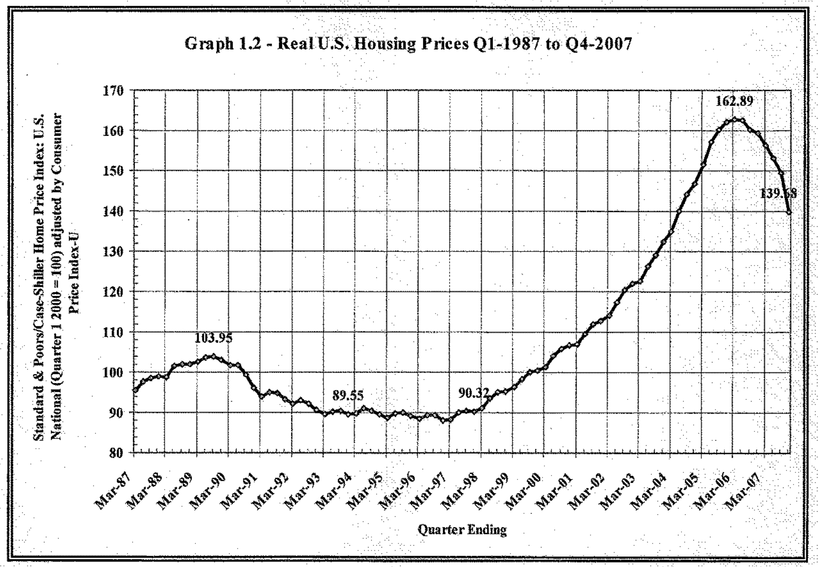
[4] U.S. expansions and contractions averaged 51 months and 11 months, respectively, in the seven complete business cycles between 1945 and 1982 as compared with 106 months and 8 months, respectively, in the two complete business cycles since 1982. Inflation, which had averaged 7.4 percent between 1968 and 1982, averaged 3.1 percent between 1983 and 2007.

[5] Written Statement of Robert J. Shiller before the Joint Economic Committee, Hearing on "Evolution of an Economic Crisis: The Subprime Lending Disaster and the Threat to the Broader Economy" (September 19, 2007), pg. 1.



percent. From the first quarter of 1998, nominal housing prices increased by 101.2 percent to a peak in the second quarter of 2006, while real housing prices increased by 80.3 percent to peak in the first quarter of 2006 (see Graphs 1.1 and 1.2).[6]

Over the long term, housing demand is a function of household formation and household income growth. Not surprisingly, housing prices had a relatively stable relationship with household income for decades prior to the housing bubble. The ratio of the median sales price of an existing single-family house to the median household income averaged 3.19 from 1969 to 1997. Beginning in 1998, however, housing prices increased at a substantially faster rate than household income. The ratio of the median sales price of an existing single-family house to the median household income increased from 3.46 in 1997 to a peak of 4.69 in 2005, 5.4 times the standard deviation of 0.28 between 1969 and 2006 (see Graph 1.3).[7]

Because renting an apartment is a close substitute for owning a home, housing prices and rental costs should change at approximately the same rate over the long term. Indeed, housing price increases had matched rental cost increases for decades prior to the housing bubble. From 1982 to 1997, the median sales price of an existing single-family house increased by an average of 4.2 percent a year, while the rental costs for a primary residence grew by an average of 4.1 percent a year. Beginning in 1998, housing prices grew at nearly twice the rate of rental costs. From 1998 to 2006, the median sales price of

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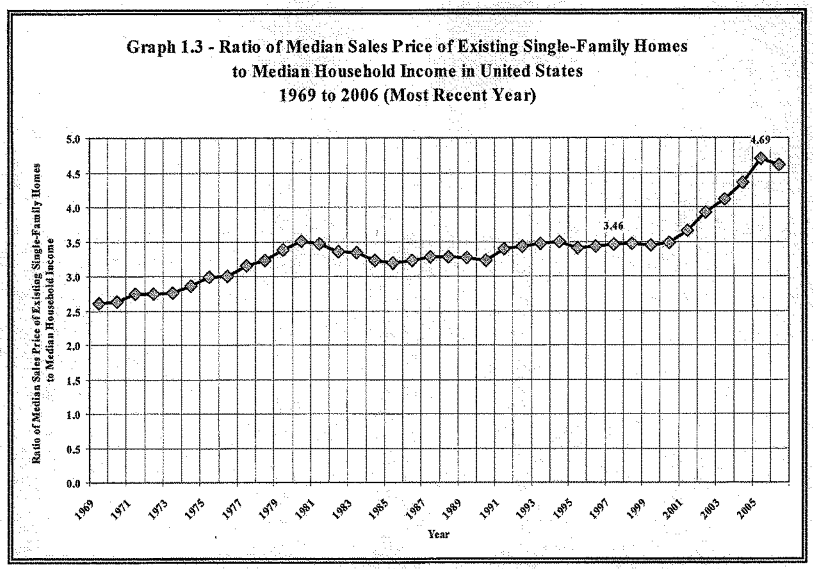
[6] S&P/Case-Shiller Home Price Index: U.S. National/Haver and Consumer Price Index-U: All Items/Bureau of Labor Statistics/Haver. Author calculated real index by adjusting nominal index by CPI. Author calculated percentage changes.

[7] Median Sales Price: Existing Single-Family Homes, United States (Current Dollars)/National Association of Realtors/Haver and Median Income of Households (Current Dollars)/Census Bureau/Haver. Author calculated ratios and standard deviations. N.B., 2006 is the latest year in which annual household income data are available.

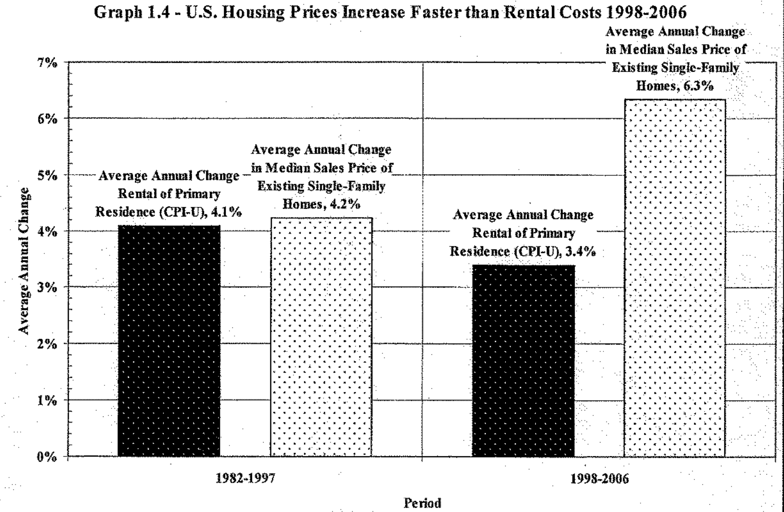


an existing single-family house ballooned by an average of 6.3 percent a year, while rental costs increased by an average of 3.4 percent a year (see Graph 1.4).[8]

Because of the prospects for easy and quick profits in housing, many speculators began "flipping" homes (i.e., buying new condominiums, townhouses, and single-family houses while under construction or existing units that need some remodeling work in the hope of reselling them once they are ready for capital gains). Speculative demand accelerated the growth of housing prices during the bubble.

[8] Consumer Price Index-U: Rent of Primary Residence, Percent Change - Year to Year/Bureau of Labor Statistics/Haver and Median Sales Price: Existing Single-Family Homes, United States (Current Dollars) Percent Change - Year to Year/National Association of Realtors/Haver.

Graph 1.4 - U.S. Housing Prices Increase Faster than Rental Costs 1998-2006



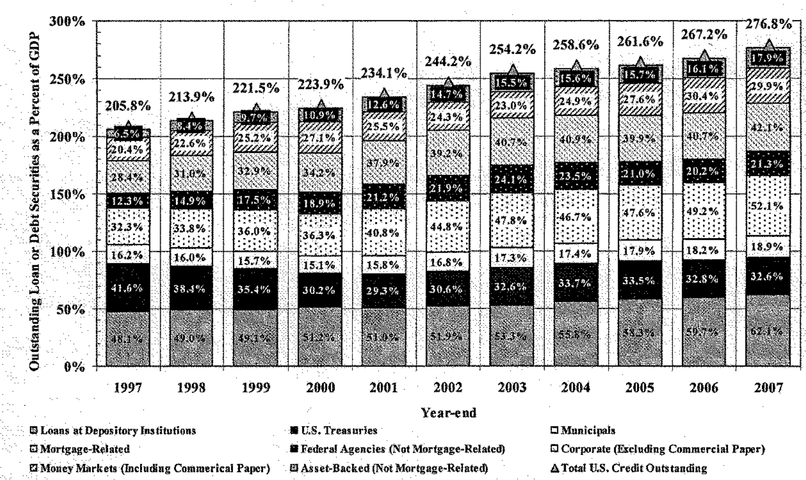
III.B. CREDIT EXPANSION

III.B.1. Size of the Credit Expansion

During the last decade, the credit available to U.S. households and non-financial firms grew much faster than GDP. Total credit outstanding including total debt securities outstanding in U.S. credit markets and total loans and leases outstanding at U.S. depository institutions grew from $17.088 trillion (equal to 205.8 percent of GDP) on December 31, 1997 to $38.325 trillion (equal to 276.8 percent of GDP) on December 31, 2007 (see Graph 1.5).

- Total debt securities outstanding in U.S. credit markets ballooned by 127.0 percent from $13.096 trillion (equal to 157.7 percent of GDP) on December 31, 1997 to $29.729 trillion (equal to 214.7 percent of GDP) on December 31, 2007 (see Table 1.A-1 in the Appendix). This growth was highly concentrated in three kinds of debt securities, two of which involve securitization:
    - Asset-backed securities outstanding increased by 361.4 percent from $536 billion (equal to 6.5 percent of GDP) on December 31, 1997 to $2.472 trillion (equal to 17.9 percent of GDP) on December 31, 2007 (see Table 1.A-1 in the Appendix).
    - Federal agency securities outstanding (other than mortgage-related) increased by 188.1 percent from $1.023 trillion (equal to 12.3 percent of GDP) on December 31, 1997 to $2.946 trillion (equal to 21.3 percent of GDP) on December 31, 2007 (see Table 1.A-1 in the Appendix).
    - Mortgage-related securities outstanding increased by 169.0 percent from $2.680 trillion (equal to 32.3 percent of GDP) on December 31, 1997 to $7.210 trillion (equal to 52.1 percent of GDP) on December 31, 2007 (see Table 1.A-1 in the Appendix).

Graph 1.5 - U.S. Credit Expansion 1997-2007



- Total loans and leases outstanding at U.S. depository institutions increased by 115.3 percent from \$3.992 trillion (equal to 48.1 percent of GDP) on December 31, 1997 to \$8.596 trillion (equal to 62.1 percent of GDP) on December 31, 2007 (see Graph 1.5 and Table 1.A-2 in the Appendix).[9]

III.B.2. Macro-Economic Causes of the Credit Expansion

III.B.2.a. Overly Accommodative Monetary Policy

The Federal Reserve's monetary policy, which proved, in retrospect, to be overly accommodative from the second quarter of 2002 through the third quarter of 2006, is the most important cause for the credit expansion that fueled the U.S. housing bubble. By reducing short-term interest rates, this monetary policy decreased the cost of funds for banks, other depository institutions, and highly leveraged non-depository financial institutions.[10] Flush with low cost funds, banks, financial institutions aggressively expanded credit by extending loans and purchasing debt and derivative securities.

The Federal Reserve controls the aggregate money supply by increasing or decreasing the reserves available to commercial banks through (1) open market operations (i.e., the purchase and sale of

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[9] Credit market data are from U.S. Department of Treasury, Federal Reserve System, Federal Agencies, Thomson Financial, Bloomberg, Securities Industry and Financial Market Association estimates. Nominal GDP data are from Bureau of Economic Analysis. Author calculated credit market data as a percent of GDP.

[10] Highly leveraged non-depository financial institutions (HLNDFIs) will be discussed in detail in part two. HLNDFIs include finance companies, financial government-sponsored enterprises (GSEs), hedge funds, investment banks, and bank-sponsored off-balance sheet entities (OBSEs).

government debt securities or foreign exchange) and (2) loans (historically referred to as discounts) to banks and other depository institutions (and recently primary dealers).[11]

Inflation occurs when the Federal Reserve increases the aggregate supply of money faster than the growth of aggregate demand for money. Generally, inflation simultaneously increases the prices of both (1) goods and services (e.g., raw materials, intermediate goods, final goods, labor, and other services) used during the current period and (2) assets (e.g., equities, real estate, and other investments) held for long-term gains. Under certain circumstances, however, inflation flows mainly through the asset channel. Then commonly used price indices such as the CPI, the GDP Deflator, or the PCE Deflator that measure changes in prices of goods and services do not record all of the price inflation that is actually occurring in the U.S. economy.

Economist and former Treasury official John B. Taylor developed the widely respected Taylor rule, which provides an objective guide for the Federal Reserve on how to adjust its target for the federal funds rate to redress deviations of the actual GDP growth rate from the potential GDP growth rate and the actual inflation rate with a targeted inflation rate (usually measured in terms of PCE Deflator). A comparison between the actual federal funds rate with the target federal funds rate implied by the Taylor rule allows Federal Reserve officials and the public to determine whether the monetary policy is too accommodative or too restrictive to achieve the Federal Reserve's twin goals of price stability and maximum sustained real GDP growth.

Comparing actual data to data from a Taylor rule-consistent simulation, Taylor found that the actual federal funds rate was significantly below the Taylor rule-consistent target federal funds rate from the second quarter of 2002 through the third quarter of 2006. He concluded that "a higher federal funds rate path (consistent with the Taylor rule) would have avoided much of the housing boom." He also

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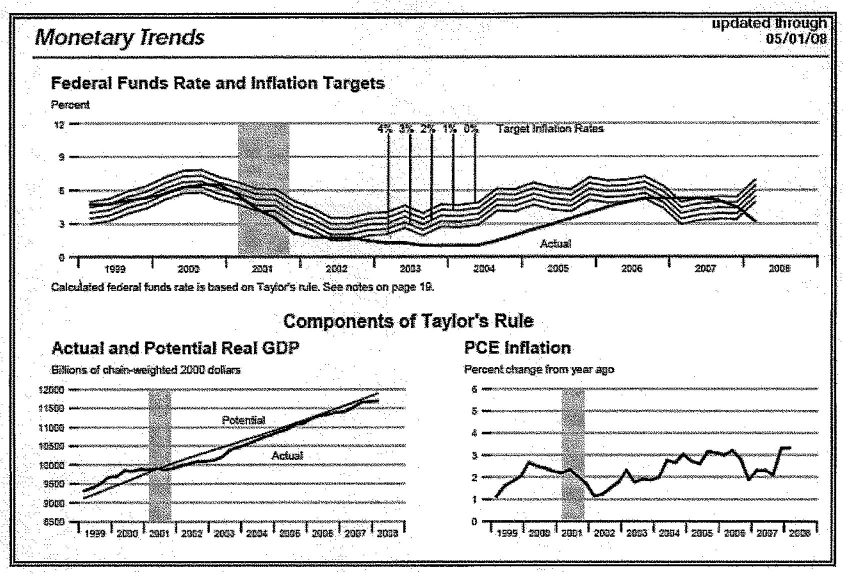
[11] A primary dealer is a bank or securities broker-dealer that may trade directly with the Federal Reserve. A primary dealer is required to make bids or offers when the Federal Reserve conducts open market operations, provide information to the Federal Reserve's trading desk, and to participate actively in Treasury auctions. The current primary dealers are:

1. BNP Paribas Securities Corp.
2. Banc of America Securities LLC
3. Barclays Capital Inc.
4. Bear, Stearns & Co., Inc.
5. Cantor Fitzgerald & Co.
6. Citigroup Global Markets Inc.
7. Countrywide Securities Corporation
8. Credit Suisse Securities (USA) LLC
9. Daiwa Securities America Inc.
10. Deutsche Bank Securities Inc.
11. Dresdner Kleinwort Wasserstein Securities LLC.
12. Goldman, Sachs & Co.
13. Greenwich Capital Markets, Inc.
14. HSBC Securities (USA) Inc.
15. J. P. Morgan Securities Inc.
16. Lehman Brothers Inc.
17. Merrill Lynch Government Securities Inc.
18. Mizuho Securities USA Inc.
19. Morgan Stanley & Co. Incorporated
20. UBS Securities LLC.



observed a strong negative correlation between changes in U.S. housing prices and changes in residential mortgage delinquency rates since 1980.[12]

Similarly, the Federal Reserve Bank of St. Louis also found that the federal fund rate was consistently below a Taylor-rule consistent rate from the third quarter of 2006 through the third quarter of 2006 (see above).[13] These findings provide empirical support for the conclusion that in retrospect the Federal Reserve pursued an overly accommodative monetary policy during the most frenzied years of housing price inflation.

III.B.2.b. Macro-Economic Supply Factors in U.S. Credit Markets

Macro-economic supply factors in U.S. credit markets involving globalization, stable inflationary expectations, and the foreign exchange policies of the PRC and other developed and developing economies in east, southeast, and south Asia restrained medium- and long-term U.S. interest rates during the first half of this decade.

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[12] John B. Taylor, "Housing and Monetary Policy," Presentation to Jackson Hole Conference (September 2007). Found at http://www.stanford.edu/~johntayl/Housing%20and%20Monetary%20Policy--Taylor--Jackson%20Hole%202007.pdf.

[13] *Monetary Trends*, Federal Reserve Bank of St. Louis (May 2008, Data updated through May 1, 2008), pg. 10. Found at: http://research.stlouisfed.org/publications/mt/page10.pdf.

III.B.2.b.i. Stable Inflationary Expectations due to Globalization and the Federal Reserve's Anti-Inflation Credibility

Globalization refers to the simultaneous liberalization of international trade and investment and the integration of the previously autarkic economies of the PRC, the former Soviet Bloc, and India with the rest of the world. Globalization greatly intensified price competition among tradable goods and services in the United States. The "China price" (i.e., price for manufactured goods from the PRC) effectively capped the prices that competing U.S. firms could charge for similar manufactured goods for a decade. To remain competitive, U.S. firms pressed their suppliers for lower prices and invested heavily in productivity-enhancing, labor-substituting equipment, especially computers, computerized machinery, and software. By reducing the demand for workers with routine skills, computer-related business investments moderated the real growth of labor compensation that one would have otherwise expected given the strength of the expansions that began in March 1991 and November 2001.[14] Consequently, globalization had first, second, and third order effects that moderated inflation in the prices of goods and services. Thus, globalization helped to divert any inflationary effects of monetary policy into higher asset prices, especially housing.

The appearance of price stability (as measured by the CPI, GDP Deflator, and PCE Deflator) from globalization reinforced the Federal Reserve's hard-won credibility from its successful disinflationary monetary policy during the 1980s and early 1990s. Consequently, U.S. lenders had stable inflationary expectations during the first half of this decade. Because of these stable inflationary expectations, U.S. lenders did not seek higher inflation premiums in medium- and long-term interest rates when the Federal Reserve's monetary policy deviated from the Taylor rule from the second quarter of 2002 to the third quarter of 2006.

III.B.2.b.ii. Foreign Exchange Policies of the People's Republic of China and Other Asian Governments

The foreign exchange policies of the People's Republic of China and the shadow foreign exchange policies by other developed and developing economies in east, southeast, and south Asia following the Asian Financial Crisis of 1997-98 also helped to suppress medium- and long- U.S. interest rates. The PRC intervened heavily in foreign exchange markets to maintain a fixed exchange rate between the PRC's renminbi and the U.S. dollar through July 20, 2005 and to suppress the appreciation of the renminbi relative to the dollar thereafter. By reducing the cost of Chinese labor, this policy encouraged inward foreign direct investment by foreign multinational firms in the labor-intensive manufacturing of low-tech goods and the labor-intensive final assembly of medium-tech consumer goods from imported parts.

Governments in other developed and developing Asian economies generally mimicked the PRC's foreign exchange to maintain the price competitiveness of their manufactured exports with China's. By buying U.S. dollars and selling their currencies, central banks in the PRC, India, Indonesia, Japan, Malaysia, South Korea, Taiwan, and Thailand added $2.06 trillion to their foreign exchange reserves from December 31, 1997 to the peak of the U.S. housing bubble on June 30, 2006. About 2/3 of these foreign exchange reserves were invested in U.S. dollar-denominated debt securities, mainly U.S. Treasuries and U.S. Agencies. Massive purchases by these central banks bid-up the prices of U.S. debt securities and consequently held down medium- and long-term U.S. interest rates.

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[14] Robert P. O'Quinn, *Information Technology Increases Earnings Differential and Drives Need for Education*, Research Report 110-6 (Prepared for the Joint Economic Committee, 110th Cong., 2nd sess., March 2008). Found at http://www.house.gov/jec/publications/110/rr110-6.pdf.

III.B.3. Effects of the Credit Expansion on Housing Prices

In summary, the Federal Reserve's overly accommodative monetary policy from the second quarter of 2002 to the third quarter of 2006 reduced short-term U.S. interest rates. Flush with low cost funds, banks, other depository institutions, and highly leveraged non-depository financial institutions eagerly expanded credit through loans and investments in debt and derivative securities. At the same time, stable inflationary expectations (arising from globalization and successful disinflation during the 1980s and early 1990s) and the massive purchases of U.S. debt securities by Asian central banks helped to keep medium- and long-term U.S. interest rates low.

Housing is the most interest rate sensitive sector of the U.S. economy. Low long-term U.S. interest rates during the first half of this decade further stimulated the already strong demand for housing among households, while financial institutions enthusiastically supplied the necessary residential mortgage credit. Along with micro-economic factors relating to financial services that will be discussed in part two of this study, an overly accommodative monetary policy and macro-economic supply factors in U.S. credit markets fueled a massive credit expansion that helped to inflate an unsustainable bubble in U.S. housing prices.

III.C. NEW ECONOMY

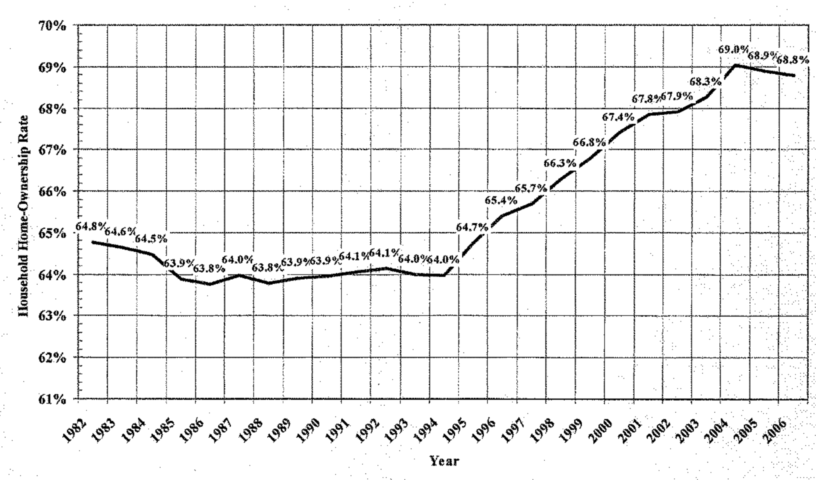
III.C.1. Promotion of Home Ownership to Financially Marginal and Minority Households without Regard to the Suitability of Home Ownership to Their Economic Situation

For decades, federal policymakers, realtors, developers, contractors, mortgage bankers, Fannie Mae, and Freddie Mac have promoted home-ownership as the fulfillment of the "American dream." Specifically, federal policymakers encouraged home-buying by:

- Enacting preferential income tax policies to reduce the cost of home ownership relative to renting (e.g., the deductibility of residential mortgage interest payments and real estate taxes without the inclusion of imputed rental value of owner-occupied housing as taxable income),[15]
- Chartering specialized financial institutions to channel funds to housing (e.g., savings banks, Federal Home Loan Banks, Fannie Mae, and Freddie Mac), and
- Offering FHA-insured residential mortgage loans with preferential interest rates and terms to financially marginal households.

[15] The mortgage interest and property tax deductions were introduced in the *Revenue Act of 1913*, which is also known as the *Underwood-Simmons Act* (ch. 16, 38 Stat. 116, October 3, 1913). Tax neutrality between home ownership and renting could be achieved either by (1) eliminating the deductibility of residential mortgage interest expense and related property tax payments, or by (2) adding an imputation for the rental value of owner-occupied housing to taxable income and then allowing the same deductions for an owner-occupied house as a rental house (including depreciation, residential mortgage interest payments, and property tax payments).

Graph 1.6 - U.S. Household Home-Ownership Rate 1982-2006



Both major political parties have promoted home ownership among financially marginal and minority households. In 1994, President Bill Clinton declared, "More Americans should own their own homes, for reasons that are economic and tangible, and reasons that are emotional and intangible, but go to the heart of what it means to harbor, to nourish, [and] to expand the American Dream."[16] According to Department of Housing and Urban Affairs (HUD) documents, Clinton's national home ownership strategy sought to "reduce down payment requirements and interest costs by making terms more flexible" and "increase the availability of alternative financing products in housing markets throughout the country."[17]

To pursue this strategy, the Clinton administration pressed depository institutions and mortgage banks to lower their credit standards and reduce down payment requirements. The Clinton administration promoted exotic alternatives to traditional fixed-rate fully amortizing residential mortgage loans, such as interest-only residential mortgage loans and negatively amortizing residential mortgage loans. These policies were intended to help financially marginal and minority households that could not qualify for traditional mortgage loans under normal credit standards to buy homes and thereby to increase the home ownership rate. The Bush administration left these Clinton administration policies in place.

The *Federal Housing Enterprises Financial Safety and Soundness Act* (also known as *the GSE Act*) was enacted in 1992.[18] Among other things, this act established the Office of Federal Housing Enterprise Oversight (OFHEO) in the Department of Housing and Urban Development as the federal regulator for Fannie Mae and Freddie Mac. The GSE Act also required the Department of Housing and

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[16] Department of Housing and Urban Development, *Urban Policy Brief* (August 1995), pg. 1. Found at http://www.huduser.org/publications/txt/hdbrk2.txt.
[17] Ibid., pg. 9.
[18] 12 U.S.C. 4501 et seq.

Urban Development (HUD) to establish three affordable housing goals (Low- and Moderate Income, Special Affordability, and Underserved Areas) for Fannie Mae and Freddie Mac to help financially marginal and minority households to purchase homes. HUD has issued three sets of progressively more ambitious affordable housing regulations under the GSE Act: December 1, 1995 for the years 1996-2000; October 31, 2000 for the years 2001-2004; and November 2, 2004 for the years 2005-2008.

Before 2000, Fannie Mae and Freddie Mac purchased relatively few subprime residential mortgage loans for securitization. That year, Fannie Mae and Freddie Mac purchased about 12 percent of all subprime residential mortgage loans originated (mainly Alt-A) for securitization.[19] To meet their more ambitious affordable housing goals in the 2000 affordable housing regulations under *GSE Act*, Fannie Mae and Freddie Mac stepped-up their purchases of the AAA-rated tranches of subprime-related CMOs issued by investment banks during the 2001-2005 period. By increasing the demand for these subprime-related derivative securities, Fannie Mae and Freddie Mac unwittingly encouraged the origination of subprime residential mortgage loans by mortgage banks and accelerated the private issuance of subprime-related RMBS and subprime-related CMOs by investment banks.

Collectively, these policies encouraged many financially marginal and minority households to buy housing during the bubble. The home ownership rate, which had averaged 64.3 percent of all households from 1982 to 1997, thereafter climbed to a peak of 69.0 percent in 2004 (see Graph 1.6).[20] Because of frequent moves, poor credit histories, lack of financial assets, and income fluctuations, many of these new home owners were unprepared or unable to discharge their mortgage obligations over time. In the end, the unintended consequences of these well-meaning policies designed to help financially marginal and minority households to buy homes were (1) leaving these households with unaffordable subprime residential mortgage loans, (2) making these households vulnerable to foreclosure after the housing bubble burst, (3) undermining the global financial system, and (4) causing a serious downturn in U.S. economic growth.

III.C.2. Few Official Warnings

In free market economy, government officials cannot prevent individuals and firms from making foolish investment decisions. However, government officials should publicly warn individuals, especially those in financial marginally households, about the risks that they assume when investing in the object of speculation during an asset bubble. Such moral suasion is not unprecedented. In 2004, for example, the Reserve Bank of Australia warned Australian households that the rapid increase in residential mortgage debt was fueling an unsustainable bubble in Australian housing prices.

As early as 2000, economist Robert Shiller, who had warned investors about a high-tech stock bubble in the late 1990s, began issuing warnings about the inflation of an unsustainable bubble in the U.S. housing market. Instead of warning American households that it might not be the best time to buy a home, officials at the Federal Reserve, the Treasury, and HUD ignored or downplayed troublesome signs of a housing bubble.

III.C.3. Cultural Re-enforcement of the Housing Mania

Moreover, an explosion of television shows and even entire cable networks that promoted home-buying, remodeling, and speculation in housing (e.g., *Flip This House* and *Sell This House* on A&E, *Flip That House* on the Learning Channel, and the Home and Garden Network) convinced many households that:

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[19] Kenneth Temkin, Jennifer E. H. Johnson, and Diane Levy, *Subprime Markets, the Role of GSEs, and Risk-Based Pricing*, Urban Institute Report prepared for the Department of Housing and Urban Development (March 2002). Found at http://www.huduser.org/Publications/pdf/subprime.pdf.
[20] Census Bureau/Haver.

- Housing was an investment rather than an expense;
- Housing was "safe" investment because housing prices never go down;
- The use of leverage increased the potential for high rates of return;
- Households could safely stretch their finances to buy or remodel housing;
- Households that waited to save a substantial down payment before buying housing risked being priced out of the market; and
- "Flipping" was a good strategy to make money.

This media promotion of housing as an investment caused a surge in the speculative demand for housing during the first half of this decade.

III.D. SWINDLES

Not surprisingly, swindlers took advantage of the unsuspecting during the housing bubble. The swindles included:

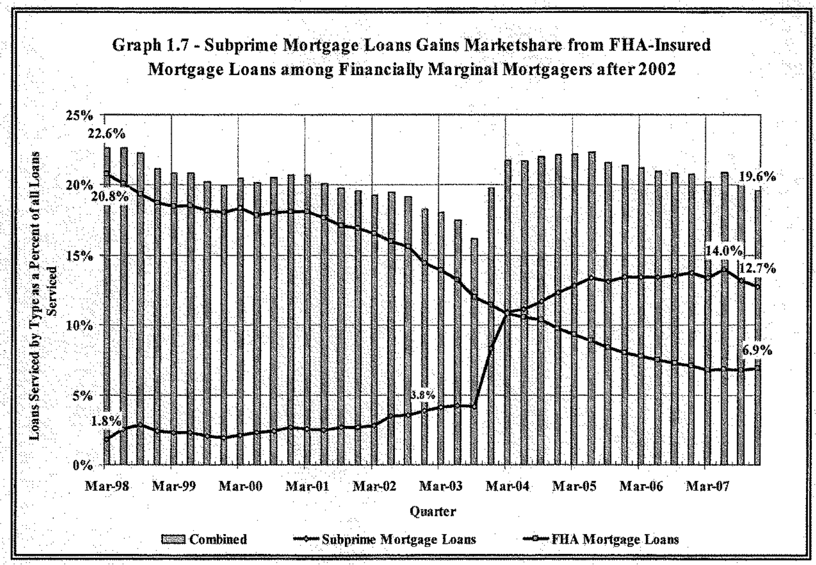
- Households that misrepresented their financial condition or committed other frauds to qualify for residential mortgage loans;
- Mortgage bankers that knowingly extended residential mortgage loans to unqualified households because securitization transferred the likely losses from poor credit standards and risky underwriting practices to the buyers of the derivative securities into which these loans were placed;
- Mortgage bankers that earned higher fees from issuers by pushing households that could qualify for prime residential mortgage loans to take out subprime residential mortgage loans instead; and
- Home builders and realtors that boosted their sales by encouraging households to take out subprime residential mortgage loans to speculate on housing.

Since the swindles associated with the subprime mortgage debacle have discussed extensively elsewhere, this study will not detail these swindles further.

III.E. OVERTRADING, REVULSION, AND DISCREDIT

Since the 1930s, financially marginal households that could not qualify for prime residential mortgage loans because of their inability to make a substantial down-payment, their high debt service-to-income ratios, their limited net worth, or their poor credit histories have obtained insured mortgage loans through the Federal Housing Administration (FHA) or Veterans Administration (VA) programs. For decades, most of the residential mortgage loans originated for financially marginal households were FHA-insured or to a lesser extent VA-insured.

During the housing bubble, the overall share of residential mortgage loans going to financially marginal households that could not obtain prime residential mortgage loans relatively remained stable. However, private subprime residential mortgage loans displaced FHA-insured residential mortgage loans as the primary source of mortgage credit for these households.



Several factors contributed to explosive market share growth in private subprime residential mortgage loans relative to FHA-insured residential mortgage loans. First, the decision of Fannie Mae and Freddie Mac to increase their purchases of privately issued subprime-related RMBS and AAA-tranches of subprime-related CMOs to meet their affordable housing goals under the 2000 regulations expanded the available funding for private subprime residential mortgage loans. Second, investment banks relaxed the credit standards for including subprime residential mortgage loans in RMBS and CMOs relative to the credit standards for FHA- or VA-insured residential mortgage loans. Mortgage banks began extending "no down payment" subprime residential mortgage loans and "no documentation" Alt-A residential mortgage loans, while the FHA and VA continued to require a down payment of at least 3 percent and the verification of income, assets, and liabilities to insure residential mortgage loans.

As a result, the market share of private subprime residential mortgage loans grew from 3.8 percent of all residential mortgage loans serviced in the fourth quarter of 2002 to a peak of 14.0 percent in the second quarter of 2007 before falling to 12.7 percent in fourth quarter of 2007. In contrast, the market share of FHA-insured residential mortgage loan market share fell steadily during the bubble from 20.8 percent in the first quarter of 1998 to a trough of 6.9 percent in the fourth quarter of 2007 (see Graph 1.7).[21]

To qualify as many financially marginal households as possible, mortgage banks and brokers promoted adjustable-rate subprime residential mortgage loans. These loans frequently had "teaser" provisions to reduce monthly payments during the first two years. These teasers included periods of low fixed interest rates, interest-only payments, or negative amortization. The share of adjustable-rate subprime mortgage loans increased from 20.6 percent of all subprime residential mortgage loans serviced in the first quarter of 1998 to 50.4 percent at the peak of the housing bubble in the second quarter of 2006.

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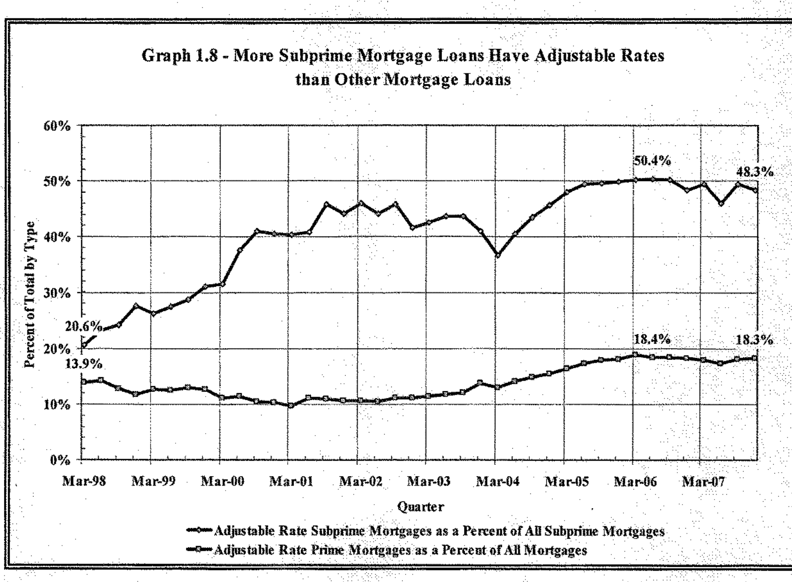
[21] Mortgage Bankers Association/Haver.



In contrast, the share of adjustable-rate prime residential mortgage loans as a percent of all prime residential mortgage loans increased modestly from 13.9 percent to 18.4 percent during the same period (see Graph 1.8).[22] As a result, interest rate risk became concentrated among financially marginal households that were least able to shoulder it.

III.E.1. Rising Delinquency and Foreclosure Rates among Subprime Borrowers

Before housing prices peaked, subprime borrowers could generally sell their homes at a profit or refinance them with another residential mortgage loan before the teasers expired, the interest rates adjusted and the monthly payments increased. Essentially, both subprime borrowers and their creditors relied on ever increasing housing prices rather than the borrower's income to repay subprime residential mortgage loans. After the peak, many subprime borrowers were unable to sell their homes or refinance their subprime residential mortgage loans. Subprime borrowers with adjustable-rate loans were especially hard hit as their interest rates reset and other "teaser" provisions that had lower monthly payments during the first two years expired. Delinquency and foreclosure rates for subprime residential mortgage loans soared.

From the fourth quarter of 2004 to fourth quarter of 2007, the delinquency rate for subprime adjustable-rate residential mortgage loans exploded from 9.83 percent to 20.02 percent, while the delinquency rate for subprime fixed-rate residential mortgage loans rose from 9.72 percent to 13.99 percent.[23] Delinquency rates for FHA-insured fixed-rate residential mortgage loans and FHA-insured adjustable-rate residential mortgage loans displayed similar increases. In contrast, the delinquency rates

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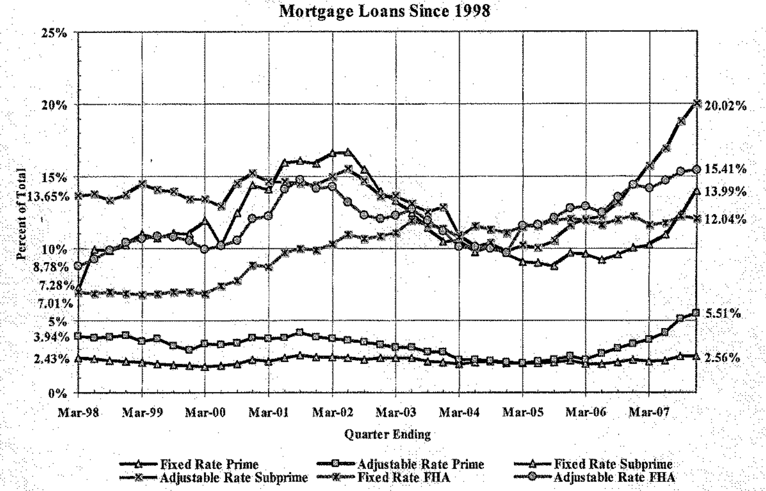
[22] Mortgage Bankers Association/Haver.
[23] Mortgage Bankers Association/Haver.

Graph 1.9 - Delinquency Percentages for Different Types of Residential Mortgage Loans Since 1998



for both prime fixed-rate residential mortgage loans and prime adjustable-rate residential mortgage loans did increase, but remained well below comparable rates for both subprime and FHA-insured residential mortgage loans. The delinquency rate for prime adjustable-rate residential mortgage loans increased from 2.11 to 5.51 percent, while the delinquency rate for prime fixed-rate residential mortgage loans edged up from 2.04 percent to 2.56 percent (see Graph 1.9).[24]

From 2000 to 2005, foreclosure initiation rates gradually declined on both subprime fixed-rate residential mortgage loans and subprime adjustable-rate residential mortgage loans. However, delinquency initiations rates have subsequently risen rather dramatically. The foreclosure initiation rate on fixed-rate subprime borrowers increased from 1.05 percent in the fourth quarter of 2005 to 1.52 percent in the fourth quarter of 2007. More ominously, the foreclosure initiation rate for adjustable-rate subprime borrowers jumped from 1.55 percent in the fourth quarter of 2005 to 5.29 percent in the fourth quarter of 2007 (see Graph 1.10).[25]

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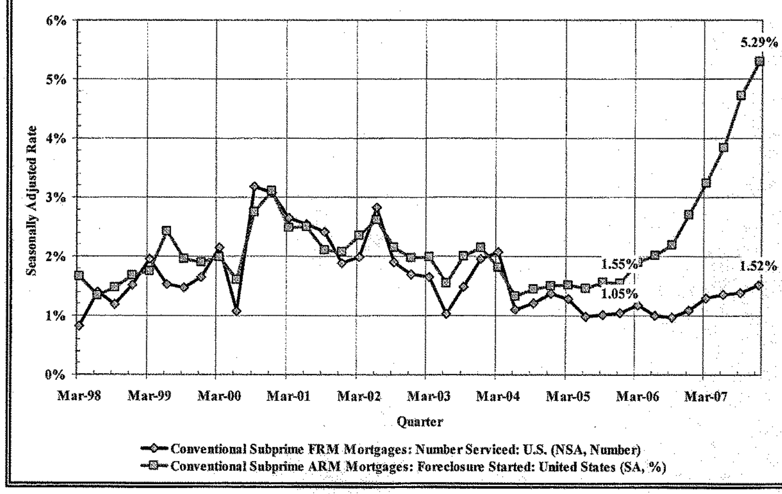
[24] Mortgage Bankers Association/Haver.
[25] Mortgage Bankers Association/Haver.

Graph 1.10 - Foreclosures Initiated against Subprime Mortgagers since 1998



III.E.2. Declining Value of Subprime CMOs

The rapid increase in delinquency and default rates reduced the value of subprime-related RMBS and tranches in subprime-related CMOs. The Markit ABX Indexes are indexes of credit default swaps[26] for twenty CMOs issued during preceding six months. Market participants use this index as a reference for the valuing tranches in specific CMOs. Each index is stated in terms of a percent of the face value of the underlying collateral. The ABX indexes in Table 1.1 depict declining implied values of subprime-related CMO tranches as delinquency and default rates among subprime borrowers rose. For example, Table 1.1 indicates that the implied value of the A tranche of any CMO in ABX 06(1) index fell from 84 percent of the face value of the underlying collateral in such CMO on September 7, 2007 to 33 percent on March 14, 2008.

Under Generally Accepted Accounting Principles, the owner of a tranche in subprime-related CMO must write down its value on the owner's financial statement by the loss implied from changes in the ABX indexes. This form of fair value accounting is often referred to as "mark-to-market" or "mark-to-model." While mark-to-market accounting and its economic effects will be discussed in detail in part two of this study, the last line in Table 1.1 displays the OECD's calculation of the global credit losses implied from a mark to the ABX index model on tranches of subprime-related CMOs during the past seven months.

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[26] Credit default swaps (CDSs) are the most common form of unfunded credit derivatives. In a physical CDS, the seller agrees to purchase a defaulted reference asset at its face value from the protection buyer. In a cash CDS, the seller agrees to pay the difference between the face value of the defaulted asset and its current market value. A CDS is functionally equivalent to financial guaranty insurance.

Table 1.1 – ABX Indexes and Implied Losses on Subprime-Related CMOs (ABX Indexes in Percent of the Face Value of the Underlying Collateral, Implied Losses in Billions)						
	7-Sep-07	19-Oct-07	30-Nov-07	11-Jan-08	22-Feb-08	14-Mar-08
ABX 06(1)						
AAA	98	98	95	94	93	86
AA	95	93	86	85	78	64
A	84	75	61	59	50	33
BBB	65	47	34	31	25	16
BBB-	57	38	30	25	19	15
Equity	0	0	0	0	0	0
ABX 06(2)						
AAA	97	94	87	84	78	71
AA	88	77	62	60	50	37
A	63	46	40	34	22	17
BBB	47	26	21	19	15	10
BBB-	40	24	19	18	13	10
Equity	0	0	0	0	0	0
ABX 07(1)						
AAA	95	91	77	73	65	56
AA	77	65	47	40	31	22
A	50	34	28	24	14	11
BBB	36	23	20	18	12	9
BBB-	33	21	19	17	12	9
Equity	0	0	0	0	0	0
ABX 07(2)						
AAA	95	92	72	70	63	52
AA	86	70	39	40	30	22
A	61	43	32	28	22	17
BBB	42	26	21	24	17	13
BBB-	39	24	21	22	16	13
Equity	0	0	0	0	0	0
Implied Loss (OECD)	**$292**	**$368**	**$568**	**$602**	**$715**	**$887**

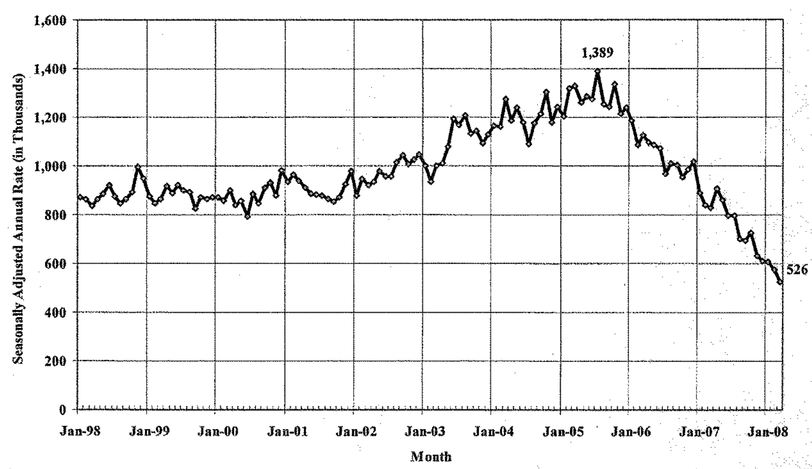
Source: OECD, pg. 5.

III.E.3. Subprime-Related Credit Losses

In a study presented at the annual U.S. Monetary Policy Forum sponsored by the Initiative on Global Markets at the University of Chicago Graduate School of Business and the Rosenberg Institute for Global Finance at the Brandeis International Business School on February 29, 2008, Greenlaw et al. used a variety of methods to estimate the global credit losses from subprime residential mortgage loans, subprime-related RMBS, and subprime-related CDOs. The authors found that global subprime-related credit losses will be $400 billion.[27]

[27] David Greenlaw, Jan Hatzius, Anil K. Kashyap, and Hyun Song Shin, *Leveraged Losses: Lessons from the Mortgage Market Meltdown*, Presented at the U.S. Monetary Policy Forum Conference (February 29, 2008).

Graph 1.11 - New Single-Family Home Sales (January 1998-March 2008)



In April 2008, the OECD used a default loss model to estimate global subprime-related credit losses. Assuming a 40 percent recovery, the OECD forecast global subprime-related credit losses will be \$422 billion.[28] The OECD discounted higher market assessments of \$887 billion implied losses from mark to ABX index model and \$702 billion implied from the reduction in market capitalization of major banks with subprime exposure because of price distortion during the current liquidity crisis.[29]

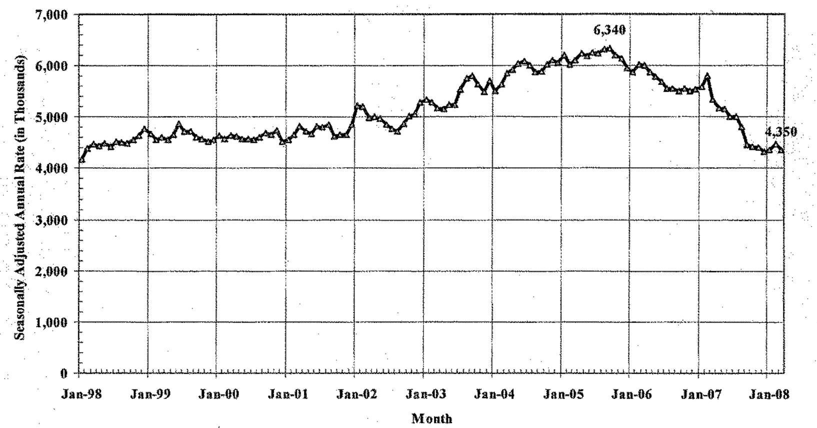
The Greenlaw et al. and OECD estimates represent only global subprime-related credit losses. The IMF, which does not break out subprime-related credit losses, forecasts the global credit losses all residential mortgage loans, RMBS, and CMOs of \$565 billion for all residential mortgage loans, RMBS, and CMOs.[30] The global credit losses for all loans, debt securities, and derivative securities that have occurred as a result of the global financial crisis that the U.S. housing bubble triggered on August 9, 2007 are likely far higher.

III.E.4. Housing Sales, Construction, and Construction-Related Employment

As housing prices neared their top, sales of new single-family homes peaked at a seasonally adjusted annual rate of 1.389 million in July 2005 and have subsequently fallen by 62.1 percent to a seasonally adjusted annual rate of 526,000 in March 2008 (See Graph 1.11).[31] Existing single-family home sales peaked at a seasonally adjusted annual rate of 6.340 million in September 2005 and have

[28] OECD, pp. 7-11.
[29] Ibid., pp. 5-6.
[30] *Global Financial Stability Report* (April 2008), pg. 50.
[31] Census Bureau/Haver. Author calculated percent change.

Graph 1.12 - Existing Single-Family Home Sales
(January 1998-March 2008)



subsequently fallen by 31.4 percent to a seasonally adjusted annual rate of 4.350 million in March 2008 (see Graph 1.12).[32]

New housing starts also peaked at a seasonally adjusted annual rate of 2.273 million in January 2006 and have subsequently fallen by 58.0 percent to a seasonally adjusted annual rate of 954,000 in March 2008 (see Graph 1.13).[33] As a result, payroll employment in residential construction and related specialty trades peaked at 3.444 million in March 2006 and has subsequently fallen by 13.6 percent to 2.977 million in April 2008.[34]

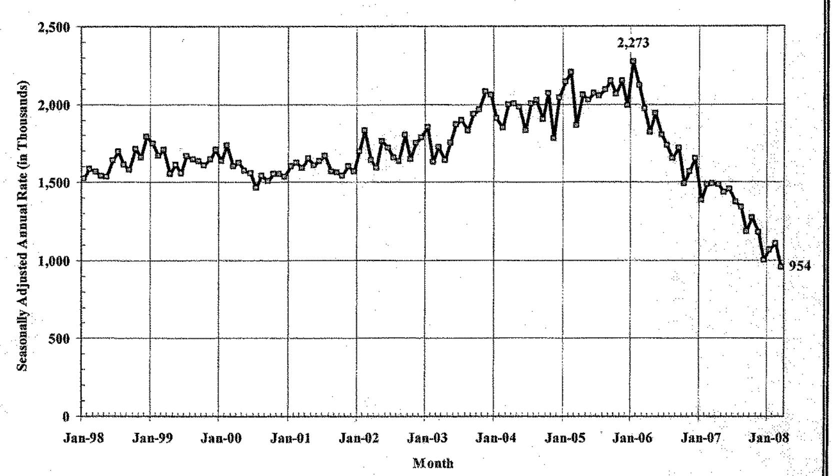
III.E.5. Bankruptcies among Mortgage Banks

During 2007, at least twenty-five mortgage banks that had specialized in originating subprime residential mortgage loans filed for bankruptcy. On April 2, 2007, New Century Financial, reportedly the largest mortgage bank that had specialized in originating subprime residential mortgage loans, filed for Chapter 11 bankruptcy. On March 26, 2008, a report of the bankruptcy court examiner found "significant improper and imprudent practices related to its loan originations, operations, accounting and financial reporting processes," and alleged that the auditor KPMG helped New Century to conceal its financial problems during 2005 and 2006.

However, failures and near failures among mortgage banks were not confined to those that specialized in the subprime segment. American Home Mortgage Investment Corporation, the tenth largest mortgage bank with a 3 percent share of the origination market, filed for Chapter 11 bankruptcy on August 6, 2007. Soon afterwards, Countrywide Financial, which operated the largest mortgage bank with

[32] National Association of Realtors/Haver. Author calculated percent change.
[33] Census Bureau/Haver. Author calculated percent change.
[34] Bureau of Labor Statistics/Haver. Author calculated percent change.

Graph 1.13 - New Housing Starts (January 1998-March 2008)



a 17 percent share of the origination market, a federal saving bank, an investment bank affiliate (which is a primary dealer), and insurance affiliate, came under extreme financial stress when a run began on its saving bank. The major credit rating agencies slashed Countrywide's credit ratings, curtailing Countrywide's access to commercial paper and bond markets and raising its interest costs. On August 16, 2007, Countrywide narrowly avoid bankruptcy after securing an emergency $11.5 billion line of credit from a consortium of forty commercial banks. On August 23, 2007, Bank of America agreed to inject $2 billion of new capital into Countrywide in exchange for preferred stock. On January 11, 2008, Bank of America agreed to buy Countrywide for $4.1 billion, about one-sixth of its market value one year earlier.

IV. CONCLUSION

This JEC study examines the inflation, popping, and deflation of an unprecedented housing bubble in the United States and the resulting global financial crisis through a comparison with Kiddleberger's asset bubble framework. Part one of this study reviewed stage one through stage five as they apply to the U.S housing bubble.

A number of well-intentioned, but misguided federal policies and macro-economic factors in U.S. credit markets helped to inflate housing prices. In descending order of importance, they include:

- The Federal Reserve's monetary policy was overly accommodative from the second quarter of 2002 through the third quarter of 2006 when compared with the Taylor rule. By lowering the cost of funds for banks, other depository institutions, and highly leveraged non-depository financial institutions, this monetary policy encouraged these financial institutions to expand credit aggressively.
- At the same time, macro-economic supply factors in U.S. credit markets reinforced this overly accommodative monetary policy by restraining medium- and long-term U.S. interest rates during the first half of this decade. Housing is the most interest rate-

sensitive sector of the U.S. economy. Along with micro-economic factors relating to financial services, low long-term interest rates further stimulated the already strong demand for housing among households, while financial institutions enthusiastically supplied the necessary residential mortgage credit.

- Globalization greatly intensified the price competition among tradable goods and services in the United States. This helped to channel the inflationary effects of monetary policy away from the prices of goods and services and into asset prices, especially housing. The inflation-suppressing effects of globalization on the prices of goods and services as recorded by CPI, the GDP Deflator, and the PCE Deflator combined with the Federal Reserve's successful disinflationary monetary policy during the 1980s and early 1990s combined to foster stable inflationary expectations. In turn, stable inflationary expectations dissuaded U.S. lenders from seeking higher inflation premiums in medium-term and long-term U.S. interest rates.

- Since the Asian Financial Crisis of 1997-98, the People's Republic of China has intervened heavily in foreign exchange markets to maintain a fixed exchange rate between the Chinese renminbi and the U.S. dollar through July 20, 2005 and to suppress the appreciation of the renminbi relative to the dollar thereafter. Other Asian governments mimicked the PRC's foreign exchange policy to maintain the price competitiveness of their manufactured exports with China's. By buying U.S. dollars and selling their currencies simultaneously, central banks in the PRC, India, Indonesia, Japan, Malaysia, South Korea, Taiwan, and Thailand added $2.06 trillion to their foreign exchange reserves from December 31, 1997 to the peak of the U.S. housing bubble on June 30, 2006. About 2/3 of these newly acquired foreign exchange reserves were invested in U.S. dollar-denominated debt securities, mainly U.S. Treasuries and U.S. Agencies. Massive purchases by these central banks bid-up the prices of U.S. debt securities and consequently held down medium- and long-term U.S. interest rates

- Federal policymakers adopted a number of policies to promote home ownership especially among financially marginal and minority households without regard to the suitability of home ownership for their economic circumstances or the conditions in the housing market.

- Federal policymakers failed to warn the public that the housing bubble was unsustainable and to discourage financially marginal households from taking on excessive non-conventional mortgage debt to buy homes as housing prices inflated.

Part two of this JEC study will scrutinize Kindleberger's stage two – credit expansion (micro-economic factors relating to financial services) – and stage six – financial panic and crisis management as they apply to the global financial crisis that arose on August 9, 2007 from the popping of the U.S. housing bubble. Finally, part three of this study will examine stage seven – aftermath – and then will offer some lessons learned for policymakers.

Robert P. O'Quinn
Senior Economist

APPENDIX

Table A-1 – U.S. Credit Markets – Outstanding Debt Securities ($ in billions & as a percent of GDP) Year-end 1997-2007

EOY	Total U.S. Treasury	% GDP	*Bills*	*% GDP*	*Notes*	*% GDP*	*Bonds*	*% GDP*	*TIPS*	*% GDP*	Municipal	% GDP
1997	$3,456.8	41.6%	*$715.4*	*8.6%*	*$2,106.0*	*25.4%*	*$587.3*	*7.1%*	*$33.0*	*0.4%*	$1,348.5	16.2%
1998	$3,355.5	38.4%	*$691.0*	*7.9%*	*$1,960.7*	*22.4%*	*$621.2*	*7.1%*	*$67.6*	*0.8%*	$1,402.7	16.0%
1999	$3,281.0	35.4%	*$737.1*	*8.0%*	*$1,784.5*	*19.3%*	*$643.7*	*6.9%*	*$100.7*	*1.1%*	$1,457.2	15.7%
2000	$2,966.9	30.2%	*$646.9*	*6.6%*	*$1,557.3*	*15.9%*	*$626.5*	*6.4%*	*$121.2*	*1.2%*	$1,480.7	15.1%
2001	$2,967.5	29.3%	*$811.2*	*8.0%*	*$1,413.9*	*14.0%*	*$602.3*	*5.9%*	*$140.1*	*1.4%*	$1,603.5	15.8%
2002	$3,204.9	30.6%	*$888.7*	*8.5%*	*$1,580.9*	*15.1%*	*$588.5*	*5.6%*	*$146.8*	*1.4%*	$1,762.9	16.8%
2003	$3,574.9	32.6%	*$928.8*	*8.5%*	*$1,905.7*	*17.4%*	*$564.2*	*5.1%*	*$176.2*	*1.6%*	$1,900.5	17.3%
2004	$3,943.6	33.7%	*$1,001.2*	*8.6%*	*$2,157.1*	*18.5%*	*$539.4*	*4.6%*	*$245.9*	*2.1%*	$2,031.0	17.4%
2005	$4,165.8	33.5%	*$960.7*	*7.7%*	*$2,360.2*	*19.0%*	*$516.4*	*4.2%*	*$328.6*	*2.6%*	$2,225.9	17.9%
2006	$4,322.9	32.8%	*$940.8*	*7.1%*	*$2,440.5*	*18.5%*	*$530.5*	*4.0%*	*$411.1*	*3.1%*	$2,403.2	18.2%
2007	$4,516.8	32.6%	*$999.5*	*7.2%*	*$2,487.4*	*18.0%*	*$558.4*	*4.0%*	*$471.4*	*3.4%*	$2,617.4	18.9%
10-year Δ	30.7%		*39.7%*		*18.1%*		*-4.9%*		*1328.5%*		94.1%	

Sources: Securities Industry & Financial Markets Association, Statistical Tables and Department of Commerce, Bureau of Economic Analysis, National Accounts

EOY	Total Mortgage-Related	% GDP	*Federal Agency Mortgage-Related*	*% GDP*	*Private Mortgage-Related*	*% GDP*	Federal Agencies (excluding Mortgage-Related)	% GDP	Corporate (excluding Commercial Paper)	% GDP
1997	$2,680.2	32.3%					$1,022.6	12.3%	$2,359.0	28.4%
1998	$2,955.2	33.8%					$1,300.6	14.9%	$2,708.5	31.0%
1999	$3,334.2	36.0%	*$2,954.2*	*31.9%*	*$380.1*	*4.1%*	$1,620.0	17.5%	$3,046.5	32.9%
2000	$3,565.8	36.3%	*$3,155.8*	*32.1%*	*$410.0*	*4.2%*	$1,854.6	18.9%	$3,358.4	34.2%
2001	$4,127.6	40.8%	*$3,631.5*	*35.9%*	*$495.9*	*4.9%*	$2,149.6	21.2%	$3,836.4	37.9%
2002	$4,686.4	44.8%	*$4,084.3*	*39.0%*	*$602.1*	*5.8%*	$2,292.8	21.9%	$4,099.5	39.2%
2003	$5,238.6	47.8%	*$4,496.4*	*41.0%*	*$742.2*	*6.8%*	$2,636.7	24.1%	$4,458.4	40.7%
2004	$5,455.8	46.7%	*$4,570.4*	*39.1%*	*$885.4*	*7.6%*	$2,745.1	23.5%	$4,785.1	40.9%
2005	$5,915.6	47.6%	*$4,798.2*	*38.6%*	*$1,118.4*	*9.0%*	$2,613.8	21.0%	$4,960.0	39.9%
2006	$6,492.4	49.2%	*$5,220.2*	*39.6%*	*$1,284.1*	*9.7%*	$2,660.1	20.2%	$5,365.0	40.7%
2007	$7,210.3	52.1%	*$5,889.4*	*42.5%*	*$1,320.9*	*9.5%*	$2,946.3	21.3%	$5,825.4	42.1%
10-year Δ	169.0%						188.1%		146.9%	

EOY	Total Money Markets	% GDP	*Bankers Acceptances*	*% GDP*	*Large Time Deposits*	*% GDP*	*Commercial Paper Subtotal*	*% GDP*	*Non-financial*	*% GDP*	*Financial*	*% GDP*	*Asset-Backed*	*% GDP*
1997	$1,692.8	20.4%	*$20.9*	*0.3%*	*$713.4*	*8.6%*	*$958.5*	*11.5%*						
1998	$1,977.8	22.6%	*$11.5*	*0.1%*	*$805.3*	*9.2%*	*$1,161.0*	*13.3%*						
1999	$2,338.8	25.2%	*$8.6*	*0.1%*	*$936.4*	*10.1%*	*$1,393.8*	*15.0%*						
2000	$2,662.6	27.1%	*$7.9*	*0.1%*	*$1,052.6*	*10.7%*	*$1,602.1*	*16.3%*						
2001	$2,587.2	25.5%	*$4.8*	*0.0%*	*$1,121.0*	*11.1%*	*$1,461.4*	*14.4%*						
2002	$2,545.7	24.3%	*$4.6*	*0.0%*	*$1,171.0*	*11.2%*	*$1,370.1*	*13.1%*						
2003	$2,519.9	23.0%	*$4.4*	*0.0%*	*$1,226.8*	*11.2%*	*$1,288.7*	*11.8%*						
2004	$2,904.2	24.9%	*$4.1*	*0.0%*	*$1,505.1*	*12.9%*	*$1,395.0*	*11.9%*						
2005	$3,433.7	27.6%	*$4.1*	*0.0%*	*$1,789.5*	*14.4%*	*$1,640.1*	*13.2%*						
2006	$4,008.8	30.4%	*$0.5*	*0.0%*	*$2,050.8*	*15.5%*	*$1,957.5*	*14.8%*	*$144.2*	*1.1%*	*$736.7*	*5.6%*	*$1,076.6*	*8.2%*
2007	$4,140.2	29.9%	*$0.3*	*0.0%*	*$2,352.1*	*17.0%*	*$1,788.1*	*12.9%*	*$166.2*	*1.2%*	*$804.3*	*5.8%*	*$817.6*	*5.9%*
10-year Δ	144.6%		*-98.6%*		*229.7%*		*86.6%*							

EOY	Total Asset-Backed Securities	% GDP	*Automobile Loans*	*% GDP*	*Credit Card*	*% GDP*	*Equipment Leases*	*% GDP*	*Home Equity Loans*	*% GDP*
1997	$535.8	6.5%	*$77.0*	*0.9%*	*$214.5*	*2.6%*	*$35.2*	*0.4%*	*$90.2*	*1.1%*
1998	$731.5	8.4%	*$86.9*	*1.0%*	*$236.7*	*2.7%*	*$41.4*	*0.5%*	*$124.2*	*1.4%*
1999	$900.8	9.7%	*$114.1*	*1.2%*	*$257.9*	*2.8%*	*$51.4*	*0.6%*	*$141.9*	*1.5%*
2000	$1,071.8	10.9%	*$133.1*	*1.4%*	*$306.3*	*3.1%*	*$58.8*	*0.6%*	*$151.5*	*1.5%*
2001	$1,281.1	12.6%	*$187.9*	*1.9%*	*$361.9*	*3.6%*	*$70.2*	*0.7%*	*$185.1*	*1.8%*
2002	$1,543.3	14.7%	*$221.7*	*2.1%*	*$397.9*	*3.8%*	*$68.3*	*0.7%*	*$286.5*	*2.7%*
2003	$1,693.7	15.5%	*$234.5*	*2.1%*	*$401.9*	*3.7%*	*$70.1*	*0.6%*	*$346.0*	*3.2%*
2004	$1,827.8	15.6%	*$232.1*	*2.0%*	*$390.7*	*3.3%*	*$70.7*	*0.6%*	*$454.0*	*3.9%*
2005	$1,955.2	15.7%	*$219.7*	*1.8%*	*$356.7*	*2.9%*	*$61.8*	*0.5%*	*$551.1*	*4.4%*
2006	$2,130.4	16.1%	*$202.4*	*1.5%*	*$339.9*	*2.6%*	*$53.1*	*0.4%*	*$581.2*	*4.4%*
2007	$2,472.4	17.9%	*$198.5*	*1.4%*	*$347.8*	*2.5%*	*$46.2*	*0.3%*	*$585.6*	*4.2%*
10-year Δ	361.4%		*157.8%*		*62.1%*		*31.3%*		*549.2%*	

EOY	*Manufactured Housing*	*% GDP*	*Student Loans*	*% GDP*	*Other*	*% GDP*	**Grand Total U.S. Credit Market**	**% GDP**
1997	*$19.1*	*0.2%*	*$18.3*	*0.2%*	*$81.5*	*1.0%*	**$13,095.7**	**157.7%**
1998	*$25.0*	*0.3%*	*$25.0*	*0.3%*	*$192.3*	*2.2%*	**$14,431.8**	**165.0%**
1999	*$33.8*	*0.4%*	*$36.4*	*0.4%*	*$265.3*	*2.9%*	**$15,978.5**	**172.4%**
2000	*$36.9*	*0.4%*	*$41.1*	*0.4%*	*$344.1*	*3.5%*	**$16,960.8**	**172.8%**
2001	*$42.7*	*0.4%*	*$60.2*	*0.6%*	*$373.2*	*3.7%*	**$18,552.9**	**183.2%**
2002	*$44.5*	*0.4%*	*$74.4*	*0.7%*	*$449.9*	*4.3%*	**$20,135.5**	**192.3%**
2003	*$44.3*	*0.4%*	*$99.2*	*0.9%*	*$497.7*	*4.5%*	**$22,022.7**	**200.9%**
2004	*$42.2*	*0.4%*	*$115.2*	*1.0%*	*$522.9*	*4.5%*	**$23,692.6**	**202.7%**
2005	*$34.5*	*0.3%*	*$153.2*	*1.2%*	*$578.2*	*4.7%*	**$25,270.0**	**203.2%**
2006	*$28.8*	*0.2%*	*$183.6*	*1.4%*	*$741.4*	*5.6%*	**$27,382.8**	**207.5%**
2007	*$26.9*	*0.2%*	*$243.9*	*1.8%*	*$1,023.5*	*7.4%*	**$29,728.8**	**214.7%**
10-year Δ	*40.8%*		*1232.8%*		*1155.8%*		**127.0%**	

Table A-2 – U.S. Depository Institutions – Outstanding Loans (in billions & percent of GDP) Year-end 1997-2007

EOY	Commercial Banks	% GDP	Savings Banks	% GDP	Credit Unions	% GDP	Grand Total Depository Institutions	% GDP
1997	$3,055.4	36.8%	$697.8	8.4%	$238.4	2.9%	$3,992.1	48.1%
1998	$3,309.3	37.8%	$720.5	8.2%	$252.3	2.9%	$4,282.5	49.0%
1999	$3,515.5	37.9%	$760.4	8.2%	$278.9	3.0%	$4,555.4	49.1%
2000	$3,887.3	39.6%	$827.0	8.4%	$309.3	3.2%	$5,024.2	51.2%
2001	$3,957.8	39.1%	$872.0	8.6%	$330.8	3.3%	$5,161.1	51.0%
2002	$4,183.0	40.0%	$895.9	8.6%	$355.2	3.4%	$5,434.6	51.9%
2003	$4,444.6	40.5%	$1,004.7	9.2%	$388.5	3.5%	$5,838.3	53.3%
2004	$4,886.9	41.8%	$1,206.3	10.3%	$428.6	3.7%	$6,522.4	55.8%
2005	$5,456.0	43.9%	$1,323.3	10.6%	$474.2	3.8%	$7,254.1	58.3%
2006	$6,129.8	46.5%	$1,237.0	9.4%	$511.1	3.9%	$7,878.5	59.7%
2007	$6,785.7	49.0%	$1,259.9	9.1%	$550.0	4.0%	$8,596.1	62.1%
10-year Δ	122.1%		80.5%		130.7%		115.3%	

Sources: Federal Reserve Board, Flow of Funds and Department of Commerce, Bureau of Economic Analysis, National Accounts

JOINT ECONOMIC COMMITTEE
SENATOR CHARLES E. SCHUMER, CHAIRMAN
REPRESENTATIVE CAROLYN B. MALONEY, VICE CHAIR

PREPARED STATEMENT OF REPRESENTATIVE CAROLYN MALONEY, VICE CHAIR

Good morning. I would like to thank Chairman Schumer for holding this timely hearing to examine the economic outlook, especially in light of the sobering developments in our financial markets in recent days and months. I want to welcome Chairman Bernanke and thank him for testifying here today.

What started out as a subprime crisis last summer has completely changed the face of Wall Street and created a tinderbox that poses the greatest threat to our financial system and our economy since the Great Depression.

Despite a series of increasingly aggressive and unprecedented actions by the Federal Reserve and Treasury Department, continuing asset losses and deleveraging have continued to undermine confidence in financial institutions, choked off the availability of credit, and led to worrisome concerns about a domino effect from the interlocking relationships between thousands of investors and banks worldwide.

Americans' economic security, indeed our future, depends on a swift resolution of this problem. I am hopeful that we can work in a bipartisan manner to stabilize our economy, but there will be no blank check for the Administration.

Treasury Secretary Paulson's $700 billion proposal for the federal government to buy toxic assets is the equivalent of one-quarter of the entire Federal budget in 2008—more than the total amount we spent this year on either the defense of our country or the entire Social Security system.

American taxpayers cannot be asked to pour so much of their good money after bad. Proper oversight of the Treasury's proposed facility is imperative, so we are amending the proposal to include a system that instills accountability. In addition, it would be inappropriate to have CEOs collecting "golden parachute" compensation packages as they leave their jobs, when taxpayers are on the hook for their mistakes. We are also pressing for an equity stake in firms in exchange for bailing them out.

Clearly, the distressed balance sheets of our elite financial institutions threaten our economic well-being and require government action. But rising unemployment, continued income stagnation, and the bursting of the housing bubble are driving household balance sheets deep in the red at the same time. The housing wealth that consumers once relied on to fuel their spending—and the economy relied on to grow—is quickly evaporating as house prices continue their downward spiral. That's causing consumer spending to drop and sending foreclosures to record levels—a major source of the problems on Wall Street.

Ordinary homeowners also deserve some direct assistance. We need to help them renegotiate their bubble-inflated mortgages so they can stay in their homes and provide further economic stimulus to avoid a deep downturn. By providing aid to the states, we can preserve families' health insurance, extend unemployment benefits, provide energy assistance, and invest in crumbling infrastructure to create good jobs at good wages.

We are also working to help protect families on Main Street facing unfair practices from the credit card industry. Yesterday, the House passed the Credit Cardholders' Bill of Rights (HR 5422), to provide crucial protections against unfair, but all too common, credit card practices.

Finally, our regulatory system is in serious need of renovation because financial innovation has surpassed our ability to protect consumers and hold institutions accountable. In order to prevent this sort of crisis from happening again, the next Congress and the next President will have to rethink our fragmented system and correct the systemic risk that we have witnessed.

Mr. Chairman, thank you for holding this hearing and I look forward to Chairman Bernanke's insights on the best policies for strengthening the economy.

PREPARED STATEMENT OF REPRESENTATIVE RON PAUL

Mr. Chairman, I believe that our economy faces a bleak future, particularly if the latest $700 billion bailout plan ends up passing. We risk committing the same errors that prolonged the misery of the Great Depression, namely keeping prices from falling. Instead of allowing overvalued financial assets to take a hit and trade on the market at a more realistic value, the government seeks to purchase overvalued or worthless assets and hold them in the unrealistic hope that at some point in the next few decades, someone might be willing to purchase them.

One of the perverse effects of this bailout proposal is that the worst-performing firms, and those who interjected themselves most deeply into mortgage-backed securities, credit default swaps, and special investment vehicles will be those who benefit the most from this bailout. As with the bailout of airlines in the aftermath of 9/11, those businesses who were the least efficient, least productive, and least concerned with serving consumers are those who will be rewarded for their mismanagement with a government handout, rather than the failure of their company that is proper to the market. This creates a dangerous moral hazard, as the precedent of bailing out reckless lending will lead to even more reckless lending and irresponsible behavior on the part of financial firms in the future.

This bailout is a slipshod proposal, slapped together haphazardly and forced on an unwilling Congress with the threat that not passing it will lead to the collapse of the financial system. Some of the proposed alternatives are no better, for instance those which propose a government equity share in bailed-out companies. That we have come to a point where outright purchases of private sector companies is not only proposed but accepted by many who claim to be defenders of free markets bodes ill for the future of American society.

As with many other government proposals, the opportunity cost of this bailout goes unmentioned. $700 billion tied up in illiquid assets is $700 billion that is not put to productive use. That amount of money in the private sector could be used to research new technologies, start small business that create thousands of jobs, or upgrade vital infrastructure. Instead, that money will be siphoned off into unproductive assets which may burden the government for years to come. The great French economist Frederic Bastiat is famous for explaining the difference between what is seen and what is unseen. In this case the bailout's proponents see the alleged benefits, while they fail to see the jobs, businesses, and technologies not created due to this utter waste of money.

The housing bubble has burst, unemployment is on the rise, and the dollar weakens every day. Unfortunately our leaders have failed to learn from the mistakes of previous generations and continue to lead us down the road toward economic ruin.

PREPARED STATEMENT OF SENATOR SAM BROWNBACK

Mr. Chairman, we are at a crossroad. We face the most monumental economic decisions in modern time. This is not the time to posture in pursuit of political advantage. Two things are certain: Inaction is not an option, and we have to get this right. To date, we have dealt with symptoms of the crisis. We must now deal with the cancer itself.

The American people are angry. They have every right to be. To most, this looks like just one more example of the government making them pay for someone else's failures. To paraphrase President Reagan, they want the government to walk by their side and stop riding on their back.

This is at its core about the interaction of Wall Street and Main Street. Absent action, if there is a prolonged period in which credit stops flowing, there is a severe adverse threat to the financial conditions of every household, every American family, and every American business, small and large.

This is not an abstract fear. I am sure that all of us on this committee have heard real world examples of how this crisis is hitting the real economy from our constituents and colleagues. For example, a major automobile seller was unable to obtain funding at workable rates to finance sales of its automobiles. Since August 2007, 87 lenders have exited or temporarily stopped making student loans backed by the Federal government. If your child is counting on a student loan for next semester's education, it could be tough to get if things continue the way they have been going. 67% of small business owners, who are the engines of job creation in our economy, report that their businesses have been affected by the credit crunch. If we have a prolonged period in which credit flows virtually dry up, we can count on failures of businesses to be able to make payrolls, employ workers, and continue operations. Failure to act can result in severely depressed economic conditions.

So, I believe that it would be irresponsible to not act. But, I also believe that we must act responsibly. Acting responsibly includes looking out for taxpayers as we consider devoting large amounts of taxpayer funds to resolve matters in credit markets.

First, Chairman Bernanke, I would like you to explain what you feel would happen if we did not act and credit flows remained frozen for a protracted period.

Second, I would like you to explain how you think Treasury's proposal would find true "hold to maturity" prices of the distressed assets that are now being valued in illiquid or non-existent markets at "fire sale" prices, at best. If Treasury pays too much for the assets, taxpayers lose. If it doesn't pay enough, then banks end up taking severe write-downs, must seek more capital, and are moved toward selling more assets at fire sale prices.

Third, I would like you to help me understand why it would not be prudent to protect taxpayers by inserting into Treasury's plan requirements that those who sell troubled assets provide the taxpayers with preferred stock warrants. Why, for example, could we not have Treasury buy troubled assets at fire sale prices, inject capital into troubled institutions, and obtain preferred stock warrants? We used warrants when the Federal government backed Chrysler debt.

Fourth, I would like you to help me understand why we should consider Treasury's proposal of up to $700 billion of value. Would there not be merit in considering an initial set of purchases of certain classes of troubled assets in the amount of, say, $100 billion? Then, we could evaluate results, and move on with $100 billion of purchases of other of classes of troubled assets. Why would it not be useful to attack the problem in a sequence of moves, rather than just one very large authorization? At the very least, we must be sure that there is adequate transparency and oversight in whatever Treasury ends up doing.

Fifth, I would like to know whether you believe that Treasury's proposed plan has any room for loan modifications by the Treasury on troubled mortgages. The root cause of problems in credit markets and in the economy seems to be declining home prices. And, to help stabilize those prices, wouldn't it be advantageous to have Treasury get into the mortgage-backed securities, separate out the troubled loans and work out those that can be worked out. It seems to me that that would help reduce foreclosures, meaning fewer properties placed on an already over-supplied market, and thereby help arrest declines in home prices.

We have a crisis in confidence in financial markets. And we have crisis of confidence of the American people in their government. When an American family seeks to borrow money to improve their home or start a business or when a small business looks to borrow to expand operations, they have to explain in detail what they are going to do with the money, what the collateral is, and how they are going to pay it back. I don't think the American people are unreasonable in asking the same questions of this proposal.

I appreciate the help that I anticipate you will give me in understanding how best to resolve the stresses in financial markets that pose a very real adverse threat to our overall economy. Again, I believe that it would be irresponsible not to act. But, I also believe that we must act responsibly and get this right, including protection of taxpayers who we are putting at risk.

PREPARED STATEMENT OF BEN S. BERNANKE

Chairman Schumer, Vice Chair Maloney, Representative Saxton, and other members of the committee, I appreciate this opportunity to discuss recent developments in financial markets and to present an update on the economic situation. As you know, the U.S. economy continues to confront substantial challenges, including a weakening labor market and elevated inflation. Notably, stresses in financial markets have been high and have recently intensified significantly. If financial conditions fail to improve for a protracted period, the implications for the broader economy could be quite adverse.

The downturn in the housing market has been a key factor underlying both the strained condition of financial markets and the slowdown of the broader economy. In the financial sphere, falling home prices and rising mortgage delinquencies have led to major losses at many financial institutions, losses only partially replaced by the raising of new capital. Investor concerns about financial institutions increased over the summer, as mortgage-related assets deteriorated further and economic activity weakened. Among the firms under the greatest pressure were Fannie Mae and Freddie Mac, Lehman Brothers, and, more recently, American International Group (AIG). As investors lost confidence in them, these companies saw their access to liquidity and capital markets increasingly impaired and their stock prices drop sharply.

The Federal Reserve believes that, whenever possible, such difficulties should be addressed through private-sector arrangements—for example, by raising new equity capital, by negotiations leading to a merger or acquisition, or by an orderly wind-down. Government assistance should be given with the greatest of reluctance and only when the stability of the financial system, and, consequently, the health of the broader economy, is at risk. In the cases of Fannie Mae and Freddie Mac, however, capital raises of sufficient size appeared infeasible and the size and government-sponsored status of the two companies precluded a merger with or acquisition by another company. To avoid unacceptably large dislocations in the financial sector, the housing market, and the economy as a whole, the Federal Housing Finance Agency (FHFA) placed Fannie Mae and Freddie Mac into conservatorship, and the Treasury used its authority, granted by the Congress in July, to make available financial support to the two firms. The Federal Reserve, with which FHFA consulted on the conservatorship decision as specified in the July legislation, supported these steps as necessary and appropriate. We have seen benefits of this action in the form of lower mortgage rates, which should help the housing market.

The Federal Reserve and the Treasury attempted to identify private-sector solutions for AIG and Lehman Brothers, but none was forthcoming. In the case of AIG, the Federal Reserve, with the support of the Treasury, provided an emergency credit line to facilitate an orderly resolution. The Federal Reserve took this action because it judged that, in light of the prevailing market conditions and the size and composition of AIG's obligations, a disorderly failure of AIG would have severely threatened global financial stability and, consequently, the performance of the U.S. economy. To mitigate concerns that this action would exacerbate moral hazard and encourage inappropriate risk-taking in the future, the Federal Reserve ensured that the terms of the credit extended to AIG imposed significant costs and constraints on the firm's owners, managers, and creditors. The chief executive officer has been replaced. The collateral for the loan is the company itself, together with its subsidiaries.[1] (Insurance policyholders and holders of AIG investment products are, however, fully protected.) Interest will accrue on the outstanding balance of the loan at a rate of three-month Libor plus 850 basis points, implying a current interest rate over 11 percent. In addition, the U.S. government will receive equity participation rights corresponding to a 79.9 percent equity interest in AIG and has the right to veto the payment of dividends to common and preferred shareholders, among other things.

In the case of Lehman Brothers, a major investment bank, the Federal Reserve and the Treasury declined to commit public funds to support the institution. The failure of Lehman posed risks. But the troubles at Lehman had been well known for some time, and investors clearly recognized—as evidenced, for example, by the high cost of insuring Lehman's debt in the market for credit default swaps—that the failure of the firm was a significant possibility. Thus, we judged that investors and counterparties had had time to take precautionary measures.

While perhaps manageable in itself, Lehman's default was combined with the unexpectedly rapid collapse of AIG, which together contributed to the development last

[1] Specifically, the loan is collateralized by all of the assets of the company and its primary non-regulated subsidiaries. These assets include the equity of substantially all of AIG's regulated subsidiaries.

week of extraordinarily turbulent conditions in global financial markets. These conditions caused equity prices to fall sharply, the cost of short-term credit—where available—to spike upward, and liquidity to dry up in many markets. Losses at a large money market mutual fund sparked extensive withdrawals from a number of such funds. A marked increase in the demand for safe assets—a flight to quality—sent the yield on Treasury bills down to a few hundredths of a percent. By further reducing asset values and potentially restricting the flow of credit to households and businesses, these developments pose a direct threat to economic growth.

The Federal Reserve took a number of actions to increase liquidity and stabilize markets. Notably, to address dollar funding pressures worldwide, we announced a significant expansion of reciprocal currency arrangements with foreign central banks, including an approximate doubling of the existing swap lines with the European Central Bank and the Swiss National Bank and the authorization of new swap facilities with the Bank of Japan, the Bank of England, and the Bank of Canada, among others. We will continue to work closely with colleagues at other central banks to address ongoing liquidity pressures. The Federal Reserve also announced initiatives to assist money market mutual funds facing heavy redemptions and to increase liquidity in short-term credit markets.

Despite the efforts of the Federal Reserve, the Treasury, and other agencies, global financial markets remain under extraordinary stress. Action by the Congress is urgently required to stabilize the situation and avert what otherwise could be very serious consequences for our financial markets and for our economy. In this regard, the Federal Reserve supports the Treasury's proposal to buy illiquid assets from financial institutions. Purchasing impaired assets will create liquidity and promote price discovery in the markets for these assets, while reducing investor uncertainty about the current value and prospects of financial institutions. More generally, removing these assets from institutions' balance sheets will help to restore confidence in our financial markets and enable banks and other institutions to raise capital and to expand credit to support economic growth.

I will now turn to a brief update on the economic situation.

Ongoing developments in financial markets are directly affecting the broader economy through several channels, most notably by restricting the availability of credit. Mortgage credit terms have tightened significantly and fees have risen, especially for potential borrowers who lack substantial down payments or who have blemished credit histories. Mortgages that are ineligible for credit guarantees by Fannie Mae or Freddie Mac—for example, nonconforming jumbo mortgages—cannot be securitized and thus carry much higher interest rates than conforming mortgages. Some lenders have reduced borrowing limits on home equity lines of credit. Households also appear to be having more difficulty of late in obtaining nonmortgage credit. For example, the Federal Reserve's Senior Loan Officer Opinion Survey reported that as of July an increasing proportion of banks had tightened standards for credit card and other consumer loans. In the business sector, through August, the financially strongest firms remained able to issue bonds but bond issuance by speculative-grade firms remained very light. More recently, however, deteriorating financial market conditions have disrupted the commercial paper market and other forms of financing for a wide range of firms, including investment-grade firms. Financing for commercial real estate projects has also tightened very significantly.

When worried lenders tighten credit, then spending, production, and job creation slow. Real economic activity in the second quarter appears to have been surprisingly resilient, but, more recently, economic activity appears to have decelerated broadly. In the labor market, private payrolls shed another 100,000 jobs in August, bringing the cumulative drop since November to 770,000. New claims for unemployment insurance are at elevated levels and the civilian unemployment rate rose to 6.1 percent in August. Households' real disposable income was boosted significantly in the spring by the tax rebate payments, but, excluding those payments, real after-tax income has fallen this year, which partly reflects increases in the prices of energy and food.

In recent months, the weakness in real income together with the restraining effects of reduced credit flows and declining financial and housing wealth have begun to show through more clearly to consumer spending. Real personal consumption expenditures for goods and services declined in June and July, and the retail sales report for August suggests that outlays for consumer goods fell noticeably further last month. Although the retrenchment in household spending has been widespread, purchases of motor vehicles have dropped off particularly sharply. On a more positive note, oil and gasoline prices—while still at high levels, in part reflecting the effects of Hurricane Ike—have come down substantially from the peaks they reached earlier this summer, contributing to a recent improvement in consumer confidence. However, the weakness in the fundamentals underlying consumer spending suggest that household expenditures will be sluggish, at best, in the near term.

The recent indicators of the demand for new and existing homes hint at some stabilization of sales, and lower mortgage rates are likely to provide some support for demand in coming months. Moreover, although expectations that house prices will continue to fall have probably dissuaded some potential buyers from entering the market, lower house prices and mortgage interest rates are making housing increasingly affordable over time. Still, home builders retain large backlogs of unsold homes, which should continue to restrain the pace of new home construction. Indeed, single-family housing starts and new permit issuance dropped further in August. At the same time, the continuing decline in house prices reduces homeowners' equity and puts continuing pressure on the balance sheets of financial institutions, as I have already noted.

As of midyear, business investment was holding up reasonably well, with investment in nonresidential structures particularly robust. However, a range of factors, including weakening fundamentals and constraints on credit, are likely to result in a considerable slowdown in the construction of commercial and office buildings in coming quarters. Business outlays for equipment and software also appear poised to slow in the second half of this year, assuming that production and sales slow as anticipated.

International trade provided considerable support for the U.S. economy over the first half of the year. Economic activity has been buoyed by strong foreign demand for a wide range of U.S. exports, including agricultural products, capital goods, and industrial supplies, even as imports declined. However, in recent months, the outlook for foreign economic activity has deteriorated amid unsettled conditions in financial markets, troubled housing sectors, and softening sentiment. As a consequence, in coming quarters, the contribution of net exports to U.S. production is not likely to be as sizable as it was in the first half of the year.

All told, real gross domestic product is likely to expand at a pace appreciably below its potential rate in the second half of this year and then to gradually pick up as financial markets return to more-normal functioning and the housing contraction runs its course. Given the extraordinary circumstances, greater-than-normal uncertainty surrounds any forecast of the pace of activity. In particular, the intensification of financial stress in recent weeks, which will make lenders still more cautious about extending credit to households and business, could prove a significant further drag on growth. The downside risks to the outlook thus remain a significant concern.

Inflation rose sharply over the period from May to July, reflecting rapid increases in energy and food prices. During the same period, price inflation for goods and services other than food and energy also moved up from the low rates seen in the spring, as the higher costs of energy, other commodities, and imported goods were partially passed through to consumers. Recently, however, the news on inflation has been more favorable. The prices of oil and other commodities, while remaining quite volatile, have fallen, on net, from their recent peaks, and the dollar is up from its mid-summer lows. The declines in energy prices have also led to some easing of inflation expectations, as measured, for example, by consumer surveys and the pricing of inflation-indexed Treasury securities.

If not reversed, these developments, together with a pace of growth that is likely to fall short of potential for a time, should lead inflation to moderate later this year and next year. Nevertheless, the inflation outlook remains highly uncertain. Indeed, the fluctuations in oil prices in the past few days illustrate the difficulty of predicting the future course of commodity prices. Consequently, the upside risks to inflation remain a significant concern as well.

Over time, a number of factors should promote the return of our economy to higher levels of employment and sustainable growth with price stability, including the stimulus being provided by monetary policy, lower oil and commodity prices, increasing stability in the mortgage and housing markets, and the natural recuperative powers of our economy. However, stabilization of our financial system is an essential precondition for economic recovery. I urge the Congress to act quickly to address the grave threats to financial stability that we currently face. For its part, the Federal Open Market Committee will monitor economic and financial developments carefully and will act as needed to promote sustainable economic growth and price stability.