

MONETARY POLICY AND THE STATE OF THE ECONOMY, PART I

HEARING BEFORE THE COMMITTEE ON FINANCIAL SERVICES U.S. HOUSE OF REPRESENTATIVES ONE HUNDRED TENTH CONGRESS SECOND SESSION

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MONETARY POLICY AND THE STATE OF THE ECONOMY, PART I

Tuesday, February 26, 2008

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The committee met, pursuant to notice, at 10:05 a.m., in room 2128, Rayburn House Office Building, Hon. Barney Frank [chairman of the committee] presiding.

Members present: Representatives Frank, Waters, Maloney, Capuano, Hinojosa, Clay, Miller of North Carolina, Scott, Green, Cleaver, Sires, Klein; Bachus, Castle, Paul, Manzullo, Jones, Shays, Feeney, Garrett, Pearce, Price, and Campbell.

The CHAIRMAN. This is the second in a series of hearings this committee has had and will have while I chair it, around the state of the economy. We have under the Humphrey-Hawkins Act, and I should note I think—well, I guess I have before, but I'm not sure if this is the first or the second Humphrey-Hawkins hearing we have had since Gus Hawkins passed away at the age of 100, a really great man. And the value of the Act becomes all the clearer. As I look at the European Central Bank with its mandate only to deal with inflation and our Central Bank with its dual mandate to deal with inflation and high employment mandated by the Humphrey-Hawkins Act, I am again reminded, I think, of the wisdom of Gus Hawkins and Hubert Humphrey, because I think we are well served by the duality of that mandate compared to what the ECB does.

But it was my view that in addition to hearing from the Chairman of the Federal Reserve Board, we ought to hear from other voices as well on the economy, and that is the purpose of this hearing. Tomorrow, Chairman Bernanke will testify before this committee, and Thursday he'll testify before the Senate. But this is part of a process by which we solicit other views.

I think the Federal Reserve is a very well-run institution. We have a former member here, of the Board. But I also believe that it gets in general more intellectual and political deference than is healthy in a democracy. It is often considered to be the case that it is legitimate for us in the democratic fora to debate war and peace and the physical future of the universe and the most intimate questions of human conduct, but if any politician dare talk about 25 basis points on the interest rate, that is somehow a great breach of the rules and could cause terrible consequences. That is nonsense; monetary policy is a legitimate subject for debate as well as any other as long as it is conducted in a sensible way.

It is particularly the case in this particular period, because what we are seeing are, I think, the limits and constraints that the Federal Reserve faces in monetary policy. And I think—let me announce a change of mind. Some time ago when we talked about the multiplicity of Federal regulators in the banking area, a common subject, one question I raised was, well, why does the Federal Reserve need to be a bank regulator? We have all these other bank regulators. Why can't they just be the monetary authority, as is the case in other places? And Alan Greenspan said at the time—and I was skeptical, but I now acknowledge that he was right—that being the regulator informs the Fed's judgment about the economy in ways that help in the formulation of monetary policy.

The problem I must say is that I do not think Chairman Greenspan fully followed through on this, because I think what we have is a disconnect between the Fed's authority as a regulator and its role in monetary policy essentially for ideological reasons under Chairman Greenspan, the Federal Reserve consciously decided not to exercise a great deal of its regulatory authority. That is now changing under Mr. Bernanke. I don't think that has been adequately addressed.

For example, in 1994, Congress passed the Homeowners Equity Protection Act to give the Federal Reserve regulatory authority over all mortgages, not just those issued by depository institutions. Chairman Greenspan consciously and deliberately decided not to enforce that, not to use that authority. When the Comptroller of the Currency and the Office of Thrift Supervision issued their Federal preemption of a lot of State consumer protection laws, including some in the mortgage area, one response was to beef up what the Comptroller of the Currency could do with regard to consumer protection.

I spoke at that point to the late Ned Gramlich, who was the Federal Reserve Governor with that responsibility. He said, "Well, here is what you need to do. Under the Federal Trade Act, the Federal Reserve system has the authority to promulgate a code of unfair and deceptive practices for the banks. That would be a replacement for some of the State consumer laws that were knocked out." I said, "Well, that's good. Why are we not doing that?" And he said that Chairman Greenspan is opposed to that. He thinks that is too much regulation. We wrote, some of us, to the Chairman, and he said, no, he wasn't going to do that.

Mr. Bernanke, I think, is again going to reverse that decision, and I believe under Chairman Bernanke you are going to see an exercise of authority to promulgate that code that we didn't have before. The relevance of that is this: I think there has been a tendency to look at monetary policy as the macro sector of the economy and financial regulation was micro, but the micro has decisively influenced the macro. We have a macroeconomic crisis today.

Clearly, at least the worst financial crisis in the world since 1929, and its impact in the United States is conceivably worse than 1929, and the single greatest cause—obviously, all phenomena in a complex world have multiple causes—but the single greatest cause is regulatory failure. The single greatest cause of the current economic crisis is the failure of Federal regulators, in particular in the United States, to use regulatory authority. The result has been

not just the subprime crisis, but the infection of the entire credit system by the subprime crisis. And both the fact that mortgage loans were made that should not have been made and the absence of any sensible regulation, and the fact that those loans were then allowed to spread in various ways that were obviously not fully understood throughout the system, is the single biggest cause of why we are here.

So what we are talking about today—and in consequence, as a number of people have noted, monetary policy is somewhat constrained. I do note Chairman Greenspan generally, both during the dot.com issue and the irrationally exuberant stock market, to quote the Chairman at the time, and today, Chairman Greenspan's inclination was to pose this choice. Either I deflate the entire economy or I allow these phenomena to continue.

And, of course, the answer to that dilemma is sensible regulation. If you have inadequate regulation of abuses, yes, then you do get to a situation where your choice is deflation of the entire economy or allowing the abuses to flourish. And that's why in the current context in particular, sensible consideration of monetary policy requires looking at the role of regulation. Because in the absence of regulation, you give monetary policy too heavy a lift, one that it conceptually and intellectually cannot make.

And that is what I believe we will inevitably be talking about. I have reviewed much of the testimony, and not surprisingly, many of the witnesses in fact make that point, that the problem we face today is a problem of inadequate regulation of—and innovation, securitization, a good thing, because innovations that don't serve some positive role die of their own lack of merit. But innovation that outstripped that any regulation, and the consequent problems that we have had have led us to where we are today.

So I said, in this case, whether we are talking about monetary policy under the Humphrey-Hawkins Act, or the economy in general, we are talking about, in my judgment, the role that inadequate regulation has played in causing a dilemma for the monetary policymakers. And that is what we will be talking about today, and we will be talking about with the Chairman tomorrow.

The gentleman from Alabama.

Mr. BACHUS. I thank the chairman. Congressman Paul is going to deliver our opening statement, but I would like to comment on one thing. On this committee, it is difficult for us to assess exactly how much stress there is on the financial sector because, I think, of a lack of transparency, and in certain cases a lack of accountability. So as with the markets, there is a lot of uncertainty out there as to where this economy stands.

You add to that economic conditions that in some cases are soft and in other cases are really not. The economy in many ways is doing quite well. And you add to that what is the proper response in light of what I would say is troublingly high inflation. This morning the PPI came out, and I'm sure Members know, it was very high, which obviously should be a concern to the Fed and should be a concern to us. When you have a slowing economy and a high inflation rate, it makes it particularly difficult to know what to do or what not to do. So we would be very interested in your

advice in that regard, but I will say the inflation numbers this morning were not good news.

The CHAIRMAN. Representative Paul, the gentleman from Texas.

Dr. PAUL. Thank you, Mr. Chairman. I appreciate this. I would like unanimous consent to submit a written statement.

The CHAIRMAN. Without objection, any written statements any of the witnesses or members would like to include will be included as part of the record.

Dr. PAUL. I want to thank the chairman for holding these hearings, and especially for the title of the hearing. The title is very appropriate, "Monetary Policy and the State of the Economy," because indeed they are related. Sometimes we in the Congress and for other reasons, economic problems are created, and we look to the Federal Reserve to solve the problems. From my viewpoint, we should look at the Federal Reserve a little earlier, because I see so many of our problems that we have coming from monetary policy.

The Austrian economists, led by Mises and Hayek—Hayek, of course, won the Nobel Prize—talk significantly about monetary policy and how inflation of the money supply is the real culprit because it distorts interest rates and causes the malinvestment and the excessive debt. And it is for this reason that most economists accept the notion that inflation is always a monetary policy, and yet today we still talk about, well, the price of oil is going up, so therefore it might lead to inflation, rather than saying, what is happening to the money supply?

Well, currently, we don't get all the statistics on the money supply anymore; M3 was an important number, total money supply, and that hasn't been looked at for a couple of years, and yet private sources report that is growing at about 16 percent a year. Now the significance of this is the distortion that causes in the marketplace. The Austrian economists predicted well before the collapse of socialism at the end of the 20th Century that it would collapse because they eliminated the pricing structure. If you don't have free market pricing, you can't determine what to produce, and at what quality and what quantity, and only the market can do that. But likewise, they were every bit as critical about the manipulation of interest rates, and that is what the Federal Reserve is doing, always making interest rates go up or down. And they generally get it wrong both times. They either have them too high or too low, and they will get criticism from both sides.

But we as a nation who champion the marketplace have totally rejected the idea that the market can determine interest rates, and that is why I think we get into trouble like this. In the 1960's, we faced a similar problem, because we were pretending that we could have guns and butter and it wouldn't really cost us. Well, anybody who knows about the 1970's knows that it cost us a lot.

Right now, what we are looking forward to is a cost much greater than what we witnessed in the 1970's, because we are much deeper in debt. Our foreign indebtedness is overwhelming. Our productive jobs are overseas and inflation is roaring again. Government statistics always lag reality, but even in government statistics today, as Congressman Bachus points out, inflation is over 12 percent a year. I mean, this is serious business. We are in stagflation. I don't think there is a question about: are we in a recession? We are in a reces-

sion. The numbers will catch up, no matter what the government statistics say, just talk to the American people. They are having a tough time. Ask middle-class Americans what they are doing. They are being wiped out, because their cost of living is going up much faster than their wages can keep up. Same way with Social Security beneficiaries.

This is all a consequence of monetary policy, the fact that we allow ourselves to resort to the creation of money. If we had to pay for this war and for the welfare programs we have here at home by taxes, this would all end quickly. But instead, you know, we tax to the hilt, then we borrow as much as we can. Then there is a limit on that because interest rates might go up, and we fear that. So then we resort to the creation of new money out of thin air, which is another tax, because the value of that dollar goes down, prices go up, and who gets hit the most? The middle-class Americans. This is why middle-class Americans are really suffering.

So there are a lot of things that I believe could be done, but once the Fed causes this distortion, we can't resort to the fact of saying, well, we need more regulations by the government. We need more regulations, but I would like to see the regulations come from the marketplace to make the adjustments necessary. But it is inevitable to have a recession once you create an artificial boom with the inflationary policy of the Fed, and that is what we are facing today.

We are in the early stages of a recession, and unfortunately, many who have studied Austrian economics predict that this one is going to be long and tough and a lot worse than the problems we faced in 1979 and 1980. Hopefully, we can do the right things, but it would involve the Congress cutting back and not putting the pressure on the Fed to monetize this.

And it is an inevitable myth we have lived with that war is an economic stimulus. That is absolutely false, and yet we live by that. We think, well, if we just spend money and the war spending participates in our GDP growth, and pretend that we're growing by building bombs that are blown up—this is an absolute myth, and therefore, this economy, I think, is on shaky ground, and we need to go back to look at what sound economic policies are as well as sound monetary policy. I thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman, and we will now proceed with our witness panel.

Mr. BACHUS. Mr. Chairman?

The CHAIRMAN. Yes?

Mr. BACHUS. I'd like to just briefly say that our witness is John Taylor, who is a distinguished professor at both Stanford and before that at Princeton, and I think at Columbia. He has a distinguished record at the Treasury Department, is considered an authority on monetary policy and currency, and we are proud to have him, as well as our other witnesses.

The CHAIRMAN. I thank the gentleman. Let me add that I have good memories of the work we did together on debt relief and generally trying to show some flexibility with regard to aid to the poorest countries in the world through the international financial institutions which fell under Professor Taylor's jurisdiction.

Our first witness now is Dr. Alice Rivlin, who is a visiting professor at the Public Policy Institute of Georgetown, a senior fellow in the Economic Studies Program at Brookings, and was Vice Chair of the Federal Reserve System from 1996 to 1999. Dr. Rivlin.

**STATEMENT OF ALICE M. RIVLIN, PH.D., SENIOR FELLOW,
BROOKINGS INSTITUTION**

Ms. RIVLIN. Thank you, Mr. Chairman. I, too, am glad you are having this hearing, and I am happy to be here to share my views. I agree with you that monetary policy is a very legitimate subject of debate, as is regulation. I do think you should separate them in your head, though. And I will use the term "monetary policy" as it is conventionally used by economists to mean what the Fed is doing to regulate the macroeconomy.

Now I know you want to focus on monetary policy today because you have Chairman Bernanke coming tomorrow. But I actually think monetary policy, as I am defining it, should be pretty far down your list of worries. The Federal Reserve has used the tools of its monetary policy arsenal quite aggressively and imaginatively in the last few months, and clearly indicated its intention to do more if necessary, so it seems to me that they are doing a good job.

I think you should also be extremely pleased with the swift bipartisan action of the Congress and the Administration on the stimulus package. You may need to take further action, but the initial package was well-designed for maximum effect, and it passed with remarkable alacrity. Our policy process doesn't always function that well.

Now if the consensus forecast is roughly right, and we have some on the panel who differ with the consensus, we will have slow growth for the next couple of quarters but will avoid recession and see growth resuming by the end of the year. But the situation, as you point out, is precarious. In housing, a spreading wave of foreclosures could undermine consumer confidence and increase the probability of recession.

Continued risk aversion of investors and unwillingness to lend on the part of financial institutions could raise the probability even higher. The hardest challenges now are to minimize housing foreclosures and get the credit markets functioning more normally, both without spending excessive public resources or rewarding people who made dumb and irresponsible decisions. That is a tall order. It is a hard thing for the committee to be facing.

The slowdown in the economic growth and job creation in the last quarter of 2007 was clearly the result of the decline in residential construction and housing prices, and the crisis in the subprime market. Nobody should have been surprised by that. We created a bubble, and bubbles burst.

We shouldn't forget that a lot of good came from the housing boom. Millions of people moved into new or better housing, and most of them, including most subprime borrowers, are living in those houses and making their mortgage payments on time. I think the downside was that many people came to believe that housing prices would go on rising forever. Lenders became lax. Borrowers became over-extended. Speculation took hold, and we simply built

too many houses. It will take time for demand to catch up with supply.

The explosion of subprime lending was a clear regulatory failure. My former Federal Reserve colleague, Ned Gramlich, to whom you referred, warned repeatedly that lax standards and predatory practices in the subprime market deserved urgent regulatory attention. But the problem is that we have a very fragmented regulatory system. Most of the questionable practices were not being perpetrated by federally regulated banks, and the Washington regulators, as you pointed out, just did not get on the case.

The worldwide fallout from the subprime crisis is just an example of how complex and interrelated our international markets have become. It was also a black eye for market capitalism. It was an embarrassing moment for those who boast about the intelligence and sophistication of financial markets. How come so few people asked the simple question, what happens to the value of these mortgage-backed securities when the music stops? When housing prices level off or decline, adjustable rates reset, and people with not-so-great credit histories can't make their monthly payments? Financial market participants now say they underpriced the risk. That is code for failing to ask some pretty obvious questions.

A lot of financial institutions and funds found themselves owning securities worth less than they thought or whose values could not be easily determined. The result was some pretty big losses and a panicky flight from risk. Uncertainty about the future tightness of credit markets makes forecasting the real economy unusually difficult. A scenario in which the crunch gradually resolves and credit flows return to some semblance of normality produces a far rosier economic outlook than a scenario in which financial institutions suffer additional large losses and the crunch gets worse, and we just don't know.

But meanwhile, back in the real economy, activity looks slow but actually not disastrous. The consensus of forecasters is that the underlying resilience of the American economy, aided by surging exports reflecting the weak dollar, and buoyed by the monetary and fiscal stimulus, will keep the economy from spiraling into recession. And my guess, for what it's worth, which is not a lot, is that the consensus will prove about right.

But the uncertainty is very great, and you have to worry about the downside. As I said, I think the Federal Reserve has been using its tools aggressively and inventing new ones on the run. Most of the Federal Reserve's action has been aimed at pumping liquidity into the credit system in hopes of getting the banks lending again. The Fed lowered the discount rate and encouraged borrowing at the discount window. That didn't work very well. So they invented a new tool, the "term auction facility," a mechanism to enable banks to borrow large, fixed amounts of credit from the Fed, and this was coordinated with other central banks.

I think these actions have been appropriate and creative. I know there are those who think the Fed is behind the curve. I suspect that these critics have in their heads, for whatever reason, a forecast like Congressman Paul's—a forecast of deep recession to come,

and they don't think the Fed is acting on that forecast. However, the consensus forecast and the Fed's does not anticipate recession.

Moreover, there are ample reasons for concern about bringing the short-term interest rate down too far and too fast. Fear of aggravating inflation is clearly one, and the other is apprehension about making monetary policy so accommodating that it fuels the next bubble in whatever asset class might catch the investors' fancy.

One way to take part of the onus off the Fed and avoid excessive easing of monetary policy is swift action on fiscal stimulus, and you have done that—a very great accomplishment. I was among those who urged several additions to the package, including an extension of unemployment compensation for an additional 13 or 26 weeks, a temporary increase in food stamp payments, and some relief to the States in the form of an increase in the Medicaid match.

The States are always hard hit in an economic slowdown, and tend, as they have to balance their budgets, to cut spending, often on Medicaid and other benefits to low-income people, and to raise taxes. These actions tend to make the economic situation worse and Federal relief can help forestall them.

I would urge the Congress, however, not to load a second stimulus package with slow-spending projects, however worthy, such as infrastructure, that do little to stimulate the economy in the short term, and add to the growing Federal debt. I also believe that the stimulus ought to be paid for. This is just a plea to remember that PAYGO is important and it should not be set aside—exceptions can become a very dangerous habit.

But the difficult challenge, it seems to me now, is designing a workable way of minimizing foreclosures and keeping families who are able to pay their mortgages in their homes. Foreclosures are in nobody's best interest; they are expensive for lenders and servicers, painful for families, and destructive of property values in the surrounding neighborhood and beyond.

The Treasury has been working energetically to pull the servicers and the borrowers together, and many States are doing this. This effort will help, but by itself, it is very unlikely to be sufficient to prevent a wave of foreclosures in the next couple of years.

Legislating in this area is very tricky, both legally and morally. Rescuing individuals and institutions from the consequences of imprudent decisions smacks of condoning those decisions. However, it may be worth some moral hazard to avoid the spreading contagion of foreclosures that is likely to damage the prudent along with the imprudent.

There are a great many proposals before the Congress on avoiding foreclosures, and I will not go into those here. Many groups more knowledgeable than I are eager to inform you on their views on this subject.

But in conclusion, so far I think the policy response to the current macro situation is on the right track, both from the monetary authorities and from the stimulus. But the difficult tasks still lie ahead, that of crafting a set of policies that will be successful in containing the spreading contagion of foreclosures.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Rivlin can be found on page 59 of the appendix.]

The CHAIRMAN. Next, Professor Taylor, who has already been introduced.

STATEMENT OF JOHN B. TAYLOR, PH.D., MARY AND ROBERT RAYMOND PROFESSOR OF ECONOMICS, STANFORD UNIVERSITY

Mr. TAYLOR. Thank you, Mr. Chairman, and Mr. Bachus for inviting me.

I would like to begin my testimony with just a brief review of the broader span of time in the role of monetary policy that has led us to where we are; in fact, I would like to go back 25 years. It seems to me if you look at the span of time since the early 1980's, you see a remarkably improved economy compared to what we saw in the late 1960's and 1970's.

We have had, since the early 1980's, three of the longest expansions in American history. We have had recessions, of course, but they have been much shorter, much less frequent, and much milder than in the past, especially in this period in the 1970's where we had recessions every 3 or 4 years. This is a much better situation than in the past.

If you go back just a decade, you see the trend growth, even more impressive. I think this is important to note. Starting in the mid-to late 1990's, the productivity growth rate in the United States picked up by substantial amount the way economists measure, by about one percentage point. That alone has produced, believe it or not, another \$9 trillion of goods and services that would not otherwise have been produced in the United States; \$9 trillion—that is a lot of money that has gone to good use.

If you now think about even more recently, you have seen this remarkably good performance spread around the world. Since 2002, there has not been the emerging market financial crises that we saw so much of in the 1990's. The 1990's, one crisis after another in emerging markets, and since 2002, it has been much quieter. That growth and global expansion, if you like, global long boom, has also produced enormous amount of good things around the world.

Economist magazine just wrote last month that between 1999 and 2004, 135 million people have come out of poverty around the world. That is the benefits of this strong economy that we have been experiencing until recently. So I think there has been a lot here to note. Now what am I mentioning this for now? It is because I believe; and, I think economists who have studied this carefully—monetary economists in particular—think that monetary policy played a great role in this stability in this unusual period of infrequent recessions and long expansions. And you can see that when you look carefully at the monetary policy decisions. They indeed have been more aggressive, more timely in responding to both increases in inflation and downturns in the economy—much more aggressive and timely—more flexible, if you like, than in the past, especially than in the 1970's when we had this terrible problem with inflation.

So in my view, and I think in the view of many monetary economists, monetary policy, not just in the United States, but even more recently in other countries deserves substantial credit for this

unusual period. I think monetary policymakers at our Federal Reserve and other central banks around the world deserve praise and credit for this remarkable situation.

I start here, because it seems to me that one of the risks we face in deciding how to adjust to the current situation is the risk of overdoing it if you look, providing an excess of these, we could very well bring this back to those bad, old days of higher inflation and—listen to this—frequent recessions, deep recessions.

That's the most important thing that we could risk here and how it would respond to this crisis to bring us back to those days, which no one wants to go back to. So I would say this is especially a concern now as Mr. Bachus pointed out with the inflation data that are coming in. The CPI last week (4.3 percent over the year), that's not just a 1-month number.

If you try to look more carefully and take out some of the special factors, you always have to be wary about doing that. It's still pretty high, over the comfort range that the Federal Reserve has mentioned. And when I go around the country and speak, I'm sure the members of this committee get this too. There is mention of inflation—frequently—just as there is the downside risks.

So most of our focus here, rightly so, has been about the downside risks, and those are real. Growth much lower in the last quarter than in the third quarter of last year, it's going to be slow this quarter too. Even if it's not negative, it's going to be slow. So there are these substantial risks; and, my written testimony I go through explanation of how we got here, and Alice Rivlin has already mentioned those.

I think the financial sector is in a particularly difficult situation now. Starting last August, you saw the interest rates rising substantially in the money markets and the so-called LIBOR market. That has raised credit costs above what it otherwise would be, so the question to me for this committee and for the Federal Reserve is how to balance these risks. How do we balance the risks of down-side and the risks of inflation?

There are benchmarks around that economists have used to try to balance out these two or three factors. One of them, by the way, is called the Taylor rule. If you look at things like that, it seems to me it gives you a way to balance. And if I look at the inflation rate and the degree of slow-down in the economy at this point, even adjusting for the turbulence in the money markets, I still get an interest rate which is somewhat above the current interest rate already.

That suggests to me that when you balance the risk properly, the additional easing would be questioned, given the circumstances both on inflation, both on the risks in the economy, and in the financial markets. So that would be my main point to make in these opening remarks.

I would just say briefly, in terms of the money markets, in assessing whether the term auction facility is working, I would say that additional transparency from the Federal Reserve would be useful. In particular, what the balance sheet of the Fed looks like, what the Fed balances are from the commercial banks, additional transparency would be useful.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Taylor can be found on page 87 of the appendix.]

Mr. MILLER OF NORTH CAROLINA. [presiding] Thank you.
Dr. Zandi?

**STATEMENT OF MARK ZANDI, PH.D., CHIEF ECONOMIST AND
FOUNDER, MOODY'S ECONOMY.COM**

Mr. ZANDI. I want to thank the committee for the opportunity to present today.

I would like to make three points in my remarks. First, I think the economy is in the midst of a recession. I think the economy contracted in December, January, and it feels like it is contracting in February. And if we string another several months of declines together, that will be considered a recession.

I think there are some parts of the country that are already clearly in recession: California, Arizona, Nevada, Florida, and Michigan are, in my view, in recession. They account for one-fourth of the Nation's GDP. And then there are 15 other States scattered across the country that if you total up their gross product, it is another fourth of GDP. So in total, we are close to half of the regional economies in recession or close.

I also think the big metropolitan areas in the Northeast are struggling quite significantly, and particularly New York, because of the problems on Wall Street, and in Washington, D.C. If you total all that up, we're well over half the Nation's GDP, so I think we're in the midst of an economic downturn.

My second point is that obviously the problem is in the housing and mortgage markets, the securities markets. The housing market continues to literally evaporate. New and existing home sales are down 35 percent, and that overstates the strength of the market, because that includes foreclosure sales, which in the case of California accounts for half of all current sales in California.

Housing starts are down over 60 percent, which is the steepest decline in the post-World War II period in terms of construction; and, house prices now are down 10 percent from their peak. The peak was just about 2 years ago in the spring of 2006, and the intensity of the price declines are very significant and quite severe. And over three-fourths of the Nation's metropolitan areas are now experiencing significant, persistent price declines, year over year price declines.

This of course along with the subprime armory setting, the lack of credit and the weakening job market is resulting in a surge in mortgage foreclosures and defaults. We collect very high quality data based on credit files from credit bureau Equifax. As of the last week of January, there were approximately 550,000 first mortgage loans in default; that translates into an annualized pace of \$2.2 million defaults. That is the first step in the foreclosure process.

Just to give you context, in 2005 which was a good year, foreclosure defaults were under 800,000, so we're almost 3 times that and rising very rapidly. Delinquency rates: 30, 60, 90, 120, 143 all jumping very rapidly; and that suggests that the foreclosures are going to continue to rise significantly at least to the spring and into the early summer.

Obviously, one of the key problems here is the shut-down of the mortgage securities market. The residential mortgage securities market is in the non-conforming market, outside of what Fannie Mae, Freddie Mac, and the FHA do, which by the way was half the origination volume in 2006. It has completely shut down—literally shut down. There were zero bonds issued for Alt-A loans in the month of January and total subprime Alt-A, and jumbo loans issuance in January totaled at an annualized pace, less than \$50 billion.

And to give you context there, in 2006, there was over a trillion dollars in issuance in those sectors. There was no credit flowing. So the problem in the housing and mortgage market, which go to the root of the economic problems that we face are not getting any better. They are at this point still getting worse.

Point three goes to policy. I think policymakers are very slow to respond to events in the wake of the subprime shock last summer. I think the Federal Reserve misjudged the severity of the downturn and the breadth of the downturn and was slow. I do think they have caught up. I think a 3 percent fund rate target is appropriate at this point in time, and the futures market expect a 2 percent funds rate by the summer.

That seems perfectly reasonable to me in the context of a recessionary economy. Fiscal policymakers also deserve plaudits. The fiscal stimulus package was a good one, particular the pace at which everyone got it together. Tax rebate, I think, is particularly efficacious, so I think that is helpful. I think the steps towards alleviating the problems in the housing mortgage markets are good steps, but they are baby steps.

They are not enough. Hope Now, Project Lifeline, expanding the loan caps on Fannie, Freddie, and FHA will be helpful, particularly for California, Washington, D.C., New York, and South Florida, allowing States to issue more bonds to help refinancing efforts. All these steps though are not going to, you know, solve the problem. They are very, very small steps. I think we are coming to the point where policymakers need to be much more aggressive with respect to what is going on in the mortgage securities market. There are some good ideas that are now being formulated, and I just mentioned one.

I do think it's now time to think about a tax pair-financed fund to purchase mortgage loans and mortgage securities. I think this could be done through an option process. Set up a bidding process for sellers to come in with mortgage securities, loans, even pools of loans if possible. Make a bid.

That bid certainly would be not at full value. They would take a big cut, but I think they would find that a way to restart the market. Once the market has restarted, once we have a price, I think credit will start to flow; and, more importantly, we have a price that all the other institutions with bad credit on their balance sheets could mark to; they could write that down quickly and get on with business.

Moreover, the Federal Government would then be the owner of these mortgages, if they bought home mortgages in the auction process, and they could take their time and figure out exactly what

to do with these mortgages and stem some of the foreclosures and the deleterious impact it's having on the broader economy.

So that's a big step. That's something that requires a big, philosophical jump, but I do think we're getting to the point where the cost to taxpayers or something like that will be measurably less than the cost of doing nothing and watching the economy continue to slip away and undermine tax revenue increase spending to help support the people who are losing their jobs.

Thank you.

[The prepared statement of Dr. Zandi can be found on page 91 of the appendix.]

The CHAIRMAN. Next is Professor Carmen Reinhart, who is professor of economics in the School of Public Policy, Department of Economics, University of Maryland. And also relevant, she is a research associate at the National Bureau of Economic Research.

Professor Reinhart?

**STATEMENT OF CARMEN M. REINHART, PH.D., PROFESSOR,
SCHOOL OF PUBLIC POLICY, DEPARTMENT OF ECONOMICS,
UNIVERSITY OF MARYLAND**

Ms. REINHART. Let me begin.

The CHAIRMAN. Is your microphone on?

Ms. REINHART. Thank you. This is my first hearing, so please bear with me if I fumble a little. I'm not sure what the procedures are, but let me divide—

The CHAIRMAN. I guess the procedure is, you talk.

[Laughter]

The CHAIRMAN. Then, when you are through, we will ask you questions and you answer. Let me just say, of all the places in this building, I hope we are tied for last in protocol. So please go ahead.

Ms. REINHART. So let me divide my remarks into four parts. First, I defer to everyone here on the very short-term issues of whether the employment numbers or the housing numbers, I'm going to talk first about a big issue which has to do with the stuff that I know, which is financial crises, which is what we're in.

And, then, I'm going to talk about three issues, and I'm going to take issue with you on policy response. And then I'm going to talk about regulation. And then I'm going to say something—lastly, where I'm relatively more ignorant about whether we can reverse these things. But let me start with the big picture of where I think we are.

The CHAIRMAN. Dr. Reinhart, it may be rude not to look at people, but when you turn your head, you lose the microphone, so please look straight ahead.

Ms. REINHART. Okay. So first, on the issue of where we are, if the past is any resemblance on the future, and we always like to think we're different, but we're not. We have been through several financial crises, including the most severe financial crises. Believe me, I have looked at all of them in the industrial countries in the post-war, and then I have also looked at emerging markets. I am not even going to touch emerging markets, but on the big financial crises and the advanced economies, they are associated with recessions, full stop.

So, if you are lucky, it is a slow-down, and that is like in 1995 when we had the Barings crisis, but that is a different order of magnitude. So the big crises are associated with recessions, full-stop. The recessions could be milder, or they could be softer. I think the Federal Reserve has been excellent in moving quickly; however, if we want to beat Japan, which had a crisis that lasted 10 years, then we should tell the Federal Reserve to start worrying about inflation, John. They shouldn't worry about inflation now. They should worry about the recession.

The second point is, if you don't act quickly, then it is too little, too late. We are having a credit crunch, as you describe, believe me. I believe Dr. Zandi described the credit crunch to the tee. You know, this is a classic. I don't study high frequency events. But I can tell you, I have looked at every, single banking crisis in the post-war, and credit crunches are a problem.

And they are a problem that doesn't go away in 1 month or 6 months. It takes a while. This is not something that is easily reversed. Asset prices are falling as we speak—housing prices—equity prices. This creates a loss in wealth that is not easily undone and has serious consequences for consumption.

You know, in industrial countries over the past 30 years on average, housing prices fell about 25 percent from their peak. That is non-trivial. So, the first part of my presentation is just on the magnitude of where we are at a broad brush. My second part is on the policy response of the Federal Reserve.

The CHAIRMAN. I wanted to get to the second part. You are going to run out of time, so I wanted to get to each part, if you can, rather than get to the second part.

Ms. REINHART. All right. Very quickly, I think we need more easing. Okay? I do think we need more easing. I do think that what we have to work on is the very quick reversal, if inflation, which I believe and I share completely.

The CHAIRMAN. Dr. Reinhart, please address your remarks to the panel. I'm sorry, but I do have more time to take. But, just talk to us.

Ms. REINHART. One last point. Regulation in the United States is more akin to Banana Republic than we would like to think. And in that regard, in the Federal Reserve's actions, but also the delegation to the States, and I will end my remarks right there. The consolidation of regulation is an important issue.

The CHAIRMAN. You have more time. You can get to your third point. I just wanted to move it on.

Ms. REINHART. No. No, because I really do think the regulation issue is critical. You know, I have looked at Venezuela, and then there is somebody who says, oh, this guy did it and then this guy did it. No. We have to consolidate regulation. I want to make this point, because I think we have to consolidate. But, I also want to say we don't want to be like Japan.

We have to act quickly and decisively, because this is a financial crisis and, you know, too little too late is a problem. And I leave my remarks there.

[The prepared statement of Dr. Reinhart can be found on page 55 of the appendix.]

The CHAIRMAN. Thank you.

And, finally, Professor Roubini, who is a professor of economics at New York University's Stern School of Business, and the co-founder and chairman of RGE Monitor.

STATEMENT OF NOURIEL ROUBINI, PH.D., PROFESSOR OF ECONOMICS, STERN SCHOOL OF BUSINESS, NEW YORK UNIVERSITY, AND CHAIRMAN, RGE MONITOR

Mr. ROUBINI. Thank you, Mr. Chairman, and members of the committee, for this opportunity to present my views. There are three questions I think that are in the minds of everybody about the economy. The first one is, of course, whether we're going to have a soft landing or a hard landing, meaning a recession. The second is how much more severe this credit crunch and problem in the financial market is going to get; are they going to improve? And third, what can the Fed do? Can the Fed avoid this kind of hard landing in the economy?

In my view, on the first one at this point, the debate is not anymore whether we're going to have a hard landing or a soft landing, but rather on how hard the hard landing is going to be. I agree with Mr. Zandi, we're already in a recession, when you look at the variety of macro-economic indicators, the economy starts to contract some time in December. And a rising number of economists now are suggesting that actually this recession is going to relatively shallow, two quarters, Q1 and then Q2, and then a recovery of economy growth.

My view of it is actually that this recession is going to be much more severe, longer, and protracted than just two quarters. I expect that this recession might last at least 4 quarters, and possibly even more than that.

If you look at the last two recessions in 1990 and 1991, and 2001, they lasted almost 3 quarters, 8 months each. And in my view, the conditions in the financial market and the economy, compared to the last two recessions, are worse. And that's why I believe this recession is going to be much longer, at least 4 quarters, if not 6 quarters.

There are at least three dimensions in which I think that the condition and the macro-economy and financial markets that are worse today than they were in the previous two recessions in the United States. And that's why I believe this recession is going to be more severe and more protracted.

The first reason is that we're experiencing right now the worst housing recession since the Great Depression. Housing starts have fallen sharply, but unfortunately new home sales have fallen even more, and therefore the gap between supply and demand, the stock of unsold homes, is at an unprecedented high. Home prices have already fallen by 10 percent and they might fall at least 20 percent from peak, and some people say all the way to 30 percent.

If they fall 20 percent, that's a wiping out of \$4 trillion of housing wealth in housing. If it's 30 percent, it's going to be \$6 trillion. If there is a 20 percent fall in home prices, the number of houses that are going to be underwater with the value of their homes below the value of their mortgage is going to be something like \$15 million.

If home prices fall by 30 percent, that number is going to be over \$20 million, and we have no recourse loans. There is a huge incentive when you are in negative equity or underwater to essentially do jingle mail, put your keys in an envelope, send it to the banker, and walk away.

So we're facing a systematic problem in the housing market. This housing recession is getting worse, has not bottomed out. The consequences are going to be massive and severe like you haven't seen since the Great Depression. First observation.

Second observation is that the conditions for the housing sector are much worse today than were in 2001. In 2001, the problems were the corporate sector. Today we have a U.S. consumer that is shopped out, is saving less, and is debt-burdened, and the U.S. consumer is being buffeted by a whole series of negative shocks.

Home prices are falling, home equity withdrawal is collapsing. Oil is at \$100 and gasoline prices are very high. There is a slack in the labor market that's starting. Consumer confidence is falling. Debt ratios for consumers are 136 percent of income. Debt servicing ratios are going up because of resetting of ARMs. There is a credit crunch in financial markets.

All these shocks are buffeting the U.S. consumer, who has now started to retrench. And with consumption being 70 percent of aggregate demand, retrenchment of the U.S. consumer means a severe recession.

Third observation of why this crisis is going to be worse and this recession is going to be worse. People talk about the subprime crisis and subprime meltdown. The problem is that we have a systematic problem in the financial system that goes well beyond the subprime problem. Now the problem in terms of the fault and so on are spreading from subprime to near-prime, to Alt-A to prime mortgages, to jumbo loans, default rates across the board for all sorts of mortgages are going up.

Secondly, it's not just a problem of residential real estate. The entire commercial real estate market is also frozen, and there is going to be a collapse of commercial real estate activity. Who would like to build shopping centers, stores, offices, as ghost towns in the West. Of course, we will lag, the collapse of housing is going to lead to collapsing of commercial real estate.

It's not just a problem of real estate. You're seeing now a rise in the fault rates all across unsecured consumer debt, auto loans, credit cards, and student loans. There is going to be a sharp increase in these default rates.

You have massive problems in the leverage loan market with these LVOs that were done in a reckless way, and now leverage loans are being priced 80 cents on the dollar. You have the problem with the monolines, and I don't believe they're going to be able to rescue a downgrade of these monolines, and if that downgrade is going to occur, it will have severe effects, as we've seen in the money market, and a downgrade of other assets that were being insured by the monolines, as backed securities.

And finally people say the corporate sector is doing better today than in 2001. Yes, that's true, on average. There is a fat tail of corporates that are actually highly distressed, with lots of that and not much profits. On an average in the United States, corporate de-

fault rates in the last 30 years has been something like 3.8 percent. For the last 2 years, that rate of default on corporate bonds was only 0.6 percent, $\frac{1}{6}$ of what is normal.

In a typical recession, corporate default rates go up as high as 10 to 15 percent and recovery rates given default fall sharply. In a normal year, you recover 70 cents on the dollar, in a recession, you recover only 30 cents on the dollar. So you have a double whammy in a recession. Default rates are much higher and recovery rates are much lower.

So there are going to be significant massive increases we've seen already in the data, in corporate default. In the last 2 years, there was slash of liquidity, credit spreads were very low, and they were bottomed out at 260 over Treasury's last June; now they're over 700 basis points over Treasury on junk bonds.

There is going to be a massive increase in corporate defaults. And once that happens, about \$50 trillion of credit default swaps that are ensuring something like \$5 trillion of corporate bonds are going to also get in trouble, because at that point those who sold the insurance, some of them might go belly-up. Might be some hedge funds, might be some investment banks, might be some monolines. And those who bought insurance might discover that they were not hedged, and you're going to have another massive loss.

So the problem we're facing right now in the U.S. economy is not a subprime mortgage problem but the subprime financial system that has severe stress like we have not seen in the last 30 years. This is a severe financial crisis, and that's why the recession is going to be more severe.

A final point about Fed policy: In my view, whatever the Fed at this point does is too little, too late. Of course, the Fed is going to ease more aggressively, and that's going to put the floor on how deep and how severe this recession is going to be, but it's not going to prevent it, because the recession has already started.

And monetary policy is ineffective in a number of ways. First of all, today we have a glut, a glut of housing, a glut of automobiles, a glut of consumer goods. And when you have a glut of these things, it takes time to work out the glut, and monetary policy becomes less effective. It's like pushing on a string. In 2001, we had a glut of tech capital goods. The Fed slashed rates all the way from 6½ percent to 1 percent. We still had the recession and real investment on tech capital goods fell by 4 percent of the GDP. It took years to work out this glut.

That's why when you have a glut the demand for these capital goods becomes interest rate insensitive. Therefore, we are not going to resolve the problem of housing or auto or consumer durables with easy money.

Second observation: Monetary problems can deal with problems of illiquidity, but today we don't have just problems of illiquidity in the U.S. economy; we have problems of insolvency. We have millions of households that are bankrupt. We have had 200 subprime lenders already going out of business. We have dozens of home builders that are going to go out of business, or already have gone out of business. You've had dozens of financial institutions where highly leveraged got in trouble and lost money and shut down. And

soon enough, as I argued, there is going to be a massive increase in corporate default rates. These are problems of insolvency of credit that you cannot resolve with money only.

The third point is that right now we have a shoddy financial system that is not affected very much by the monetary policy. You have non-bank financial institutions, that like banks borrow short and illiquid ways and lend long or invest in illiquid ways, as savings, conduits, money market funds, hedge funds, investment banks. And unlike banks that have access to the lender-of-last-resort support of the fed, these non-bank financial institutions that have subject to this liquidity risk of a rollover of their claims that might lead to a crush because of illiquidity don't have access to the lender-of-last-resort support of the fed.

Final point: We have systematic problem in the financial system. The lack of transparency, the great opacity that exists of all these instruments that are hard to price, that are highly liquid, and therefore monetary policy cannot affect them.

So, final observation: We are in a recession, and this is going to be a severe recession, and we are in the middle of systematic and systemic financial crisis that is becoming extremely dangerous.

[The prepared statement of Dr. Roubini can be found on page 66 of the appendix.]

The CHAIRMAN. Thank you. Dr. Rivlin, let me just clarify one thing. Usually when people leave things out, and they have written statements, I am happy because we move quicker. But you left out one phrase for speed that I hope you'll repeat. You talk about the importance of paying for the stimulus that we just did. In your written testimony, you said over 5 years. I assume you omitted to say that orally.

Ms. RIVLIN. Sorry about that. Yes, I meant over 5 years.

The CHAIRMAN. Right. Because there would be no point in doing the stimulus that immediately—

Ms. RIVLIN. You certainly don't want to pay for the stimulus in the year that you do it.

The CHAIRMAN. No. And that would have been the speaker's position, and it is within the PAYGO rules to have the 5-year payback period.

Ms. RIVLIN. Yes. I'm just a fan of the PAYGO rules, and I don't like—

The CHAIRMAN. I understand. But I—now I do want to get back, and I also agree, as you pointed out, obviously monetary policy and regulatory policy are not the same. I understand that. I do think that what is happening here is that ordinarily when we do Humphrey-Hawkins hearings, both the hearings themselves and previously the focus is on the macro-economy. But it does again seem to be today—and many of the witnesses have said this—that it is a failure in what has been the micro, the particular subprime lending, a fairly specific sector, that's the single biggest cause of the current macro problem. And you can't solve the problem without getting back to it.

Let me just—this is kind of a sequence—as I was reading the testimony this morning I was struck, and I have handed this out to people. Dr. Rivlin: "The exposure to subprime lending was a clear regulatory failure. So that regulatory failure cause of expo-

sure in the subprime lending.” Then Dr. Zandi: “The fundamental source of the economy’s problems is the housing downturn and surge in mortgage loan defaults and foreclosures.” That is, it was a regulatory failure that led to the subprime crisis, and it’s the subprime crisis that’s led to the border crisis. Professor Reinhart talks about multiple regulatory failures, which have led to this.

And now let me turn to Professor Roubini, because we have already heard today the argument that “Well, yes, but if the government rushes in, you’ll just make it worse, leave the market to itself.”

And let me just quote, and I’d ask you to expand on and ask others to comment on this. In your testimony, you say, “Policy makers”—the executive branch I assume you’re talking about—“stress that their preferred approach would be one of ‘self-regulation’ and reforms undertaken by private financial institutions rather than new rules and regulations imposed by authorities. While the right balance between principles and rules and regulations and supervision is open to discussion, the recent experience suggests that excessive reliance on principles not backed by appropriate rules, the delusional hope that internal models of risk management will provide the right amount of risk-taking, the wishful thinking that self-regulation will work, the hope that financial institutions will self-reform the system of compensation of bankers, are all mistaken views. A more robust set of rules, regulations, and supervisions will be necessary, as excessive reliance on self-regulation and market discipline has shown its failure.”

I would ask any of the members to comment: I think that is absolutely the case. We used to have someone here who was a monetary economist, who was in the House: “Markets are smart and government is dumb.” I guess if you still wanted to hold to the question of “Government is dumb,” we would have a remake of the movie, “Dumb and Dumber.”

[Laughter]

The CHAIRMAN. So, Dr. Roubini, do you want to expand on that? And then I would ask the others, if they want to comment.

Mr. ROUBINI. Yes. I present more detail in my written testimony, my points of view on the issue of regulation. And as I said, right now we’re facing a significant problem that goes well beyond subprime. Of course, many of the regulatory mistakes were done in the last years by allowing these reckless lending practices to occur. Things like zero down payment, no verification of income assets, and jobs, interest rate only, negative amortization, and TISA rates.

And by the way, all this kind of stuff was occurring not only in subprime but in subprime, near prime, and prime, jumbo loans, piggyback loans, home equity loans. About 2/3 of all mortgage origination since 2005 had these reckless characteristics.

But as I said, right now what the financial stability— 401—7 are discussing are these broader problems of the stability of the Anglo-Saxon financial system. You have issues of internal models of risk management, whether they work or not, whether liquidity risk is stress enough, what is the role of credit rating agencies and their conflicts of interest, what is the system of compensation of bankers, whether the system of originate and distribution of credit risk transfer securitization is working, or how can we reform it? Wheth-

er Basel II should be reformed because its weakness is by relying too much on internal models, on rating agencies, not assessing correctly liquidity risk, having countercyclic—procyclical capital—ratio.

So there is a whole set of things that are right now on the table, and if you want a financial system that works and everybody is in favor of financial innovation, but we know a financial system works only if there is a set of rules and regulations. Because otherwise we are in a financial market that is—

The CHAIRMAN. Let me—because we are running out of time. But is it fair to summarize your view? Is it that these things that you are describing were all decisions made in the private sector, and you believe that in dealing with them and preventing repetitions, etc., some public sector decisions are going to have to be made setting up the rules, is that correct?

Mr. ROUBINI. Yes. I mean there's this debate on how much you want to rely on principles as opposed to rules, because of course there is a risk the financial innovations are—

The CHAIRMAN. But in either case, they are promulgated—

Mr. ROUBINI. —in the light of regulation, but I think the pendulum swung too much in the direction of relying only on principle and self-regulation—

The CHAIRMAN. But in both cases, in principles and rules—and I agree with you that we need more rules—you are talking about binding legally promulgated restrictions on what the private sector does?

Mr. ROUBINI. Yes, I do. I think that—

The CHAIRMAN. All right—

Mr. ROUBINI. —I think that a certain reliance on stronger rules—of course, you have to be cautious—

The CHAIRMAN. Thank you. I have to move on. Dr. Reinhart?

Ms. REINHART. The decentralization of governance, if you will, of regulation, is a problem. One of the things that if you look at the big picture, at the BIS, is that you try to get common rules. If you have every State having their own rules on what is deemed a worthy loan, we're really steering away from actually the big picture that we're pushing.

The CHAIRMAN. Thank you. Dr. Zandi.

Mr. ZANDI. Well, let me say that I think there's plenty of blame to go around, a lot of actors that were involved in this and many mistakes made, not just the regulators. But I do think regulatory oversight was lacking in this period, and I think most fundamentally that's because of the Byzantine nature of our regulatory structure. There are half a dozen regulatory bodies that oversee the mortgage and housing markets, and in fact the mortgage industry worked hard to find the cracks in the regulatory structure. In fact, some of the most egregious lending was done by institutions that were regulated by the FDIC, the OTS, the OCC, and the Federal Reserve. They—

The CHAIRMAN. But could have been under the Homeowner's Equity Protection Act if the Federal Reserve had promulgated rules.

Mr. ZANDI. Yes, although this was a period that was fast moving, big changes. It was hard to see that the restructure was creating the kind of problems it was. But I sympathize with what you're

saying, and I do think if the regulatory agencies were more rationalized, if there was some way to centralize the process, although this is a big problem—

The CHAIRMAN. I have to disagree there. With regard to the non-bank lender, originators, mortgage brokers, there wasn't any split, there was the Federal Reserve. They had pretty primary jurisdiction. There was potentially some State things, but frankly the problem here was that the Comptroller of the Currency and the Office of Thrift Supervision pre-empted State authority in many areas. So I mean it's not as if somebody tried to do something, and somebody else checked them. The Federal Reserve had authority and they decided not to use it.

Mr. ZANDI. Yes. I think though, that you know, think back to the period of 2005 and 2006. These new institutions reforming very rapidly, they were literally under the radar screen. I mean, restructures I think weren't really under their purview—thinking about it.

The CHAIRMAN. I miss Ned Gramlich. He was a great man. I hope he left his radar screen to somebody, because they weren't under his radar screen. Dr. Taylor?

Mr. TAYLOR. Mr. Chairman, I think these are good points. I would say that, however, the problems were caused, as we know, by financial institutions making decisions in retrospect certainly they shouldn't have had individuals making decisions like this. So, I think the first thing to say is the problems, the responsibility for dealing with them are with those individuals, are with the private investors, the private institutions.

The role of policy right now, we discussed this, monetary policy in particular is to prevent spillovers of that to the rest of the economy. That's—

The CHAIRMAN. But can monetary policy prevent the spillover? I think that is the frustration that absent regulation—

Mr. TAYLOR. Yes, I believe it can.

The CHAIRMAN. You think monetary policy by itself can deal with the foreclosures?

Mr. TAYLOR. I believe it's having an effect already. You know, for example, some of these resets are going to be smaller with—

The CHAIRMAN. You think that the only policy response we need for the current situation is to continue to have lower interest rates?

Mr. TAYLOR. I think it's part of the response. I think it prevents some of the—

The CHAIRMAN. What would the rest be?

Mr. TAYLOR. But you can overdo it, and that's why I've said the inflation issues are important too.

I think with respect to looking at changes, you need to be very specific about what the problems were. The off-balance sheet operations at the banks, the so-called structured investment vehicles, those should have been monitored.

The CHAIRMAN. Can we mandate that they'll be on the balance sheet?

Mr. TAYLOR. —monitored in the future. You look at what the Fed—

The CHAIRMAN. Should we mandate that they would be on the balance sheets, the regulators?

Mr. TAYLOR. I think you need to see what the Fed comes up with in that—

The CHAIRMAN. Well, it could be that the Fed is not out in Patagonia somewhere. This is a public policy question.

Mr. TAYLOR. —think about what you're mandating. Let me put it that way. So define what the structure investment vehicle is. If you think the regulators are not doing it right, then of course you need to change the law. But I'd say be specific, what's the problem, address the problem, and then take some actions.

But there is a concern about overdoing it, and try to change—reform the whole system when there—

The CHAIRMAN. My last question. Do you think regulation has been overdone in the last 5 years in this area?

Mr. TAYLOR. No, I don't think regulation has been overdone.

The CHAIRMAN. Thank you. Dr. Rivlin?

Ms. RIVLIN. Two points. I think you have to be careful not to overdo it. You do have a regulatory failure here. However, if everything that we can now think of with hindsight had been done, you might still have had a housing bubble. There's not much that regulation can do to keep people from making dumb decisions. And what we know about market economies is that every once in a while they get really irrational, and it is very hard to stop people who think that housing prices are going to go up forever.

But that said, I think now you need to look at who regulates what and make the system more rational and stronger, so that we don't have a repeat of this particular set of issues.

The CHAIRMAN. But you acknowledge that Ned Gramlich did say that we should step in and do something?

Ms. RIVLIN. Yes, and I think he was right. We should have done something. But your problem is, "What do we do now?"

The CHAIRMAN. No. Well, that is true, but in order to figure out what to do now, you have to figure out what went wrong. And assessing the role that regulation played in the past is part is part of what you do going forward. Ignoring history is not a good way to make policy prescriptions.

Ms. RIVLIN. Right. And I think clearly we should have regulated—I don't know who exactly "we" is—"we" the government should have regulated all of the people who were making predatory loans.

The CHAIRMAN. And I will close with one last point—and I didn't get a chance to talk to Dr. Roubini—but we ought to be clear, we aren't just talking about subprime. Subprime is where it started. But in fact, the absence of good decisionmaking in the private sector and the absence of any regulation allowed it to spread, and mechanisms in the private sector that we were told might be confining this, various forms of diversification and risk management, appeared to have exported it. But it does appear that among the major exports in the America these past years have been bad mortgages, and with negative consequences elsewhere in the world.

So it started as a subprime crisis and then spread through the system and systemic aspects that we were told a couple of years ago were going to confine this seemed to have spread it. Mr. Bachus?

[No response]

The CHAIRMAN. Mr. Paul.

Dr. PAUL. Thank you very much. My question is directed to Dr. Roubini, but first off I want to say once again that I have a little trouble with this assumption that if we have poor information sent out to us in the marketplace from the Federal Reserve with distortion of interest rates that regulation is all that we need that will solve all these problems, because mistakes are made by investors and savers, mainly because they're getting bad information.

But I wanted to address a subject with Dr. Roubini. In his written comments, he says the perception by markets that the Fed is trying to avoid necessary economic correction and the necessary adjustment in asset prices is something that I think is what's going on right now and so important, because when there is a distortion, the market says correct.

But because of the emotional and political aspect of people losing a house, you know, it's virtually impossible. Nobody wants to take that position because it looks like you're being cold-hearted. Yet at the same time when the pretense is that we're going to save everybody's home, frequently when we're demanding lower interest rates, we know that behind the scenes what we're really doing is propping up Wall Street.

Every time there's an announcement of significance with interest rates, the stock market pops up, and that seems to me to be the real goal is to bail out Wall Street because the people continue to lose their homes.

But my question is related to a later statement that you said here. The Fed has now altogether ignored concern about moral hazard and concerns about future inflation and now starting to undermine the credibility of the Fed. And I think that is also true, but what I'd like to ask about is, when should we be concerned about that? After we have this crisis develop and the bubble seems to be unwinding? Where in your estimation does the bubble come from?

And when was your concern about the housing market? Was it after we saw 2 years ago or so that this thing was collapsing, or was this something that you were able to predict? And were you concerned about it when overnight rates were 1 percent and we could get mortgages once again down at 4 percent in this age of fiat money where there's zero amount of savings? This is astounding.

You know, in capitalism, capital comes from savings, but we have no savings. And yet, you could go out and get a mortgage, a \$500,000 or a \$100 million mortgage and pay under 5 percent for this. Was your—did you have concern at that time about what the Fed was doing? And would you accept the premise that much of the mischief and the bubbles come from the Federal Reserve? If not, where do the bubbles come from?

Mr. ROUBINI. You're asking a set of very important and interesting questions. If I have to try to explain how we got into this housing bubble, I think there are a variety of factors. I think there is a consensus now that the Fed cut rates and kept them too low for too long. If you're using, for example, the Taylor rule that Professor Taylor has developed, you probably should have started raising rates much faster than they did after the 2001 recession. So certainly, easy money was part of the story.

Part of it was also global conditions that kept, you know, long-term interest rates low, this bull market conundrum that Chairman Greenspan was referring to that depends on global conditions like the relative supply of savings grow relative to investment. So that was a factor that kept the loan rates low in normal and real terms.

But in my view, even more so the monetary policy was a failure of regulatory policy. Because if you're expecting home prices to go up by, say, 20 or 30 percent per year, having a Fed fund at 100 basis points higher is not going to make much of a difference. And that's where the regulatory failure came, because literally, allowing things like zero downpayments, like not verifying the income and the assets and the loans, having interest rate-only loans. Having negative amortization where you're paying even less than the interest and then the mortgage value is going up over time. Introducing teaser rates.

These were forms of financial innovation that were dangerous and were reckless, and Governor Gramlich and others early on suggested these things were things they should have avoided. And unfortunately, Chairman Greenspan was the biggest cheerleader for these forms of financial innovation that led us into trouble.

So the Fed made mistakes, but in terms of monetary policy and in terms of regulatory policy, it was not just the Fed. It was the entire attitude, I fear, in Washington the last few years which essentially wanted to emphasize any form of regulation, was this kind of laissez faire ideology that markets know better. But we know in financial markets, people are greedy. And greed is good in some sense, at least entrepreneurship, but it has to be controlled by institutions, rules and regulation. Otherwise, financial markets become a jungle where you have asset bubbles and credit bubbles and when this occurs, and they go bust, the economic consequences are severe.

Dr. PAUL. May I have one short question?

Ms. WATERS. [presiding] Yes, you may.

Dr. PAUL. This is a short question for Dr. Taylor. You talk about the Taylor rule and how to figure out the proper Federal funds rate. Of course, from my viewpoint of the market, nobody is capable of doing this. But what would your estimate be if we allowed the market—what would happen if the market determined the Fed fund's rate? And why would it be so bad?

Mr. TAYLOR. Well, the only way the market could determine the Federal funds rate is if the Fed set money supply or the reserves and then the market could respond. So the system we work in now tries to come close to that, Mr. Paul, but it doesn't do it exactly.

Instead what the Fed does is sets the interest rates to be consistent, I believe, with these low inflation goals. And if they stick on that, we should be fine. I think if, again, to my opening, the last 25 years, you have to recognize are remarkably stable and long expansions, relatively infrequent recessions, shallow recessions. That is much better than how it used to be, and it spread around the world. I think that's a signal that monetary policy in these dimensions has done well.

It's made—it's not always been that way. I think the ease in 2002–2003, as I wrote before, did go too far. And that's one of the

reasons now why I would be concerned about going too far again. If you stick these basics—inflation, you're right to point out concerns about inflation, but you consider that along with balancing the risks to the downside, I think we should be okay.

Ms. WATERS. Thank you. I will recognize myself for 5 minutes. Let me just quickly ask this panel, do you believe that the recently passed economic stimulus package is the right kind of fiscal policy to stimulate spending in the economy? Just—you don't have to expound on it, just yes or no. Starting with you, Mr. Roubini.

Mr. ROUBINI. Yes. I do believe it's a step in the right direction.

Ms. WATERS. Yes?

Mr. ROUBINI. Yes.

Ms. WATERS. Thank you.

Ms. REINHART. I concur.

Mr. ZANDI. I think it was a laudable package, yes.

Mr. TAYLOR. I would like to just add, I think some effort to worry about the tax increases that are coming down the line is important right now. If there's not legislation introduced to prevent the tax increases in 2011, 2012, etc., then we could be actually undoing any stimulus that comes from what you've already passed.

Ms. WATERS. Yes, Ms. Rivlin?

Ms. RIVLIN. I think the package was a very good one and speedily enacted. I suggested in my written statement that there were some things you might have added and may still have to add.

Ms. WATERS. Thank you. It appears that in this discussion this morning, there is a lot of attention on the subprime crisis, which appears to be at the center of this economic downturn. And I'd just like to ask Mr. Roubini, Mr. Frank was reading, I guess, part of your statement where you talk about self-regulation and you believe that public policymakers I think it is said here, would prefer self-regulation to regulation that's developed by the public policymakers here. Do you really believe that there's any chance for over-regulation by this Congress in the financial services market in any shape, form, or fashion? Does anyone believe that, Mr. Roubini?

Mr. ROUBINI. Certainly you have to be careful about, you know, not overregulating. I think that—

Ms. WATERS. Who do you think would overregulate? Who do you think—how much power do you think the financial institutions have in this Congress?

Mr. ROUBINI. I don't know that. What I'm saying is that in this debate about regulation of the financial system, there is a long discussion on how much you should rely on market incentives, on principles on self-regulation, and also you should have also the stakes of actual rules. And I think that there has to be a fine balance between the two, and unfortunately in the last few years we have gone too much in the direction of essentially relying only on market discipline, on self-regulation and on internal incentive the financial system for a variety of reasons, and I'm not going to spell them now. They don't work. So I think that the balance has to be brought back to a set of rules and regulations that are binding, together with reliance on these principles.

Ms. WATERS. The financial institutions basically responsible for the subprime crisis are involved in a coalition of financial groups that are talking about self-regulation in dealing with the subprime

crisis—Hope Now. Are any of you familiar with Hope Now? Dr. Rivlin, is it working?

Ms. RIVLIN. I think it's a good idea. As I said in my testimony, I don't think it will solve the problem, but it may help.

Ms. WATERS. Does anyone know what it has been doing or what it has accomplished since they got together and decided they were going to correct some of the problems and do some of the workouts and make sure that people stay in their homes? Has it been working? Does anyone know? Has it worked at all?

Mr. ZANDI. They have put out information with regard to the amount of contacts they've made with distressed homeowners. They have put out information with regard to how many modifications have occurred to loan contracts and repayment plans. I think in a broad sense, it has helped only on the margin, and it has not helped in a significant way. Most of what the coalition of lenders and investors in Hope Now have done is put people on repayment plans, which simply says, you haven't paid me in the past, but I'll allow you the opportunity to pay me in the future. But by the way, I'm going to roll in penalties and fees on what you didn't pay me before. So prospects are that these folks aren't going to stay in their homes for very much longer. It's just delaying the inevitable.

So I think in general it's fair to say that there has been some positives from it, but they have been very, very small and very minor. And I think fundamentally the problem is that the investor groups that own these mortgages are very conflicted with respect to what should and what they want done. And until they're on the same page, we're not going to see many modifications. And that may never happen without some pressure.

Ms. WATERS. Would you suggest, Ms. Reinhart, that there should be public policy that would help these institutions really get in the modifications business?

Ms. REINHART. Consolidation of regulation. I think part of the problem that we're seeing is that nobody is held accountable, that, you know, it's you blame that person and you blame that person.

Ms. WATERS. Is there anyone here who thinks that the servicers should be given protection from liability in order to do modifications because they have said that they are afraid of having to—of being sued by the investors if they do modifications that would lose money or would not realize the profits that were anticipated? Do you think servicers should be given protection from liability?

Mr. ZANDI. I don't think—there's legislation to do that. I think even if you passed it, it would be ineffective. I think servicers would still be nervous that they would get sued, because you could not write the legislation in a way that would satisfy them. They're going to have to get the green light from the investor groups themselves before they engage in significant modification. And by the time you get this all together and in place and everyone figures it all out, you know, we're past—we're going to be deep into 2008, and we're going to have a lot more foreclosures and a lot more problems.

So, it's not a bad road to go down, but I am very skeptical it will result in any substantive improvement in the market anytime in the near future. There's other legislation for cram-downs in bankruptcy in Chapter 13. I think that's a better idea. I think that's a

stick. I understand there are problems with it and I sympathize with those issues, but I do think that is a more—that could be more efficacious.

Ms. WATERS. Does anyone here have a better idea of how to do this?

Mr. ZANDI. Yes. My view is instead of doing it legislatively, you set up a taxpayer-based fund that would go in through an auction process and buy mortgage loans and mortgage securities in a bidding auction context. And in that kind of context, the sellers of these mortgages would take a loss. They would sell, but they would sell at a big discount, so they would get hurt.

And you would start the securities market. You would revive the market because you know the Treasury is the buyer. Let's say it's the Treasury that's conducting the auction. You would have a market. They say I'm buying. I'm going to get the best price. As soon as there's a price, there's a market. Credit will start to flow.

Moreover, once you have a price, then all the other institutions with mortgage holdings can mark to that price. One of the problems we're having right now is they don't know what to mark to, therefore, they can't clean off their balance sheet all their bad loans, and therefore they're unwilling and unable to extend credit. This would allow them to do that.

And then third, if you're buying mortgage loans, the government is buying mortgage loans, they take possession of those loans. They are now the owner, and that gives the government significant latitude with respect to how to treat those mortgages. You could, you know, you could lower the mortgage amount to the value of the home and then refinance into an FHA loan. There are many things you could do. But that would be a process that would restart the securities market, get credit flowing, and also help some of these very hard-pressed homeowners. And no one's getting a bailout.

Ms. WATERS. Thank you. Very interesting. All right. We're going to move on to Mr. Shays. Who is next? Oh, you're back.

The CHAIRMAN. I am glad to delegate to the gentleman from Connecticut. The gentleman from California is recognized.

Mr. CAMPBELL. Thank you, Mr. Chairman. Let me preface my questions by saying I agree with Dr. Roubini and Dr. Zandi that I think we are in a period of negative GDP growth which is very likely, almost certain to be 6 months or longer, and therefore be the technical definition of a recession, and very likely to be longer than that. So I'm going to use the term "recession," because I think we are in one, and that to deny that is just ignoring what is likely, what is almost certainly the truth.

So my first question is to Dr. Taylor and Dr. Roubini. If this—this was not a consumer-led downturn. This was a credit and capital downturn. Consumers, it would seem to me therefore, can't lead us out of it, and that what we have to do is figure out ways to get capital moving again, get people to take risks again, to change risk premiums, etc., to get capital moving. Am I wrong on that? And if so—or if I'm right, what should we be doing to do that?

Mr. TAYLOR. I think that's certainly part of it. But remember, consumption and actually net exports has held up the economy for almost 2 years. You have 2 years of a housing decline. It's really

in some sense to me amazing as you look back on that we had two full years of recordbreaking declines in starts and construction. And for most of that period, this economy just kept going. That's because of the strength of the consumer. Also, foreign trade and exports. So it is important to make sure that—in fact the biggest risk in my view is that you have some weakening on the consumer side.

With that said, efforts to bolster investment, that's where some of the interest rates effects come into play that the Fed has already taken, is very important. And I would say that's—it has to be a balanced thing. You know, the best kind of recovery, which I think we should be thinking about now, by the way, because you're right. Whether you call it a recession or a slowdown, we're in it. So the thing to me to thinking about is how we—what's this next expansion going to look like? I don't think it's going to be as deep as Dr. Roubini indicates.

Mr. CAMPBELL. Dr. Roubini, your thoughts?

Mr. ROUBINI. Yes. I mean, the problems, of course, started with housing, but in some sense the sector of the economy that has the most financial trouble and vulnerability is the housing sector. In the 1990's, of course, it was the corporate sector that over-expanded, over-invested, and borrowed too much. And then you had the bust of the tech bubble, and the consumer was actually in much better shape. That's why you didn't have a contraction of private consumption during the last recession.

But the last few years have been years in which there has been a massive increase in consumer debt. A lot of it was mortgages, but a lot of it was not just mortgages. It was, you know, auto loans, credit cards, student loans, you name it. And the total stock of that, of the housing sector's share of their income went from 100 percent to 136 percent, and the savings rate of the housing sector that was already low to begin with in the 1990's fell further and went all the way into negative territory.

So the worry that I have right now is that we have essentially the largest part of the economy, this private consumption and the housing sector, that is under severe financial distress, that has never had so much debt, and now we have this severe credit crunch, and you are also buffeted by slack in labor market, high oil prices and everything else. That's why I worry about—

Mr. CAMPBELL. So what brings us out?

Mr. ROUBINI. Excuse me?

Mr. CAMPBELL. What brings us out of this?

Mr. ROUBINI. I think that you need fiscal stimulus, as you have done already. I don't think it's going to be enough, what you've already done. Last time around we started from a surplus of 2.5 percent of GDP. In 2000, it went to a deficit of 3.5. There was a 6 percent in fiscal policy. This package is 1 percent, first of all, and we've squandered the surplus that we had a few years ago. That's why now we structure a budget that—

Mr. CAMPBELL. But I guess—and I'm sorry to just—because I have several more questions. Is it capital? Is it capital that will bring us out of it, or will the consumer bring us out?

Mr. ROUBINI. It will be capital, but I think that actually in the United States for the last few years, we have invested too much in unproductive capital, essentially the stock of housing capital, and

we didn't invest enough into the productive capital. Traditionally in the United States, housing is subsidized in a dozen of different ways. And then went this bubble. So, part of the adjustment is unavoidable. There was too much investment in residential real estate. That has to fall. And hopefully, the right economic policy is going to lead to a recovery of real investment in the true capital stock of the economy.

Mr. CAMPBELL. Okay. Let me—because I'm actually already running out of time. Let me fire off two questions and then I'll ask. One will be to you, Dr. Zandi.

The CHAIRMAN. We're being a little lax on time, so don't—you don't have to rush that much. Go ahead.

Mr. CAMPBELL. Oh, okay. All right. Then, Dr. Zandi, let me ask you. Talking about your proposal of an auction of MBSes and so forth, I guess I don't understand how if the Treasury—if there's an auction, Treasury goes in and buys it, they're by definition offering the highest price, or a higher price than anybody else, how that is not the Treasury thereby providing or essentially bailing out to some degree the investors and people who made some bad decisions, and in my view ought to lose money for having made those bad decisions.

Mr. ZANDI. Right. Well, they're making a market. And the market will determine the value, the appropriate value, the price, the appropriate price, because they're going to take bids from multiple sellers who are going to be bidding against each other and know it, and determine the appropriate price for those securities.

Mr. CAMPBELL. So you're saying that if you have some MBSes now there is nobody—you can't—even 20 cents on the dollar, you couldn't sell it to anybody?

Mr. ZANDI. Well, you will find somebody who will buy it for 10 cents on the dollar or 20 cents on the dollar, but no one is going to sell it, because they know that's not the appropriate value. And therefore there is no trading, and therefore there is no market.

Mr. CAMPBELL. Well, then why does the Treasury need to buy these? If the idea is that all you need to do is create a market with some liquidity, why can't a market be created without Treasury?

Mr. ZANDI. What you need is a buyer who is willing to pay fair value, and says—and I can find that fair value because I'm big enough and I can set up an auction that's deep enough and broad enough and have enough sellers in it that I can find the appropriate price.

Mr. CAMPBELL. Okay.

Mr. ZANDI. Right now, there is no price.

Mr. CAMPBELL. Okay.

Mr. ZANDI. There is no market. And there is no credit.

Mr. CAMPBELL. All right. One more question for you, and then I have one question for the panel generally. Is—if we talk—you mentioned that the Alt-A, subprime, and largely the secondary market is kind of totally missing, dried up, gone as of January I think you said, out there. If we do additional regulation, don't we have to be careful that we don't perpetuate that situation? Don't we want that market to come back, not like it was, but at least to some degree?

Mr. ZANDI. Yes. Absolutely. And, you know, this discussion about regulation and what should be done about the regulatory process is an issue for the long run. This is a complicated issue. I would not jump in and make big decisions fast, because this is a can of worms that has been in the making since the Great Depression. It just can't be fixed quickly.

What needs to be fixed quickly is what you began with in your questioning, and that is the securities markets need to be restarted. Because if credit doesn't flow, you can help homeowners today with problems, but you're going to have hundreds of thousands behind them. So it's key to get the credit flowing. And my point is, we're coming to the realization, I'm coming to the realization that the markets aren't going to do it on their own. Ninety-five percent of the time, they figure it out, and markets should be left to their own devices and do it. Five percent of the time they can't, and this seems to me like it may be one of those times, 5 percent.

Mr. CAMPBELL. Okay. Then the last question I have. We have all talked about the economy. I share Dr. Taylor's concern about inflation, by the way. But the one thing I didn't hear anybody mention was the value of the dollar. And I guess this is for the whole panel, and then I'll close, Mr. Chairman. Is anyone concerned about—that if the value of the dollar falls further from where it is that that is good, dangerous, or bad for United States economic policy long-term? Thank you.

Ms. RIVLIN. I would be concerned if the dollar plummeted and added to disarray in the world markets, but an orderly decline in the dollar, which is what we have seen, seems to me what we need to stimulate exports—to reduce our very large deficit in the balance of payments.

It's getting better. We have a long way to go. And part of the self-corrective mechanism is the dollar falling and making it much more attractive for other people to buy from us, and less attractive for us to buy from them.

Mr. TAYLOR. I certainly think we should be concerned about precipitous movements, but I also think we should be concerned about the strength of the dollar per se. It's a very important part of policy for confidence in America to have what I used to call at the Treasury the strong dollar policy.

I do think that there are potential inflationary consequences of the dollar depreciating, and that's one of the concerns certainly that would be part of my thinking. I think with respect to the improvement in the trade deficit that we've seen, which we have, the current account has come down, I actually believe that's largely due to in some sense the same thing we're worried about here, is the housing. Because it means that the gap between saving and housing—saving and investment, excuse me—has come down, and that's just what would cause the improvement in the current accounts. It's one of the silver linings that we always try to think about for any event like this. But the trade deficit improvement is I think mainly related to the investment issue.

Ms. REINHART. Add that can we take it one step at a time. Right now, the process that we are in, and I agree with Nouriel, is a recession or about to be in one. A weakening dollar helps the current

account deficit. We can worry about the inflation consequences; but for the time being, let's worry about the economic downturn, because it's not likely to go away in a month or two.

The CHAIRMAN. The gentlewoman from New York.

Mrs. MALONEY. Thank you.

Dr. Zandi, you mentioned that we need to get credit flowing in our country, but how do we get that credit flowing? How do we get that credit access moving? What can we in government do to stimulate or help that direction?

Dr. ZANDI. Well, I think the root of the problem in the securities markets in the financial system obviously goes to the residential, mortgage securities market. That has been effectively shut down. So I think if you focus on that market, try to revive that market, that the rest of the financial system will follow, just as it followed down into the credit crunch or credit squeeze, it will follow it out. And I do think we are at a point where we shouldn't wait for the markets to figure it out themselves, because it is affecting the broader economies resulting in a recession-like, if not a full-blown, recession.

So my proposal is that the Federal Government become more actively involved in that process. I've described that to you. I could describe it again, but I think that would be the most efficacious way of reviving, restarting quickly, something that could be done very quickly. We have experience with auction processes.

The Federal Reserve very ingeniously put together the Taft process, which has worked, I think in everyone's view, quite well. I think we can do that quite easily. There's obviously missing, complicated issues, but I think that's the best approach.

Mrs. MALONEY. Some of the candidates for President are saying that our tax credit system is skewed in this country and that what we need to do is be giving tax advantages, tax credits to those companies and corporations that create jobs in America. And some allege that our system now really rewards companies that go overseas and move their headquarters and jobs overseas. Could you comment on that Dr. Zandi? And do you think that is a direction we should be considering?

Mr. ZANDI. Yes, I mean I think the Tax Code plays obviously a key role in the location and expansion decisions of businesses here in the United States and globally, and, because we are clearly a very globally-oriented economy in every aspect, that is important. We are competing with other countries with respect to our Tax Code and how attractive our Tax Code is.

But let me say, I think this isn't an issue for 2008 or 2009. That would be more of a longer-term issue for the next President. It's not something I think I would be focusing on this year.

Mrs. MALONEY. Now, many of you have testified that we are headed towards a downturn in our economy. Would you like to comment on whether you think this downturn will be short and shallow, or long and deep? And how limited might the Fed be in their capacity to act due to the rising inflation?

Dr. Rivlin, and anyone else who would like to comment?

Ms. RIVLIN. Frankly, I don't think we know. What we can do is take out insurance to increase the probability that it will be short and shallow. I think you've already done that with the stimulus

package. I think the Fed has done that by cutting rates. And now you need to take steps that will get the credit flowing again. I like Dr. Zandi's proposal.

There are others, but you need to work both on the credit markets, and, I think, on the ground where the foreclosures are. And I would consider in addition to his proposal, or that family of proposals, some direct grants either to States or to nonprofit organizations that can help keep people in communities in their houses, buy the foreclosed houses if necessary, and rent them back.

Mrs. MALONEY. Well, we have taken steps. In fact, roughly 300,000 RFPs are out now to community groups. In my home State and city, we are having meetings with homeowners with people on the ground, government sponsored, to try to help them.

But in that vein, what additional measures give us, if you believe according to Dr. Zandi's testimony where we are facing prices of \$4 a gallon that this would be the equivalent tax of \$100 billion on our households? This burden on top of the losses and wealth to the home prices falling and higher heating oil and gases, what additional measures in addition to revenue sharing helped localities and the steps that we have taken in Congress would give us the biggest bang for the buck to help families the most during this challenging time?

Dr. Rivlin, and anyone else who would like to comment?

Ms. RIVLIN. I think we may need additional stimulus and I would do it through either increasing the Food Stamp Program, certainly lengthening the time for unemployment insurance, and some form of revenue-sharing with the States, which could be the Medicaid match. We've done that before. It works, and we know how to do it.

Mrs. MALONEY. Some of us, including our chairman, tried to get that in our stimulus package.

Mr. TAYLOR. Ms. Rivlin, just briefly I think what you're doing in the communities is very important, and more of that needs to be done. I think at the higher levels, if you like what's done, are the Treasury—and actually my Governor in California did the same thing—was to bring the servicers and the investors together, because there is a lot of commonality.

I think they had a lot of mutual interest here. If they could figure out a way to get over this, I think that's very important. I must say though, with respect to further action, I am beginning to worry about the psychology of tax increases coming down the line. Right now, unless there is a change in the law, we are going to get a tax increase, a big one, coming in 2010.

And it's going to be a tax increase on capital as well as labor. I think that's beginning to be a concern for people and I think the next step, whatever it is, has to recognize that and take some actions, in my view, to prevent it.

Mrs. MALONEY. Anyone else? My time is up if anyone else would to comment.

The CHAIRMAN. That's all right. We'll move on to the gentleman from Florida.

Mr. FEENEY. Well, thank you, Mr. Chairman, and thanks for holding this hearing.

If we were hoping that consumer confidence was going to pull us out of this potential recession, anybody listening in today, you know, will be less likely to come to our rescue. Now, I think we are pretty much agreed that this is going to be something more significant than a soft landing and the question is what to do about it.

Very briefly, with respect to fiscal policy, nobody has actually mentioned Milton Friedman's concept of permanent income. The fact is that investors long term don't change their behavior unless there is some positive change in permanent income and one-time stimulus packages, while they may or may not do very much harm, do very little long-term good.

As Dr. Taylor pointed out, it is productivity that leads to prosperity for a society and that has always and everywhere been true. I view a stimulus package a little bit like a rain dance. The thing about a rain dance is that if you dance long enough, it will rain, but probably not because you were dancing, and it may not do a lot of harm.

I will say that, you know, Dr. Zandi, your comments about the fact that we just don't have a credit crisis, there simply is no credit, I think was one of the extemporaneous positions you took. Even borrowers with good credit are having a devil of a time getting access to mortgage loans. Obviously, this is starting to spill over into business loans, etc.

Housing prices are declining. There are no buyers out there because buyers cannot get access to credit, and the correction in the easy credit has already occurred. No new regulation has to occur from this Congress, because investors simply are not willing to enter this mortgage lending market.

Dr. Zandi, investors buying securitized loans, where was that, say, 2 or 3 years ago versus where it is today? The amount of total capital investors are putting into securitized mortgage loans, do you happen to know?

Mr. ZANDI. At the peak in 2005, 2006, and the first half of 2007, annualized issuances were running at just about a trillion dollars. And that was per annum.

Mr. FEENEY. Per annum?

Mr. ZANDI. Per annum. That's a non-conforming market, everything that Fannie, Freddie, and the FHA don't do.

Mr. FEENEY. And where is it now?

Mr. ZANDI. In January, annualized, per annum, less than \$50 billion.

Mr. FEENEY. So roughly 95 percent of the market is gone?

Mr. ZANDI. I would say it is effectively nothing.

Mr. FEENEY. And with respect to encouraging the re-establishment or the resurrection, I guess we need a "Lazarus" act here. It's dead.

With respect to doing that, is it true that to the extent that you further impair security, that it will take longer for the investors to come back?

Mr. ZANDI. I think I started to say yes.

Mr. FEENEY. I spoke to a Realtor recently. She said the biggest problem she has on a daily basis is that appraisers are terrified to establish a price, because they are going to be held civilly responsible, etc., so she can't get even today's market value, because ap-

praisers are worried about what the market will be 6 months or a year from now.

But along with that, I'm very interested, because I also serve on the Judiciary Committee, and you testified recently in front of that committee about your cram-down proposal. To the extent that residential mortgages are subject to the arbitrary decision of a judge, either to reduce the interest rate, to reduce the value of the security, or to lengthen payments, is that a factor as we try to pull a Lazarus with the credit market that will prolong the return of investors to start providing credit again to borrowers?

Mr. ZANDI. No. I don't believe so, because the legislation is for mortgages that have already been originated and not mortgages going forward, and, so, I don't think it will have any material impact on the securities market.

Mr. FEENEY. Well, presumably, number one, is that the opinion of Moody's, whom you represent?

Mr. ZANDI. That is my own personal opinion.

Mr. FEENEY. Okay. Well, presumably, moral hazard, which is a concept the economists talk about, consumers, investors, etc., presumably even Congress can be subject to the theory of moral hazard, and if we do it once and like it, get patted on the back by news editorial boards and the few borrowers that will be helped, isn't there a potential we will do it again, or, even more importantly, won't there be a potential in the minds of the investors that have left the market? Maybe Dr. Taylor could answer that question.

Mr. TAYLOR. Well, it's the idea of moral hazard applies to government as well as to private individuals. Its incentives are really important. So if you are going to give the indication that is the problem with the so-called bail-out worries, that if you just make it easy for people to get out of mistakes that they made themselves, then you are going to perpetuate future mistakes in the future.

And the ideal with respect to the subject of this hearing, monetary policy, as long as the focus is on the overall economy, interest rates coming down, looking at growth inflation issues, and not focus particularly on especially parts of the financial sector, that should be fine with respect to the moral hazard. So it's a way to focus on the macro things in terms of the broad instruments we have, like interest rates, and as it said bail out particular sectors.

Mr. FEENEY. I am happy to go on, but we have other questions.

The CHAIRMAN. I appreciate it, and that you have come to an appropriate segue here, the gentleman from North Carolina, the author of the bankruptcy bill.

Mr. MILLER OF NORTH CAROLINA. Thank you, Mr. Chairman.

Quickly, before we turn to the bankruptcy bill, I want to disagree with the members of the panel or others who suggested what happened, that the calls of foreclosure prices was that lenders or financial institutions generally were not sufficiently cautious in making loans without making sure that people could repay the loans.

Pretty much everyone involved in mortgage lending in 2005 and 2006 knew perfectly well the people they were lending money to could not repay the loans according to the terms of the loans. They were loans that were designed to become unpayable, unaffordable.

The absolute intention was that people would be in a position of being trapped and having to refinance again. And every time they

refinanced again, they'd have to pay a prepayment penalty, maybe 5 percent of the mortgage; to get out of the last mortgage, they would have to pay points and fees to get into the new mortgage. And every time they did that as housing appreciated, the middle-class families who owned the homes had less of the house, less of the equity. And everybody involved in mortgage lending, they're the ones who ended up with it. It ended up in their pocket, not in the pockets of the middle-class families, and that was the exact intention.

What went wrong? Dr. Rivlin used the phrase, "the music stopped." Is the value housing stopped appreciating? And when that stopped happening, it didn't work. Seventy percent of the subprime loans in 2005 and 2006 had prepayment penalties; 90 percent had a quick reset of interest rates that might increase after 2 or 3 years, so there are 2/28s and 3/27s.

The monthly payments would typically go up 30 to 50 percent. Everyone knew that those could not be repaid, and the volume of subprime loans went from 8 percent of all mortgage lending in 2003 to 28 percent of all mortgage lending, and 55 percent wasn't to people with poor credit; 55 percent of the people who got subprime loans qualified for prime loans. They had their trust betrayed by the people they were dealing with.

Dr. Zandi, you did testify before the Judiciary Subcommittee on what is being called the "cram-down" bill, the bill that would allow bankruptcy courts to modify home mortgages on the same terms, the same basis they would modify any other form of secured debt. And you did say then that you thought that would have a very modest, if any, effect.

You did suggest that it be time-limited. There would be some said. The bill in the House now has been. You were by teleconference or you were by video, and after you left us, there were other witnesses. And one of those, actually, was Mr. Feeney, who asked one of the other witnesses or said, well, you know, I am sure that there are other economists who take a different point of view, and the witness for the mortgage bankers was nodding his head vigorously, as if to say, yes, that's right. Yes, we do have economists who say that.

Mr. ZANDI. I am sure you could find on any subject multiple economists, I understand.

Mr. MILLER OF NORTH CAROLINA. Well, my question is, have you seen it published? Because I haven't seen an analysis. My understanding of the way academics do things is that they publish their analysis. They set forth what their facts are. They take you through their analysis and give you their conclusions. In the 8th grade, we called it "show your work."

Showing your work in 8th grade math class is exactly the same. Peer review is exactly the same concept. Now I have heard—one Member who has been on the fence about this bill has told me that someone, an opponent of the bill, said that they were willing to show him, privately, their analysis, but it was privately. It was sort of, "Psst, want to see our economic analysis?"

While the analysis that supports the conclusion that you reached has been published, there was a Georgetown study just a week or two ago of 40 some pages long; it had footnotes and charts and

graphs and all the stuff that you think serious, academic work would have.

Mr. ZANDI. No. Academic work doesn't have charts.

Mr. MILLER OF NORTH CAROLINA. What's that?

Mr. ZANDI. They don't have charts.

Mr. MILLER OF NORTH CAROLINA. Okay. I have yet to see anything.

Mr. ZANDI. No. No charts. Yes.

Mr. MILLER OF NORTH CAROLINA. By the opponents that really sets out their analysis for why interest rates are going to leap. Are you familiar with any published analysis?

Mr. ZANDI. No, sir. I am not, and I am following this very carefully. And I have not seen any. No.

Mr. MILLER OF NORTH CAROLINA. Okay, I have asked the Congressional Research Service. It seems that there are several comparisons that are apt here. In 1978, the law changed. It is one of the major re-writes of the bankruptcy law. Before that, as I understand it, with the exception of a few rare times in American history, secured debts could not be modified in bankruptcy.

After 1978, everything but home mortgages for individuals could be modified in bankruptcy. I asked the Congressional Research Service to look at and compare investment properties, the availability of lending, the availability of credit, the terms of credit, the interest rates for investment property and for primary residence to see if they could see anything different coming out of 1978. They said, "No. Nothing."

The Georgetown study looked at the different places in the country where the courts were applying the law differently between 1978 and 1994 said they could see no difference. Is that a valid analysis, to see if the law is different one place than it is somewhere else, to see if the terms of availability credit are different in the two places?

Mr. ZANDI. Yes, I think the Georgetown study that you are referring to is a well-done study. It's the best study I have seen and I think it provides strong evidence that there is no difference in interest rates, or no significant difference—nothing they can tease out of the data.

Mr. MILLER OF NORTH CAROLINA. Well, there's that. There's the difference in different parts of the country based on what the courts decided—the split in the circuits, lawyers say. The mortgage lending industry says one of the big differences that the bankruptcy bill would mean that they couldn't collect deficiencies beyond for the indebtedness beyond the buy of the home. But, in fact, a good many States now have anti-deficiency statutes, including the world's 5th largest economy, California.

Mr. ZANDI. Sure.

Mr. MILLER OF NORTH CAROLINA. I am not aware of any difference in the terms of availability credit between States who have anti-deficiency statutes and those that do not. Are you aware of any difference?

Mr. ZANDI. No, sir. I am not.

Mr. MILLER OF NORTH CAROLINA. Okay, in 1986, the same thing, family farms, chapter 12 of the bankruptcy laws allowed exactly the same thing with respect to family farms.

Are you aware of any?

Mr. ZANDI. No.

Mr. MILLER OF NORTH CAROLINA. Okay. Are those the kinds of things that you would expect to look to to see if there would be a difference in terms of availability of credit?

Mr. ZANDI. I can't think of a better approach than exactly that.

Mr. MILLER OF NORTH CAROLINA. Okay, and you were aware of the Georgetown study. You reviewed it.

Mr. ZANDI. And I have heard the arguments from the Mortgage Banker's Association. I have heard the numbers. I think the added interest cost was 250 basis points. I think more recently they are saying 150, but I have not seen any research or work. I have tried to see it, but I have not seen it. No.

Mr. MILLER OF NORTH CAROLINA. Okay, thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from New Jersey, the gentleman from Connecticut, the gentleman from North Carolina, and the gentleman from Illinois are on the list that the minority gave to me. So, the gentleman from New Jersey.

Mr. GARRETT. Thank you, Mr. Chairman. And thank you gentlemen and ladies of the panel, as well.

I appreciate you coming and your testimony. You know, taking a line from the gentleman from Florida who has raised questions with regard to doing the rain dance, the suggestion there of course is that you can do the rain dance, and keep on doing it, and it will do no harm. Of course, what we do in Congress is a little bit different than that. What we do may have negative implications.

Mr. Taylor was referencing the idea that with stimulus today, there may be potential tax hikes down the road, and that could be doing some harm. And regulating in certain areas may be creating moral hazards in other areas, potentially, and that could be doing some harm. So, as light as the rain dance analogy might work in some cases, it may not work exactly as to what Congressmen do.

I do appreciate all your testimony today. Let me just ask sort of a candid question as we sit here trying to figure out whether we should be regulating more or less or to what degree and what action should be taken and what the predictions are for the future.

Can any of you comment on this? Back in 2005, when Congress was here discussing some other legislation and what have you, and the housing market was going pretty well—strong—what have you. I know we heard a recitation to the late Ned Gramlich, who was making his predictions.

Can any of you reference us to your comments or papers predicting in 2007 that the market would be where it is today, that the balloon would have burst as it did, and that we would be in this significant credit problem we find ourselves in today?

Who predicted this on the panel?

Mr. ROUBINI. In July and August of 2006, I wrote a series of articles arguing that we will experience the worst U.S. housing recession in the last 50 years, that home prices would fall from pig to trough by at least 20 percent, and, that these housing recessions were going to lead to a severe credit crunch and eventually a recession. And it was not just me. There were seven other people in aca-

demia and otherwise that predicted that this was just a housing bubble like we've never seen in U.S. history.

If you look at the second edition of the book by Bob Shiller, "Irrational Exuberance," there is a chart showing the real home prices for the United States for the last 120 years. It has like a flat chart with some booms and busts, 20 percent. Since 1997, this chart shows that the real prices go up 100 percent. This was not a bubble; I don't know what's a bubble. It was about to go bust.

Mr. GARRETT. Thank you. Anyone else?

Ms. REINHART. If I may say so, I wrote the twin crisis paper, which was about banking crises and currency crises in 1996 before the Asian crisis erupted.

Mr. GARRETT. And anyone else?

Ms. REINHART. Well, let me just make one quick point.

Mr. GARRETT. Thank you. Thank you. Anyone else, because I have other questions.

Ms. RIVLIN. I think quite a few people thought that this was a housing bubble—what was not really anticipated was how it would affect the credit markets through the mortgage-backed securities. I think that was the big surprise.

Mr. GARRETT. Okay. And I have some other questions unless you want to chime in now. And I appreciate that, because I asked Alan Greenspan that question when he was here. Because to put the question this way, I want to get into the housing market as soon as this bubble bursts timing wise, and he could never answer that question for me, so I appreciate those of you who were out in front of it.

One of the issues, of course, besides the housing market as you just mentioned, is the credit market. And part of that goes to the issue, first tied to it, is the bond market today and the problems that we are seeing with some of the big bond insurers that they are in trouble.

Do any of you want to comment on this? What would happen to our overall economy if some of those insurers go belly-up? And, secondly, what would the effect of a downgrade on the GSEs? We have already seen the beginning of that, I guess, on Monday—a downgrade of Fannie Mae by Goldman Sachs.

Is a ripple effect there and what is that effect on the economy as well?

Ms. REINHART. Ratings are pro-cyclical, so do not look for help from that end, meaning that when you know, like Nouriel talks about things being bad, ratings are not going to help in that front, they are very pro-cyclical. They are pro-cyclical at the corporate level and at the sovereign level.

Mr. GARRETT. Thanks, I appreciate that.

Mr. TAYLOR. So one thing, one of the certainly issues if you go back and look at what went wrong is the rating agencies themselves. I mean this is ridiculous, what they were calling high-quality paper. In retrospect, it seems to me as healthy to go back and now and try to get this right, and look into the future.

So yes, it will have some negative impacts, absolutely. And hope to minimize the spillover of those, as I have tried to indicate. But I think now you don't want to do anything to really question as

best possible analysis from the rating agencies we can get, because it was terrible.

Mr. GARRETT. Well there is talk that there may be downgrades of MBIA and AMBEC of an additional \$40 to \$70 billion in write-downs, a phenomenal number. Can the financial market basically absorb that large of a figure?

Mr. ZANDI. Well, I think your focus on the monolines and on potential downgrade of the GSE's highlights how significant the risks are, and that if in fact there are downgrades of the monolines, they will be out of business and there will be significant problems in the municipal bond market, which will affect many households.

And it will also induce greater substantive write-downs, tens of billions if not hundreds of billions of dollars in the mortgage security markets, because there is insurance in those bonds as well. The GSE got downgraded, then of course the cost of—right now the only part of the mortgage market that is prior and current to the households is through Fannie, Freddie and the FHA.

Fannie and Freddie are not as creditworthy, their cost of capital rises, therefore mortgage rates are going to rise, they are going to be less willing and able to extend out credit.

So this highlights the very significant risks that exist and are playing out, and highlight the importance of policymakers to continue to be very aggressive and try to work on policies that are going to help the securities markets, I think that is what's important here.

The CHAIRMAN. Quickly, could—we are going to have a vote, so one more quick question, yes.

Mr. GARRETT. Just one quick question. To the credit of the chairman, I know the chairman has been trying to move legislation with regard to the GSE's for reform in that area, and we haven't gotten that done. Is that a problem that we just expanded there, without doing what the chairman is trying to do as far as putting some reins on it as the chairman is trying to do?

Mr. ZANDI. No. I don't—because what you did was a temporary increase in their loan cap, and I think that is entirely appropriate in the context of the problems we are having. And the help that this will provide will be very significant to California, South Florida, New York, and Washington, D.C. Those are the markets where many of the securities are based; those are where the loans are.

The CHAIRMAN. And the Secretary of the Treasury has my word that this committee will not consider a bill to extend that beyond the December 31st expiration.

Mr. GARRETT. And I appreciate the chairman for that.

The CHAIRMAN. Unless it is in the context of the broader reform, including, because some have been concerned, Mr. Roubini raised it about the upper-end bias. Money that would be using some of the money they would make off that for lower income, affordable housing.

Well I just can't resist. When I listen to the rating agencies, I do want to use a quote, if I may, that I have applied in other contexts. It says—I look at the role of the rating agencies in this, and it was triggered by Dr. Reinhart saying they were pro-cyclical, which is a polite way of saying that they come in after the fact and tell us what they should have told us before.

The great editorial writer for the New York Post, Murray Kempton, once said that, "The function of editorial writers is to come down from the hills after the battle is over and shoot the wounded." That does appear to be what the rating agencies have done in the current situation. The gentleman from Georgia.

Mr. SCOTT. Thank you Mr. Chairman, and again welcome all of you to our committee. I would like to get your reaction to a couple of points. The first one deals with the housing crisis, and the other deals with what is happening with many of our companies going into bankruptcy with these two things.

First, let's deal with the housing crisis, and what a program that has been put forward is, do you think, is enough? And that is the Bush Administration's new plan for homeowners facing foreclosure, which is Project Lifeline, I think you all are familiar with that. I would like to ask you if you think, if you truly believe that this plan will go far enough to keep these families in their homes.

And that is particularly true, because as we look at banks who are continuing to restrict access to credit seems to me continues to exacerbate the problem. In addition, property values are declining, making it difficult for an increasing amount of homeowners to refinance in the first place. By the end of the year, it is estimated that 15 million households will actually owe more on their mortgages than their homes are worth.

This has to be a major concern, and in fact there are hundreds of thousands of homeowners who, even if they wanted to refinance, just cannot do so because they are locked out. Do you believe that what the Administration is putting forward in Project Lifeline is enough to get the job done, given the complexities and the inter-reactions that are happening as a result of the banks number one, restricting access to credit and the derivatives of the problem as I outlined earlier.

Ms. RIVLIN. No, I don't. I think it will help some people, but probably not very many, and I think you need a two-pronged approach. One is the one that Dr. Zandi has discussed—some kind of a taxpayer fund, buying mortgages or mortgage pools at a considerable discount. The discount ensures that sellers are not making much money. And I think you also need to work at the community level. It will not be easy to design that; you might let the States do it. But you need to get people on the ground thinking about how to keep people in their homes and having some resources to do it.

Mr. SCOTT. Yes, Dr. Taylor.

Mr. TAYLOR. I think what the Treasury is doing, and what I said earlier Governor Schwarzenegger did in California to bring the servicers and the investors together, it is focused on the problem right now, which is to try to get some adjustments in the payments so people can stay in their houses and have the okay of that basically from the people who will benefit from that, the investors themselves.

I think that is very good. I think Mrs. Maloney's comment about the community organizations and doing this at the ground level, and Dr. Rivlin mentioned this too, is very important as well. My sense is those are the things we should be doing. The risk here is the housing prices falling even further it seems to me. And we

don't know what is going to happen with that, there is certainly a risk of that.

But at the current levels, especially with the interest rates being lower, that reduces the reset issue significantly, the fact that you have a lot of the indexes that are used to reset the mortgages have come down, even the LIBOR index has come down substantially, a couple hundred basis points.

Mr. ZANDI. Can I say in regard to Hope Now and Project Lifeline?

Mr. SCOTT. Yes, you may.

Mr. ZANDI. They are, I think, laudable efforts, but they will ultimately fail, at least to a degree that matters. And there are three reasons, because there are three different groups that have a significant problem with making it work. First are the investors that own highly rated tranches of these securities. They have no interest, financial interest in allowing modification to occur.

Second, the servicers themselves, they are very nervous about being sued by the investors even though they are under tremendous pressure by you to do so. So they are going to be very reluctant to it. And third, just operationally, this is a very, very difficult thing for them to implement effectively, quickly and that is mucking it up.

Mr. SCOTT. But let me get your thoughts on this, because I think there is one proposal that certainly needs to be put on the table I think, and I would like to get your response to it. And that is would not it make sense for us to put a moratorium, a type of moratorium on all foreclosures and put a time limit on it, maybe it's for 6 months? But to give an opportunity to stop the bleeding and allow a refinancing to take place that would be patterned on that, a person's ability to pay at that particular point. The moratorium on the mortgages, is that a real possibility that we should be looking at?

Mr. TAYLOR. I think a government-mandated moratorium would be troublesome at this point.

Mr. SCOTT. I didn't hear you sir.

Mr. TAYLOR. I think a government-mandated moratorium would be quite troublesome at this point. I think the lifeline idea of a month, a pause if you like, which is basically agreed to from the private sector is, it makes sense to me at this point. But if you are going to just go in and affect private contracts on a massive basis, it seems to me it could cause more problems in the future than you are trying to solve.

Mr. SCOTT. But the point is that I would say I am getting at is that unfortunately throughout this country, the rate of foreclosures and the timeframe to enact the foreclosures varies. Some months if you are—in some States, if you are behind in your payments a month or 2 months, your property is on the courthouse being dealt with, and in other States, the timeframe stretches.

And I think that is a fundamental flaw that we are not dealing with this disparity, and the lengths of time and the range of numbered payments that the individual consumer gets behind before his house is foreclosed, I think we need to address that.

Mr. TAYLOR. It just seems to me that the plans that are in place now do try to narrow in on the people that can deal with this prob-

lem and the ones that should be fine, or they are not affected by it. So it is a pretty big section in the middle there that it's focused on and it seems to me that's what we should try to do in the meantime. In the meantime you know, if it could get worse, risks are there for further housing price to decline.

Mr. NOURIEL. Can I add a point. I think that the severity of the problem is that there are essentially two types of solutions. One is one in which essentially you do the auction and the government essentially nationalizes a good chunk of the mortgages, hundreds of billions of dollars. So that is socialization on a certain of these loses.

The alternative is that in a market solution, eventually millions of people are going to go out, walk out of their homes, because as you have suggested millions, and many more are going to have a value of their homes that is below the mortgage, so they can walk out. In that case, you wipe out the capital of the banking, your systemic banking crisis and you nationalize the banking system.

So either way you nationalize the mortgages or you nationalize the banks, that is what we are facing now.

Ms. REINHART. Forgive my ignorance on this topic, but one of the chronic problems with commodity stabilization schemes is treating permanent shocks as temporary. And so that you try to treat it as temporary and patch it, but that it lasts. I think we are facing some of that here.

The CHAIRMAN. We will now move on with that tearful close, and we will go to Mr. Shays.

Mr. SHAYS. Thank you, I am going to make a few observations. First, I love this panel, and I read all your statements. So I wasn't hearing some of the answers, but great statements, great panel. I am struck by the last questioner and it is like he is trying to, in my judgement, with no disrespect, repeal the law of gravity.

The reason you have foreclosures is that people are stopping paying their mortgages and the people who own the properties have to pay someone else. And it would be like, it seems to me, saying if someone can't quit a job, even if the employer isn't paying them. Well you have to just keep working. Your employer isn't paying you, but you have to keep working. In this case, someone isn't making payment on property that someone else owns that owes money to someone else.

And how are they going to pay that someone else if you just say the people can stop paying, but you can't foreclose on them. I am getting from this that consumers, there is a them that they are shopped-out, saving less and debt-burdened, that is a pretty scary thing. And Ms. Rivlin, your comment that we built more houses than there was a demand for, and that is amazing in a way when you think about it, because what it says to me is as we were building more houses, we had to find people to buy them, and the people we found to buy them were people who couldn't afford them.

And so we were having more risky schemes to get them to buy them. But what it says to me is that there is no easy fix, which leads me to a second point. There are three CEO's, all brothers of Fortune 500 companies, and they said, "What made you all successful?" And they said, "We faced up to reality and we dealt with reality."

And it strikes me that we are trying to ignore reality. Reality is we have more houses than there is a demand for right now, and that is one of the challenges. Another challenge is that we have a bond market where the bond companies, the insurance companies need about \$15 billion.

Another reality, it seems to me, is that credit agencies have destroyed their franchise. They—I don't trust them. And now I am concerned that the credit agencies, to try to win back favor, and I would like you to comment on this are going to now really clamp down and then depreciate the value of what is on the market, of what people hold as having some value and further deteriorated. And I am concerned that the rating agencies, to try to win back favor, are going to overcompensate. I would like you to quickly, each of you, tell me about what role the credit agencies have in making things get worse or better.

Mr. TAYLOR. I think it seems that a lot of the investors should look elsewhere than the credit agencies to get their information. That would keep them on their toes. And you know, the investors I know, they don't even need these credit rating agencies. So the more we can find, if you like, substitutes, new ones, competitions for this business, the better off we will be.

Mr. SHAYS. Others?

Ms. REINHART. The literature on both on the corporate level and on the sovereign level, rating agencies are pro-cyclical. They do not help in economic downturns.

Mr. SHAYS. Mr. Chairman, I would just like to say we have had some hearings on credit agencies, and I would love us to revisit this issue.

The CHAIRMAN. Yes, I would say that the gentleman from Pennsylvania, Mr. Kanjorski, has been significantly engaged with that and we will return to that.

Mr. SHAYS. Could I ask about—the first package was a stimulus package, you know we gave folks some money to spend, we allowed businesses to write off their capital and new planting equipment, and we raised the housing limits for Fannie Mae, Freddie Mac, and FHA. And that all seemed to make sense. It strikes me that the second package has to shore up the credit market in the sense of we have to somehow, should we be providing money to the bond market. And I mean you have mentioned it, but I would like to know if there is consensus.

It strikes me that if we basically are not telling people whether or not their taxes are going to go up, the wise investor is going to hold back because of not knowing what is going to happen, or are they, because the capital gains may go up try to sell property even more quickly to take a lower price but pay a lower tax?

Could you speak to that, and then I am done.

Mr. TAYLOR. I briefly mentioned this before—I think anything that is in the future should deal with this tax increase that is coming down the line unless legislation is passed. I don't think you can separate it out anymore; that was part of the way this moved so quickly.

Mr. SHAYS. Now you were the request of the Republican members as a witness. I would like to know what some of our other

members say. No, I mean, and I happen to agree with you. I am just curious if others agree with you, Dr. Taylor.

Mr. ROUBINI. I don't agree, I think that those tax cuts were things we couldn't afford. And unfortunately, whoever is going to be in power in the next Administration will have to reverse some of these tax cuts.

Mr. SHAYS. So—if dividends go up?

Mr. ROUBINI. And income taxes for the higher-income individuals as well, absolutely. You have a fiscal time bomb. I mean your fiscal debt is already going from 150 to 410, and that doesn't include Iraq and Afghanistan. And on top of it—

Mr. SHAYS. And that will have no impact on slowing the growth of the economy?

Mr. ROUBINI. No, but on top of it you are going to have another fiscal stimulus at the end of the year with a recession. The recession is going to make the deficit even bigger. And now people are talking about the government buying hundreds of billions of dollars worth of mortgages. So there are people saying we are going to have a budget deficit of \$800 billion a year from now.

That is the problem we are facing, so you want to make also the tax cuts permanent, another trillion dollars of losses of revenues? I think it is just kind of fiction.

Mr. SHAYS. Doctor, do you believe that tax cuts stimulate any economic growth, or do you just think that is some kind of made-up story?

Mr. ROUBINI. If you cannot afford them, they don't stimulate economic growth; there is a budget constraint you have to finance.

Mr. SHAYS. Dr. Zandi?

Mr. ZANDI. Well I think this is a debate for the next president and the next Congress. I think if you try to tackle that one now, you will not get anywhere and you will not make any progress on things that you should. Secondly, I am all for lower tax rates, I think they are stimulatory, I think they are very helpful. The lower the tax rates we can have, the better. But I also think our most significant long-term economic problem is those very large, looming budget deficits. The budget math is very disconcerting, and if you have the lower tax rates great, but we have to figure out how to pay for them.

Ms. REINHART. In a nutshell, short run gain, long-term pain. That is basically—meaning—

Mr. SHAYS. I understand.

Ms. RIVLIN. The reason the tax cuts were not made permanent was that we couldn't afford them, and we knew that at the time, you all knew that at the time, and that is why they were made temporary. And it is still true, on a long-term basis, that we are going to need either to cut spending drastically or to raise revenues, and you have to face up to that.

Mr. SHAYS. Okay, thank you. Thank you all very, very much.

The CHAIRMAN. The gentleman from Texas.

Mr. GREEN. Thank you, Mr. Chairman. Thank you and the ranking member for hosting this hearing, and I thank the witnesses for appearing today. Let me start with a question with reference to regulation. Are you of the opinion that regulation could have prevented this current crisis? And because I have not been here, I

have not heard much of what you have answered. And by the way, I have had another hearing that I have been attending for the benefit of those who want to know why I wasn't here.

If you think that regulation could have prevented this crisis, could you just kindly extend a hand into the air, this way I can get through it quickly, if you think regulation could have prevented it. The current subprime crisis as it's called, the current crisis in financial markets, could regulation have helped prevent it?

Ms. RIVLIN. I think it could have mitigated it. If we had stronger regulation of predatory lending, we would have not had as much capital flowing into the housing markets, but I don't think it would have solved the whole problem. The very low interest rates also exacerbated the housing bubble.

Mr. GREEN. If we would have had regulations in place to prevent making loans at a teaser rate, but not having the purchaser qualified for the adjusted rate, would that have been helpful, anyone differ? If we had in place a regulation that required documentation showing that you had income, would that have been helpful?

The CHAIRMAN. Could I just let you note that the recorder is very good at his job, but his ability to record head nods, eyebrow raises—we probably want to give some indication of people as to what they—

Mr. GREEN. Yes, sir, thank you, Mr. Chairman.

Ms. REINHART. I just want to make one observation. You know that I have studied crisis everywhere, banking crisis, and the problem is that regulation usually lags behind financial innovation. That is a chronic problem.

Mr. GREEN. I concur with you. I right now am not going to challenge anyone on the notion of whether we could prognosticate what was going to happen as such as we could have had the regulations in place. I think there was some evidence to indicate that there was some regulations that we could have, based on empirical evidence, put in place.

But be that as it may, I would like to go back to where I was with reference to undocumented loans, loans where you don't have document to support, income. If you are of the opinion that would not have been helpful, raise your hand. For the record, all persons seem to agree that it would have been helpful, with one exception, Mr. Taylor.

Mr. TAYLOR. What specifically is your question, sir?

Mr. GREEN. My question is a basic statement. We had many loans made to persons who did not document income, commonly known as no-doc loans. If we had regulations, some regulation that would require some documentation of your income, would that have been helpful?

Mr. TAYLOR. Now I am going to have to see what documentation you mentioned, but let me be more specific. I think that a lot of the loans given to people were based on statistics that they were paying, and the same quality of people who continue to pay. And that is because housing prices were rising so rapidly that people had an enormous incentive to keep up their payments. And so those data were used by the underwriters, by the automatic underwriting programs, and I think that was a big part of the problem.

Mr. GREEN. So if I may, would I put you on the side of those who would contend that no-doc loans were not helpful?

Mr. TAYLOR. I see specifically what you mean, but—

Mr. GREEN. No-doc loans, a person gets a loan and does not produce evidence of income.

Mr. TAYLOR. Basically you have to have evidence of the borrower's capability of paying to get a loan.

Mr. GREEN. So you would agree that making no-doc loans then does provide some degree or problem for an industry that depends on payback.

Mr. TAYLOR. Yes.

Mr. GREEN. Okay. For fear that I may not get this in, I probably will come back to my questions. But Dr. Zandi, are you familiar with the term "traunche warfare?"

Mr. ZANDI. Yes, I think so.

Mr. GREEN. You mentioned the persons who are at the higher traunches.

Mr. ZANDI. Yes.

Mr. GREEN. And you have persons who are at lower traunches. The statement has been made that no one benefits from what is occurring now. You said earlier however that the persons who are at these higher traunches, they don't have the same risk if you will. You didn't use that term, but that is the term that I would add.

Mr. ZANDI. Incentives.

Mr. GREEN. Yes, incentives as those in the lower traunches.

Mr. ZANDI. Right.

Mr. GREEN. Could you explain to us why the persons at the higher traunches, as briefly as you can, would not have the same incentives, please?

Mr. ZANDI. The folks who are at the highest traunches, the triple A, double A traunches will get their money back unless 70 or 80 percent failure rate, default rate, net loss rate occurs on the security. And in a modification, what they are worried about—let me back up.

In most of these securities, what happens is you have a pool of money out there that is distributed to all the investors. This pool gets distributed based on how the underlying mortgages perform. So if the mortgages are performing well, then over time that pool of money gets distributed to all off the investors, the highly rated traunches, the lower rated traunches.

What the highly rated traunche owners are worried about that in the modification that money will get distributed and then the modification will ultimately go bad and they will suffer a loss and there won't be that pool of money to protect them and they will ultimately lose money. So they are much more interested in allowing these loans to go all the way through the process and wiping out the lower rated traunches.

And what they have left are the homeowners who are going to pay and who are going to pay reliably and they are going to get their money back. So in the modification they are very nervous that they are not going to get their money, and in a foreclosure, they are more likely to get their money back.

Mr. GREEN. Just a final comment, if I may, Mr. Chairman, and by the way the people who have these higher tranches, they paid more to occupy the positions that they occupy.

Mr. ZANDI. Yes, they got a lower return because they took less risk. It is the guys at the bottom end who took a lot of risk got very high returns. And their view is, you know, why should I help them out, when this was the deal? If things got bad, the lower rated were going to suffer more than me.

Mr. GREEN. Thank you, Mr. Chairman. I yield back.

Mr. JONES. Mr. Chairman, thank you very much, and I want to thank the panel. I've been in and out like most members of other committees, and one major committee, military personnel talking about the needs of the active duty, the needs of our military—

The CHAIRMAN. Well, we probably ought to stick with this subject, since we're going to have a vote soon.

Mr. JONES. I'm coming right to it. The book, "The Day of Reckoning," by Pat Buchanan, says that any great nation that has to borrow money from foreign governments to pay its bills will not long be a great nation. America is borrowing money from other countries to pay our bills. Dr. Zandi, this will probably go to you, but if anybody else wants to join in, that will be great.

My concern is—and I realize that debt is part of living—the issue when you can pay your debt each month, but you're going to borrow money from another bank to pay your bills, which America is doing, by putting all these Treasury notes out for sale, then you can live within the debt.

My question is this: At what point does America lose its financial credit with other countries? If the debt is growing at \$1.61 billion a day, we're borrowing money to fight the war in Iraq and Afghanistan, we're borrowing money to pay for the surplus—I mean the stimulus package—at what point, Dr. Zandi, do we get to a point of no return?

It happened to the Soviet Union during the Ronald Reagan days in the presidency. There was an arms race that they tried to compete with America. America was strong then, and therefore they couldn't compete. They fought a 10-year war in Afghanistan. So we're in a situation where now we're having to borrow money to pay our national bill. At what point does this get beyond the point of no return?

Mr. ZANDI. I think once we get into the next President's term, when we start to grapple with the question of what do we do about the tax cuts, and how do we address Social Security, Medicare, and Medicaid, if you are not successful in addressing that issue, I think we will have a significant problem.

Mr. JONES. Okay. Will you explain your point of a significant problem? The American people—

Mr. ZANDI. I think what it would manifest itself in is that interest rates would rise measurably, long-term interest rates would rise measurably, and of course that would be a significant weight on the economy—and that would certainly exacerbate conditions—that you will need to solve that long-term budget problem; otherwise, we're going to face high long-term rates, much slower investment and productivity growth, and ultimately it feeds on itself.

Mr. JONES. Would you say that the next President—he or she—the next President would have 8 years to try to get a handle on this problem, or less or more?

Mr. ZANDI. I think it's in their term, because we are going to be faced with the question of: What are we going to do about those tax cuts? How are we going to pay for them, or not? And just how are we going to address Social Security or Medicare?

The Baby Boomers are right there, and they are now sucking down Social Security, Medicare, and given the high cost of health care and the escalating cost of health care, we're there. It's going to be in this term.

Mr. JONES. I have a couple more minutes. Would anyone else like to respond?

Ms. RIVLIN. I don't think we know the exact moment at which the reckoning comes, but I agree with everything Dr. Zandi has said. We've been taking chances for a long time. We need to fix this problem of the long-run budget deficit. That doesn't mean we have a crisis in the budget right now. It's a relatively small amount in relation to our economy, but our long-term problem is very serious.

Mr. JONES. Anyone else?

Mr. REINHART. Britain once dominated the world. It no longer does. Things happen. And the 1967 sterling crisis was a good end to that reign. So we have to be very careful.

Mr. JONES. Mr. Chairman, thank you very much. I'll yield back at this time.

The CHAIRMAN. Clearly, Dr. Reinhart, Britain's reign over the world did end some time before the sterling crisis of 1967.

Ms. REINHART. But that finished the sterling zone.

The CHAIRMAN. The gentleman from Illinois?

Mr. MANZULLO. Well, thank you. I'm intrigued with the testimony, and if I could just make a few observations: Everybody on the panel agreed that the present stimulus package was good to put \$600 to \$1,800 in the hands of the American consumers so they could spend it, but only one agreed that the tax cuts should continue.

I just find it totally contradictory that you could be in favor of this stimulus, and then sit back and look at the average family of 4 having to pay about \$2,700 more in taxes, when in fact Wall Street is already reacting to that. But that is more of a commentary.

Second, Dr. Rivlin had mentioned in her testimony the fact that—and perhaps I read it wrong—residential construction is not a big part of the economy, even with its linkage to consumer durables and other real estate services. I would disagree with that entirely.

If you take a look at what goes in home lumber, wire and electrical fixtures, plumbing, pipes, fixtures, appliances, windows, glass, flooring, wood, linoleum, paint, caulk, hardware, locks, hinges, nails, indirectly loggers, truck sales, for pick-up trucks, for construction sites, tires—I have a tire factory in my district—other construction tools and trucks and equipment, sales of these items have huge hits on manufacturing, whenever that happens in residential housing, and when you don't have residential housing going

up, you don't have commercial housing going up, because one drives the other.

And this is backed up into all aspects of the economy. You can sit here, we can sit here and solve the housing crisis today, but when people are losing their jobs because of the smack from the collapse of the residential construction industry, then all of us are the tiger chasing each other around the tree, trying to figure out what's going on.

But also services related to residential housing are Realtors, brokers, telecompany, mortgage brokers, then the people who build the office buildings for the people in these professions. And so I think we have to sit back and take a reality check as to the impact of construction and the impact of manufacturing.

Dr. Greenspan did a great job of keeping down inflation, but he did not understand manufacturing. Chairman Bernanke does. Dr. Greenspan said that what jobs you lose in manufacturing, you more than compensate for in high-end, white-collar jobs, but on three different occasions, when I examined him before this committee, he couldn't give me an example of one of those.

But the real question I want to ask here is this: Lisa Madigan, who is the attorney general for the State of Illinois, put out her report as to what happened in the housing market, and she said this housing market collapsed even before the resetting of ARMs because people bought homes they could not afford in the first place.

That is what is going on in Illinois. And my question to you is whether you have a federalism hat on or federalism hat off, whose job is it to govern these instruments of debt? The 2/28s, the 3/27s, the no-principal payments, the ARMs, the fact that people took out these layered loans. I mean, who has the jurisdiction over that? The States? And if not the States, then the Federal Government? And what agency? I'm trying to attach responsibility, if any, as to who would be in the position to get rid of these types of loans that cause the problem.

Ms. RIVLIN. Part of the problem was that the answer to that question wasn't clear. The States had jurisdiction over many of these loans. The chairman has pointed out that arguably, the Federal Reserve could have asserted its authority to regulate these loans, and certainly to pull the other regulators together and say, "Let's all do it together," which they eventually did do.

But it was a very unclear situation, and that's what I think you as legislators have to straighten out.

Mr. MANZULLO. Okay. Would everybody agree with that analysis?

Mr. ZANDI. Yes. I think the problem is you had the Federal Reserve, the OCC, the OTS, the FDIC, the FCC, and every State regulatory agency having some part of the process, and it was only until—I believe it was November of 2006 that they collectively issued their first guidance with respect to interest-only neg-am jumbo loans. They didn't even get to subprime loans. They didn't issue collective guidance on subprime loans until I believe it was April/May of 2007, well after the fact.

And that goes to the Byzantine nature of the—

Mr. MANZULLO. Now the guidance on it is in terms of words of guidance or actual saying that you can't have these documents, or governing the documents.

Mr. ZANDI. No, it was strongly—it was worded guidancing—you know, you can't make teaser rates to these types of loans.

Mr. MANZULLO. But I guess my question is—and maybe we all scratch our heads—why would a bank or lending agency get involved in having somebody buy a house when you don't even know if that person can make the first payment? I mean what—something happened that—

The CHAIRMAN. Would the gentleman yield?

Mr. MANZULLO. Of course.

The CHAIRMAN. What happened was securitization.

Mr. ZANDI. Yes.

The CHAIRMAN. What happened was that you no longer had to worry about whether that individual could pay you back, because you made the loan and sold it, and then other people bought it, and packaged it, and sliced it, and they said, "We have all these techniques." And what they did was take these loans that never should been made in the first place, and sent them all over the world.

Mr. MANZULLO. But isn't there something—I don't want to use the word "dishonest," but I just, I mean you're a business person, and you're sitting across the table from a person you know cannot make that first payment.

The CHAIRMAN. Yes.

Mr. MANZULLO. And there's a problem there.

Mr. ROUBINI. As the chairman suggested, you had essentially a securitization food chain, in which every step of the way somebody was making an income from a fee and not told in the credit risk. You started with the mortgage broker that wanted to maximize his or her own income by maximizing the number of mortgages that are being approved. Then there was the originating bank, that was essentially putting these things together into RMBS's and sending them somebody else and getting a fee. It was the mortgage appraiser, who had an incentive to—

The CHAIRMAN. But—

Mr. ROUBINI. —over-appraise the value of the mortgages. Then the investment bank was repackage—

The CHAIRMAN. Everybody at—

Mr. ROUBINI. —into CDO's, and the rating agency was making a fee and profit out of mis-rating this thing. So at every step of the way, somebody was making a fee and transferring—

Mr. MANZULLO. I understand. Mr. Chairman, I do have one question.

The CHAIRMAN. Yes, go ahead.

Mr. MANZULLO. I didn't mean to cut you off. If there is going to be a regulation here, and I'm just—we're all thinking out loud, and that's the purpose of the hearing—wouldn't the regulation be at the level where you could say unless these certain underwriting criteria are met, that there can be no securitization?

The CHAIRMAN. Will the gentleman yield?

Mr. MANZULLO. Of course.

The CHAIRMAN. We passed a bill that does a lot of that. The bill that came out of this committee that passed the House says that

nobody in the country, including your broker, can make certain loans. And we then require that the securitizer do due diligence before packaging the loans, and we hold the securitizer liable if a loan has been sold without the due diligence, the borrower can then cancel out the loan, and the securitizer is on the hook. So much of what the gentleman—

Mr. MANZULLO. There were some infirmities in that bill that compelled me to vote against it, but there's—

The CHAIRMAN. Well, I gather. But the gentleman is—

Mr. MANZULLO. I understand. I understand.

The CHAIRMAN. But what the gentleman is asking for, we have already passed in this House.

Mr. MANZULLO. I understand that. I understand that. And thank you. I'm going to yield back to—

The CHAIRMAN. Well, I'm going to take some time out, because I have to say, with all due respect, that I now know more about regulation, and Dr. Roubini, you got it wrong. And Mr. Zandi and Dr. Reinhart. No, it was not a multiplicity of regulators; it was an absence of regulators.

First of all, under the Homeowner's Equity Protection Act passed in 1994 out of this committee—not by me—John LaFalce, my predecessor, a senior Democrat, was the major advocate, and it is not an accident that was the last time the Democrats, frankly, were in control of the House—the Federal Reserve was given authority to promulgate rules for all mortgages, not just for depository institutions. Dr. Roubini, as you noted correctly in your written statement—frankly, you should have stuck with it—you say that there was a clear regulatory failure. Ned Gramlich started that; this is on your page 3. And then you note: "Most of the questionable practices were not perpetrated by federally regulated banks, and the Washington regulator didn't know the case."

So there wasn't much the OCC and the OTS could have done. Under Chairman Greenspan, as an ideological matter, he flatly refused to use the authority given to him by the Homeowner's Equity Protection Act despite Ned Gramlich asking him to do it. He said that was the kind of intervention that would do more harm than good.

We then had, frankly, a further problem because it was then up to the States, and the States had the right to do it or not do it. But Dr. Reinhart, I'd have to disagree with you on this one point.

Some States were trying to do things. And then the Comptroller of the Currency and the Office of Thrift Supervision promulgated rules that significantly preempted rules not only concerning national banks, nationally—banks, but their affiliates, and their operating subsidiaries and their affiliates were a problem.

So there were State laws. For example, we just had a lawsuit going through. Ohio had a law about mortgage brokers. State Farm had a bank, and they required mortgage brokers to be contractors, not employees of the bank. And Ohio had some rules about the mortgage brokers, and the Office of Thrift Supervision said, "No, no, we preempt that, they're a national thrift."

What we have since done in the bill that this committee passed was in fact to not wait for the Fed anymore, but to pass a set of laws, as Dr. Roubini says in his written statement, where you had

depository institutions making mortgages with insured deposit funds, there was regulation. And a very small percentage of the problem happened there.

The problem came when pools of money not from depositors, liquidity that became available not subject to regulation, originated by non-regulated institutions, they weren't subject to those national rules, they were subject to some State rules. Some of them got preempted.

What we have now done is to pass this set of national rules, including—we were told oh, don't interfere with the securitizers—we have given some liability to that securitizers.

Chairman Bernanke takes credit, and I think he has a dilemma, because he doesn't want to repudiate Alan Greenspan, so he's been a little slower, but he is in fact taking different views with regard to this, with regard to the authority the Federal Reserve has under the Federal Trade Act to promulgate unfair and deceptive practice codes for banks. He's moving.

So the Fed now has begun the process of adopting rules on OPA. But the Fed did have some power. There were enforcement problems, I will concede. The statute didn't give them an enforcement problem, although in the past when the Fed has wanted to do something and it didn't have enough enforcement power, it found its way here pretty quickly and asked for it.

So we should be very clear that it was not a tangle of regulators; it was the deregulatory theory of the time. It's the philosophy that Dr. Roubini talked about: "We'll handle it ourselves. You stay out of it. Don't mess us up." That was the philosophy that ruled the Congress, that markets are smart and government is dumb.

And there was a conscious decision by people for ideological reasons to restrain themselves. We are now saying, "No, we do need to get into regulation," and it's a point Dr. Reinhart made. Innovation outstrips regulation. And innovation is a good thing. And innovation that produces no value, you don't have to worry about. It will die, and no one will support it.

But you do have to make sure that regulation catches up to innovation and to some extent allows the benefit without the harm. But this is a clear case of ideological preference for deregulation, leading to this problem.

The panel is excused, and I thank you.

Ms. RIVLIN. I don't disagree with that.

[Whereupon, at 12:58 p.m., the hearing was adjourned.]

A P P E N D I X

February 26, 2008

**Congressman Ron Paul
Statement for the Record
Financial Services Committee Hearing
“Monetary Policy and the State of the Economy”
February 26, 2008**

Mr. Chairman,

Price controls are almost universally reviled by economists. The negative economic consequences of price floors or price ceilings are numerous and well-documented. Our current series of hearings have been called to discuss the most important, but least understood, price manipulation in the world today: the manipulation of the interest rate.

By setting the federal funds rate, the rate at which banks in the Federal Reserve System loan funds to each other, the Federal Reserve inhibits the actions of market participants coming together to determine a market interest rate. The Federal Reserve and the federal government do not deign to interfere in setting the price of houses, the interest rate on mortgages, or the prices of wood and steel. The Fed's actions in setting the federal funds rate however, because it reflects the price of money to a borrower and thus affects demand for money, affects prices throughout the economy in a manner less pervasive but just as damaging as direct price controls.

The example of the Soviet Union should have taught us that no one person, no group of people, no matter how scientifically trained, can arbitrarily set prices and not expect economic havoc. Only the spontaneous interaction of market participants can lead to the development of a functioning price system that allows the needs and wants of all participants to be met. The sense I get from reading much of the punditry is that the federal funds rate is set often by the whims of the Federal Reserve governors. Even mechanistic explanations such as the Taylor Rule rely on inputs that are often left up to the discretion of the Fed policymakers: what is the potential GDP, do we use CPI or PCE, overall CPI versus CPI less energy and food, etc.

The setting of the interest rate strikes me as quite similar to the way FDR used to set gold prices in the 1930's, at his whim, resulting in economic havoc and uncertainty. When market actors have to devote much of their time to discerning the mindset of government price-setters, to parsing FOMC statements and minutes, they are necessarily diverted from productive economic activity. They cease to become purely economic actors and are forced to become political forecasters. This is not a problem isolated to this particular case, as businesses are forced to reckon with tax increases, expiring tax credits, import tariffs, subsidies to competitors, etc. However, because the interest rate determines the cost of borrowing and therefore determines whether or not marginal long-term business investments are undertaken, this politicized interest rate manipulation has far more impact than other government policies.

This setting of the interest rate introduces the business cycle into the economy. Until we understand the results these Federal Reserve actions have, we will be doomed to repeat these periods of boom and bust. I urge my colleagues to study this matter, and to resist the urge for greater Federal Reserve intervention in the market.

Testimony before the House Committee on Financial Services

of

Carmen M. Reinhart
Professor, University of Maryland and Research Associate, National Bureau of
Economic Research

February 26, 2008

Thank you, Chairman Frank and the other members of the Committee for this opportunity to comment on the U.S. economy and the conduct of Federal Reserve policy. On a personal note, your invitation was well beyond my sense of the possible when I emigrated from Cuba to this country as a girl of ten. My family and I had three suitcases to our name and no prospects, but today I sit before this distinguished Committee and am deeply grateful.

I am currently a professor in the School of Public Policy and Department of Economics at the University of Maryland. I suspect that I was invited today because, for the past decade, my research has focused on economic crises. It is a fascinating line of work with a discouraging conclusion.

Across countries and over the centuries, economic crises of all type follow a similar pattern. An innovation emerges. Sometimes it is a new tool of science or industry, such as the diving bell, steam engine, or the radio. Sometime it is a tool of financial engineering, such as the joint-stock company, junk bonds, or collateralized debt obligations. Investors may be wary at first, but then they see that extraordinary returns appear available on these new instruments and they rush in. Financial intermediaries—banks and investment companies—stretch their balance sheets so as

not to be left out. The upward surge in asset prices continues, and that generation of financial market participants concludes that rules have been rewritten: Risk has been tamed, and leverage is always rewarded. All too often, policy makers assert that the asset-price boom is a vote of confidence on their regime. Only seldom, to my knowledge, do they protest that perhaps the world has not changed and that the old rules of valuation still apply.

But the old rules *do* apply. The asset price rise peters out, sometimes from exhaustion on its own or sometimes because of a real shock to the economy. This exposes the weaknesses of the balance sheets of those who justified high leverage by the expectation of outsized capital gains. Many financial firms admit losses, and some ultimately fail. All those financial firms hunker down, constricting credit availability in an effort to slim their balance sheets. With wealth lower and credit harder to get, economic activity typically contracts. Only after the losses are flushed out of the financial system and often with the encouragement of lagging monetary and fiscal ease does the economy recover.

This sorry spectacle repeats itself in the various types of crises, but the most relevant to you must be the aftermath of banking crises. In recent work with my coauthor, Ken Rogoff of Harvard University, I documented eighteen such episodes in industrial economies over the past thirty years. Declines in assets, including those of both houses and equities that the United States has experienced over the past year, are common markers of the onset of banking crises. In the worst five banking crises

in industrial countries over the past thirty years, the value of houses fell about 25 percent on average from their peak.

The cautionary lesson for today's situation in the United States is that the decline in output after a banking crisis is both large and protracted. The average drop in (real per capita) output growth is over 2 percent, and it typically takes two years to return to trend. For the five most catastrophic cases, the drop in annual output growth from peak to trough is over 5 percent, and growth remained well below precrisis trend even after three years. Given this record of economic dislocation associated with banking strains, I expect that the U.S. economy is in or about to enter recession. My best hope, and I put no more 40 percent probability on the outcome, is that we are amidst a protracted slow patch. In either case, resource slack will accumulate and the unemployment rate will rise.

Of course, there are differences in each episode, just as there are similarities. The biggest difference in the United States in the period since the peak in house prices in early 2007 has been monetary policy. Thus far along, the Federal Reserve has been more aggressive in pulling down the real short-term interest rate (or the nominal short-term interest rate less a proxy for inflation expectations). And for that I hope that you congratulate Chairman Bernanke.

But I also hope that you take the opportunity to ask him three sets of questions. First, Federal Reserve policy easing in the last five months of last year seemed to be constrained by concerns about inflation. Judging from the longer-term projections included in the minutes of the October 2007 and January 2008 meetings,

Federal Reserve policy makers seem to have an informal goal for PCE inflation (excluding food and energy) or something less than 2 percent. Was that goal reining in their response to the weakening of spending in 2007, and will it constrain their actions their actions over the remainder of this year?

Second, policy actions this year suggest that the Federal Reserve has abandoned the practice of gradually responding to economic events that marked the experience of the prior two decades. Will this phase of post-gradualism apply symmetrically later this year if evidence accumulates that inflation expectations are on the rise?

Third, Chairman Bernanke and his predecessors have previously argued that Federal Reserve involvement in the supervision of financial institutions is important in making both the conduct of supervision and monetary policy better. But the past few years apparently witnessed multiple regulatory lapses. Supervisors failed to caution depositories offering potential borrowers unsuitable mortgages. They also acquiesced as complicated structures were booked off the balance sheet, even though, in the event, they were not treated as such by corporate headquarters at the first sign of stress. At the same time, it is hard to read the hesitant easing of late 2007 as evidence that monetary policy makers were receiving useful insights from their supervisory colleagues. Does Chairman Bernanke still view supervision and regulation as an appropriate responsibility of the Federal Reserve?

“Monetary Policy and the State of the Economy”

Testimony of

Alice M. Rivlin*

The Brookings Institution and Georgetown University

Committee on Financial Services

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Good morning, Mr. Chairman and Members of the Committee. I am delighted to have the opportunity to share my thoughts about the current economic situation and what policy makers can do to improve it. I will touch on the outlook and what it depends on, the actions of the Federal Reserve, and the possible need for further fiscal stimulus. I would also like to say a few words about what seems to me more challenging question: how to contain the spread of foreclosures and preserve affordable housing.

I know you want to focus today on monetary policy, because you have Chairman Bernanke coming before you tomorrow, but frankly, I think monetary policy should be far down your list of worries. The Federal Reserve has used the tools in its limited arsenal aggressively and imaginatively and clearly indicated its intention do more if necessary. The monetary policy authorities seem to me to be doing a good job. You should also be extremely pleased with the swift bi-partisan action of the Congress and the Administration on the stimulus package. Although you may need to take further action, the initial package was well designed for maximum effect and passed with remarkable alacrity. Rarely does our policy process function so well!

If the consensus forecast is roughly right, we will have slow growth for a couple more quarters, but will avoid recession and see growth resuming by the end of the year. But the situation is precarious. In housing, a spreading wave of foreclosures could undermine

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consumer confidence and increase the probability of recession. Continued risk aversion of investors and unwillingness to lend on the part of financial institutions could raise the probability even more and turn a slowdown into a full-blown economic route that could spread beyond our borders. The hardest challenges now are how to minimize housing foreclosures and how to get the credit markets functioning more normally—both without spending excessive public resources or rewarding people who made dumb or irresponsible decisions.

The Economic Outlook

The slowdown in economic growth and job creation in the last quarter of 2007 was clearly the result of the decline in residential construction and housing prices and the crisis in the sub-prime mortgage market. Nobody should have been surprised. The rapid, sustained increase in the demand for housing—especially in growing metropolitan areas and sun-belt communities—reinforced by low interest rates, the explosion of sub-prime and related lending, and a flourishing secondary market turned a housing boom into a bubble. Bubbles eventually burst.

We should not forget that a lot of good came from the housing boom. Millions of people moved into new or better housing. Most of them (including most sub-prime borrowers) are living in those houses and making their mortgage payments on time. The downside, however, was that many people came to believe that housing prices would go on rising forever. Lending standards became lax, borrowers got over-extended, speculators built housing ahead of the demand, and the prospect of making big bucks attracted the crooks that always gravitate to a bubble.

So we built too many houses. It will take time for demand to catch up with supply. The inevitable downturn in prices led to rapidly rising defaults, especially on sub-prime mortgages, and the prospect of many more defaults as teaser rates on adjustable rate mortgages (ARM's) are reset to higher levels.

If the story ended there, we might not be having this hearing. Residential construction is not a big part of the economy (even with its linkage to the consumer durables and other real estate services), and neither is the sub-prime market. The big surprise was that the problem ricocheted through the credit markets, here and around the World, because of the widespread ownership of mortgage-backed and related securities.

The explosion of sub-prime lending was a clear regulatory failure. My former Federal Reserve Board colleague, the late Edward M. Gramlich, warned repeatedly that lax standards and predatory practices in the sub-prime market deserved urgent regulatory attention. But most of the questionable practices were not perpetrated by federally regulated banks, and the Washington regulators did not get on the case.

The world-wide fallout from the U.S. sub-prime crisis is yet another lesson in how complex and inter-connected international financial markets have become. It was also a black eye for market capitalism—an embarrassing moment for those who boast about the intelligence and sophistication of financial markets. How come so few people asked the simple question: What happens to the value of these mortgage-backed securities when the music stops—when housing prices level off or decline, adjustable rates reset, and people with not-so-great credit histories can't make their monthly payments anymore? Financial market participants now say they “under-priced the risk,” which is code for failing to ask some pretty obvious questions.

A lot of financial institutions and funds found themselves owning securities worth less than they thought or whose values could not be easily determined. The result was some big losses and a panicky flight from risk. Lenders jacked up their lending standards, investors fled to Treasuries, mortgage credit became less available, and banks got skittish even about lending to anyone, even each other. Obscure corners of the financial system—the credit-worthiness of bond insurers and the hazards of relying on auction credit markets—suddenly were front page news. Uncertainty about the future tightness of credit markets makes forecasting the real economy unusually difficult. A scenario in

which the crunch gradually resolves and credit flows return to some semblance of normality produces a far rosier economic outlook than a scenario in which financial institutions suffer additional large losses and the crunch gets worse.

Meanwhile, back in the real economy, activity looks slow, but not disastrous. The recently updated CBO forecast, which is close to the consensus of commercial forecasters, expects a slow year (1.9 percent growth in real GDP for the year) with a modest pick-up (to 2.3 percent) in 2009. CBO expects a gradual rise in the unemployment rate (to 5.5 percent in 2009) and some moderation in consumer price inflation. In other words, the consensus is that the underlying resilience of the American economy, aided by surging exports reflecting the weak dollar, and buoyed by monetary and fiscal stimulus, will keep the economy from spiraling into recession. My guess, for what it is worth, is that the consensus will prove about right, but uncertainty remains great, especially about the credit markets and the potential impact of foreclosures on housing values and consumption. The risks are mainly on the down-side and gloomier forecasts are not hard to find.

Monetary Policy

The Federal Reserve has been using its tools aggressively and inventing new ones on the run, in an intense effort to keep financial institutions liquid and preserve credit flows to businesses. Since August the Fed has lowered the federal funds rate 225 basis points in a series of fairly big steps. The most dramatic was the surprise 75 basis point drop on January 22, prompted by the melt down in overseas equity markets and the anticipated response of our own. Most of the Fed's recent action has been aimed at pumping liquidity into the credit system in hopes of getting the banks lending again. The Fed lowered the discount rate and encouraged borrowing at the discount window. When that approach proved insufficient (and made calibrating the federal funds rate more difficult) it invented a new tool, the Term Auction Facility (TAF)—a mechanism to enable banks to borrow large fixed amounts directly from the Fed. This effort was coordinated with similar ones at other major central banks.

I find the Fed's actions both appropriate and creative. I know there are those who think that the Fed is "behind the curve." I suspect these critics have in their heads, for whatever reason, a forecast of deep recession to come, and do not think the Fed is acting on their forecast. However, the consensus forecast—and the Fed's—does not anticipate recession. Moreover, there are ample reasons for concern about bringing the short-term interest rate as down as low as it was in 2002-3. Fear of aggravating inflation is one. Another is apprehension about making monetary policy so accommodating that it fuels the next bubble—in whatever asset class might catch investor's fancy.

Fiscal Stimulus

One way to take part of the onus off the Fed and avoid excessive easing of monetary policy, is swift action on fiscal stimulus. Congress and the Administration worked together surprisingly quickly to pass the stimulus package that the president signed last week. The package negotiated by the Speaker and the Administration adhered to the prescription of most macro-economists that an effective short-term stimulus should be timely, targeted and temporary. It was designed to send checks to low and middle income people, who are most likely to spend them quickly, and increase incentives for near-term business investment. The Senate improved the House-passed package by adding low income seniors and retired veterans to the recipients. The proposal also increases the loan limits for Fannie Mae, Freddie Mac, and the Federal Housing Administration (FHA) and ties future loan limits to median house prices in the metropolitan area. That this legislative initiative became law with the President's signature in mid-February is gratifying. The accomplishment proves that the two branches, the two houses of Congress, and the two political parties can work together constructively when the need is urgent, which is very heartening to all of us enjoy seeing our government functioning well.

I was among those who urged several additions to the package, including an extension of unemployment compensation for an additional 13 or 26 weeks, a temporary increase in food stamp payments, and some relief to the states in the form of an increase in the Medicaid match. The states are always hard hit in an economic slow-down, and tend—

since they have to balance their budgets—to cut spending, often on Medicaid and other benefits to low-income people, and to raise taxes. These actions tend to make the economic situation worse, and federal relief can help forestall them. I would, however, urge the Congress not to load a second stimulus package with slow-spending projects, such as infrastructure, that do little to stimulate the economy in the short-term and add to the growing federal debt.

Even though temporary stimulus will not add substantially to the long run deficit, I believe that the stimulus should be paid for over a five-year period, like any other spending. Adherence to the PAYGO principle is an important discipline, and making exceptions to it for any reason can become a dangerous habit.

Avoiding a Wave of Foreclosure

The difficult challenge now, it seems to me, is designing a workable way of minimizing foreclosures and keeping families that are able to pay on their mortgages in their homes. Foreclosures are in nobody's interest. They are expensive for lenders and servicers, painful for families, and destructive of property values in the surrounding neighborhood and beyond. Secretary Paulson has worked energetically to pull the major servicers of mortgages together into an effort to contact borrowers in danger of default and give them the opportunity for counseling and adjustment of terms. Many states are also encouraging lenders and servicers to work with borrowers to avoid foreclosures. These efforts will reduce the potential volume of foreclosures, perhaps significantly. By itself, however, this approach is unlikely to be sufficient to prevent a wave of foreclosures in the next couple of years.

Legislating in this area is tricky, both legally and morally. Rescuing individuals and institutions from the consequences of imprudent decisions smacks of condoning their poor decisions. However, it may be worth some moral hazard to avoid the spreading contagion of foreclosures that is likely to damage the prudent along with the imprudent. One approach would be to channel federal money through established local community

groups with experience in affordable housing. They could be charged with buying properties in the foreclosure process and reselling or leasing them to low-income families on affordable terms. Another option is creating a new government corporation charged either with buying and reselling properties in foreclosure or refinancing defaulted loans. Rather than creating a new institution, however, it would probably be faster and more effective to use the expertise and experience of Fannie Mae and Freddie Mac carry out this mission. A different approach, more oriented to stabilizing the credit markets, would be to give investors government bonds in exchange for whole mortgage pools. The investors would take losses but acquire assets of known value, and the entity acquiring the pool could work with the borrowers to refinance the loans and avoid foreclosures where possible.

Several groups of expert far more knowledgeable than I am on housing finance are working on such proposals. The trick will be to craft a structure that can be made to work quickly and effectively, while avoiding adding excessively to the looming federal debt.

Conclusion

So far, I think the policy response to the current economic situation is on the right track. The Fed has acted aggressively and with some imagination to keep the financial services sector liquid and ease monetary policy. The stimulus package will certainly help avoid recession or mitigate a downturn if it occurs. One of the difficult tasks still ahead, however, is crafting a set of policies that will be successful in containing the spreading contagion of foreclosures. Thank you, Mr. Chairman and members of the Committee.

The Current U.S. Recession and the Risks of a Systemic Financial Crisis

by

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A vicious circle is currently underway in the United States, and its reach could broaden to the global economy. America's financial crisis has triggered a severe credit crunch that is making the U.S. recession worse, while the deepening recession is leading to larger losses in financial markets, thus undermining the wider economy. There is now a serious risk of a systemic meltdown in US financial markets as huge credit and asset bubbles collapse.

At this point the debate in the U.S. is no longer about soft landing versus hard landing (recession); it is rather on how hard the hard landing will be. An analysis of the macro data published in recent weeks suggests that the economy has already entered into a recession in December 2007. So the question now is whether this recession is going to be relatively short and shallow (lasting two quarters in Q1 and Q2 of 2008 as several analysts suggest) or much longer, deeper and more protracted (four to six quarters).

The fact that the US is now in a recession is, at this point, without much doubt even if the consensus forecast – always behind the curve – now gives only even odds (49% according to the WSJ panel of forecasters, 50% according to the Bloomberg panel) to a recession outcome. The latest data point to a severe recession ahead lasting at least four quarters rather than mild recession that most forecasters are now predicting: a fall in employment in January; very high and elevated levels of initial and continued unemployment claims; a non-manufacturing ISM that literally plunged; the Philly Fed report and other forward looking indicators being in recession territory; falling – in real term – retail sales in the holiday season; mediocre results and falling sales for most retailers in January; plunging auto sales; very weak and further falling consumer confidence; a credit crunch that is becoming more severe in credit market as measured by a variety of credit spreads; the beginning of a severe recession in commercial real estate;

a worsening housing recession; sharply falling home prices; evidence of a serious credit crunch in the banking system based on the Fed survey of loan officers; a correction in all major stock markets and the beginning of a bear market in the NASDAQ; serious evidence of a global economic slowdown, especially in Europe, with outright recession ahead in some European countries. All these indicators points towards a severe recession.

It is not very likely that - as some forecasters now do – this will be a mild two-quarter recession and that growth will recover in H2 of 2008. The last two U.S. recessions in 1990-91 and 2001 lasted 8 months each. The current recession will last much longer and will be more severe for three reasons:

1. We are experiencing the worst U.S. housing recession since the Great Depression and this housing recession is nowhere near bottoming out. Home prices will eventually fall – relative to their 2006 peak – by 20% to 30%. They have already fallen by almost 8% based on the Case-Shiller/S&P index.
2. The U.S. consumer is shopped out, saving-less and debt burdened and now buffeted by oil prices close to \$100 a barrel, a weakening labor market, weak income generation, falling consumer confidence, falling home values, falling home equity withdrawals, high debt, rising debt servicing ratios, a severe credit crunch and a sharp correction in the stock market that will turn into a bear market once the recession becomes deeper.
3. The U.S. financial system and credit markets are experiencing their most severe crisis since the early 1980s. The problems are now not limited any longer to subprime mortgages but spreading across the whole spectrum of credit and financial markets.

Let us consider in more detail this third point. Currently the problems in financial markets are no longer merely sub-prime mortgages, but rather a whole “sub-prime” financial system. The housing recession – the worst in U.S. history and worsening every day – will eventually see house prices fall by more than 20 percent, with millions of Americans losing their homes and/or walking away from them as they have negative equity in them.

Delinquencies, defaults, and foreclosures are now spreading from sub-prime to near-prime and prime mortgages. Thus, total losses on mortgage-related instruments – include exotic credit derivatives such as collateralized debt obligations (CDOs) – will add up to more than \$400 billion.

Moreover, commercial real estate is beginning to follow the downward trend in residential real estate. After all, who wants to build offices, stores, and shopping centers in the empty ghost towns that litter the American West?

In addition to the downturn in real estate, a broader bubble in consumer credit is now collapsing: as the US economy slips into recession, defaults on credit cards, auto loans,

and student loans will increase sharply. US consumers are shopped-out, savings-less, and debt-burdened. With private consumption representing more than 70 percent of aggregate US demand, cutbacks in household spending will deepen the recession.

We can also add to these financial risks the massive problems of bond insurers that guaranteed many of the risky securitization products such as CDOs. A very likely downgrade of these insurers' credit ratings will force banks and financial institutions that hold these risky assets to write them down, adding another \$150 billion to the financial system's mounting losses.

Then there is the exposure of banks and other financial institutions to rising losses on loans that financed reckless leveraged buy-outs (LBOs). With a worsening recession, many LBOs that were loaded with too much debt and not enough equity will fail as firms with lower profits or higher losses become unable to service their loans.

Given all this, the recession will lead to a sharp increase in corporate defaults, which had been very low over the last two years, averaging 0.6 percent per year, compared to an historic average of 3.8 percent. During a typical recession, the default rate among corporations may rise to 10-15 percent, threatening massive losses for those holding risky corporate bonds.

As a result, the market for credit default swaps (CDS) – where protection against corporate defaults is bought and sold – may also experience massive losses. In that case, there will also be a serious risk that some firms that sold protection will go bankrupt, triggering further losses for buyers of protection when their counterparties cannot pay.

On top of all this, there is a shadow financial system of non-bank financial institutions that, like banks, borrow short and liquid and lend to or invest in longer-term and illiquid assets. This shadow system includes structured investment vehicles (SIVs), conduits, money market funds, hedge funds, and investment banks.

Like banks, all these financial institutions are subject to liquidity or rollover risk – the risk of going belly up if their creditors do not rollover their short-term credit lines. But, unlike banks, they do not have the safety net implied by central banks' role as lender of last resort.

Now that a recession is underway, US and global stock markets are beginning to fall: in a typical US recession, the S&P 500 index falls by an average of 28 percent as corporate revenues and profits sink. Losses in stock markets have a double effect: they reduce households' wealth and lead them to spend less; and they cause massive losses to investors who borrowed to invest in stock, thus triggering margin calls and asset fire sales.

There is thus a broader risk that many leveraged investors in both equity and credit markets will be forced to sell illiquid assets in illiquid markets, leading to a cascading fall in asset prices to below their fundamental values. The ensuing losses will aggravate the

financial turmoil and economic contraction.

Indeed, adding up all these losses in financial markets, the sum will hit a staggering \$1 trillion. Tighter credit rationing will then further hamper the ability of households and firms to borrow, spend, invest, and sustain economic growth. The risk that a systemic financial crisis will drive a more pronounced US and global recession has quickly gone from being a theoretical possibility to becoming an increasingly plausible scenario.

Let me elaborate now in more detail on three important issues:

1. Why there is now the risk of a systemic financial crisis.
2. Why the Federal Reserve and other financial policy makers may not be able to prevent this systemic crisis
3. How a worsening housing recession may lead 10 to 20 million households into negative equity territory and induce them to default on their mortgages and walk away from their homes.

1. The Rising Risk of a Systemic Financial Meltdown: The Twelve Steps to Financial Disaster

Why did the Fed ease the Fed Funds rate by a whopping 125bps in eight days this past January? It is true that most macro indicators were heading south and suggesting a deep and severe recession that has already started. But the flow of bad macro news in mid-January did not justify, by itself, such a radical inter-meeting emergency Fed action followed by another cut at the formal FOMC meeting.

To understand the Fed actions one has to realize that there is now a rising probability of a “catastrophic” financial and economic outcome, i.e. a vicious circle where a deep recession makes the financial losses more severe and where, in turn, large and growing financial losses and a financial meltdown make the recession even more severe. The Fed is seriously worried about this vicious circle and about the risks of a systemic financial meltdown.

That is the reason the Fed had thrown all caution to the wind – after a year in which it was behind the curve and underplaying the economic and financial risks – and has taken a very aggressive approach to risk management; this is a much more aggressive approach than the Greenspan one in spite of the initial views that the Bernanke Fed would be more cautious than Greenspan in reacting to economic and financial vulnerabilities.

To understand the risks that the financial system is facing today I present the “nightmare” or “catastrophic” scenario that the Fed and financial officials around the world are now worried about. Such a scenario – however extreme – has a rising and significant probability of occurring. Thus, it does not describe a very low probability event but rather an outcome that is quite possible.

Start first with the recession that is now enveloping the US economy. Let us assume – as likely - that this recession – that already started in December 2007 - will be worse than the mild ones – that lasted 8 months – that occurred in 1990-91 and 2001. The recession of 2008 will be more severe for several reasons: first, we have the biggest housing bust in US history with home prices likely to eventually fall 20 to 30%; second, because of a credit bubble that went beyond mortgages and because of reckless financial innovation and securitization the ongoing credit bust will lead to a severe credit crunch; third, US households – whose consumption is over 70% of GDP - have spent well beyond their means for years now piling up a massive amount of debt, both mortgage and otherwise; now that home prices are falling and a severe credit crunch is emerging the retrenchment of private consumption will be serious and protracted. So let us suppose that the recession of 2008 will last at least four quarters and, possibly, up to six quarters. What will be the consequences of it?

Here are the twelve steps or stages of a scenario of systemic financial meltdown associated with this severe economic recession.

First, this is the worst housing recession in US history and there is no sign it will bottom out any time soon. At this point it is clear that US home prices will fall between 20% and 30% from their bubbly peak; that would wipe out between \$4 trillion and \$6 trillion of household wealth. While the subprime meltdown is likely to cause about 2.2 million foreclosures, a 30% fall in home values would imply that over 10 million households would have negative equity in their homes and would have a big incentive to use “jingle mail” (i.e. default, put the home keys in an envelope and send it to their mortgage bank). Moreover, soon enough a few very large home builders will go bankrupt and join the dozens of other small ones that have already gone bankrupt thus leading to another free fall in home builders’ stock prices that have irrationally rallied in the last few weeks in spite of a worsening housing recession.

Second, losses for the financial system from the subprime disaster are now estimated to be as high as \$250 to \$300 billion. But the financial losses will not be only in subprime mortgages and the related RMBS and CDOs. They are now spreading to near prime and prime mortgages as the same reckless lending practices in subprime (no down-payment, no verification of income, jobs and assets (i.e. NINJA or LIAR loans), interest rate only, negative amortization, teaser rates, etc.) were occurring across the entire spectrum of mortgages; about 60% of all mortgage origination since 2005 through 2007 had these reckless and toxic features. So this is a generalized mortgage crisis and meltdown, not just a subprime one. And losses among all sorts of mortgages will sharply increase as home prices fall sharply and the economy spins into a serious recession. Goldman Sachs now estimates total mortgage credit losses of about \$400 billion; but the eventual figures could be much larger if home prices fall more than 20%. Also, the RMBS and CDO markets for securitization of mortgages – already dead for subprime and frozen for other mortgages - remain in a severe credit crunch, thus reducing further the ability of banks to originate mortgages. The mortgage credit crunch will become even more severe.

Also add to the woes and losses of the financial institutions the meltdown of hundreds of billions of off balance SIVs and conduits; this meltdown and the roll-off of the ABCP market has forced banks to bring back on balance sheet these toxic off balance sheet vehicles adding to the capital and liquidity crunch of the financial institutions and adding to their on balance sheet losses. And because of securitization the securitized toxic waste has been spread from banks to capital markets and their investors in the US and abroad, thus increasing – rather than reducing systemic risk – and making the credit crunch global.

Third, the recession will lead – as it is already doing – to a sharp increase in defaults on other forms of unsecured consumer debt: credit cards, auto loans, student loans. There are dozens of millions of subprime credit cards and subprime auto loans in the US. And again defaults in these consumer debt categories will not be limited to subprime borrowers. So add these losses to the financial losses of banks and of other financial institutions (as also these debts were securitized in ABS products), thus leading to a more severe credit crunch. As the Fed loan officers survey suggest the credit crunch is spreading throughout the mortgage market and from mortgages to consumer credit, and from large banks to smaller banks.

Fourth, while there is serious uncertainty about the losses that monolines will undertake on their insurance of RMBS, CDO and other toxic ABS products, it is now clear that such losses are much higher than the \$10-15 billion rescue package that regulators are trying to patch up. Some monolines are actually borderline insolvent and none of them deserves at this point a AAA rating regardless of how much realistic recapitalization is provided. Any business that required an AAA rating to stay in business is a business that does not deserve such a rating in the first place. The monolines should be downgraded as no private rescue package – short of an unlikely public bailout – is realistic or feasible given the deep losses of the monolines on their insurance of toxic ABS products.

Next, the downgrade of the monolines will lead to another \$150 of writedowns on ABS portfolios for financial institutions that have already massive losses. It will also lead to additional losses on their portfolio of muni bonds. The downgrade of the monolines will also lead to large losses – and potential runs – on the money market funds that invested in some of these toxic products. The money market funds that are backed by banks or that bought liquidity protection from banks against the risk of a fall in the NAV may avoid a run but such a rescue will exacerbate the capital and liquidity problems of their underwriters. The monolines' downgrade will then also lead to another sharp drop in US equity markets that are already shaken by the risk of a severe recession and large losses in the financial system.

Fifth, the commercial real estate loan market will soon enter into a meltdown similar to the subprime one. Lending practices in commercial real estate were as reckless as those in residential real estate. The housing crisis will lead – with a short lag – to a bust in non-residential construction as no one will want to build offices, stores, shopping malls/centers in ghost towns. The CMBX index is already pricing a massive increase in credit spreads for non-residential mortgages/loans. And new origination of commercial

real estate mortgages is already semi-frozen today; the commercial real estate mortgage market is already seizing up today.

Sixth, it is possible that some large regional or even national bank that is very exposed to mortgages, residential and commercial, will go bankrupt. Thus some big banks may join the 200 plus subprime lenders that have gone bankrupt. This, like in the case of Northern Rock, will lead to depositors' panic and concerns about deposit insurance. The Fed will have to reaffirm the implicit doctrine that some banks are too big to be allowed to fail. But these bank bankruptcies will lead to severe fiscal losses of bank bailout and effective nationalization of the affected institutions. Already Countrywide – an institution that was more likely insolvent than illiquid – has been bailed out with public money via a \$55 billion loan from the FHLB system, a semi-public system of funding of mortgage lenders. Banks' bankruptcies will add to an already severe credit crunch.

Seventh, the banks losses on their portfolio of leveraged loans are already large and growing. The ability of financial institutions to syndicate and securitize their leveraged loans – a good chunk of which were issued to finance very risky and reckless LBOs – is now at serious risk. And hundreds of billions of dollars of leveraged loans are now stuck on the balance sheet of financial institutions at values well below par (currently about 90 cents on the dollar but soon much lower). Add to this that many reckless LBOs (as senseless LBOs with debt to earnings ratio of seven or eight had become the norm during the go-go days of the credit bubble) have now been postponed, restructured or cancelled. And add to this problem the fact that some actual large LBOs will end up into bankruptcy as some of these corporations taken private are effectively bankrupt in a recession and given the repricing of risk; covenant-lite and PIK toggles may only postpone – not avoid – such bankruptcies and make them uglier when they do eventually occur. The leveraged loans mess is already leading to a freezing up of the CLO market and to growing losses for financial institutions.

Eighth, once a severe recession is underway a massive wave of corporate defaults will take place. In a typical year US corporate default rates are about 3.8% (average for 1971-2007); in 2006 and 2007 this figure was a puny 0.6%. And in a typical US recession such default rates surge above 10%. Also during such distressed periods the RGD – or recovery given default – rates are much lower, thus adding to the total losses from a default. Default rates were very low in the last two years because of a slosh of liquidity, easy credit conditions and very low spreads (with junk bond yields being only 260bps above Treasuries until mid June 2007). But now the repricing of risk has been massive: junk bond spreads close to 700bps, iTraxx and CDX indices pricing massive corporate default rates and the junk bond yield issuance market is now semi-frozen. While on average the US and European corporations are in better shape – in terms of profitability and debt burden – than in 2001 there is a large fat tail of corporations with very low profitability and that have piled up a mass of junk bond debt that will soon come to refinancing at much higher spreads. Corporate default rates will surge during the 2008 recession and peak well above 10% based on recent studies. And once defaults are higher and credit spreads higher massive losses will occur among the credit default swaps (CDS) that provided protection against corporate defaults. Estimates of the losses on a notional

value of \$50 trillion CDS against a bond base of \$5 trillion are varied (from \$20 billion to \$250 billion with a number closer to the latter figure more likely). Losses on CDS do not represent only a transfer of wealth from those who sold protection to those who bought it. If losses are large some of the counterparties who sold protection – possibly large institutions such as monolines, some hedge funds or a large broker dealer – may go bankrupt leading to even greater systemic risk as those who bought protection may face counterparties who cannot pay.

Ninth, the “shadow banking system” (as defined by the PIMCO folks) or more precisely the “shadow financial system” (as it is composed by non-bank financial institutions) will soon get into serious trouble. This shadow financial system is composed of financial institutions that – like banks – borrow short and in liquid forms and lend or invest long in more illiquid assets. This system includes: SIVs, conduits, money market funds, monolines, investment banks, hedge funds and other non-bank financial institutions. All these institutions are subject to market risk, credit risk (given their risky investments) and especially liquidity/rollover risk as their short term liquid liabilities can be rolled off easily while their assets are more long term and illiquid. Unlike banks these non-bank financial institutions don’t have direct or indirect access to the central bank’s lender of last resort support as they are not depository institutions. Thus, in the case of financial distress and/or illiquidity they may go bankrupt because of both insolvency and/or lack of liquidity and inability to roll over or refinance their short term liabilities. Deepening problems in the economy and in the financial markets and poor risk managements will lead some of these institutions to go belly up: a few large hedge funds, a few money market funds, the entire SIV system and, possibly, one or two large and systemically important broker dealers. Dealing with the distress of this shadow financial system will be very problematic as this system – stressed by credit and liquidity problems - cannot be directly rescued by the central banks in the way that banks can.

Tenth, stock markets in the US and abroad will start pricing a severe US recession – rather than a mild recession – and a sharp global economic slowdown. The fall in stock markets – after the late January 2008 rally fizzles out – will resume as investors will soon realize that the economic downturn is more severe, that the monolines will not be rescued, that financial losses will mount, and that earnings will sharply drop in a recession not just among financial firms but also non financial ones. A few long equity hedge funds will go belly up in 2008 after the massive losses of many hedge funds in August, November and, again, January 2008. Large margin calls will be triggered for long equity investors and another round of massive equity shorting will take place. Long covering and margin calls will lead to a cascading fall in equity markets in the US and a transmission to global equity markets. US and global equity markets will enter into a persistent bear market as in a typical US recession the S&P500 falls by about 28%.

Eleventh, the worsening credit crunch that is affecting most credit markets and credit derivative markets will lead to a dry-up of liquidity in a variety of financial markets, including otherwise very liquid derivatives markets. Another round of credit crunch in interbank markets will ensue triggered by counterparty risk, lack of trust, liquidity premia and credit risk. A variety of interbank rates – TED spreads, BOR-OIS spreads, BOT –

Tbill spreads, interbank-policy rate spreads, swap spreads, VIX and other gauges of investors' risk aversion – will massively widen again. Even the easing of the liquidity crunch after massive central banks' actions in December and January will reverse as credit concerns keep interbank spread wide in spite of further injections of liquidity by central banks.

Twelfth, a vicious circle of losses, capital reduction, credit contraction, forced liquidation and fire sales of assets at below fundamental prices will ensue leading to a cascading and mounting cycle of losses and further credit contraction. In illiquid market actual market prices are now even lower than the lower fundamental value that they now have given the credit problems in the economy. Market prices include a large illiquidity discount on top of the discount due to the credit and fundamental problems of the underlying assets that are backing the distressed financial assets. Capital losses will lead to margin calls and further reduction of risk taking by a variety of financial institutions that are now forced to mark to market their positions. Such a forced fire sale of assets in illiquid markets will lead to further losses that will further contract credit and trigger further margin calls and disintermediation of credit. The triggering event for the next round of this cascade is the downgrade of the monolines and the ensuing sharp drop in equity markets; both will trigger margin calls and further credit disintermediation.

Based on estimates by Goldman Sachs \$200 billion of losses in the financial system lead to a contraction of credit of \$2 trillion given that institutions hold about \$10 of assets per dollar of capital. The recapitalization of banks sovereign wealth funds – about \$80 billion so far – will be unable to stop this credit disintermediation – (the move from off balance sheet to on balance sheet and moves of assets and liabilities from the shadow banking system to the formal banking system) and the ensuing contraction in credit as the mounting losses will dominate by a large margin any bank recapitalization from SWFs. A contagious and cascading spiral of credit disintermediation, credit contraction, sharp fall in asset prices and sharp widening in credit spreads will then be transmitted to most parts of the financial system. This massive credit crunch will make the economic contraction more severe and lead to further financial losses. Total losses in the financial system will add up to more than \$1 trillion and the economic recession will become deeper, more protracted and severe.

A near global economic recession will ensue as the financial and credit losses and the credit crunch spread around the world. Panic, fire sales, cascading fall in asset prices will exacerbate the financial and real economic distress as a number of large and systemically important financial institutions go bankrupt. A 1987 style stock market crash could occur leading to further panic and severe financial and economic distress. Monetary and fiscal easing will not be able to prevent a systemic financial meltdown as credit and insolvency problems trump illiquidity problems. The lack of trust in counterparties – driven by the opacity and lack of transparency in financial markets, and uncertainty about the size of the losses and who is holding the toxic waste securities – will add to the impotence of monetary policy and lead to massive hoarding of liquidity that will exacerbates the liquidity and credit crunch.

In this meltdown scenario the U.S. and global financial markets will experience their most severe crisis in the last quarter of a century.

2. Can the Fed and Policy Makers Avoid a Systemic Financial Meltdown? Most Likely Not

Can the Fed and other financial officials avoid the systemic financial crisis scenario described in the previous section? The answer to this question – to be detailed below – is twofold: first, it is not easy to manage and control such a contagious financial crisis that is more severe and dangerous than any faced by the US in a quarter of a century; second, the extent and severity of this financial crisis will depend on whether the policy response – monetary, fiscal, regulatory, financial and otherwise – is coherent, timely and credible. I am of the view that one should be pessimistic about the ability of policy and financial authorities to manage and contain a crisis of this magnitude; thus, one should be prepared for the worst, i.e. a systemic financial crisis.

I will present next eight reasons why I am skeptical that such a systemic risk scenario can be avoided.

Before we get to the many reasons why one should be pessimistic let us consider at least one reason why one could be more optimistic. The main good news in this respect is that, after being behind the curve in its assessment of the economic and financial risks, the Fed now gets it and is worried about a serious systemic financial crisis. For over a year the Fed assessment of the risks to the economy and to the financial markets was flatly wrong. The Fed argued that the housing “slump” would bottom out over a year ago; instead the housing recession got deeper and is nowhere near bottoming out; Bernanke argued repeatedly that the subprime problem would be a niche and contained problem; instead we have observed a severe liquidity and credit crunch that has spread to the entire financial system; the Fed argued that the housing recession would have no significant spillovers to the other sectors of the economy in spite of the importance of housing and in spite of the fact that housing is the main assets of most households; instead we are now observing an economy wide-recession. So to put it simply the Fed – as well as most macro analysts and forecasters - got it totally wrong in its assessment of the risks to the economy and to financial markets.

Today instead the Fed is certainly aware of the risks not just to the real economy but also to financial markets. As senior Fed officials argue in private the risk of a catastrophic event – a small probability of a systemic financial meltdown that would lead to a severe recession – is rising and this scenario, however unlikely, has to be avoided at any cost. This is the main reason why the Fed has thrown caution to the wind and has taken a very aggressive approach to risk management, as signaled by the 125bps Fed Funds easing in eight days in January.

What is the Fed's and the financial officials' strategy to avoid the vicious circle of a severe recession and of a systemic catastrophic financial meltdown? Here are the main elements of this strategy and the important limitations and constraints to that strategy.

First, an aggressive monetary easing with the reduction of the Fed Funds rate to reduce the risk of a deeper and more protracted recession. The limits to this monetary policy easing are twofold. First, at some point the Fed needs to worry that an aggressive Fed Funds easing will lead to a disorderly fall of the US dollar, to foreign private investors pulling the plug on the financing of still large US external deficits and to higher imported inflation. Second, monetary policy is relatively ineffective in stimulating the economy as: there is a glut of housing, consumer durables, automobiles and it will take years to clear that glut; i.e. monetary policy becomes less effective as the demand for such capital goods becomes less interest rate sensitive under glut conditions or, in other terms, easing money is like pushing on a string. Second, the problems of the economy are not just problems of illiquidity but rather more deep seated problems of insolvency; and monetary policy cannot resolve serious credit problems in the economy.

Second, a strong provision of liquidity to financial markets to reduce the liquidity crunch in interbank and money markets. Such provision of liquidity failed to reduce such a crunch in the fall of 2007 until the Fed became much more aggressive in December with its new liquidity auctions. Since then interbank spreads have become smaller – especially because markets were pricing very aggressive Fed Funds easing - but such a liquidity crunch has not disappeared – as proxied by the crucial BOR-OIS spread while the credit crunch in credit markets has now become even more severe than in the fall. Also, interbank spreads may significantly widen again for several reasons. First, such spreads include two components, a liquidity premium and a credit premium; while the Fed can affect the former through its provision of liquidity it cannot affect the second and recent evidence suggests that interbank spread are now more driven by credit spreads. Second, with a worsening economy and increasingly large losses in an opaque financial system where lack of trust in counterparties is increasing and where counterparty risk will increase in a deepening recession, credit premia will become larger.

Third, an robust attempt to coordinate a private rescue of the monolines to prevent their rating downgrade and thus avoid another round of writedowns in the financial system. As a senior policy official put it in a private meeting at Davos rescuing the monoline is “a no brainer”. The trouble is that, while a few weeks ago it was thought that a \$10 to \$15 billion recapitalization of the monolines was thought to be doable and sufficient to prevent such a downgrade it is now becoming increasingly clear that the monoline losses on their insurance of toxic structured finance products are massive and that \$10-15 billion will not be enough to avoid a now necessary and unavoidable downgrade.

Also, as argued here before, a business model that requires a AAA rating to remain in business is a business model that does not deserve an AAA rating in the first place. As also agreed by Bill Gross of PIMCO bond insurance of structured products was a form of “voodoo finance” that created AAA ratings for toxic instruments that should have never had such ratings in the first place.

And once the unavoidable downgrade of monolines occurs financial institutions will be forced to write down another \$150 billion structured finance assets kicking another round of large financial losses. The downgrade of the monolines could also lead to large losses

– and potential runs – on the money market funds that invested in some of these toxic products. The money market funds that are backed by banks or that bought liquidity protection from banks against the risk of a fall in the NAV may avoid a run but such a rescue will exacerbate the capital and liquidity problems of their underwriters. Finally, the monolines' downgrade will then also lead to another sharp drop in US equity markets that are already shaken by the risk of a severe recession and large losses in the financial system. Indeed, in the last few weeks movements of the stock markets have been driven more by news about the fate of the monolines rather than the monetary easing news of the Fed, a signal that markets realize that the economy suffers of credit, rather than just illiquidity, problems.

Fourth, avoiding a more severe credit crunch by an aggressive support of the recapitalization of the financial system through capital injections by sovereign wealth funds (SWF). The risk of a credit crunch following the losses in financial institutions and their reduction in capital is serious. For example, Goldman Sachs estimated that \$200 billion of losses in the financial system will lead to a contraction of credit of \$2 trillion given that such institutions hold about \$10 of assets per dollar of capital.

That is the reason why the Fed, the US Treasury and other financial officials have totally set aside any other concerns about SWFs (their foreign government ownership, their lack of transparency, etc.) and have aggressively supported the recapitalization of the financial system by such SWF. To avoid a more severe recession it is better to restore the balance sheet of the banks via a recap that reduces the need to contract lending and credit than via a contraction of the asset side of such balance sheet. However, this recapitalization of banks by sovereign wealth funds – about \$70 billion so far – will be unable to stop the credit crunch and the credit disintermediation (the move from off-balance sheet to on balance sheet of SIVs, conduits and other vehicle; and the moves of assets and liabilities from the shadow banking system to the formal banking system) and the ensuing contraction in credit as the mounting losses in the financial system will dominate by a large margin any bank recapitalization from SWFs.

Based on our analysis such losses in the financial system could add up to more than \$1 trillion - not just \$200 billion – and a good part of these losses will be among financial institutions such as commercial banks and investment banks. Thus, unless SWF or other financial institutions are willing to throw much more good money after bad money (the Chinese SWF – CIC - lost 30% of its investment into Blackstone in three months alone; while BofA lost most of its \$2 billion investment in Countrywide and is not at risk of doubling up its losses by taking over the insolvent Countrywide) it will be impossible to avoid a significant reduction in the capital of the financial system and the severe credit crunch that is now underway. And there is now evidence that even long-investment horizon investors such as SWF are starting to become skeptical about throwing good money after bad money into US and European financial institutions.

Also notice that recent data suggest significant losses and the beginning of a credit crunch among smaller banks and even some medium sized regional and national banks. The

chances that such smaller banks with serious problems will get massive support from SWF are very low.

Fifth, attempts to reduce the number of foreclosures among distressed homeowners and provide measure of support of the housing markets. These include the Hope plan to freeze the reset of some ARM mortgages, the lifting of some of the limits to the portfolios of the GSEs, the use of the Federal Home Loan Bank system to provide liquidity to mortgage lenders, use the FHA Secure loan refinance program to reduce the number of foreclosures, etc. But some of these plans are too little too late to make a difference while others are outright inappropriate uses of public money.

To understand the gargantuan challenge that policy makers face in controlling the severity of the housing recession note that it highly likely that US home prices will fall between 20% and 30% from their bubbly peak; that fall would reduce household wealth between \$4 trillion and \$6 trillion. Also, while the subprime meltdown is likely to cause about 2.2 million foreclosures, a 30% fall in home values would imply that over 10 million households would have negative equity in their homes and would have a big incentive to use “jingle mail” (i.e. default, put the home keys in an envelope and send it to their mortgage bank).

Given the size of the meltdown in the housing market and the risks of massive default the measures undertaken so far are either minor band-aid solutions or inappropriate uses of public funds. The Hope plan – while going in the right direction in spirit – is so constrained that it will help only a very small fraction of subprime borrowers in avoiding a reset of their ARMs; studies suggest that – at best – only 5% to 10% of such borrowers will be able to benefit from such a reset. The severity of the housing crisis is such that even a hypothetical plan that allowed all of subprime borrowers to freeze their resets would not be enough. Currently politically unthinkable appropriate solutions – such as an outright across the board reduction of the face value of the mortgages of the order of 10% to 20% to reduce the jingle mail are unconceivable now but may become necessary in the near future to stem a tsunami of defaults and foreclosures.

The time will come – unfortunately too late – when financial institutions will realize that they are better off freezing the resets and, at the same time, write down a part of the face value of the mortgage, to allow strapped homeowners to avoid default as the alternative of foreclosure and selling homes at steeply discounted prices in a very illiquid markets involves larger losses for the creditors than a reduction of the debt burden of illiquid and/or insolvent borrowers. Unfortunately this rational solution to the mortgage credit problems will come too late and only when massive insolvencies will lead banks to appreciate the benefits of this alternative and more radical approach to mortgage distress. In the meanwhile the housing and mortgage carnage will continue at accelerated rates.

Similarly, the FHA Secure program has been so far a total failure and there are now suggestions to vastly expand it to make it more effective. The proposals to allow the GSEs (Fannie and Freddie) to buy or guarantee mortgages above the current conforming limits of \$417k (all the way to a new limit of \$729k) don't have much merit. The jumbo

loan market may be in distress now but why should the GSE heavily subsidize very large mortgages of upper class Americans. At the \$417 limit the GSE are already seriously subsidizing the mortgages by middle and middle upper class households. Now extending this subsidy to the wealthiest households buying McMansions and expensive condos is highly inappropriate public policy. Also, as suggested by OFHEO, such plan may lead the GSE to divert their lending activities from buying and guaranteeing smaller and less expensive mortgages towards bigger jumbo loans.

Finally, the widespread use of the FHLB system to provide liquidity – but more clearly bail out insolvent mortgage lenders – has been outright reckless. Countrywide alone – the poster child of the last decade of reckless and predatory lending practices – received a \$51 billion loan from this semi-public system; in the absence of this public bailout Countrywide would have ended up where it should, i.e. into outright bankruptcy. And the largesse of the FHLB system does not stop at Countrywide. A system that usually provides a lending stock of about \$150 billion has forked out loans amounting to over \$750 billion in the last year with very little oversight of such staggering lending. The risk that this stealth bailout of many insolvent mortgage lenders will end up costing massive amounts of public money is now rising.

Sixth, the Fed and other financial regulators have concentrated on trying to avoid the liquidity and insolvency problems of banks and other depository institutions. Through the provision of massive liquidity – including the new TAF auctions - to these depository institutions, the reduction of the discount rate and the easing of access to the discount window, via actions of forbearance such as the waiver of Regulation W or via the effective bailout of some subprime lenders such as Countrywide via the FHLB system the Fed and other financial regulators have been busy to avoid a “Northern Rock” style of bank collapse and run. Whether such actions are wise as some banking institutions are insolvent and whether such actions will be effective in preventing some bank defaults is open to discussion. There is increasing likelihood that some banks – even some large regional ones or some smaller national ones – may go under during a severe recession, regardless of what the Fed does.

But much more importantly the Fed is not directly able to resolve the liquidity and credit problems of the “shadow banking system” (as defined by the PIMCO folks). A more appropriate definition of this system would be the “shadow financial system” (as it is composed by non-bank financial institutions) and this system is now facing serious problems that cannot be easily addressed by the Fed. This shadow financial system is composed of financial institutions that – like banks – borrow short and in liquid forms and lend or invest long in more illiquid assets. This system includes: SIVs, conduits, money market funds, monolines, investment banks, hedge funds and other non-bank financial institutions.

All these institutions are subject to market risk, credit risk (given their risky investments) and especially liquidity/rollover risk as their short term liquid liabilities can be rolled off easily while their assets are more long term and illiquid. Unlike banks these non-bank financial institutions don't have direct or indirect access to the central bank's lender of

last resort support as they are not depository institutions. Thus, in the case of financial distress and/or illiquidity they may go bankrupt because of both insolvency and/or lack of liquidity and inability to roll over or refinance their short term liabilities. Deepening problems in the economy and in the financial markets and poor risk managements will lead some of these institutions to go belly up: a few large hedge funds, a few money market funds, the entire SIV system and, possibly, one or two large and systemically important broker dealers.

Dealing with the distress of this shadow financial system will be very problematic as this system – stressed by credit and liquidity problems - cannot be directly rescued by the central banks in the way that banks can. The Federal Reserve Act does allow lending by the Fed to non-depository institutions only in extreme emergency conditions and after a very restrictive and cumbersome voting and approval process. And since the Great Depression such emergency authority to lend to non-depository institutions has not been invoked. Thus, while the liquidity injections by the Fed has been helpful in reducing the liquidity crunch among many depository institutions they have been ineffective in dealing with the liquidity and credit problems of such shadow financial system. This is the reason why the SIVs collapsed and their assets and liabilities had to be brought back on-balance sheet. This is why money market funds that experienced massive losses on their holdings of toxic ABS had to be rescued by their holding banks or financial groups. If some large hedge funds were to experience a significant run on their funding – as the risk of redemptions is rising given the large losses by some of them in recent months and in January and the coming deadline for redemptions – no one would be able to bail them out, thus forcing a potentially dangerous fire sale of their assets in an illiquid market.

And at this point one cannot now rule out that one or more large broker dealer may end up into liquidity or credit problems and face bankruptcy. These are all problems that the Fed and other financial regulators cannot resolve, either directly or indirectly.

Seventh, the Fed and financial regulators and supervisors are walking a very fine line between transparency/recognition of losses and forbearance. On one side they recognize the need for financial institutions to be transparent and reveal fully the losses on their balance sheets as the uncertainty about such losses is an importance source of the lack of trust and confidence that has made this crisis severe; they also recognize the need to avoid forms of policy forbearance that would exacerbate such a lack of confidence. At the same time the authorities are trying to avoid – via appropriate forbearance actions - a self destructive asset price deflation and fire sales of assets that would exacerbate the financial meltdown, the credit crunch and the collateral damage to the real economy. The trouble is that finding the right and appropriate “middle way” between transparency and recognition of losses and “appropriate” forbearance is very hard.

The logic of finding a middle way is obvious. Transparency and openness about the losses that financial institutions suffered is necessary to resolve the “Where is Waldo?” problem, i.e. the uncertainty among the investors on who is holding the toxic waste and how much of it; this uncertainty has been the source of the risk aversion, lack of trust in counterparties and liquidity hoarding that has worsened the liquidity and credit crunch.

So, greater transparency and recognition of the losses is appropriate to restore confidence in the financial system.

On the other hand there is also recognition that under very distressed and illiquid market conditions too much transparency and too much marking to market may lead to a self-destructive cascade of asset prices falling below medium term fundamental values and the credit crunch getting worse. Specifically, there is now a risk that a vicious circle of financial losses, capital reduction, credit contraction, forced liquidation and fire sales of assets at below fundamental prices will take leading to a cascading and mounting cycle of losses and further credit contraction. In illiquid market actual market prices are now even lower than the lower fundamental value that they now have given the credit problems in the economy. Market prices include a large illiquidity discount on top of the discount due to the credit and fundamental problems of the underlying assets that are backing the distressed financial assets. Capital losses then will lead to margin calls and further reduction of risk taking by a variety of financial institutions that are now forced to mark to market their positions. Such a forced fire sale of assets in illiquid markets will lead to further losses that will further contract credit and trigger further margin calls and disintermediation of credit.

As one former senior financial official put in a private Davos' WEF session on systemic financial risk if we had today for the auto loans and credit cards an instrument similar to the ABX for pricing the value of subprime loans such form of market transparency would be self-destructive and lead banks to show massive additional losses, even larger than those warranted by the worsening fundamentals in the consumer credit market. In other terms, marking to market in a market where prices are discounted by illiquidity may be self destructive.

The problem is that this principle of avoiding – via appropriate forbearance - a self destructive cascade of asset fire sales in illiquid markets is a sensible idea that it is easier expressed in theory than being applicable in practice. Some of the early attempts to provide such forbearance were actually faulty and destructive of confidence: for example the super-SIV plan was conceptually faulty in the first place and its failure appropriate. If a fire sale of the illiquid assets of the SIV was inappropriate the right solution was not to park such assets in a freakish super-SIV. It was rather to bring back those assets on the balance sheet of banks where they belonged in the first place.

Similarly, the concern about the writedowns that will follow a downgrade of the monolines is well taken. However, desperate attempt to avoid a rating downgrade of monolines that do not deserve such AAA rating are highly inappropriate as the insurance by these monolines of toxic ABS was reckless in the first place. If public concerns about access to financing by state and local governments during a recession period are warranted it is better to split the monoline insured assets between muni bonds and structured finance vehicle, ring fence the muni component and let the rest be downgraded and accept the necessary writedowns on the structured finance assets. If these necessary writedowns will then hurt financial institutions that hold this “insured” toxic waste so be it as these assets should have never been insured in the first place. The ensuing fallout

from the necessary writedown – such as the need to avoid fire sales in illiquid markets - should then be addressed with other policy actions.

These examples suggest that while the concerns of authorities on avoiding self destructive fire sales and asset price undershooting (relative to fundamentals) may be warranted providing appropriate – as opposed as inappropriate and self destructive forbearance – is easier said than done. The Fed and other financial authorities are looking for a “middle way” but that middle way may not clearly exist in practice. Thus, there are serious limits to the authorities’ ability to follow sensible policies that avoid a vicious circle of asset price undershooting and excessive credit contraction.

In this regard market perceptions that the Fed is out there to bail out investors and the stock market are also not conducive to greater confidence in the monetary authorities. While the Fed goal may rightly be that of bailing out Main Street rather than Wall Street a recession is now not only unavoidable but also necessary to reduce the imbalances – excessive spending relative to income – that were festered by the asset and credit bubbles that burst last year. While public policy should be concerned about a contraction of demand and economic activity that is in excess of what is necessary to restore economic and financial sustainability public policy should not aggressively prevent the necessary economic adjustment that is now required, i.e. a painful reduction of consumption relative to income and an increase in the saving rate that is necessary to bring the economy on a more sustainable growth path over the medium term.

Thus, the perception by markets that the Fed is trying to avoid the necessary economic correction and the necessary adjustment in asset prices – including a needed sharp reduction in equity price and in home prices and the necessary increase in credit spreads – is a matter of concern. While moral hazard will be contained by the massive losses that lenders and investors will suffer regardless of what the Fed does the perception that the Fed is trying to prevent the necessary adjustment in asset prices is not confidence building. While the Fed may be running out of bubbles to create and while inflation may end up being the last of the problems that the Fed faces ahead market perceptions that the Fed has now altogether ignored concerns about moral hazard and concerns about future inflation are now starting to undermine the credibility of the Fed.

Eighth, and finally, the Anglo-Saxon financial system is in a severe crisis – as argued by Martin Wolf or – as argued here – this is the first crisis of financial globalization and securitization. The reform of the financial system to reduce the risk of future destructive credit and asset bubbles is a massive undertaking that the G7 and the Financial Stability Forum have just started. Formally senior financial officials argue that everything is on the table and open to discussion and reform: the flaws and wrong incentives of the securitization (originate and distribute) model, the conflicts of interests of the rating agencies, the poor risk management in financial institutions, the lack of true stress testing, the importance of liquidity risk, the wrong incentives deriving from the system of compensation of bankers and financial sector operators who have an agency problem relative to the firms’ shareholders and an incentive to gamble for redemption, the lack of

information and transparency in the financial system, the flaws of Basel 2, the problems of pricing and valuing complex structured finance products, as well as other issues.

Reforming this system is urgent to restore confidence in the financial system and reduce the risks of boom and busts in asset prices and credit that are becoming increasingly self-destructive. It is one thing to have such boom and busts in less developed and complex financial system with lower degrees of financial innovation. It is another one to have these repeated and increasingly unstable cycles in very complex systems that private sector agents and public sector regulators and supervisors don't fully understand and are unable to control. The risk that a systemic financial meltdown in this most complex "black box" financial system that has run amok will cause a "black swan" event with destructive real economic and financial consequences is rising.

And while policy makers and regulators now claim that everything is on the table in terms of reforming a faulty financial system they stress in private that their preferred approach would be one of "self-regulation" and reforms undertaken by private financial institutions rather than new rules and regulation imposed by authorities. While the right balance between principles and rules in regulation and supervision is open to discussion the recent experience suggests that excessive reliance on principles not backed by appropriate rules, the delusional hope that internal models of risk management will provide the right amount of risk taking, the wishful thinking that "self-regulation" will work, the hope that financial institutions will self reform the system of compensations of bankers are all mistaken views. A more robust set of rules, regulations and supervisions will be necessary as excessive reliance on self-regulation and market discipline has shown its failure. Starting with the interim report that the FSF group headed by Mario Draghi will present to the G7 finance ministers we will see how serious financial officials are about reforming the system and reducing the medium terms risks of a systemic financial crisis. For the time being there are good reasons to be skeptical that the right policy actions and reforms will be undertaken.

In conclusion, the risks of a systemic financial meltdown of the sort that I described in the previous section are rising. While the Fed and the financial policy authorities are now fully aware of the risks of this scenario – after a long two years where they misdiagnosed the problems in the economy and the financial system – and they are starting to take some of the appropriate policy actions in the monetary and financial spheres, a realistic assessment of the risks in the real economy and in the financial system suggests that it will be very hard to avoid a severe economic recession and the financial fallout of such a recession. And the risks of a systemic financial crisis that will exacerbate such a US recession and will lead to near recession conditions around the world are now rising.

3. The Forthcoming "Jingle Mail" Tsunami: 10 to 15 Million Households Likely to Walk Away from their Homes/Mortgages Leading to a the Risk of a Systemic Banking Crisis

The current housing recession, subprime meltdown and severe credit crunch in financial markets has many worrisome aspects. And while there is always a "crisis de jeux" - one

day SIVs, the next day monolines, the next day TOBs or auction-rate securities - one needs to keep some perspective and consider which risks are first-order sources of stress for financial markets and which ones are of second or third-order concern.

I will argue that currently the most important first-order risk for financial markets derives from the likelihood that 10 million to 15 million households may walk away from their homes if – as likely - home prices fall another 10% in 2008 and further in 2009. When – in the summer of 2006 – this author argued that this would be the worst housing US recession in the last 50 years and that home prices would fall – from their peak value – by 20% such predictions were taken as being way too pessimist. Unfortunately the housing recession ended up being even more severe than the most pessimistic predictions by this and other authors. Indeed, this is likely to end up being the worst housing recession in U.S. history – not just in the last 50 years – and home prices may likely eventually fall by 30%, not this author's original 20%. By now prices declines of the order of 20% are predicted by Goldman Sachs, Robert Shiller, MarketWatch chief economist Irwin Kellner and others; while Paul Krugman has suggested even a figure of 30%; and, according to Robert Shiller, in some markets home prices may fall by 40 to 50%.

So let us consider the implications for the household sector of price declines of the order of 20 to 30%. The math is simple as I will flesh out in this note: 10 to 15 million households will end up in negative equity territory and will be likely to default on their homes and walk away from them. Then, the losses for the financial system from these massive defaults will be of the order of \$1 trillion to \$2 trillion, a multiple of the \$200 to \$400 billion of losses currently estimated for mortgage related securities.

Let us consider next some of the details of this scenario and its consequences for the financial system. In the last few weeks a spate of articles have appeared in the press noticing the alarming increase in default rates not just among subprime borrowers but increasingly near prime and prime borrowers. In particular it has been noted that the number of voluntary defaults, i.e. households literally walking away from their homes and mortgages has surged.

What is happening is just the consequence of rational economic behavior. In most US states mortgages are non-recourse loans; thus, if a home owner defaults on its mortgage the bank take over the collateral – the home – via foreclosure but once that happens it cannot go after the borrower for any difference between the value of the original mortgage and the current value of the property.

The fact that most mortgages are de jure non-recourse (and the fact that even those mortgages that are de-jure with recourse are de-facto non-recourse as the legal and other costs of going after the borrowers are excessive) has powerful implications: it implies that the borrower has effectively a put option that allows him or her to walk away from its home whenever the value of the home is below the value of the mortgage, what is technically referred to as negative equity.

Of course, not every home owner with negative equity will walk away from its home, i.e. send “jingle mail” (put the home keys of the home in an envelope, send it to the bank and walk away from the home). Reputational considerations and other factors may lead some home owners to keep on servicing their mortgage. But it is obvious that the larger is the negative equity in a home the greater is the incentive to do use “jingle mail”. Indeed, why should any rational agent continue to service a debt when the underlying value of the collateral for it is much lower than the value of the debt and the creditor cannot go after the debtor for the difference between the debt value and the value of the collateral?

Until recently there was a conventional wisdom and wishful thinking that home owners would not voluntarily walk away from their homes. This wishful thinking was based on a few flawed assumptions. First, most analysts did not even consider the possibility that home prices would fall so much that a large fraction of households would fall into negative equity; there was the delusion that home prices would go up forever or would never fall. Second, analysts did not consider how many of the mortgages originated in 2005-2007 were with little or zero down-payment and thus with little or no equity to begin with; the myth of the stable and non-defaulting home owner was based on a distant past when most borrowers put 10 to 20% down payment in their home and had substantial equity into it. Third, economic logic suggested that an agent with such a put option would walk away from its home and mortgage whenever in negative equity territory; so delusions that sentimental value would restrain home owners from defaulting had little economic rationale. So, now that home prices keep on falling and an increasing number of home owners end up in negative equity territory voluntary defaults and “jingle mail” are surging. Is there then anything to be surprised about?

How many households will end up in negative equity territory and will thus an incentive to walk away from their mortgages? The answer to this question of course depends on how much home prices will eventually fall from their peak. A recent analysis by Goldman Sachs suggests that if home prices fall another 10% in 2008 after having fallen by about 8% from peak in 2007 (based on the Case-Shiller/S&P index) about 15 million households will be in negative equity territory. There are other estimates that are consistent with the Goldman Sachs one. Calculated Risk – a very well respected housing blogger – estimated that if home prices decline by 10% in 2008 the number of households with negative equity will be 10.7. But this estimate was based on a partial underestimate of the fall in home prices in 2007 relative to its 2006 peak (as the Case-Shiller data for all of 2007 were not available at the time of that estimate). Thus, the number of households with negative equity could be closer to 12 million. Calculated Risk also estimates that a cumulative fall in home prices of 20% implies 13.7 million households with negative equity while a 30% cumulative fall implies 20.3 million households with negative equity.

These figures are staggering considering that in 2006 the total number of households with mortgages was 51.2 million. So between 20% to 40% of households with mortgages may end up with negative equity in their homes and with a big incentive to walk away from their mortgages. Even the lower bound figure of 10 million households with negative equity (20% of those with mortgages) is huge.

How many additional losses will banks suffer if these many households walk away from their homes? If a bank ends up with a home that is worth less than the value of the mortgage the loss for the bank is at least as large as the difference between the mortgage value and the market value of the collateral. But losses are likely to be even larger: foreclosure is an expensive proposition for banks; and ending up with many properties that are not easily sellable in current illiquid housing markets where there is a glut of homes will imply further losses. Of course, the initial loss from a fall in home prices is taken by the household whose equity is eroded by the fall in home prices. But many of these households had very little equity to begin with; and once the fall in prices leads to negative equity and the borrower walking away from the home the further losses from falling home prices – i.e. all the negative equity in the home – is taken by the bank that originated the mortgage or – in the case of securitization – the investors that eventually bought the RMBS or CDOs related to that mortgage.

What is the size of these losses for financial institutions and investors? Again this is a complex estimate as it depends on how large in the fall in home prices and the recovery rate given default and foreclosure. The only hard estimate that I have found so far is one by Calculated Risk. The way he puts it: “Assuming a 15% total price decline, and a 50% average loss per mortgage, the losses for lenders and investors would be about \$1 trillion. Assuming a 30% price decline, the losses would be over \$2 trillion. Not every upside down homeowner will use jingle mail, but if prices drop 30%, the losses for the lenders and investors might well be over \$1 trillion (far in excess of the \$70 to \$80 billion in losses reported so far).”

What will be the consequence of losses of over \$1 trillion and, possibly, as high as \$2 trillion? That would wipe out most of the capital of most of the US banking system and lead most of US banks and mortgage lenders – that are massively exposed to real estate – to go belly up. You would then have a systemic banking crisis of proportions that would be several orders of magnitude larger than the S&L crisis, a crisis that ended up with a fiscal bailout cost of over \$120 billion dollars. And the worrisome part of this scenario is that – with home prices likely to fall by 20% or more – this scenario of systemic banking crisis is becoming increasingly likely.

Monetary Policy and the State of the Economy

Testimony before the
Committee on Financial Services
U.S. House of Representatives

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February 26, 2008

Thank you Chairman Frank, Ranking Member Bachus, and other members of the House Committee on Financial Services for giving me the opportunity to testify on monetary policy and the state of the economy.

As an essential prelude to assessing current economic conditions and monetary policy, I would like to begin with a brief review of macroeconomic performance in the United States and the global economy in recent years.

For the past twenty-five years the U.S. economy has experienced unprecedented economic growth and stability compared with previous times in our history. Economic expansions have been stronger and longer than in the past. Recessions have been shorter, shallower, and less frequent. Forty-seven million additional jobs have been created. And of course, inflation has been lower and more stable than in the days we now call the Great Inflation of the late 1960s and the 1970s.

For the past ten years, the economic growth trend has been even stronger. Productivity growth—the amount of goods and services that workers can produce per hour of work—has surged by one full percentage point per year, creating an additional \$9 trillion of goods and services. And recently this long boom has gone global with emerging market and developing countries experiencing improvements in economic growth and economic stability. As *The Economist*¹ has recently stressed, this global growth has resulted in a large reduction in poverty—a reduction of 135 million people from 1999 to 2004 alone, “more people, more quickly than at any other time in history.” And since 2002 we have not seen any of the kind of emerging market financial crises that were so common in the late 1990s.

In my view economic policy has played a key role in this improvement, and monetary policy—the subject of today’s hearing—has had a particularly important role. Monetary economists have documented a marked improvement in monetary policy starting in the early 1980s, and they attribute much of the credit for this better macroeconomic performance to this improvement. Since the early 1980s monetary policy

¹ “The World’s Silver Lining,” *The Economist*, January 24, 2008

has been systematic in its aggressive and timely responses to economic conditions, increasing interest rates when inflation is picking up and reducing interest rates during downturns. The same type of monetary policy in other countries is a key factor in the improved *global* economic performance. Monetary policy makers at the Federal Reserve and other central banks deserve praise and thanks for this accomplishment.

Current Economic Conditions

I start with this review to illustrate the dangers in the current situation of possibly of overdoing the easing of policy and moving off this proven systematic approach to monetary policy, which could bring back the problems of higher inflation as in the past, including more frequent and severe recessions. The recent signs of increased inflation are worrisome in this regard.

Of course the downside risks have received much attention recently and rightly so. The slump in housing and the related financial market turbulence have sharply increased downside risks for the economy. Economic growth was down last quarter and this quarter, compared to the third quarter of last year. One antecedent of the current economic situation was the period of extra low interest rates in the period from 2003 to 2005, one of the few departures from the policy followed in the 25 year period of excellent performance.² This probably added fuel to the housing boom and thereby may have led to a larger housing bust. In addition, there was a lack of information, transparency, and accountability among private financial institutions and investors about the risk in mortgages originated in the United States. These were then packaged into complex financial instruments which turned out to be far riskier than many had thought.

Financial institutions and investors must take primary responsibility for dealing with these problems. Monetary policy should respond by helping to limit spillovers beyond the financial sector by adjusting interest rates as economic growth slows, but, at the same time, stay on the course that has proved so effective for the past 25 years. Monetary policy must therefore also be concerned about inflation.

Balancing the Growth and Inflation Risks

How does one balance these risks? One way is to use a benchmark; that is, to look at what the systematic responses that worked well in the past would imply about today. Economists call such a benchmark the Taylor Rule, and according to my estimates and calculations, the current federal funds interest rate is lower than what would be consistent with such a benchmark.

With GDP growth close to zero in this and the past quarter, the gap between real GDP and the economy's potential is about 1½ percent. The actual consumer price index

² John B. Taylor (2007) "Housing and Monetary Policy," *Proceedings of the Jackson Hole Symposium*, Federal Reserve Bank of Kansas City, August.

(CPI) and personal consumption expenditures (PCE) inflation rates are 4.3 percent and 3.5 percent respectively over the past 12 months. Looking at several smoothed measures of inflation (including 4 quarter averages of the inflation rate for the GDP price index, the core PCE inflation rate, or core CPI rate) the inflation rate appears to be at least 2½ percent. Using these lower estimates of inflation and the real GDP values that I just cited gives a benchmark interest rate about a percentage point above the current level. However, it seems reasonable under current circumstances to make a further adjustment for the unusual interest rate spreads that currently exist in the money market. As I explain later in this testimony, recent research and experience in the money markets suggests an additional adjustment, but this would still imply an interest rate target above current levels in my view.

Hence, these calculations, which endeavor to balance the key risks, are not consistent with further interest rate cuts at the present time. In my view the calculations appropriately balance the considerable uncertainty about both the downside risk to growth and the upside risk to inflation as now estimated. Of course, if further economic weakness pulls the growth rate down, with declining employment and production, then additional cuts would be appropriate.

Adjusting for Financial Sector Stress

An important question is whether and by how much monetary policy should adjust to financial market disturbances to prevent spillovers to the rest of the economy. Recent research by John C. Williams and me focuses on the unusual conditions in the money market during the period from August 9, 2007 to the present, and specifically on the spread between the term Libor rates and the overnight fed funds rate.³ We document these spreads and provide evidence that they are due to counterparty risk between banks, related to concerns about securities derived from sub-prime mortgages and other assets.

The spread between Libor at 3 month maturity and an index of overnight federal funds rates expected for the same period (technically the Overnight Index Swap (OIS)) jumped on August 9 from a multiyear steady average of 11 basis points, and has fluctuated as high as 106 basis points. It is now around 50 basis points. These term rates affect many securities including mortgage originations and resets on adjustable rate contracts, and they are thus at the center of the monetary transmission mechanism. Because the Fed's new Term Adjustment Facility did not increase the total supply of liquidity and did not alter counterparty risk, our assessment is that it did not have a significant effect on this spread.

In any case, one possible approach to adjusting the systemic component of monetary policy would be to subtract a smoothed version of this spread from the interest rate target that would otherwise be implied by developments with inflation and real GDP

³ John B. Taylor and John C. Williams (2008) "A Black Swan in the Money Market," February 21, 2008

growth.⁴ Currently the adjustment would be around ½ percentage point. Such an adjustment has the advantage of being more transparent and predictable than an arbitrary or purely discretionary adjustment. At least to the extent that counterparty risk declines to normal levels, the adjustment will be temporary. When banks are better able to assess the risks of their counterparties, they will lend more freely and spreads will come down. Such an adjustment could add predictability at times of financial market stress. Currently the Federal Reserve seems to be making adjustments for the stress in the markets, and if they are to be made, it is better to be as clear and predictable as possible about them. Investors and others in the economy could then factor the adjustments into their strategies, as Paul McCulley and Ramin Toloui of PIMCO have recently suggested.⁵

We already have some experience with such a policy. The Swiss National Bank has followed such a policy since last August because it targets three month Libor rather than the overnight rate. Hence, as the Libor spread increased in Switzerland the Swiss National Bank automatically and temporarily lowered the overnight rate.

The centrality of the Libor spread to the monetary transmission mechanism provides some rationale to focus on this spread rather than on a wide variety of other possible interest rates spreads, from high-yield corporate securities to emerging market debt. Trying to adjust monetary policy to all these spreads would likely interfere with needed private sector assessments of risks.

To increase transparency further, I recommend publishing the Fed's daily balance sheet, especially the "Fed balances" that banks hold at the Fed. This would increase transparency and help reduce uncertainty. Such information would make it easier to determine whether efforts by the central bank to provide additional liquidity in the money market will or will not affect spreads in the money market. Available data on repurchase agreements does not provide this information on a timely basis. I see no reason why this greater degree of transparency could not be achieved right now.

Thank you. I would be happy to answer any questions you may have.

⁴ John B. Taylor (2008), "The Costs and Benefits of Deviating from the Systematic Component of Monetary Policy," Keynote Address at the Federal Reserve Bank of San Francisco Conference on Monetary Policy and Asset Markets, February 22, 2008

⁵ Paul McCulley and Ramin Toloui (2008) "Chasing the Neutral Rate Down: Financial Conditions, Monetary Policy, and the Taylor Rule," Global Central Bank Focus Pacific Investment Management Company (PIMCO), February 21, 2008

**Written Testimony of Mark Zandi
Chief Economist and Co-Founder
Moody's Economy.com
Before the House Financial Services Committee
Hearing on "Monetary Policy and the State of the Economy"
Tuesday, February 26, 2008**

Mr. Chairman and members of the Committee, my name is Mark Zandi; I am the Chief Economist and Co-founder of Moody's Economy.com.

Moody's Economy.com is an independent subsidiary of the Moody's Corporation. My remarks represent my personal views and do not represent those held or endorsed by Moody's. Moody's Economy.com provides economic and financial data and research to over 500 clients in 50 countries, including the largest commercial and investment banks, insurance companies, financial services firms, mutual funds, manufacturers, utilities, industrial and technology clients, and government at all levels.

I will make three points in my remarks.

First, the economy is likely in the midst of a recession. Real GDP growth slowed sharply during the last quarter of 2007, and the economy appears to be contracting in early 2008. The job market has stalled, retailers are struggling, and manufacturing activity is weakening.

Recession-risks are evident in the increase in unemployment during the past year. The unemployment rate has risen by half a percentage point from its 4.4% cyclical low

last March to 4.9% this January. Recessions are always preceded by such a rise, and such a rise has never occurred and a recession not ensued. The economic reasoning behind why higher unemployment is the catalyst that sets off the vicious cycle that characterizes recession is that increased joblessness undermines consumer confidence and thus consumer spending. Businesses respond to flagging sales by cutting back their investment and payrolls, and unemployment rises further. A negative self reinforcing cycle begins.

A number of large state economies are already in recession, including Arizona, California, Florida, Michigan and Nevada.¹ These states account for one-fourth of national GDP. Fifteen other states, including Alaska, Arkansas, Connecticut, Georgia, Hawaii, Illinois, Kentucky, Minnesota, Missouri, Montana, Ohio, Rhode Island, Vermont, Virginia and Wisconsin are very near recession. These states account for an additional close to one-fourth of national GDP. The large metro area economies of the Northeast, extending from Boston to Washington DC are still expanding, but growth is sharply slowing, particularly around New York City which is being hurt by Wall Street's travails. If these economies devolve into recession, then a national recession will occur.

My second point is that the most fundamental source of the economy's problems is the unprecedented housing downturn and resulting surge in mortgage loan defaults and foreclosures. Housing activity peaked nearly three years ago, and since then home sales have fallen by approximately 35%, housing starts by nearly 60%, and house prices by 10%. Some two-thirds of the nation's housing markets are currently experiencing

¹ Regional economies are determined to be in recession using a similar methodology as employed by the National Bureau of Economic Research in determining national recessions. Payroll employment and industrial production are the two principal economic indicators used for the basis of whether a regional economy is experiencing a persistent broad-based decline in economic activity.

substantial price declines, with double-digit price declines occurring throughout Arizona, California, Florida, Nevada, the Northeast Corridor and the industrial Midwest.

Further significant declines in housing construction and prices are likely through the end of the decade as a record amount of unsold housing inventory continues to mount given the ongoing turmoil in global financial markets and its impact on the mortgage securities market and thus mortgage lenders and the recent weakening in the broader economy and job market. I expect national house prices to ultimately decline by close to 20% from their peak to their eventual trough.² Even this disconcerting outlook assumes that the Federal Reserve will continue to ease monetary policy and that the mortgage securities market revives this spring.

Residential mortgage loan defaults and foreclosures are surging. Falling housing values, resetting adjustable mortgages for recent subprime and Alt-A borrowers, tighter underwriting standards, and the weakening job market are conspiring to create the current unprecedented mortgage credit problems. According to very accurate data based on consumer credit files, there were 550,000 first mortgage loans in default (the first step in the foreclosure process) as of the end of January, 2008.³ This equates to some 2.2 million defaults at an annualized pace. Even if mortgage loan modification efforts increase measurably in coming months, I expect well over 3 million mortgage loan defaults this year and next. Of these, 2 million homeowners will go through the entire foreclosure process and ultimately lose their homes. The impact on these households, their communities, and the broader economy will be substantial.

² See "Aftershock: Housing in the Wake of the Mortgage Meltdown," Moody's Economy.com, December 2007.

³ The source of this data is a 5% random sample of all the nation's consumer credit files maintained by credit bureau Equifax. The sample is drawn at the end of every month.

The unraveling of the housing and mortgage markets continues to undermine the fragile global financial system. Estimates of the mortgage losses global investors will eventually have to bear range as high as \$500 billion.⁴ The losses publicly recognized by financial institutions to date amount to no more than \$150 billion. Losses on construction and land development loans made by the banking system to homebuilders are sure to increase measurably in coming quarters and the credit problems on other consumer loans are rising rapidly, particularly in those parts of the country in recession due to the housing downturn. These stresses are also exposing other weak spots in the financial system, including the monoline insurance industry and the credit default swap market. Given the opacity of the global financial system, it is unclear who are at most risk, and as such players in credit and equity markets remain on edge; unwilling to extend credit to each other. The availability of credit has been impaired and the cost of capital has risen for nearly everyone, good credits and bad, and the negative economic repercussions are mounting.

The housing downturn is also undermining consumer spending. Even a modest pull-back by consumers will push the economy into recession, as such spending accounts for 70% of the nation's GDP. The odds of such a retrenchment are high given that the saving rate of the one-third of households who are homeowners and have borrowed against their homes in recent years is an estimated negative 10%.⁵ If this group, which also accounts for about one-third of all consumer spending, simply matches its' spending to its income

⁴ See "Leveraged Losses: Why Mortgage Defaults Matter," Jan Hatzius, Goldman Sachs US Economic Research, November 15, 2007. "A Macro Look at Subprime Losses, ARMs and Convexity Hedging," Alec Crawford, RBS Greenwich Capital, November 2007.

⁵ The personal saving rates for difference groups within the population is derived based on data from the Federal Reserve's Survey of Consumer Finance and Flow of Funds. Renters and homeowners who have not cashed-out homeowners' equity, each accounting for about one-third of the population, have close to zero saving rates.

over the next several quarters, the negative impact on overall consumer spending will be substantial.

My third point is that while a recession is likely unavoidable in coming months, it will take deft and aggressive monetary and fiscal policymaking to ensure that the downturn will be short and modest.

Indeed, the last two recessions in 2001 and 1990-91 were short and mild by post World War II standards, but only because of the aggressive monetary and fiscal stimulus provided to shore up the economy. In the early 1990s downturn, the real federal funds rate fell from 5% to 0% and the federal budget deficit increased from 3% to 5% of GDP. Early in this decade, the real funds rate fell from 4% to -1% and a surplus of 2% GDP turned into a deficit of 4% of GDP.

Policymakers' initial response to last summer's subprime financial shock was very tentative, as they misjudged its severity and the extent of its economic fallout. Financial markets and the economy subsequently eroded. The Federal Reserve finally reacted in dramatic fashion in late January, substantially changing the conduct of monetary policy and slashing the federal funds rate target in an unprecedented way. Equally as dramatic was the quick passage in February of a sizable and reasonably well-designed fiscal stimulus package. In addition to a tax rebate for households and investment incentives for business, the stimulus raises the current mortgage loan caps on the FHA, Fannie Mae and Freddie Mac. This should result in increased mortgage lending in particularly hard-hit housing markets such California, southern Florida, and around D.C. and New York

City. The stimulus also authorizes more state tax-exempt bond issuance to fund the mortgage refinancing efforts of stretched homeowners.

While substantial, this recent aggressive policy response may very well be insufficient to resurrect the global financial system and fully revive the economy. As long as credit and equity markets and the banking system fail to find their footing, the economy will struggle. The economy may even begin to recover this summer, lifted by the fiscal stimulus package. Without a healthy financial system, however, any recovery will prove weak and disappointing.

Moreover, confidence that financial markets will work through their problems aided by lower interest rates and some coaxing by the Treasury Department appears increasingly misplaced. The financial system may not be up to the task of re-starting itself, at least not quickly enough. A more aggressive policy response, specifically targeted to the problems in the nation's housing and mortgage markets and financial system, seem necessary. At the very least policymakers should be planning as if there efforts to date are not sufficiently successful.

One such response is proposed legislation to allow subprime first mortgage loans originated during the period when underwriting was its most frenzied to be cramdowned in a Chapter 13 bankruptcy filing. The appropriate cramdown would be determined by a bankruptcy judge and could include the reduction in mortgage principal owed to the appraised value of the home, a lower interest rate, and/or changes in the loan's maturity. Under current bankruptcy law first mortgages are exempt from any such changes so that homeowners are unable to effectively use bankruptcy to avoid foreclosure. This

legislation would be an effective way to quickly induce more substantive loan modifications.

Other more creative steps are preferable and increasingly possible. One potentially attractive idea is to establish a taxpayer-financed fund to buy up mortgage loans and mortgage securities. This could be done via an auction process, in which mortgage owners would sell mortgages and securities to the government at a steep discount; just how deep a discount will be determined by the bidding. An immediate benefit would be to provide liquidity to the frozen securities market which would reduce pressure on the entire financial system. The process would also provide a clear price for mortgage securities, thus facilitating efforts by financial institutions to appropriately mark-to-market their mortgage holdings. Their inability to do so has resulted in widespread uncertainty and angst in the financial system, contributing to its current problems.

The government, now the new owner of mortgages purchased through the auction process, could also work to forestall foreclosures and thus shore up the housing market. They could, for example, refinance a homeowner into a smaller, and thus more manageable, FHA loan. While the borrower would only have to make payments on the new smaller loan, they would still owe the government the difference between the new and old loan. When the homeowner eventually sold, any proceeds would have to be used to fully repay the government, thus ensuring that no homeowner receiving help would make a profit at the expense of taxpayers.

The total cost of the plan would ultimately be very modest. At the extreme, the upfront cost would be approximately \$250 billion, assuming the federal government

purchased all 2 million loans that are expected to end up in foreclosure through the end of the decade at a 30% discount to their original value. According to the FDIC, this is just about the ultimate cost to taxpayers (in today's dollars) of the early 1990s savings and loan crisis via the Resolution Trust Corporation. Of course, the government would not lose all \$250 billion, as many of these homeowners would be able to remain current on their new lower mortgage amount. Even if only half of homeowners were to be good payers, which seems pessimistic, then the ultimate cost to taxpayers will certainly be no more than that of the recently-enacted fiscal stimulus plan.

While this proposal certainly has some difficult problems to solve – how for example does the federal government evaluate bids by those selling mortgage securities, and how would second mortgage holders be treated? – and while it may now sound a bit extreme, so did freezing ARM payments and lifting Fannie and Freddie's mortgage lending caps just a few months ago.

What policymakers decide to do or not do in coming weeks will determine whether millions of Americans lose their job through the end of this decade and will have a significant bearing on the economic well-being of everyone else.

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