

THE BROOKINGS INSTITUTION

THE GREAT CREDIT SQUEEZE: HOW IT HAPPENED
HOW TO PREVENT ANOTHER

Washington, D.C.

Friday, May 16, 2008

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PROCEEDINGS

MR. GALE: good morning everyone. My name is Bill Gale. I'm a VP and the Director of Economic Studies, I was going to say here at the Brookings Institution, but it's not here, it's across the street at the Brookings Institution. I'd like to thank all of you for coming out on this wet Friday morning. We'll spend a lot of time talking about financial market participants that are underwater, but hopefully we will not literally be underwater here.

As early as last summer there were signs that our credit markets were facing substantial disruptions. It's now obvious, too that the

events leading up to and culminating what's become known as Bear Stearns Weekend will be called as a historic event in our Nation's history, our Nation's financial history. But the country and indeed the world need to move on and they face several related issues. How did these events come to pass? What should be done to address the current situation? And what can be done to reduce the likelihood and severity of such events in the future?

This morning we will cover these issues, as a part of this event we are releasing a report co-authored by my colleagues Martin Baily, Doug Elmendorf, and Bob Litan. The report is out in the lobby, I'd like to note that the paper itself is still a work in progress. We will be releasing a final version of the book in the fall as a Brookings book.

Let me start by introducing the participants in this morning's activities. The three authors as follows; Bob Litan is a Senior Fellow in Economic Studies and when he's not hanging his hat here in Washington he is also the VP for Research and Policy at the Kaufman Foundation in Kansas City. Doug Elmendorf is also a Senior Fellow in Economic Studies. He's a member of the Hamilton Project and along with Larry Summers and Greg Mankiw he is a co-editor of the Brookings Papers on Economic Activity. Martin Baily is, believe it or not, also a Senior Fellow in Economic Studies. You're detecting a common theme here. He's the leader of our new initiative on business and public policy. This new

initiative is developing core strengths in several areas, most notably financial markets and institutions, also competitiveness, corporate governance and related issues.

The initiative is set for an official launch this fall and let me just add on a personal note, we're delighted to have Martin Baily back with us after 18 years in the wilderness.

We're also fortunate to have Sebastian Mallaby with us to moderate the panel. In addition to penning a column for the Washington Post, Sebastian is currently a Senior Fellow for International Economics at the Council on Foreign Relations where he's working on a book on Hedge Funds and he is the leader of their Center for Geoeconomic Studies. Welcome Sebastian.

Joining the authors on the panel this morning is Keith Ernst, a Senior Policy Counsel at the Center for Responsible Lending. The Center is a non-profit, non-partisan research and policy organization that aims to protect homeownership and family wealth by working to eliminate abusive financial practices. We're very happy to have Keith with us here this morning.

Richard Brown will also be joining us on the panel. Richard is the Chief Economist and the Associate Director for Risk Analysis in the Division of Insurance and Research at the Federal Deposit Insurance Corporation. I believe that's the longest title on this morning's panel.

Welcome Richard.

And finally, we're especially honored to have with us the Chairman of the FDIC, Sheila Bair who will join us to give opening remarks. She has been with the FDIC since 2006. As many of you know the Chairman has had a leading voice on regulatory policy in both public and government sectors, having been with the Treasury Department, the Commodities Future Trading Commission, the New York Stock Exchange and other organizations. Following her remarks she will take questions before she needs to leave for another activity. The authors will then give an overview of their work, followed by a roundtable discussion moderated by Sebastian and then there will be time for questions and answers from the audience after that. So think of good topics for the authors while you're listening to them talk.

Before we start let me just add special thanks to the team of people that set up this event. Karen Anderson, Leandra English, and Gordon McDonald really did heroic activities and we greatly appreciate their efforts. With that let me turn the podium of to Chairman Bair.

MS. BAIR: Thank you Bill that was a very nice introduction. I would like to thank Brookings and the sponsors of this program for inviting me to speak today. It's a very prestigious group.

Let me first say that this new study by Martin Baily, Douglas Elmendorf, and Bob Litan comes at exactly at the right time. It gives a

comprehensive overview of how we got to where we are and covers the key issues policymakers must deal with to fix broken mortgage markets and ultimately stabilize housing prices. Importantly it connects the dots between some of the seemingly disparate financial developments of the past year. Among these is the direct connection between protecting consumers and safe and sound lending.

It's one of the best volumes I've seen since the one published last year by the late Ned Gramlich on subprime lending. And as a former academic I can appreciate all of the time and energy that went into it. Without a doubt we have some significant challenges ahead of us. And while some credit markets may be stabilizing, families, communities, and the economy continue to suffer. Frankly, I think things are going to be getting worse before the get better. As regulators we continue to see a lot of distress out there. Foreclosures keep rising as mortgages reset to higher rates. Home prices keep sinking and millions of families continue to struggle with unaffordable mortgages.

I can sympathize with these families. I've seen hundreds and hundreds of ordinary people at foreclosure workshops desperately looking for ways to keep their homes. And all of us can see the strain of the state and local government budgets and the impact on the banking and financial systems. There is more uncertainty ahead. Data show that there could be a second wave of the more traditional credit stress you see

in an economic downturn. Delinquencies are rising for other types of credit; most notably for construction and development lending, but also for commercial loans and consumer debt.

The slowdown we've seen in the U.S. economy since late last year appears to be directly linked to the housing crisis and the self-reinforcing cycle of defaults and foreclosures putting more downward pressure on the housing market and leading to yet, more defaults and foreclosures. This is why regulators and policymakers continue to focus on the housing market. We need to find better ways to help struggling homeowners.

Over the past year federal and state governments and consumer groups have worked with industry with some success to encourage the industry to modify loans. But it's just not happening fast enough. Given the scale of the problem this can not go on by loan by loan as it has. Solutions must be simple and practical and quick to implement. And they must be designed to result in limited or no cost to taxpayers.

Congress and the White House are working on proposals that will expand the role of the Federal Housing Administration which insures mortgages. These are laudable efforts and they will help certain borrowers, but the FHA approach has generally accepted limitations and new refinancing options may take more time than we have. We need something that is more immediate and more scalable.

I think the next line of attack should be using low cost government loans to help borrowers pay now unaffordable mortgages. We need to take a systematic approach that pays down enough of these mortgages to make them affordable. And I think this can be done at zero cost to taxpayers.

The FDIC is suggesting that up to \$50 billion in new government loans that would be issued that would pay down a portion of the value of over a million existing loans. The Treasury would do a special debt issuance to provide funding for these loans. We're calling these new government loans the Homeownership Preservation Loans or HOP Loans for short. Eligible borrowers could get a HOP Loan to pay off up to 20 percent of their mortgage.

Mortgage holders would get the cash as their part of the deal they would restructure the remaining 80 percent into fixed rate affordable payments. And they would agree to pay the governments interest costs for the first five years. That way the HOP Loans would be interest free to the borrower for the first five years and after that borrowers would begin repaying them at fixed Treasury rates fully amortized over the remaining life of the mortgage.

This would give borrowers a breather and dramatically reduce the chance of foreclosures. As another part of the deal the mortgage holders would agree that the government would be paid first

after any sale or refinancing of the house. As a result, taxpayers would be protected from any losses even if the borrower cannot repay the mortgage for any reason. The plan would leverage the governments lower borrowing costs to significantly reduce foreclosures with no expansion of contingent liabilities and no net exposure to taxpayers.

The HOP Loan program has a number of major advantages. First, it is not a bailout. I think that's a very big plus. Second, it would help stabilize a huge number of high-cost mortgages which would be a good thing for the credit markets. And it would also help keep people in their homes making their payments affordable which would slow the decline in home prices. HOP Loans would essentially give borrowers breathing room by reducing their debt burden to a more manageable level. And they would focus on homeowners who want to stick it out and stay in their homes long-term.

Let me explain briefly how HOP Loans would work with a brief example. Take a look at this projection on the screen. For a borrower with \$200,000 mortgage in this example, the HOP Loan program would slash the current payment by about \$500 to \$1,200 a month. That's a 30 percent reduction. After five years when it's time to repay the Treasury, the HOP Loan payment, plus the regular mortgage payment would push the monthly total to about \$1,400 a month. That's still \$300 less a month than the original payment. And now it's five years down the

road giving borrowers time to stabilize their finances and to rebuild some home equity.

The HOP Program focuses on making unaffordable mortgages affordable and it has incentives for mortgage investors to qualify borrowers who have a good chance of paying off a restructured loan over the long-term. It would compliment the current FHA proposals now before Congress, which may be the most effective for people who are deeply underwater with mortgages worth much more than their homes. It also works with an existing securitization contracts avoiding costly legal disputes. Unlike any other current proposal there would be no need to negotiate with the owners of second liens such as a home equity loan. And it can be implemented quickly because it is administratively simple; in most cases eligibility can be determined with information readily available by servicers from existing records. No property assessments are required.

So what about the naysayers? No matter your political stripes or economic interests, foreclosures especially preventable ones are to be avoided. They cost lenders and borrowers a lot of money. A modified performing loan is almost always of significantly greater value to mortgage investors than a foreclosed home. As for the taxpayer, as I said this is no bailout at taxpayer expense. The HOP Loan program is designed to result in no cost to the government. The loans and their

financing costs would be fully repaid.

So what about the speculators? I was at a foreclosure prevention meeting in Los Angeles a few weeks ago. The place was filled with hundreds of families wanting to fix their mortgages with hundreds more lined up around the block. I saw a lot of anxious, terrified faces. I didn't see many loan flippers or condo speculators. Yes there are borrowers out there who knowingly overleveraged hoping to make a quick profit as home prices rose. But there are also many people who are the unknowing subjects of misleading marketing and inexcusably lax underwriting. All they wanted was to live in a home of their own and what they got was a mortgage they couldn't repay.

What is accomplished when these good faith borrowers are forced into foreclosure? Another empty house on the market, another blight on the neighborhood, another hit to surrounding property values, more erosion of local tax bases. These foreclosures are hurting us all.

Is the HOP Loan program a Holy Grail? No, but it could help break the log jam. Too many unaffordable mortgages are causing a never ending cycle, a whirlpool of falling house prices, and limited refinancing options that contribute to more defaults, foreclosures, and the ballooning of the housing stock. And the only way to break this perilous cycle is by a wholesale restructuring of these unaffordable mortgages.

I think it's time we come to grips with the need for more

proactive intervention and we need to act soon. The housing crisis is a national problem that requires a national solution. It's no longer confined to states that once had go-go real estate markets. Creating additional tools to help borrowers that are cost neutral and are systematically applied makes too much sense not to act upon.

The FDIC has dealt with this kind of crisis before. We all remember the S&L disaster of the 1980s and 1990s. Fortunately, we're in a much stronger position today. Banks are healthy and we want them to stay that way, but we haven't forgotten the lesson not by a long shot. We learned the hard way that early intervention always costs less and is always better than a policy of after-the-fact clean up. I hope that is the path that we follow and I urge all of you here today to climb on board, help us make the right policy choices and help restore the American promise.

Thank you very much.

(Applause)

MS. BAIR: I would be happy to answer questions now about HOP Loans or any other issue on your mind. Yeah.

MR. MICHAELS: Dave Michaels with the Dallas Morning News. You mentioned that the housing crisis is a national problem. I wonder if that's true because, for instance, in Texas in the urban markets housing prices are still fairly stable. Sales have slowed, but I wonder if by saying that do you see another wave of foreclosures where the rates in

these markets are going to be as high as what we're seeing markets like in Riverside, California or Cleveland, Ohio?

MS. BAIR: We do see price declines encroaching into other areas that were not impacted initially. So yes, I do think, I don't make a prediction but I think there is a lot of uncertainty and I do think there is an issue of the home price declines spreading into other areas exacerbating this problem. I do. Yes?

MS. SIMON Sue Simon of Capital Insides Group. I've read that some of the problem with the HOPE NOW, activity to get loan modifications going is that some of the mortgages have second liens or are in securitized packages. I'm wondering if you've seen evidence that those packages securitized by Fannie and Freddie are easier to pull out and modify than those that were not, were by Wall Street investment banking houses and so forth. Whether there's a difference in identifying or figuring out who the owner of the mortgage really is and then bringing that forward by the servicer for modification?

MS. BAIR: Yeah, I think it's a bit of a mixed bag. Actually, as I understand it the pooling and servicing agreements that government conforming loans actually pretty much across the board have severe restrictions or prohibitions on principal write-downs and that is also common with private label securitizations as well. And generally it's much easier to do a modification that relies on an interest rate reduction than it

does on a principal reduction, which is I think another reason why we came up with the HOP Loans. You're talking about a pay down as opposed to a write-down and presumably with most of these mortgages if you need to do additional adjustments to get the fully indexed payment below the 35 percent debt-to-income ratio requirement that we propose, you can do it through an interest rate adjustment.

So I think it's a bit of a mixed bag in terms of, I couldn't really say that category one is more restrictive than others. But I do think another important lesson moving forward and if we ever get the securitization market back, is to make sure these PSAs give a lot more flexibility to servicers to modify distressed loans.

MR. MUNOZ: Cesar Munoz with F and E Service and Newswire. I wanted to ask you about this fear of a second wave of more credit distress, I mean, now there are signs that the economy is actually better than some people feared and you know, the recession fears have diminished. I mean, so do you still see that second wave as happening or not?

MS. BAIR: Yep. I hope it doesn't happen. I would love to be proven wrong on this, that if we've turned the corner and things were stabilized and I think that is one plausible scenario but I think there is just a lot of uncertainty out there and there are a lot of warning signs too. Home price declines continue, are pretty relentless. The foreclosure rate

is still pretty relentless. We are seeing up-ticks in delinquency rates across most categories of lending activity. So I think there are some danger signs as well as some potential positive signals so I think there is uncertainty, but I think there is greater risk of not doing something than there is in doing something.

Please, yes.

AUDIENCE MEMBER: Looking back are there things that you would have done at FDIC with the benefit of hindsight that you wish you had done or do you think there are other regulators that you would have liked to have done different things? You mentioned the lax lending standards.

MS. BAIR: Right, right.

AUDIENCE MEMBER: What might have been able to stop that?

MS. BAIR: Well, hindsight is always 20/20 and I think it's second guess so I would just say that we know now what kind of a really pervasive type of problem we were getting into with deteriorating lending standards. I think, I only came to the FDIC in June of '06. Earlier, in 2001, 2002 I was at Treasury looking at predatory lending issues more from a consumer perspective and I am working with Ned Gramlich and others on this issues and he was one of the first tom I think, really raise the red flag very early and everyone should have listened to him more

seriously.

If there is one thing that could have been done that should have been done, probably again in hindsight, it was using the Federal Reserve Board's broad rulemaking authority under HOEPA to apply tighter lending standards across the board. I'm on of those who thinks that you can, at least, constrain housing bubbles and other types of asset bubbles through regulation. And I think straightforward strong standard required of all mortgage originators, not just banks but everybody, underwriting what we call the fully indexed rate simply meaning that you've got, if you're going to do an adjustable rate mortgage you got to make the borrower can make the reset rate not just the initial rate and that you've got to document income.

We just had too many loans being made on the assumption that home prices would keep going up so they could refinance out even though they were unaffordable. And that fed the bubble. So I think tighter, you know, common sense, don't overreact but just common sense strong across the board underwriting standards, document the ability to repay. Make sure they can make the reset if it's an ARM. We should have done that across the board and we didn't and hopefully we will now. Yes?

MS. RIVLIN: Alice Rivlin, Brookings. How realistic do you think it is to hope that we can get through this without putting taxpayer

money at risk? We have already put taxpayer money at risk in the rescue of Bear Stearns, which I think was the right thing to do. But isn't it likely that we're going to have to do that for homeowners as well?

MS. BAIR: Well, I think that's a very good question. We tried very hard to come up with a proposal which we think can accomplish a lot of scale modifications at zero cost and one of the ways we make sure the government doesn't incur costs is by requiring the first lien holders to subordinate their first lien interest to the extent of the government loan. So if there was a subsequent default the government would be paid off of the top, so I think we've tried to address the credit risk problem.

Whether this will be enough, I don't even know if this will be implemented. And certainly, I think the FHA will help on the margin too. But I think the longer it goes without tackling the core problem, which is the housing crisis, the more expensive potentially it could be which is why I think why we need to act now.

MR. LITAN: Hi, I'm Bob Litan of Brookings and also the Kauffman Foundation. And thank you very much for coming.

So one of the issues that we address in our report is in the wake of the Bear Stearns situation, there are now calls for the FED or the SEC or somebody to start regulating investment banks. And the question is, should that regulation take the form of our traditional bank regulation or should it be some other kind of regulation?

MS. BAIR: I think there's certainly parts of the bank regulatory framework that could very well be applied to investment banks. I don't think you need identical regimes because they are still somewhat different business models and deposit insurance being an important key differentiation between commercial banks and investment banks. But I think certainly trying to homogenize standards on leverage I think would be extremely helpful and also having something akin to our prompt corrective actions – when an investment bank starts getting into trouble there is an orderly process of supervisory responses and the ability of the government to close the bank if need be. So yeah, I think those attributes of the bank regulatory framework would be quite appropriate to apply to investment banks and I won't dodge the issue of who should have the authority.

MR. PARKER: John Parker, Brookings. On this graph up here you say 50 percent debt-to-income ratio eventually drops to 39 percent debt-to-income ratio but there's not mention of other debt so if this household qualifies, I mean, does this household have any car loans? Do they have credit card debt, anything like that?

MS. BAIR: That's a really good question. We decided to use as our affordability metric, what's called a Front-End DTI, which is principal interest, taxes, and insurance as a percentages of income. And basically we did that for administration ease and that's a fairly standard

lending metric. You could, certainly there are other ways that lenders use to calculate DTI taking into account the Back-End ratios, taking into account all recurring debt. But there are variations in definitions on how you do that and we thought a streamlined approach to get this done quickly for administrative ease, we decided to use the Front-End DTI. So that would include principal interest, taxes, and insurance, just housing related debt.

MR. PARKER: To be clear, that allows you to very quickly apply this adjustment scheme to many, many loans without taking lots of time?

MS. BAIR: That's right.

AUDIENCE MEMBER: Just a quick question. Since in hearing Chairman Frank's plan is that there'd be, the lenders would have to take a haircut. Is this something that you've talked to Mr. Frank or Chairman Dodd about? And what do you see as the likelihood of it being accepted going forward with some of the legislation that's being considered on the Hill?

MS. BAIR: Right, I have talked to Chairman Frank and Chairman Dodd and we've done a variety of briefings with the Administration on the Hill. I think everyone's open to it. I think it is, they're taking some time to learn more about it and I think as the second wave of activity, I think this may very well be something that people find attractive.

But we're really into a public education phase with this now, so we're on going dialogue with the Hill on doing briefings. Yes.

AUDIENCE MEMBER: Related to that, who and how many people would have to approve the HOP Program before it could actually go into effect?

MS. BAIR: Well, we would, I think it would just take a simple authorization to Treasury to set the program up. Treasury would administer it and again, we've designed it purposely to be administratively simple so loans could be qualified based on origination documents. They would have, the services would have to verify current income, but because you're leaving the loans in the pool, you're not refinancing them out. You're leaving them in the pool, you're leaving the credit risk in the pool. You don't have to find a new lender, you don't have to do an appraisal, you don't have to negotiate with a second lien holder.

So there are a lot of administrative steps that can be avoided with this. So that the documentation to qualify for the loan is fairly streamlined, then we would also require that the servicers participating in this would subject themselves to an annual audit by the Federal Banking Regulator. Most of these servicers are affiliated with a federally regulated bank and those that are not would have to submit to one of us coming in and auditing them to make sure they were compliant with the program.

AUDIENCE MEMBER: But you don't see either the

simplified basis as a problem? It's been pointed out that these people do have other debts.

MS. BAIR: Well, I think it would be up to the servicer. It's a voluntary program, number one. We have eligibility criteria, but it's still up to the servicer to qualify the borrowers for these. The government's credit risk is protected because as a condition for participation if a loan is made to pay down 20 percent of the principal, the amount of that loan, the first lien interest would have to be subordinated to the government for the amount of that loan. So if there is a re-default, there's no adverse selection problem here because if there is a re-default the government gets paid off, off of the top. So I think the economic incentives built into this proposal eliminate the credit risk which I think reduces the need for an elaborate oversight of the underwriting process because the credit risk stays with the pool it's not with the government.

AUDIENCE MEMBER: But if it stays with the pool, are they likely to go for it? Are they likely to see this as something that is going to help them if they're going to lose their preferred position in security?

MS. BAIR: Well, I think there are a number of, well they're not really getting their – they're getting a loan. They're getting a pay down so we're only saying to the amount of that pay down you need to subordinate interest. So it's a \$100,000 loan, \$20,000 gets paid down so \$20,000 is owed to the government, \$80,000 is still owed to the

investment pool but because they're only owed \$80,000 their first lien is now \$80,000. That top \$20,000 is to the government.

So they're not really, they're getting a pay down so their first lien interest is only being reduced because their loan is being paid down. Only \$80,000 is owed to them now. So I think having that additional equity go in, having some of these delinquent loans, the means to fund equity, to make up for arrearages, and a mechanism for getting the payment down to an affordable payment so you convert a loan that is in distress to one that's performing again. I think has significant advantages to investors, but again, we're actively engaged with conversations with them too. But I do think there's some absolute economic benefits to them in participating.

MR. MALLABY: Sebastian Mallaby from the Council on Foreign Relations. If I had you right you said that part of the approach in regulation terms to the broker dealers and investment banks would be able to close them down. But I thought the lesson from Bear Stearns was that you can't because the counterparty ripple effects are just too severe. Can you elaborate a bit on that?

MS. BAIR: Well, I think there should be a mechanism for the government to close the bank down in an orderly way. I mean, the FDIC has a broad range of authorities that set up a bridge bank and consistent with least cost resolution we can take steps and make individualized

determination if there was systemic risk implication, we do have latitude under our current statutory authorities to honor some general creditor claims and others that otherwise would be below us in priority but what we can do is completely extinguish shareholders. We can completely extinguish sub-debt holders, those types which ensures that moral hazard is mitigated and market discipline is preserved. That's what the FED and the SEC did not have in the Bear Stearns situation. They had to do an open institution-type of acquisition to take care of the problem.

MR. MALLABY: Right, but the question I guess, is what it they lacked some kind of authority that could be created going forward? Or is it intrinsic in the nature of an investment bank which has millions, possibly a trillions worth of contracts in the derivative market with counterparty, is that it's not an analogy with traditional banking institution where you can close it down, make deposits through deposit insurance.

MS. BAIR: Well, commercial banks have a lot of QFC and counterparty exposure, too. I think the other part of this, it's just not the ability to close the bank down, but have systems of prudential supervision and prompt corrective action. So hopefully there's more intense monitoring to begin with.

We usually have a lot of notice, it's been a long time since we've had to deal with a large institution, we generally, because of prompt corrective action and a very intensive prudential regime, there's usually

quite a bit of notice. It's more of a slow burn and there are efforts to be able to try to work with the institution on a supervisory basis to get them out of their problems. But there is a process for closing them in an orderly way if they have to be closed. So I think the ability to resolve an institution with some flexibility if it has systemic implication, but also a stronger prudential framework of safety and soundness oversight of investment banks combined with a system of prompt corrective action, I think that's consistent with where this report was coming out and I think it has a lot of merit.

MR. GALE: Thanks, Bill Gale. I wanted to come back to the structure and incentives in the HOP set up. If you think about two households that each took out an adjust – the same income, they took out the same adjustable rate mortgage on a house that cost the same amount a few years ago, except one of them really leveraged up and is now underwater because the house price fell and the other one didn't. They took out a relatively modest loan. The one that really leveraged up is eligible for this let's say and the one that didn't isn't.

MS. BAIR: That's right.

MR. GALE: So what I was thinking was that since this, the HOP Program is established not to cost taxpayers any money, what would be the problem with letting the well grounded household, the one that did the right thing to begin with, also be eligible for reestablishing at a fixed

rate? And I guess the answer is sort of they wouldn't qualify, but they would have a huge incentive to go out and take out a home equity loan and then get the principal reduction. So the question is given that it doesn't cost the taxpayers anything to do this, why would you not want to let that happen or would you want to let that happen?

MS. BAIR: Well, I guess two things. One is you would have to have a loan that was originated between January 1, 2003 and I think it was July 1, 2007 to qualify for this. And yes, we are focused on unaffordable mortgages, trying to make unaffordable mortgages affordable. So the eligibility is it has to be unaffordable at origination.

I think there is a plausible argument to making it more broadly available. Politically, substantively on a policy basis. Politically I don't know. I think you counter the potential political attraction for making it more generally available with the dollar signs that, you know, granted I think we've structured this in a way that it truly would have no cost to the government. But if you're talking about helping a broader range of borrowers, you're talking about a much bigger debt issuance than \$50 billion. So I think it's a trade off.

I would certainly be open to broadening it, because I do think we've structured a proposal that would not – because of the super priority link for the government would not cost the taxpayers anything.

AUDIENCE MEMBER: On the HOP Loan, I understand the

incentives for the first lien holder to do this. But could you explain how we work with subordinate lenders? It seems to me they're in a much worse position after this loan is restructured.

MS. BAIR: I don't think they are. Well, first of all they don't, you're not refinancing so you don't need to get them to release anything and their position is not being subordinated because, again, just for ease of – a simple example. Let's take a \$100,000 loan, let's say there's a \$100,000 first lien, right? And then another \$20,000 second lien interest. So the second lien holder is \$100,000 behind, right? So with this \$20,000 comes in to pay off 20 percent of the loan, so now \$20,000 is owed to the government, \$80,000 is still owed to the first lien investors. The second lien guy is still where he always was, he's \$100,000 behind. So some have actually argued that second liens would benefit from this because it's making the payment more affordable, making it more likely that maybe the borrower can actually pay a little on their second lien, too.

I don't see how a second lien holder is disadvantaged. Legally, I don't see how they would be able to weigh in one way or the other because their position is not being impacted. Yes.

AUDIENCE MEMBER: Just a question about what's happening out there in the real world. Some of the people who bought homes without any money down or were really renting in essence; they really didn't become an owner. And I'm wondering, I know American

Enterprise Institute has, the shadow group has an idea about converting these loans into leases and is that happening? Is it possible for some of these mortgages for people to rent their own home?

MS. BAIR: I think that's a fabulous idea. You run into the restrictions on these pooling and servicing agreements. I mean, I think under the Remick accounting rules, my staff the technical experts can correct if I'm wrong, but I think under the Remick Rules these trusts are basically brain dead. They can hold mortgage backed securities, they can't hold lease agreements. So to have flexibility to try to do some type of rearrangement so you put the tenant, the former borrower into a renting situation I just don't think it can be done if it's in a securitization pool. I think you'd have to get it refinanced out first and then try to make some type of adjustment along those lines.

Thank you very much.

(Applause)

MR. GALE: Thank you very much for those very candid and helpful remarks and excellent answers to all of the questions. The Chairman has to leave to go to another commitment, but we will stay and move on to the next part of the event.

MR. BAILY: Thank you for coming. It's really a privilege to be able to present a sense of what happened and what we should do about it. Now I'm going to go right into this. Now there is this big, fat, long

report which has got all of the details in. Obviously we can't go through all of that, but I just wanted to give a little bit of a flavor of what we think happened getting into this crisis.

Probably the most sort of pervasive fact is that everybody believed that home prices were going to continue to go up. In nominal terms, in regular dollar terms, housing prices had very rarely fallen in the last 30, 40 more years. They fell a little bit in 1982, which was one of the worst recessions, the worst recession since World War II. Maybe a quarter the Index went down, but basically home prices went up. This chart shows real home prices, so even adjusting for inflation since the mid-1990s owning a home has been a great investment.

I know this is sort of familiar, but I want to put an emphasis on it because I think it really underlies what happened in the sense that everybody got a false sense of security believing that house prices wouldn't go down and that these kinds of mortgage investments were good. I mean, if you look at the Bank for International Settlements, their Basel Rules for example, had low capital requirements for mortgages on the belief that these were not very risky assets.

Now why did home prices go up so much? Well one of the reasons is that interest rates came down, yes you know mortgage rates went through the roof during the '70s and '80s. The troubled times of inflation. They've been coming down pretty steadily. Now some of this

was low interest rates from the FED, but the FED raised and lowered interest rates several times over this period and we've still got a trend of declining interest rates.

Some of it also was capital flowing in from the rest of the world. So there's a lot of what Ben Bernanke referred to as the savings glut or a lot of capital sloshing around the world looking for returns and a good bit of it ended up in the United States. So there was just money available which kept interest rates down and encouraged the rise of housing prices and of course, encouraged people to take out mortgages.

Now the dot-com bubble burst in 2000. We had stocks weak and a lot of people sort of decided they had gotten burned buying high-tech stocks or at least hearing about people who got burned and they wanted to buy something that was more understandable, more secure, so that buying that house looked like the right investment. In the recovery from the 2001 recession we see a very large growth, just huge amount of mortgage originations, people were buying houses. Houses were becoming more expensive requiring bigger mortgages. But a lot of that lending was in conforming mortgages, so a lot of this was Fannie and Freddie conforming mortgages and that went up. It actually went up to 62 percent of the total by 2003.

Now after 2003, it's not that the system ran out of people to lend to exactly but they ran out of the sort of first round of people. There

weren't so many people after buying new houses, a lot of people had already bought the house they want or they changed houses or whatever. Moreover there were some restrictions on Fannie and Freddie as to how many loans they could hold on their portfolios. Although I think the main thing really is looking for to expand the housing pool so to speak to get more people into homes, people who previously couldn't afford homes.

But that also of course brought in some speculators. We also got a lot of people that wanted to leverage their home to buy a car or to buy a boat or to buy a second home or something like that. So starting in about 2004, you can see here that the share of non-conforming loans particularly some of the home equity loans and other kinds of loans went up substantially. And coinciding with this as we'll keep saying in a minute, as we heard from Sheila Bair this was a loan standards, lending standards did decline.

One of the things you can see as a sign of that is that starting in around 2004 a lot of people started taking out interest only and negative arm loans. There were also a lot of no-doc loans. I don't have numbers on that, but I actually took out a no-doc loan myself so I'm one of those folks. So you got this relaxation of lending standards and people who were not making a conventional mortgage payment weren't paying the principal or even in some cases weren't even paying the whole interest amount.

Now as you can see from this the use of securitization was a big part of the flow of money that was coming from the rest of the world from other people here in the U.S. into the housing market. And so securitization really boosted up the funds available for the sub-prime and Alt-A loans. Alt-A loans are a little different from sub-prime, different credit score characteristics but are basically similar in the sense of not being prime conformable loans. So securitization played a really substantial role and the sub-prime ended it going from 46 percent of the total to 81 percent of the total.

Now this chart shows what's happened to different vintages of lending and as you can see 2004, if you went back to 2003 would look somewhat – 2004 is up a little bit from 2003, but as you can see as you go from '04 to '05 to '06 to '07 the delinquency rates, these are 90 day delinquency rates start to rise very substantially reflecting the fact, I think, mostly the relatively lax lending standards. That issue is compounded in this chart also by the fact that housing price increases were starting to slow. In 2004 prices were still rising but not as fast so there was becoming a little bit more incentive from the price side also to be delinquent. I think it was the lax lending standards that were causing the biggest problems.

Now as you all know this is the rate of increase chart, this is not actually the price of houses this is the rate if increase chart so the rate

of increase with some ups and downs was continuing to rise through early 2004 but then it started falling very quickly and we actually got into negative territory. I'm not sure I can read exactly where on that chart, but it was somewhere around January '07 we started to see prices falling according to the Case-Shiller Index. There's another index, the so-called OFEO Index which shows a little bit smaller – not a little bit, somewhat smaller declines in house prices, but both show the same general pattern which is house prices beginning to fall.

So what was sort of going on here? Well I think it was a classic bubble, everybody thought house prices were going to go up. This was a good investment. Everybody wanted to go into it. Securitization played a big role, and there are lots of charts and discussion in the paper about how you got sort of layers of securitization taking place. You created these CDOs (collateralized deposits), and these allowed this stuff to be sold to people who otherwise wouldn't have bought this kind of mortgage securities. So you've got packages of fairly risky mortgages, which were then pulled together and then divided into these trenches. They were given AAA ratings, at least for the upper parts, the more senior trenches here, and then they were able to be sold to, you know, small banks in Germany, to insurance companies, to all kinds of people, who wouldn't normally be buying a pool of relatively shaky mortgages. And again, because of the ratings, and as we say in the paper, there are some

serious concerns about the rating agencies and how they behaved in this period. Those could be sold to a lot of different people. And, of course, financial institutions began to take risks on this as well.

Now, as the prices started to come down, delinquency rates started to go up. The single family residential mortgages is the light blue line, and you can see that going up markedly actually starting as early as 2005. So, as you got these delinquencies, what happened was that the sort of excess that was built into the CDOs got burned off. As the delinquencies came along, okay, the people who had the equity trench were out of luck, and then the people who had the bottom, you know, BBB trench were out of luck. But, as the delinquencies rose, suddenly there are some other AAA trenches began to default also, in terms that the flow of income coming in from the people paying the mortgages wasn't sufficient to cover the interest that was on these CDOs.

So, as a result of this you've got – well, you've got the first difficulties in VAREO about February 2007. There is a timeline in the paper that shows HSB reported some concerns. A couple of the big hedge funds of Bear Stearns went under, and this started to spread both to U.S. institutions and to other foreign, mostly European institutions that began to report troubles, because they were hitting default rates at a much higher rate than they had expected, certainly at a much higher rate than the AAA ratings would have suggested.

And then, in the summer of 2007, what had been seen as sort of isolated problems all of a sudden became this global crisis, and the risk premium shot up. This is the spread between the three-month liability and the three-month Treasury Bill rate. It's significant, because the liability is the rate that banks use to lend money to each other. So it started to tell you that banks and financial institutions were no longer trusting each other, which previously had assumed, you know, that's just convenience; you posit the money around to maintain liquidity. But, once that market starts to break down, then all of a sudden you have the European Central Bank, The FED, the Australian Central Bank having to pump liquidity into the system, because the banks no longer can borrow easily amongst themselves, and the liquidity in the system is breaking down.

This is just a representation of the kind of vicious cycle that starts once this kind of thing happens. You get rising, subprime losses, that makes investors say, oh, wait a minute, I'm not sure I want to lend to that guy; then asset prices fall; then financial institutions have to announce losses, as they did; and then the banks decide they don't want to lend to other banks; and then banks don't have enough liquidity, so then they have to try to liquidate some of their assets, and that causes asset prices to fall more, and meanwhile, you are getting more defaults coming in from the subprime market, and this thing creates this cycle of illiquidity.

Now, these – these are four charts, and I'm not going to read through them, through them all, particularly as I seem to have gone into Doug's stuff, but these are in the report, and let me just sort of just summarize the other things.

I think there are some things that contributed to this crisis that we don't think necessarily should be blamed for it. These include the FED interest rate policy and the fact that people were lending to us from around the world. We think open capital markets are a good thing. We think the FED was doing what it should have done to try to keep unemployment down, to generate recovery from what had been a pretty sluggish recovery of the economy. So those things were a factor, but not something that we would particularly change. We are going to talk about some of those things we would change; the one I would mention here is the one that was mentioned earlier, which is the lax lending standards. Nick Gramlick's name correctly has been mentioned here and will be mentioned again. He was warning, the people were warning of the lax lending standards and nobody was doing anything about it. Now we have this system of regulation, which is spread among different people, so various people thought they didn't have the responsibility. I think that's an excuse. I think they should have done more, and in particular, I think that the Federal Reserve had the status and the position to speak out more forcefully in trying to improve the lending standards and say, look, this is going to get

us into trouble if we don't do something about it, even if they didn't have specific authority over some of these banks.

All right, I am going to stop here and turn it over to Doug.

Thank you.

MR. ELMENDORF: Thank you, Martin. I am Doug Elmendorf, from Brookings. The events that Martin describes pose two challenges directly on policy: one is to resolve the current crisis; the other is to find ways to reduce the likelihood that this sort of crisis recurs. I am going to talk just briefly about resolving the current crisis and turn it over to Bob Litan, our third co-author, to talk about ways to prevent similar crises in the future.

The paper touches on five categories of short-run policies that had been used and that we recommend should be used to resolve the current crises. The first two are straight up macro economic stabilizations, so I'll just touch on those. We have a large fiscal stimulus, about \$150 billion dollars of tax cuts, for which the checks are literally in the mail as we speak, and we have a very sharp reduction in the federal funds rate. The Federal Reserve took its target rate down from 5.25% to 2%, a very sharp reduction in reaching a rather low historical level.

The other three bullet points here discuss policies that are more specific to the current crisis, not part of the usual macro economic tool kit: the Federal Reserve acting as lender of last resort; policies

regarding Fannie Mae and Freddie Mac; and then mortgage foreclosure policy, and I'll describe each of these a bit more carefully.

In acting as the lender of last resort, the Federal Reserve's principal efforts have been to encourage people to borrow from the discount window or close cousins of the discount window. In order to encourage this lending the FED has taken a number of steps successively as the problems have worsened. They began by simply trying to encourage use of the discount window, by narrowing the spread between the discount rate and the federal funds rate, and then by introducing anonymous auctions to try to avoid the stigma that can attach to discount window borrowing. Then, when things got worse, the FED went beyond that, and in several steps, they expanded the collateral that they accept in exchange for loans. Traditionally, the FED works with Treasury Securities as collateral, but they moved beyond that and accepted a variety of, first, mortgage-backed securities and now other asset-backed securities as collateral, both for loans and to swap directly with Treasury Securities.

And then they moved yet beyond that and expanded the institutions with access to the discount window from the traditional set, which are commercial banks, to include the investment banks known as primary dealers, institutions the FED operates with when it does open market operations. All of these variants and the complicated alphabet names that go with them are all collectively trying to enhance the liquidity

of certain assets that are very important to financial institutions' balance sheets, and whose liquidity fell off quite sharply the last Fall and this Winter. We think that all these steps in fact make sense, but they do present important risks, in the near term, because the Federal Reserve now has collateral assets whose value is somewhat unclear, and in the longer term, because of the way this might affect the risk taking institutions do, and that points to the importance of better regulation down the road, which Bob will talk about.

Then, on this crucial week or weekend in March, the FED moved beyond these broad-based approaches and was involved in the rescue of Bear-Stearns. Again, we think that step was the best of the bad options that the FED had available at the time, but it is a consequential step. The shareholders got very little, which makes sense, but the creditors, the counterparties of all these transactions that Bear-Stearns was part of, were made whole in a way they might not have been without the Government action. That was by design essentially. That was stopping the possible contagion that we think was an important step, but it also does create a moral hazard risk, and again stresses the importance of better prudential supervision regulation in the future. More might happen. We have had a calm couple of months, but the lack of a dramatic event recently does not mean that we are out of the woods. There is a risk of further crises. A lot of mortgage losses have yet to be declared,

and there are a lot of other corners of the financial system that have not yet had their turn in the spotlight in the past year. And even if we avoid crisis altogether, banks need to raise more capital. They have taken very large losses. They have raised a fair amount of capital, but not enough. That's quite dangerous. That's somewhat dangerous for them, but also dangerous for the economy as a whole. Without that capital, the banks will be reluctant to lend to households and businesses, and if they don't lend, then that will lead to a perhaps a deeper recession, or at least a very prolonged economic slowdown. Jim Bernanke yesterday again repeated his urging that banks raise as much capital as they can as soon as they can.

Policies toward Fannie Mae and Freddie Mac have basically been to encourage them to raise capital and not push them to do much more lending. When the crisis first broke last Fall, there was some discussion on whether Fannie and Freddie could play a larger role in resolving problems, but it soon became clear that they were pretty busy bailing their own boats and didn't have a lot of extra resources to use in bailing other people's boats. In fact, there is some risk of insolvency. As house prices fall further, as they almost certainly will, there have been estimates that another 15% decline in house prices might put Fannie and/or Freddie under water themselves, and that would raise further serious policy challenges. Possible actions would include: forbearance,

government equity investment, and even possibly naturalization, and we urge in the paper that some attention be given to contingency plans.

A third area of policy is mortgage foreclosure policy. Seven million households will likely default in the next few years and lose their homes, as Chairman Bair said. There are questions about the appropriate role for Government. Skeptics have argued that many families who will lose their homes have knowingly took the risk of putting little money in or taking a lot of money out, and as a result are not especially deserving of help. Moreover, a bail-out could encourage undue risk-taking in the future. Those are legitimate concerns, but I don't think they are the entire story. The Government still has a role to play. For one, foreclosures have negative consequences beyond the families directly involved, as Chairman Bair emphasized. The consequences include reducing the property value of nearby homes, and jeopardizing the stability of communities, especially where foreclosures are concentrated in certain areas, neighborhoods or communities, as they are likely to be.

In addition, the dispersion of mortgage ownership through the securitization and derivitous process complicates the modification process. Fewer loans will be modified than are even in the best interest of the lenders to modify because of administrative and logistical problems. With that view in mind, the Government has taken a number of actions so far. The Administration has expanded the reach of the Federal Housing

Administration in several steps: there is money that has been appropriated for additional mortgage counseling to help people work out problems; the Hope Now Agreement for borrowers facing rate resets; and Project Lifeline to try to stall the foreclosure process a bit and give the lenders and borrowers more time to work things out. We recommended several further actions. One is legislation to clarify that servicers' fiduciary responsibilities are to the mortgage pool as a whole; they can take actions that benefit the mortgage pool as a whole without worrying about whether a specific holders of pieces or trenches of that pool that might be hurt. The second we have reluctantly to come to support some limited change in the bankruptcy law; and third, we support further expansion for eligibility for FHA-guaranteed loans. The proposal put forward by Chairman Frank in the House and Chairman Dodd in the Senate are, in our view, carefully calibrated to target the benefits to people who are in situations that are sustainable; to not open taxpayers' laws to everybody who might just want a better mortgage, but in fact to target help people who can stay in their homes with a very modest amount of help. We think that kind of calibrated policy is fairly small board in the big scheme of the mortgage or financial markets, but can make an important difference for those households and can dampen some of these dangerous spillover effects, and we urge that the Government proceed with that.

So, let me stop there and turn this over to Bob for a look at the longer term policy approaches.

MR. LITAN: Thanks, Doug, and I don't want to wear out your patience, so I'm going to try to quickly go through this.

Before I do, just some general themes that we touch on in discussing the long run, or namely, how to prevent something like this from happening again.

Number one, there are those who say, well, financial innovation ran amuck, and we ought to cut back or significantly reduce financial innovation. We don't take that view in this paper. We think that financial innovation has been good for borrowers and for lenders. It has been good for America. America is the center for financial innovation. But, what we do need are the right rules for innovation so that it gets channeled in a productive way; and in fact, the right rules can make innovation productive, and that's the purpose of our long-arm reforms.

Second, virtually everything that I'm going to show you can be done by regulation. Very little needs to be legislated.

Number three, we do not recommend that we wait for other nations to act. There is, of course, a global interconnectiveness to financial operations, and that argues for having international standards; however, there are transactions costs and delays associated with negotiating international agreements. This crisis, in our view, does not

warrant us waiting another five or ten years, which it would have taken for the Boswell-2 Agreement to be negotiated. We'd rather that the United States go ahead and fix what's wrong right now.

And finally, we ought to be mindful that we are not going to be able to eliminate all financial crises. There will be financial crises. The challenge is to reduce their frequency and their severity. I should also add the additional caveat that this is all a work in progress, and that this is complicated, as you'll see. There are many, many moving parts, virtually all parts of the financial system or the regulatory system have been implemented in it, and so we reserve our rights to change our minds in the future as we get more information, a paraphrase of Cain's.

Actually, let me go to this chart, in the book, or in the report itself, we chronicle the various ideas by the stage of the process of securitization, of origination and securitization, and also by the different actors involved. I'm not going to do that here, because I think it's probably more useful to focus on a few reforms by major theme, and there are three themes that we ought to keep I mind, in our view, in fixing things in the future. We need more transparency throughout the process. We need less leverage and more liquidity. And finally, we need better supervision.

So, let's go to the transparency suggestings. Again, I am not going to go through each one of these. They are in the report themselves. Let me just tick off a couple of the ideas. When it comes to mortgages, a

very simple idea is that we ought to make a disclosure for borrowers a lot simpler. We don't want patient package insert-type regulation or disclosures for mortgages, and that's pretty much where we are now.

Alex Pollack of AEI has suggested that we boil down one page of disclosures – apparently something like this is in Senator Schumer's bill -- this seems very sensible to us. More mortgage counseling in advance. There is a lot of evidence -- Ned Gramlich and others have written that it makes sense to do that so that people don't get in over their heads at the beginning.

We have talked about the more restrictions under HOB0, which talks about high-cost loans. The FED has already proposed those; we endorse that. There are some other FED proposals dealing with other loans; we endorse those too.

The Treasury Department has recommended a federal agency to oversee state regulation of the mortgage originators. We think that is a good idea; that there ought to be a federal agency. And, in fact, one of the interesting things about the treasury proposal, just to comment on, is that not only would it set minimum standards, but it would also have a system for the FEDS to essentially rate the quality of state regulators, as we understand it, and that information would be very important to, we think, securitizers so that, for example, a state that was not doing a good job overseeing its mortgage originators would have a hard time selling its

loans and securitized pools, and that would be a very powerful incentive for them to tighten up in the future.

Asset-backed securities, there ought to be more reporting. Let's talk -- a quick detour about rating agencies, because really, if you look at this whole crisis, and there are quite a few of what lawyers would call but for causes, you know, but for something, the event would have would have happened. Well, I think, and I think my co-authors agree that the credit rating agency failure here was a clear but for cause of this crisis; if the rating agencies have not stamped AAA on a lot this stuff, we would not have seen the originations and we wouldn't have seen this whole thing in the first place. But it is hard to fix credit rating agencies, all right, and I'm going to explain why.

There is an inherent -- there are a couple of conflicts that are very difficult to get around. Number one is the issuers or the people that are doing the securities pay for the ratings. There is no other way to support that model, that business model. You may be able to have some investors pay ratings, but given the fact that information leaks out, it's the issuers who are going to pay and that's just life.

Number two, a lot of the people -- and let's be honest about this -- I don't to be pejorative, it's true -- a lot of the people who work at credit rating agencies want to work at investment banks, and so, they are in effect training to be investment bankers. And so the investment bankers

are participating with them in designing essentially a lot of the securities that were sold. That's an inherent conflict. It's the revolving door problem that has been transmuted to the private sector. I don't know how you fix that, all right? But there are certain things you could do. There have been, for example, proposals to have greater clarity so that investors can compare ratings across different asset classes, so you would know, for example, the different methodologies or rating on say an asset-backed security versus a corporate bond and so forth. Secondly, the SEC has talked about disclosing the track records of agencies in rating securities. Apparently, investment banks and sophisticated dealers on Wall Street already have this information, but perhaps if it were disclosed to everybody people would pay more attention to which agency had a better track record.

And the third thing we talk about is that when it comes to newer instruments coming to the market, there is an inherent problem, in that you have a very limited database to project on an actuarial basis what the default rate is going to be. Well, why don't we require agencies to disclose the length of period of time upon which they are making this projection and also their methodology, so that we can get behind the ratings and actually look that maybe there isn't a lot of close there for the Emperor, and maybe we won't pay so much attention to the ratings and

people will look down more deeply? People are already doing this now, investors, but this would help them do that.

When it comes to commercial banks, a clear failure here with the so-called SIVs (destruction investment vehicles) that were done off balance sheets. There have been proposals to revise the accounting rules and change the percent of outside capital for SIVs. Actually there is something that would even be better. Why not -- or at least as a supplement, you could -- why not have a mandatory disclosure by the banks of the fact that they had sponsored a SIV, so that investors would know that there is a probability that the bank would have to take the SIV back on its balance sheet; and why not have a requirement for the banks to at least state the circumstances under which they would take the thing back on its balance sheet. This kind of thing would at least, in a qualitative sense, provide better disclosure to investors. And, when it comes to derivatives, the so-called credit default swatches, the asset-backed securities, much more serious attention has got to be given to standardizing these agreements and eventually get them traded on exchanges, because right now they are done over the counter, they are relatively thin markets, and if we standardized them, they would look like, you know, regular stocks and bonds, and there potentially would be more liquidity; there would be more transparency; and there is interest now by the dealers, some of the primary dealers, in these securities and funding

exchanges. We actually think that it would be better to have an independent exchange, because independent exchanges are likely to be more transparent than a dealer-owned exchange.

When it comes to leverage and more liquidity, I think the proposals there are pretty straightforward, just a couple of comments.

On investment banks, Chairman Bair talked about this and I asked her the question, should there be bank-like regulation of investment banks? She noted there is one difference between investment banks and commercial banks, and that is deposit insurance. And, I should point out that the people who are calling for bank-like regulation of investment banks are saying, well the FED is loaning them money, they ought to -- they ought to do regulating on my banks. The lending facility that the bank has constructed is temporary. It's not permanent, as in the case of deposit insurance. So those two facts it seems to me at least warrant perhaps a lighter touch regulation of investment banks than commercial banks. Now we can still have something similar to bank-like regulation, but it doesn't have to be the same thing. But Chairman Bair put her finger on what we think is an absolutely critical point. There ought to be a way to orderly close, or at least wind down the affairs or sell an investment bank that is in trouble. Sebastian, you asked this question, well you've got an investment bank that's got all these counter parties, you wouldn't want to close it down. But here is something you could do. If you had a bridge

bank and made, for example, Bear Stearns be the equivalent of a bridge bank, the FED could guarantee its liabilities for at least a couple of years while the FED would have time, not just a weekend -- it could have had two years to figure out what's the best way to dispose of Bear Stearns. Maybe the best way was not selling it over the weekend to J. P. Morgan, because under that time pressure -- there ought to be less time pressure and an orderly way to solve a future Bear Stearns, bond insurers, higher capital requirements, especially if they do more than just municipal bond insurance. So if they are not just doing mono-line and they are doing a lot of new stuff, higher capital.

And the final point here when it comes to effective supervision, really just a couple of notes here. There is a Treasury proposal out there that was advanced a couple of weeks ago, to fundamentally reorganize the way we regulate everything, to move the boxes around, and this is clearly a long-term project and we have a couple of things to say about that, but the major headline is, it's a lot more important what goes inside the boxes than where the boxes are, okay? It's namely the people and the rules they follow are a lot more important than who regulates what. And there is some merit to some of the Treasury proposal; for example, in an ideal world, we would pay for a consolidation of the CFTC and the SEC, for example, all right? In an ideal world, an optional federal charter for insurance makes sense. In an ideal

world, maybe some consolidation of the banking regulatory system makes sense. But, in the meantime, let's get the rules right, let's get the capital regulation, let's get the disclosure right, and that will go a long way.

And, I guess when it comes to risk management practices we all know that a lot of the banks failed, investment banks and so forth. This is a very complicated issue, because you have got a lot of very smart people in these banks and investment banks, and the question is, can the FEDS ever keep up with them? In other words, can they build models that can outdo or out-predict what the investment commercial banks are doing? That's a pretty tough sell. But one thing they can do, and we talked about it in the report, is that if there is one harbinger of future difficulty in any kind of financial activity, it's rapid growth of an asset class or an activity. So at least federal regulators in the future should pay a lot more attention to something that's rapidly growing. We are now saying that they should kill it off or stop it, but at least that can be an occasion for them stepping in and at least slowing the activity down, because if there is anything that you saw in Martin's charts, it was that rapid growth and subprime that surely should have set off a lot of alarm bells.

So, that completes our report. There are a lot of details in it, and we commend -- we commend it to you and we thank you for your attention. And now we are ready to go to our Panel. Sebastian, I guess? Thanks.

MR. MALLABY: Great. Sebastian Mallaby from the Council on Foreign Relations. I am going to first of all give the two people on the Panel who have yet to speak a chance to speak, and then I am going to go back to the authors of the study and do some cross-examination before opening it up to you guys, who can sort of finish the job. All right.

So, Keith Ernst, we'll start with you. You work at the Center for Responsible Lending, so I want to ask you about the aspect to do with the retail part of this, or the lending to homeowners. The report comes out in the position that it says that, you know, there are concerns with some of these types of lending that that went on, but we shouldn't go so far as, from a regulatory standpoint, to actually ban adjustable ARMS, TISA loans, negative amortization and so forth, none of these things should actually be banned. Is that too soft.

MR. ERNST: Well, let me back up a step. I'll say this paper offers an array of policy perceptions that are very interesting and we could dig into for a long time. Many of them I broadly agree with, you know, the notion that we don't have a lot of luxury for time in terms of responding to the immediate foreclosure crisis. We have seen a lot of FED urgency on the market side, and we need to see more of that urgency on the consumer side for the responding to the foreclosure crisis, the proposals for FHA flexibility, the proposal the Chairman Bair talked about, the court-supervised modification of loans and bankruptcy all are great proposals. I

think in terms of the root causes of the crisis we at the Center for Responsible Lending would place a little more emphasis perhaps on the hope or rulemaking underway at the Federal Reserve now. Fundamentally this crisis was brought about by the origination of bad loans, loans originated under suspect circumstances where incentives were fundamentally misaligned. So I would say, I would suggest that the authors would be very interested in the response that, for example, the charges like pre-payment penalties from subprime mortgages there is much that could be done. Now this doesn't necessarily mean that whole classes of loans need to be taken off the table. What it does mean though is much more focus needs to be placed on the circumstances in which those mortgages originated and their potential to serve consumers well or badly.

MR. MALLABY: But I guess the key question here, which you have certainly dodged, is of course there has to be judgment in what kind of loan makes sense to design and who you send it to, but is the exerciser of that judgment private loan originators or is it originators?

MR. ERNST: I think the responsibility fundamentally has to rest with the public institution. I think one of the implications of this crisis, one of the issues is that the private market here, the ratings agencies, investment houses, their incentive is to make sure the math comes out right in terms of the economic returns on the transaction. It's public

institutions that have concerns about externalities and about the larger questions that face society in terms of how it affects the borrowers and consumers. And one of the things -- you know, I'll take this opportunity to bring this out -- one of the things that really hasn't gotten touched on very much in terms of the larger question of what's going on in the marketplace or the social implications of this, if we look at the borrowers who are being most hurt by the subprime mortgage foreclosure crisis and the communities most being hurt, they are some of our most vulnerable communities. A majority of borrowers, of African-American borrowers, of Latino borrowers, are a near majority of who took out subprime loans, or took out loans in recent years ended up with one of these risky subprime loans that is headed for foreclosure. And so, fundamentally it presents questions that are uniquely of interest to public institutions, so I think regulators do have a central role to play here.

MR. MALLABY: Right. But I'll just try one more time, okay? So, there are obviously types of loans, like a loan that resets after five years, which can be extremely useful to a young family trying to get their first house, and if they expect that in five years' time they will be earning more, which might be a reasonable expectation if they are pretty young, maybe they should buy something that resets in five years. Now, should the public regulator ban that, yes or no?

MR. ERNST: Well, you know, I think the question is you are asking me are adjustable rate mortgages ever appropriate, and clearly there are circumstances where adjustable rate mortgages are appropriate.

MR. MALLABY: Okay.

MR. ERNST: Are there circumstances where adjustable rate mortgages that are unaffordable after 24 months because of large scheduled increases in payment irrespective to changes in interest rates are appropriate, I think that is a much harder question to answer

MR. MALLABY: Okay. That's enough torture.

MR. ERNST: I'll take more.

MR. MALLABY: Richard Brown, you are with the FDIC, so you are at the shop end of some of these issues. I want to maybe get your response to Bob Litan's idea of a bridge bank. It struck me as a pretty interesting idea. It is certainly true that if the Bear Stearns' transaction had had more than just a weekend to be done, it might have been done in a different way. But, do you see that as workable? Who would operate this bridge bank? Have you thought about this issue at all?

MR. BROWN: I think -- I don't think we have looked at it with regard to the Bear Stearns' situation in particular, but with regard to the bank administration itself, we have learned over the years -- we have seen increasing rules applied through the fiduciary reforms to the banking industry where there is a more codified set of rules; what happens in

bankruptcy; what are the powers; when can those rules be suspended for systemic risks; and what is the documentation that is required? And I think the presence of those rules I do think keeps the regulators honest in terms of what their, how they react to these situations, and it gives the marketplace, I believe, some sense of order. They know what to expect when things happen. So, with regard to the banks I think rules have been a good thing. It still provides some flexibility to the regulators. With regard to other situations -- somebody mentioned the GSEs, the investment banks -- I think that rules, having some sense of what happens in a bankruptcy situation is only good for the marketplace, and also some notion of when those rules need to be suspended in a crisis.

MR. MALLABY: But I guess the question on the bridge bank is precisely because the nature of the securities traded over the counter by a broker dealer like Bear Stearns is so complicated, who operates this bridge bank? Who has the expertise to come in and hold it if it's not going to be a J. P. Morgan, in other words, another player in the market?

MR. BROWN: You've put your finger on a very good point, and I think that the experience that the Resolution Trust Corporation had in running 700-and-some-odd conservatorships during the 1990-1991 period, as well as the FDIC in running actually some fairly large bridge banks, they really don't compare in size to some of the large financial institutions today. It's a much more daunting operational task, and I do

think it requires a great deal of capital market expertise. And I think the other thing to recognize and somebody mentioned running a bridge bank for two years, I wouldn't recommend running a nationalized institution for two years and then trying to recoup some franchise value at the end of that period. I think it's something that does need to be resolved in a finite period of time, but it can give the regulators the benefit of not having to do a transaction on that weekend, the benefit of some time to sort things out in a more orderly fashion.

MR. MALLABY: And now rather, as I did with Keith Ernst, I want to see whether you think one aspect of the paper is a bit too sort of soft on the status quo, and that is the attitude towards securitization. I mean, so the paper argues that, you know, there are merits to securitization, that it distributes risk, it gets it out of the core of the financial system, it can distribute it to other countries, Norwegian and other townships can bear some of the costs. Now, this is obviously if you can disperse risks and therefore reduce this cost, but do you think that given what we have seen one ought to take a slightly tougher view of financial innovation?

MR. BROWN: Well, there are unresolved problems with securitization with financial innovation, and it really has to do with the incentives of the various parties. Some of the parties were paid on day one, the brokers, the originators, some of the parties hope to get paid on

time, the borrowers hope to be able to make their payments over time, and I think the nature of the returns, the fact that during a housing boom the returns are not, you know, one good year, one bad year, they are serially correlated, so you have a number of good years in a row when people get paid and everything works out. I mean, there was a lot of complacency bred by the fact that you could not make a bad loan in 2004, 2005, and so, in many cases, loans were structured that only could perform during those good times and really had no hope of performing during even a flattening of home prices. So I think that the serial nature of that exacerbated some of the incentive problems that we have. There is nothing inherently wrong with securitization, but I do think that the incentive problems have to be addressed, and I think some of the proposals in this paper, having the originators retain some interest in the securitized pool makes sense in terms of aligning the incentives better and preventing some of these problems in the future.

MR. MALLABY: But let me take the securitization issue up with Martin Baily.

Sir, I suppose one response to the tone of the paper is to say, look, you really are trying to have it both ways here. You are trying to say on the one hand that financial innovation is a good thing, we should support it; on the other hand, obviously it's gone wrong, so our solution is more transparency around these instruments and then we'll have less

likelihood, not zero, but less likelihood of trouble. But, my question is, don't investors get the transparency that they deserve, that they demand? We are not talking here, in the case of the wholesale part of this problem, the securitization, we are not talking about, you know, selling these instruments to, you know, households that did not have the wherewithal to analyze them. These were being sold to investment banks, to commercial banks, to the asset managers, professionals. If they had wanted more transparency, they could have demanded it, but they couldn't be bothered. So, you know, how much certainty do we have that their desire to look carefully at the assets they are buying can be altered by the Government coming in and saying, be more transparent?

MR. BAILY: When Doug and I presented some of these early findings in Paris, Jean Terrell was on the panel with us. Jean is a very famous French economist, and is very famous for his work in the United States as well. And he said one of the things that made it fun, he was sort of jesting about this crisis, was that it showed that asymmetric information gets markets into trouble, and that is I think the situation we have gotten into with this, although there are other issues as well. So, when we -- when you had your earlier conversation, should we ban adjustable rate mortgages, I think the answer to that is, no, you shouldn't ban them. There may be certain mortgages that you don't allow to be offered because you think that borrowers really don't have the information

to decide rationally whether this was a good choice or not. Now you have posed to me a different question. You say, well how can there be asymmetric information, if I can put it that way, when you are selling to the UBS or some other organization, and I think that's a good question. And again, in some earlier meetings we have had people in the audience say, well what should have happened is there should have been whole teams of people really evaluating these different assets and finding out what was underneath them and making sure that they didn't have the problems that they turned out to have. But that is not a very efficient way to make a marketing practice I don't think you can sustain; that everybody who buys a particular set of assets is going to do the necessary due diligence to really understand what's behind it. What happened in practice of course is that people relied on the credit rating agencies, and to some extent, on the reputation of the institutions that were issuing them. In the light of what's happened, these purchasers of these securities are going to be much more careful the next time around. What we need to -- what we suggest is that if we have more transparency, and we won't be, you know, 20 years from now, 10 years from now running into that same situation. So, yes, these are sophisticated buyers, but at the same time creating more transparency I think gives them the advantage in not getting into this same trouble again in the future.

MR. MALLABY: But, Martin, let me just persist a bit with this point. I like the way you framed it, by the way, connect the asymmetry when you are selling to UBS. It seems to me that one can think of instances where UBS light entities, right, sort of professional investors, loaded up on types of investments where again they were being provided advice by conflicted people, rather like the ratings agencies today. All of us now thinking about the way that investment banks bought tech stock (ITOs) in the late 1990s, it was well known that they were conflicted because they were also the same institutions underwriting the ITOs, and so when they tried to sell them to investors, they were known to be conflicted, but the investors bought them anyway. And these were not complicated instruments. These are just stocks, right? So -- and then there are other examples which, I guess, you could talk about the way that the futures markets were used to construct portfolio insurance, people bought this, they got into trouble in 1987 and the crash, and then once they understood it they didn't do it again. But, the point is that, is the problem with the opacity of the innovation, or is it with sort of incentives around the guys making the investment decisions? And, if the incentives are wrong, they will buy tech stocks, even though that's simple things; they will buy portfolio insurance even though it doesn't work; they will buy mortgages even though they are not properly originated?

MR. BAILY: Well, your question is a very searching one, and let me answer two ways. I picked UBS, and I didn't mean to pick on UBS, although they have lost a lot of money in this, one of the things that UBS did was to issue a report to shareholders on how they have gotten into such a mess. And, as we mentioned in our report, one reason is that there stress testing rules for their own portfolio and the risks they were taking didn't work very well, because they didn't take into account the possibility of a general downturn in the housing market. So I think that they regarded the need for improved ability to stress test some of their own portfolios.

The other thing that came across very clearly, and also in the -- in other reports, the financial -- I get these acronyms tangled up, particularly when I am in front of a microphone, but anyway it's highlighted in the report -- that reviewed the way in which different institutions went over and did the testing of their risks that they were taking. And what happened in these institutions is that the departments that were making tons and tons of money really just were given a free reign and you didn't get the supervision by the heads of the banks, by the executives who ultimately responsible for their own practices. Now, that's a private sector thing, but I think the Government to the extent that we are supervising, looking at these banks, we need to be able to say to them, tell us about what your risk managements practices are, and are you in fact doing the

due diligence on these securities. And then, on the other side, yes, I think there is scope to make some of this stuff a bit more transparent. We do have prospectus requirements for the stocks and various things, so I think there are ways which would have made the UBS or the Lehman or the Citibank more able to see what it was that they were buying, or for that matter, the small Indus bank in Germany, who ended up with some of the stuff.

MR. MALLABY: Let me try Doug Elmendorf on a sort of analogous question about leverage.

Sir, I have been asking Martin about, you know, whether the real problem is in financial innovation and the lack of transparency around CDOs, or is it just that the investors decided to make bad decisions. I guess I have a similar question about leverage. Is the real problem with, you know, in the amount of leverage, or is it in the institutions that abuse leverage? And, let me just elaborate a bit on the question before I let you answer. I'll just make it a bit harder for you. So, leverage right now in your paper is regarded as a problem, and clearly there are ways in which it can exacerbate trouble. My favorite example is actually in the silver market. When silver crashed at the end of the 1970s or 1980s, the market that crashed with it had a perfect correlation was actually cattle, and the reason was that highly leveraged speculators had bought silver, lost a lot of money, they had to cover their position, and so they sold cattle as well.

So leverage created the systemic sort of contagion effect. I am not denying that it's a problem, but leverage can also allow financial market players to bring prices into more efficient levels. Arbitrage works better and markets become better priced, more stable, more efficient and less prone to bubbles, where efficient players can borrow the money they need to force prices back into line. So leverage can have two sides to it, and yet at the moment everyone is just criticizing it. Now, therefore, is it right really for your paper to be saying we should be looking at tougher capital requirements and less leverage, or should you really be looking at the incentives that cause people to abuse leverage?

MR. ELMENDORF: That's easy.

MR. GALE: This guy is a tough fellow. I didn't know we were getting this. That's great.

MR. ELMENDORF: So, Sebastian, you are obviously right, that leverage is not always a bad thing. Our sense is that the incentives that face institutions though lead them to take more leverage than is in society's interest. So, that's why part of the build on Martin's comment, transparency is important, but you also need to -- it's not sufficient, and it's not sufficient because people in certain situations, which I'll describe in a moment, even if they have all the information, will still be inclined to take larger risks than is good for society as a whole, and that's partly because of the risk of contagion in financial markets; it's partly because of the

Government's safety net in the form of deposit insurance or the Federal Reserve acting as a last resort. There is a safety net that the Government provides, and with that in mind, that creates this moral hazard. People are more inclined to take risks than they would be otherwise. So I think the incentives are a problem. Where they can be fixed directly, that makes sense, and some of the efforts to get the -- you think about credit ratings agencies -- these are efforts to try to fix the incentives, but as Bob noted before, it's often hard to fix those incentives. And, in that case, I think we are forced to fall back on the Governments directly regulating what can happen. The private sector will do a lot, I think, and maybe this didn't come through enough in the time we had to present our proposals, we talk in the report about the role of the private responses. Those private institutions that took less risk or had more liquidity are faring much better now than those that took more risk or had less liquidity, and that lesson is not being lost, I think, on the other institutions. One specific manifestation of this is an awful lot of players borrowed, on a short-term basis, to finance long-term commitments, and that strategy works well as long as you can roll everything over, but it doesn't when the music stops, and that involves households who borrowed from ARMs, whose resets they could not afford; it includes SIVs that borrowed in short-term funding markets; it includes investment banks that borrowed through overnight repurchase agreements; it involves municipalities that borrowed in auction rate

markets instead of locking in longer term financing; all of these institutions on the assumption they could roll over their borrowing. So I think there are -- I think the -- although the leverage is not always bad, the incentive is for private institutions to take more risks, to be more level than is in society's interest, I said, because of both the contagion and the federal safety net, and because of that, public policy as a whole needs to push back a little bit against that leverage. But you are surely right that we don't want to stop it altogether and trying to decide where and when to push back is important.

I think one thing we focus on in the report as you read it you will see -- you already did -- you'll see is that we don't, in fact, try to restrict risk taking everywhere in every institution in the economy, but there are places where excessive risk taking is particularly damaging. The problems that we have discovered at the largest U.S. financial institutions are the ones that are most worrisome in terms of the functioning of financial markets now and the risk of a slow down in lending going forward, and it's really on those institutions that we focused. There will still be undoubtedly players in the economy who will be risking substantial amounts of their money.

MR. MALLABY: Okay. So if I understand you right, there are two reasons to push back on leverage, and one is that the incentives to take more risks because it's going to be socialized, and so this

presumably means that in the recent episode with the extension of the Federal Reserve window access that you described earlier, you would argue for more pushing back on leverage than before, because the temptation to borrow more when you know you can pass on the risks to the taxpayer is going to -- okay -- so let me now make a segue to what Bob Litan was saying. It seems to be the other reason for pushing back on leverage, is if one is pessimistic, as you were slightly, and by the ability of the Government regulators to enforce sort of more prudent behavior by the private sector, is that right?

MR. ELMENDORF: Well actually I didn't have time to focus on a level of detail that now I will expand on when we talk about the leverage or the capital ratios that banks are subject to. We are quite critical in this report of the Boswell capital rules. We are not the first ones to be so critical, but my goodness have events demonstrated, there is something wrong with those rules. They were, at the last writing, they were about to go into effect -- I think they went into effect in 2007. They were over 400 pages long. They were incredibly detailed. They allowed banks to use their own internal models to set their own leverage rules. They ignored the so-called SIV problem, where banks just evaded the whole leverage rules or the capital rules and created these SIV monsters. They didn't take into account liquidity, and on and on. And, by the way, they also took 10 years to develop. And so when you add all of that up --

I'm not the only one. I've before about this. There are quite a few academics who have written then, and our report now reflects it. We think there is a fundamental rethinking that needs to be done about the whole Boswell system. This, in our view, the substance was wrong and the process was wrong. And so, I think if we had our way, we would just go back to a simple leverage rule, would not make all these fine distinctions that the Boswell rule tried to make about the riskiness of the different assets, and then we would add more market discipline in the form of the subordinated debt requirement. Subordinated debt is a bond. It's not like a deposit. It therefore can't run; the people who hold it can't run; and if large institutions had to back a certain portion of their assets and their off-the-balance-sheet liabilities with subordinated debt, there would be stronger market discipline on these institutions. It would help the regulators do their job. This is an idea whose time has come, and I think if we let the market work hand-in-hand with regulators in a much simpler way of regulating banks, we would all be far better off.

MR. MALLABY: Just one detail point on that subordinated debt idea, and as I remember, it came from partly from Charles Camirez or mainly from him I think and maybe the Reillys too, and he advanced it at a time before the credit default swap market had really developed. And now that you do have that market, you have a market mechanism already

which is telling you what the perceived risk of a financial institution is.

Does subordinated debt add substantially to that market signal?

MR. ELMENDORF: Well, actually there are a lot of people I think who share fatherhood for the subordinated requirement.

MR. MALLABY: Okay. Right.

MR. ELMENDORF: There are lots of academics. Actually the Shadow Financial Regulatory Committee, of which I am part on another, in another time of my life, even and also now, the Shadow Committee has been endorsing this for at least eight years. And by the way, I should also say the Shadow Committee also endorsed the bridge bank idea that we talked about before. But, the credit default swap market is a useful market, although it's still over the counter, and we say in the report that that market ought to be moved to exchanges. But, subordinated debt is different in the sense that not only is it uninsured, like the credit default swaps, it's typically longer term and it goes to the whole institution. It doesn't go to a specific basket of loans. Typical credit default swap says, here is a basket, if it fails, the insurer pays off. What we are talking about is the whole institution. And so maybe, and I hadn't thought of it, but maybe you can view a subordinated debt as a credit default swap for the whole bank. And -- but that's actually a pretty good way of putting it now that I think about it. So it is fundamentally different.

MR. MALLABY: Let me just put one last thing on the table before I open it up, and this could be answered by any of you. If it's the case that one views financial innovation as basically a good thing and the hope is you can tame it, but we are not really sure that transparency works or maybe it does, maybe it doesn't, equally with leverage, it can be good, it can be bad, we want to reign it in, but not too much, to make the users of these innovations and of this leverage more responsible, we would like better prudential regulation, but we are probably skeptical about how far that really works. So what about a final idea, which is to move towards a system with slightly different compensation incentives for people inside these financial institutions? If their own incentive were that they would not get a bonus if something they do in year one blows up in year five, it might change the kind of risk they take. Obviously people working in an investment bank, who put on a lot of leverage to lock in a spread and a SIV because they are buying all of these subprime mortgages, which is yielding a nice return, more than their cost of money, they can lock that in, they can make a bonus in year one, year two, year three, year four, and year five they lose all the money, but it's not their money now, now it's the shareholder's money. So obviously this asymmetric incentive drove a lot of this risk taking. And we do have a model lab of how some people sometimes are compensated differently, which is the sort of hedge fund model where the managers have their own model generally in the fund. If

they lose in year five, that's their own money. It's also their reputational capital, as far as their financial capital. It's a funny thing that finance has evolved since the 1930s, paying people kind of one-year bonuses when the return is to financial activity and not one-year returns. Could you see the system evolving, maybe Bob first, or anyone else who wants to comment on that?

MR. LITAN: It's obviously an interesting idea and actually it's somewhat perplexing why institutions don't do this on their own. But when it comes to mandating it, I guess I get a bit nervous about having the Government get to the level of designing compensation packages. I don't think there is much precedent for it elsewhere, and also I am worried that it could be gained or offset. So, for example, suppose you say to a lending officer part of their bonus is going to depend on the performance of their originated loans in the future and what happens, I predict that within two weeks or less investment banks would devise the equivalent of credit default swaps or hedging instruments to protect them against that loss. I mean, these are smart people. And, I think whatever you do, they'll gain. And this is a problem for all regulation. In fact, we point this out in our paper, that regulators are constantly in a race against the market and they are always behind. And the gain really is, or the challenge, is that they not be too far behind. But, I think before we put in

any regulation, I think it is incumbent on all of us to think about how will it be gained and I worry about gaining.

MR. ERNST: I agree with Bob. I think it's much better to get the incentives right on the company and then let the company decide how to create the right incentives for its own employees. Once you get down to the level of micromanaging compensation it probably doesn't work very well. I mean, we do have a rule about CEOs not earning more than a million dollars creates certain things, but I think that rule hasn't really worked, particularly to restrain CEO salaries. So, legislating at that level strikes me as being probably a mistake, but I agree with you, it certainly was part of the problem going forward. The question in the past, if we can get the incentives right on the banks or other financial institutions, we hope they will restrain their employees.

MR. MALLABY: Anybody else want to chime in on that?

Okay. Let's have some questions. Who's got a question? I can see one question back there. The microphone, please identify yourself.

MR. MILLIKEN: Yes. Al Milliken, Washington Independent Writers. On page six of your Executive Summary, you state that several million households will likely default on their mortgages in the next few years. Who will the eventual buyers and owners of these properties be, and for those needing to refinance to prevent foreclosure, what options do

they have once their documenting of income and assets is showing an inability to meet standards?

MR. ERNST: I'll take a crack. Let me first see if I understand your question correctly. So your question is, first, what's going to happen to these properties that are going into foreclosure; and secondly, if I understand it, what's going to happen to the families who have lost their homes? Is that right?

MR. MILLIKEN: Well, is there options for someone not able to document properly, do they have any options except losing their homes?

MR. ERNST: Okay, so two questions. I mean, one, I think, you know, the growing backlog of properties on the market is a problem. In many -- in quite a few markets you have financial institutions bringing the majority of new properties into the marketplace and it's creating a problem and feeding the foreclosure cycle that we are in. And I think part of the response has to be looking at things like Chairman Bair's proposal, like other efforts that would put drivers, put borrowers back in the driver's seat in terms of thinking about how to modify these mortgages perhaps through court-supervised modifications. So one question is, you know, in terms of these properties, there is a clear need to do something to stop these dominoes from continuing to fall, and to keep, to turn the momentum around a little a bit. And there are some policy proposals that we are

talking about today and are being debated widely. In terms of families, you know, there is a struggle. You want to help families prevent needless foreclosures. There are clearly families out there who could afford reasonably priced and soundly structured credit, and it's important that those families get these escape hatches, these escape routes made available to them. You don't want to dig families deeper into a problem who truly can't afford the mortgage with any reasonable modification, and there is a balance that needs to be struck there. I think you need to have flexibility in how borrowers are able to demonstrate their ability to sustain the mortgage. I think you can take that a good ways and help many families doing that. Clearly there will be limits. Clearly some families will not be able to demonstrate an ability at the end of the day, and there were unfortunately be foreclosures. The goal is to minimize the needless foreclosures.

MR. MALLABY: Maybe I can two or three questions, is that all right?

MR. ELMENDORF: I just want to make one statement. The mortgage intervention proposals do have a certain test built into them, a cost test. With regard to the FHA proposals, it's whether they can, the borrowers, can qualify for the loan at the lower appraised value. With regard to Chairman Bair's proposal the cost test is really the debt-to-income ratio. Can they repay it at 35% debt-to-income? So, I do think

some households will not be able to qualify under either of those types of standards, and there does need to be some cost test applied to it. With that said, the market is on their own. The standards that markets are imposing in subprime realty markets right now are very draconian, and I do think that there is a capacity to make some, to provide some relief to some of those borrowers outside of some of the originations that are taking place in the private marketplace today.

MR. MALLABY: Let me see if I can take two or three questions. We'll take one here, one here and one here. You walked past him. I'm talking about the one with the white shirt there.

MR. McLUCAS; Scott McLucas with KPMG, clearly interested in your reference to market-to-market accounting and the role that it might have played and your suggestion -- the role it played in marking down assets beyond where the holders of those inherent assets thought they should be presumably valued. And, my question is, you suggest possibly suspending accounting rules in terms of financial crisis, and I wondered if you might elaborate on that plan, and also if you could, just put in some sort of continuum where this issue falls on your sort of cause and solution scale.

MR. MALLABY: Mmm-hmm, okay. Let's turn to this lady here with the salmon-colored sweater.

MS. SIMON: Sue Simon, Capital Insides Group. My question is, how are we going to look back on this period of transition as we work these out from the investment banker holder of the mortgage-backed security and the SIVS? Are they making a bet that maybe prices won't fall that far so they are not willing to modify the loans yet, or they don't -- they want hold onto those second liens? Are they waiting for Washington to do a grand bail out and then they, the modification? What's going to be happening into next year, which I understand to be the long, drawn out crisis of this, in terms of the Wall Street side of their attitude about where Washington will come in and the prices of housing?

MR. MALLABY: Okay. Finally, in the front here, please.

Ms. McCARTLE: Megan McCartle, the *Atlantic Monthly*.

You are talking about regulation, there has been a lot of talk about externalities and the contagion problem. Usually, externalities seem to be the biggest problem when there is a private benefit and a public cost, but - - so do you think that, first of all, that the banks were not internalizing? I mean, it seems like they had a pretty substantial negative internal cost as well. And, as part of that, I mean, was it the federal safety net that you think of? I mean, was that a big factor of people thinking that they would get bailed out by the FED if the mortgages went wrong, or do they generally not think that the mortgages were going to go wrong? And the second half of that question is, on the transparency question, you know,

you have sort of touched on this, is who are the regulators who are going to be smarter than Bear Stearns in evaluating the risks of these securities, which seem to have been substantially internally mispriced, and how do you deal with the risk of information overload, because in fact, like in mortgages already right, you talk about a one-page sheet, and they already have a term sheet, and they, you get this sort of information blindness. So how do you balance the fact that there is quite a lot of information you need with the fact that people from basic mortgages to all the way up to investment banking analysts seem to ignore information when there is too much of it? And then the very final piece of that is, what will the regulators do that the markets aren't already doing in terms of repricing these risks and re-evaluating how this stuff works?

MR. MALLABY: So now you guys are happy then that you weren't moderating this time. You would have been in really big trouble.

MR. LITAN: Yeah. I'll take some of those for you. Okay, market-to-market real quickly, we didn't talk about that in the summary, but it is in the paper. We think that the market-to-market rules, which require banks and investment banks and their trading book to market-to-market -- I'm grossly overstating this, but trying to simplify -- market-to-market their asset-backed securities, and particularly mortgage-backed securities, that they have fed a downward, vicious cycle, and there is very thin transactions. All of the anecdotal evidence suggests that. So the

question is, do you use a very thin market to put a price on all of this stuff? And, this is a very controversial question, because people have asked me, well, if you don't use that, what do you use instead? Well we actually have a proposal, and they are a two-part proposal, where the FED could, for a temporary period, declare a certain class of assets under distressed or disorderly market conditions, stress that it's temporary, so that you are not -- you are only -- you would go back to market-to-market after the distress is over. And, during this period you would use discounted cash flow, which is now used by banks as it is, and it would take into account expected defaults, and this is something that banks do all the time, and they would use the original discount rate, or the original interest rate, not the implied market rate that is being used based on a very thin transaction basis. And we cite an estimate for the Bank of England that points out that if you did something like this, the write-downs would be significantly less and you would reduce this vicious cycle. A couple points -- I won't handle the SIVS -- I think the -- or the mortgage servicing -- I think Doug will handle that -- on the banks and the regulators and so forth, investment bankers, will they ignore all the information? Yeah, maybe some of them. But we know that in the last seven years they bought stuff only on ratings. Now they are not doing that, and now there is, if anything, an overreaction. People aren't trusting the rating agencies at all. We think that if you provided selective additional information that's there, they would pay

attention to it, all right, and that's our bet. It's better that it be Bear than nothing. And by the way, these are different people than mortgage borrowers, who can't read through all the gobbledygook. Investment analysts get paid to read all this stuff. Was there a moral hazard let's say for Bear Stearns? You know what, I don't think so. Bear Stearns never imagined that this could ever happen. I don't think that any of the investment banks ever thought that they would get cut short, not being able to roll over their repos, all right? Now, in retrospect, everybody knows that this could happen, and so I anticipate that all of the investment banks are going to try to lengthen the maturity of their liabilities, because they don't want to have happen to them what happened to Bear Stearns.

MR. BAILY: Can I go? I have a couple, two quick comments. One is, we have, we push the virtue of home ownership, and with some good reasons. There are a lot of reasons why people want to own homes and why it's good for neighborhoods and so on. We may have pushed it a bit too much in recent years. At the moment we give tax preferences for home ownership, particularly for higher income folks who deduct their mortgage interest and property taxes. I think it would be a good idea to sort of rethink that a little bit and whether we want to do more for renters or make it a little bit more of a level playing field so that we are not necessarily -- not everyone is in the right position to own a home. They may be in the wrong point in their life cycle. They may want to move

and so on. The second point, you raised a very good question, should regulators or can regulators do than the markets are already doing? Well I like to think in our report we spend a good bit of attention on that and say specifically this is not a sort of diatribe about how we need to completely revamp the whole regulatory system. We do pay considerable attention to what markets are doing and what needs to go beyond that. As long as you get these kinds of very large macroeconomic consequences, I think it's important to have regulators there. I was at a discussion a while ago when somebody said, well the only reason we have problems is because you have deposit insurance. And I said, well, didn't we have bank failures before we had deposit insurance? I mean, we had the great depression, there was no deposit insurance. So, I think we have these institutions in place to ameliorate these crises, and then there is an appropriate role for the government to do a light touch regulation, but to have the kind of regulation we have described here to supplement and actually make the markets work better.

MR. MALLABY: Do one of you want to take the last, the second question, I guess?

MR. ELEMENDORF: The servicing, yeah.

MR. ERNST: I've got more on the third.

MR. BAILY: So, in the conversations that we have had with mortgage servicers, I don't get the sense that they are, in general, waiting

for the big rescue. I think if they are they are reading the tea leaves a little wrong frankly. I think we can see from the fact that Congress and the Administration have not yet agreed on a \$3 billion dollar proposal to expand the FHA, which is what Barney Franks' proposal has been scorned at by the CBO, suggests people who are waiting for hundreds of billions of dollars to come flooding in are, I think, betting wrong. I don't think that's principally what they are doing. I think they are now -- I think for much of this year they are not going to have something dramatic. Next year the political constellation could be different, but it's hard to predict what the economic forces will be at the time. I think mostly not as much is happening because of the obstacles in the system to modifying mortgages. There may be some betting that house prices won't go down that much further, but I think that's probably a bad bet too. So I think mostly it's just there are a lot of obstacles in the system and servicers who never thought they would have to deal with this volume, anything like this volume of modifications are just getting their minds around how to proceed best.

MR. ERNST: And, coming over to the third question for a second, when this crisis first started unfolding, subprime mortgages were about 13% of all outstanding mortgages in the U.S. And I think, while there are a lot of complicated mechanisms that came together to multiply the effects of that mortgage pool in terms of its effect on the overall

economy, one thing should be very clear from this crisis, which is that ultimately consumer protection standards could be very much in line with investor's long-term aggregate interests. And so I think one thing when we think about what can regulators do; I think regulators can pay much more attention to the quality and the circumstances under which mortgages are being originated and prevent those bad seeds from coming in and growing into the sort of problem we have today. And so I think regulators can take, you know, a lot of lessons from this paper and think about a lot of ways to do what they are doing better. I think one of the important lessons has to be a back to basis fundamental approach, to say, mortgage innovation is good, but when mortgage affordability products become a euphemism for giving mortgages that are unsustainable, not something that regulators have a duty to come in early and check. By getting ahead, you can avoid some of the complexity and prevent some of the problems before they really metastasize.

MR. ELMENDORF: I happen to agree with that Keith, and I think one of the lessons is that, to take away from this is that consumer protection and safety and soundness are really two sides of the same coin. If people have mortgages they don't understand, they are unlikely to perform on them consistently across the cycle. I will say also that in terms of connecting the credit events and the home price appreciation, there were regulatory reports by the FDIC and other regulators fairly early on.

In 2005, 2006, we saw the regulatory guidance on untraditional mortgage products proposed in late 2005 finalized in October 2006. There is a tendency though for regulators not to shout it from the roof tops, not to say, you know, prepare to meet they doom in the marketplace. And also, I think the guidance is there is an attempt to make it measured and I think that perhaps it wasn't as effective or as timely as it could be. The other big problem, and I think the report refers to it, are the gaps in the system. The regulators, the inter-agency guidance really has authority over federally-regulated banks and thrifts and there are many other players involved, many other incentive problems that it did not directly breach.

MR. MALLABY: Well, that's it. Thank you everybody for coming. Thank you to the Panel. Thank you to the Brookings Institution.

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