

THE BROOKINGS INSTITUTION

RESPONDING TO THE GLOBAL FINANCIAL CRISIS:  
WHAT WE DID AND WHY WE DID IT

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**Welcome:**

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**Interview:**

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## P R O C E E D I N G S

MR. ALLEN: Ladies and gentlemen, good morning and welcome to the Brookings Institution. My name is John Allen and I'm the president of Brookings. And I'd like to welcome each of you here today for a very important event hosted by our Hutchins Center for Fiscal and Monetary Policy.

The Hutchins Center's mission of improving quality fiscal and monetary policies, as well as educating the public on the same, is one we're deeply proud of here at Brookings. I want to thank you all for joining us today and to welcome those who are coming in by webcast and, of course, to offer a very warm Brookings welcome to the media.

With the upcoming discussion with the guidance of Tim Geithner and Hank Paulson and our own Distinguished Fellow Ben Bernanke, the Hutchins Center has teamed with the Yale Program on Financial Stability to undertake an important task. The aim of this project, which we highlighted in an all-day conference yesterday, is to ask key individuals who were in the government responding to the 2007 to 2009 financial crisis to record important decisions, the decisions that they made at the time. In essence, to find out what they did, what they didn't do, what they couldn't do, and why. The goal is to create a reference for future generations, if you will, of financial crisis fighters who would want to know and who would wonder what did they do way back in 2008?

Today we have the exciting opportunity to hear from three of the most consequential participants in this crisis, outstanding leaders all, who deserve a substantial amount of credit for preventing the second Great Depression. First, Ben Bernanke, of course, who was the chair of the Federal Reserve; and Hank Paulson, who was the secretary of the treasury in the Bush administration; and Tim Geithner, who was president of the Federal Reserve Bank of New York and then secretary of the treasury in the Obama administration. And they will be interviewed by Andrew Ross Sorkin of The New York Times and CNBC, who will be soliciting questions from the audience following

his conversation.

Also, ladies and gentlemen, just a reminder, we are on the record and we're live. But before we begin I'd like to welcome to the stage Andrew Metrick, the Janet Yellen professor of finance and management at the Yale School of Management and the director of their Financial Stability Program. Thank you very much. (Applause)

MR. METRICK: Good morning. You're here to see what is the main event, what is a multiyear project to catalogue, explain, and analyze the actions that were taken during the financial crisis by the official sector in the United States. These actions were taken by these -- as leaders these three individuals here. And I think while we can argue and discuss, and we will, whether or not any of the specific things that they did were good or bad or worked or didn't work, what is not in dispute is the extraordinary partnership that was forged by the three of them, the cooperation across two different administrations of different parties, and, perhaps even more surprising in official Washington, across multiple agencies of one government, the federal government.

This cooperation has extended to the project that we're hearing about today, where they have brought from the private sector, from government service, from academia the people who worked with them as their key lieutenants in 2007 through 2009 back to do the work, to explain what they did, and to make a record of those decisions. This is a unique thing for financial crises. I'm a scholar of financial crises. We don't have a record like this from anywhere else, which is in part why we're often condemned to make the same kinds of mistakes over and over again.

So this will be a very valuable service, what they have done to bring their teams back together again for scholars, for future crisis fighters, and for anybody who wants a financial crisis not to have devastating effects. As somebody from all three of those groups, I want to say thank you and I look forward to hearing what you have to say today. (Applause)

MR. SORKIN: Thank you. And thank you for being here. Thank you to

the Hutchins Center here at Brookings. It is a privilege to have this conversation 10 years later and we hope to make this an interactive conversation, so please do ask your questions, ask them early, and write it down. There'll be cards going around.

I want to start this morning by trying to bring us all back to 2008. We're going to have a conversation and debate about the policies of what took place, but this was much as story to some degree about policy as I would argue it was about people and it was personal. And I want to start by trying to bring all of you, all three of you, back to what I imagine may have been some of your own worst personal moments.

We've had some conversation over the years about this, but I'm genuinely curious, when you lie in bed at night 10 years later, Hank, what do you think of as the worst moment for you personally?

SECRETARY PAULSON: Well, 10 years later I haven't been doing a lot of thinking back, but by going through this process it's brought a lot of it back. And as I think about it basically we were too busy during the day. We were just working around the clock, so when we were playing offense there wasn't a lot of time to be fearful.

But to me, by and large, the worst moments were waking up, because I would invariably put my head on my pillow, go to sound asleep immediately, but wake up around midnight, you know, and at night little problems seem big and big problems seem insurmountable. And so I would look into the abyss and just, you know, see food lines, see a second Great Depression, wondering if one more institution went down how would we ever put it all back together again.

But the events during the day, when -- you know, there were a good number of events we all lived through, the one that comes immediately to mind was the Sunday of Lehman Brothers weekend when we had gone to bed on Saturday night thinking that a deal was done. We come in Sunday morning, you know, talk with the team, talked with Tim, everything looked good. And when we learned that afternoon, after trying everything, that it wasn't going to be -- that Lehman was going to go down,

and I remember then just being overcome by a sense of fear. Everyone was looking to me. How was I going to deal with it?

And then I did something that was very uncharacteristic. I stepped out, called my wife Wendy, told her I'm scared. And she immediately brought me back to one our verses from Second Timothy, you know, "The Lord has not given us the spirit of fear, but power and love and a sound mind." And I immediately snapped back, you know, and was fine.

And then the related event was about 10 days later it hit me, I had a brother who is just my best friend, a senior vice president at Lehman and I had not talked to him about this.

MR. SORKIN: It just hit you?

SECRETARY PAULSON: It just hit me. (Laughter) I mean, we were -- but the reason it just hit me is that week after, it was just stunning the number of things we were dealing with. You know, we had to focus on Morgan Stanley and Godman Sachs, needed to go to Congress for the TARP, you know, the AIG --

MR. SORKIN: So did you call him?

SECRETARY PAULSON: -- the money markets. So I called him and when I called him he was just terrific. He just said, listen, I knew you did everything you could. I was worried about you, don't worry about me. But it was -- but there are plenty of those, as I think back on it and I don't want to think back on all of the different moments, but there are plenty of them.

MR. SORKIN: Tim, your moment?

SECRETARY GEITHNER: I don't know, I just remember that mix of crushing burden and responsibility, a fear about whether we were going to be able to get our arms around it, just tired. It was easier when we decided whatever the next stage of escalation, when you could choose to act, but I think the hardest thing was sitting at the table with my wife in the morning with her reading about what we were doing, and just

seeing on her face that mix of despair and doubt. (Laughter) And I believe that she felt we were, you know, ethical people trying to do the right thing, but she looked at what we did and said, she's like really? I think that was the hardest thing.

And of course that was mirrored by what we faced across the country and that gap between what we thought was right, what we thought was the best of the available options, the gap between what we thought was going to provide the broadest benefit with fastness, as quickly as possible, and what people thought was fair and just. I think that was, in some ways, the hardest thing.

MR. SORKIN: I want to get back to that and the questions your wife had in just a moment because I think those questions may be the questions that the country's still grappling with.

But Ben, real briefly, your moment because I know you had one.

MR. BERNANKE: AIG Tuesday, I think, market's in chaos. We organized an \$85 billion loan to make sure the world's largest insurance company would not collapse. Hank and I went to Bush, got his support, but he said go talk to Congress. So Hank and I went to talk to a group of congressional leaders and explained what we were doing, why we were doing it. You know, will it work? It could work. (Laughter) Will you get your money back? We hope so. (Laughter)

So the questions went on for a while and then it died down. And then Harry Reid was leading the discussion and he said, remember, Hank, remember Sicily.

SECRETARY PAULSON: Gosh, yes.

MR. BERNANKE: He said, Mr. Secretary, Mr. Chairman, he says, I want to thank you for coming down here and explaining this situation to us. He says, but I want you to understand one thing. Nothing you've heard here tonight constitutes congressional support or approval for what you're about to do. (Laughter) This is your decision and your responsibility.

And I remember feeling so alone, looking over at Hank and saying this is

the kind of thing that we're going to have to do.

SECRETARY PAULSON: And the question before that was where do you get the \$85 billion?

MR. BERNANKE: Yeah. (Laughter)

MR. SORKIN: So, Mr. Chairman, you're the professor on this panel.

MR. BERNANKE: Yeah.

MR. SORKIN: You grade people for a living.

MR. BERNANKE: No. (Laughter) You don't understand how it works at these Ivy League universities. (Laughter)

MR. SORKIN: Grade or measure, if you will, your own performance and the performance of these gentlemen. How do you think about it now? How should we all think about it? How would you grade it?

MR. BERNANKE: You know, it's not really a fair question, obviously, because we didn't let students grade themselves usually, right? I mean, I think generally, I mean my general sense, we didn't anticipate the full -- all of us had various concerns about the financial system, about the economy, none of us anticipated the full ramifications and extent of the crisis. And so in that respect we were late.

We then responded very aggressively. I think overall we were successful in stabilizing the financial system. And there was a paper given here yesterday about comparing how quickly it happened, at what cost, how quickly the economy recovered. And generally speaking, we look good compared to other advanced economies, to other countries that have had crises in the past.

I think where we didn't succeed, obviously, and Tim already alluded to that, is that we didn't persuade the country, generally speaking, that what we were doing was necessary, although we firmly believed it was. And so that communication issue I think is still out there. But we did respond aggressively to the crisis itself and did bring it under control pretty quickly.

MR. SORKIN: So, Tim, what do you think you missed? What do you think was the big miss in all of this? If we just go to the central issue of how we got here.

SECRETARY GEITHNER: You know, you could succumb and think it happens across lots of parts of economic policy, which is it's the general failure of people to appreciate the damage that might come from the remote, implausible, low-probability event. It seemed to most people living in this country that the type of financial panic, a run on the banking system that was part of the Great Depression, that could possibly cause a Great Depression, was not something that could happen in modern times. And you could say that was a failure of imagination.

As a country we were living with a financial system that had looked more stable over time. That made people believe it was going to be more stable in the future. But we ran into a dangerous moment in the world with a system that had dramatically outgrown the protections of the Great Depression without the tools to prevent panics, to break panics.

But, you know, in a simple way it's the failure to anticipate, act early enough to reduce the risk of the existentially damaging event that seems remote and implausible.

MR. SORKIN: So when you look at the numbers that you guys have all put together and your teams have put together 10 years later, is there data that you wish you had focused on more and that today you'd focus on instead? Hank, is there any piece of data that you think --

SECRETARY PAULSON: I don't think this is about data because my strong belief is that these crises are unpredictable in terms of cause or timing or the severity when they hit. And sure, there'll always be someone at that time that can say, look, I called it, but that person won't get it right the next time.

And so to me the huge takeaway was that we were dealing with an epic, once-every-75-year financial crisis, a severe crisis. And to me the biggest takeaway was

we weren't able to put out the fire without getting the fiscal authorities we needed from Congress, without getting the tools we needed. And so there was nothing more frustrating than -- because by early 2008, we knew we needed more. And to know you needed more and can't get it is a tough situation to be in.

And so to me I knew when we got there we knew how flawed the regulatory system was. The Treasury, we started working on a study looking at the limitations. But to me, it was just missing the magnitude of the event.

MR. SORKIN: Okay, this is you, Hank Paulson, on the debate. You said, "I was never able to" -- this is what you actually said was one of the things you wished you could have done better. You said, "I was never able to convince the American people that what we did wasn't for Wall Street, but was for them."

SECRETARY PAULSON: Right.

MR. SORKIN: I'm going to ask all three of you about this because this to me is the central issue. If you look at where we are today and describe it as a success economically, there are still many in this country who don't believe it. And the question is from a policy perspective both in the policy itself and in the communication of the policy was there another way to do it?

SECRETARY PAULSON: Well, I will start because you're looking at me. (Laughter) But I would begin by saying I think that one of the issues was that we were early relative to where some other countries have stepped in to deal with these things. And so we stepped in before the banks had collapsed and we did some things to fix the financial system which are very hard to explain because they were objectionable things. I mean, in the United States of America, you know, there's a fundamental sense of fairness that the American people have. If you take risk and you succeed, that's great. But if you take risk, the government shouldn't be there. You don't want to reward the arsonist. And so we were forced to do things to protect the American people which are by definition going to be hard to defend.

And then the second thing is how could we explain what we were doing was for Wall Street and not -- that it wasn't for Wall Street and that it was for the American people? And it is very, very hard to explain that the system was so complex, so interconnected that we had to go to the source and Wall Street was like the heart. And we had to stop -- we had to go to the heart, we had to go to the source to stop the bleeding. Otherwise it was going to kill the economy. And what we were doing was we were putting -- the TARP, the things that we did, was like putting a tourniquet on it. But it's very hard to explain that finance is the lifeblood of the economy.

I mean, we tried it. All of us stood up there. Ben did something on *60 Minutes*. Tim talked about it all the time. I tried to explain that, you know, if you wanted to take money out of your ATM, if you want a loan to send your kids to college, or whatever, you need finance. But it's a hard case to make and we were unable to make it.

MR. SORKIN: Chairman?

MR. BERNANKE: I think the premise of your question is somehow that current dissatisfaction, populism, the remaining obvious economic problems that there are, are all traceable back to the financial crisis. I think that's a wrong premise. The financial crisis didn't help, obviously. We know historically that financial crises do tend to precede increases in populist politics. But people have been saying that the country's been going in the wrong direction for 40 years.

There's been a long period of very slow gains in real wages, increasing inequality, slow upward mobility, social mobility. We've had rising concerns about trade, China's entry into the WTO in 2002, immigration, cultural issues, so the whole gamut of things that are feeding into the popular mood. And I think the financial crisis, obviously, exacerbated that, but it was not, I don't think, the primary source of the politics that we're seeing today.

Now, on the communication, it was tough. None of us are experts in communication. I did go on *60 Minutes* and I spoke at military bases and at colleges and

things like that. But we had some very gifted people, like Tim's boss President Obama and others, who really couldn't turn around that narrative, and I think that's just very hard to do.

MR. SORKIN: Let me ask about some of the policy issues themselves, though, in terms of the development of TARP, in terms of questions about whether you'd want to help homeowners more directly. I know that's something, Tim, you've thought a lot about, principal reduction, things like that. Do you look at that today and say had we gone in that direction, both from a policy perspective, we'd be better off economically or politically?

SECRETARY GEITHNER: I think that in general the country would have been better served if we'd had a stronger program of you might call them fiscal stimulus: tax cuts, support for state and local governments, a whole range of things like that, larger, sustained longer. And so there was less burden on the Fed to carry the burden of trying to get the economy growing again after we put out the financial fires.

And, you know, we did put in place a quite large, sustained program of tax cuts and things like that. They were ultimately overwhelmed by the cutbacks at the state level and that put a big drag on the recovery, which was always going to be weak and damaged coming out of the financial crisis. I think that would have made a big difference. And we were successful in relaxing some of the political constraints on that, but not successful enough.

Housing is, you know, tragically complicated the broad thrust of the programs we did were not large enough to offset a substantial part of the damage from a recession in which millions and millions of people lost their jobs. The approach we adopted, and we were trying to do the best with the available tools we had, was to try to make sure we brought mortgage rates down. We keep the housing mortgage market open and functioning, so that house prices would start rising again, people wouldn't suffer a massive additional loss of wealth.

Those programs, which were done as a result of GSE conservatorship which Hank oversaw and what the Fed was doing in monetary policy, they were very powerful. The programs we did to directly limit the risk people would lose their home unnecessarily, they helped 9 million people benefit from lower payments on their mortgages and millions of people refinanced who were underwater, but they were not large enough and they came late in the process. They came too late. And it would have been better if the stuff we learned in the process of trying to make those things work, we'd learned that more quickly and delivered it better.

MR. SORKIN: I know one of the issues that you think about a lot is Fannie and Freddie and how that you think ultimately did help homeowners.

SECRETARY PAULSON: I don't think it, it did. Imagine how far housing prices would have fallen if we didn't have mortgage funding during the financial crisis, and Fannie and Freddie were the only source of mortgage financing, so that made a very significant difference. So I just can't imagine what would have happened if they hadn't gone into conservatorship.

MR. SORKIN: What led you to go into conservatorship? I mean, what was the spark for that, the inflection point?

SECRETARY PAULSON: Well, the spark was these were these huge entities. They had like \$5.4 trillion in securities outstanding that were getting ready to implode. And, you know, their securities were 3.7 trillion in the U.S. and 1.7 trillion outside of the U.S., you know, just sort of flowed like water throughout the financial system, had been treated as if they had this implicit government guarantee. But these were entities that auctioned off sometimes 20 billion of debt in a week. They'd even had an auction that had gone wrong.

So I started working in the fall of 2006 with Barney Frank. We got permission from the Bush White House to compromise and to -- the President encouraged me to work out a compromise, and we were working for a long time. But it

took them at the end just getting ready to go down to have to go and get those emergency authorities.

MR. SORKIN: One of the reasons I asked you the question is I think about the geopolitical issues we deal with today and I remember in your book you write a sequence about a phone call that you got about the Chinese and the Russians.

SECRETARY PAULSON: Yeah, wow. Yeah, you got a good memory.

So that was, you know, we were talking all the time. I mean, Ben and Tim and I were talking with foreign counterparts. The Chinese were actually quite responsible during the financial crisis and the relationship we built with this strategic economic dialogue was very helpful.

So the anecdote you talk about illustrates how global these entities were because what had happened was it wasn't a phone call. It was we'd gone to Congress, we'd gotten these emergency authorities. We did not yet know how bad it was when you looked under the hood and it was terrible, much worse than anybody had expected. So I wasn't sure of the extent of the problem or what we were going to do to address it.

And I was in China on a short trip and a Chinese -- someone I was very close to, a very senior Chinese official took me aside and said the Russians had approached them and said let's start selling together and this will force the Treasury Secretary to use the emergency authorities, the so-called "bazooka." And I'm thinking to myself, you know, I don't even know the extent of the problem. We haven't come up with a solution to address it. That just put more pressure. And we were already rushing because we knew that there were a number of very unstable financial institutions, four or five of them, and we really wanted to stabilize Fannie or Freddie before they became unglued. So it really was an added incentive.

But you talk about scary moments, that was another one. Because here I was in China, so I couldn't pick up the phone and call back to the U.S. because my calls back to the U.S. -- and I couldn't say to Ben, Ben had a team of people in Fannie or

Freddie, and I couldn't say how bad is it, Ben? Because I didn't want the Chinese -- and I'm saying, oh, yeah, I think everything's going to be okay. (Laughter)

And they would listen to the phone, but my phone call would all be positive things and I couldn't talk about that call I had from the Russians. But as soon as I got back, wow, you know, that really gave me an incentive to get moving.

MR. SORKIN: Policy question on Fannie and Freddie for both of you. When Fannie and Freddie were put into conservatorship I can't imagine that anyone on this panel thought 10 years later that it still would be. Did you?

MR. BERNANKE: No, I guess I would have thought that by now there would have been some restructuring, but we also see the Congress is having difficulty making bipartisan policy decisions. And so I guess the job that Hank did was so good that it's been sustainable. (Laughter) You know, the housing market is functioning and the GSEs are functioning, so I think there'd be good arguments to do some reforms, but it's not an emergency and Congress is not working that effectively outside of emergency situations.

SECRETARY GEITHNER: And, you know, like many things in policy, the solutions are divisive. In our system it's sort of easy to -- inertia is like overwhelming when the solutions are divisive. But the system as it works today, it does work. It's a manageable problem. It's not the optimal solution. It'd be better to transition at some point in the future to a housing system where the government was not playing such a large role. But the government will have to play a meaningful role in the housing market in any recession.

And whatever you think about the long-term future of the GSEs, whatever you think about the design structures before the crisis, they're less fragile today, the incentives are better, and you will need them in the future to mitigate the risks of a future recession.

MR. SORKIN: You talked about things that are divisive and, as we said,

there continues to be a conversation about rescuing banks and TARP and what that looks like. One of the things we didn't talk about when we were talking about TARP before is the accountability of executives.

And I think that Barney Frank may still be here. I know one of the debates that you had early on, that he had with you, was around executive compensation. If you're going to hand over the money to the banks, you need to restrict the executive compensation. How should people think about that today?

SECRETARY PAULSON: Well, I was the one that dealt with that, and you need to start with what our plan was. What we wanted to do was get out quickly and recapitalize the system. And we had no power to force banks to take capital. In the world we were living in, a healthy bank could very quickly become a shaky bank if the economy continued to deteriorate or for certain banks if some banks went down.

So what we did was we, and I negotiated this with Congress, we agreed to certain restrictions on CEO compensation and golden parachutes, but we didn't accept restrictions on bankers' bonuses because otherwise the banks wouldn't have taken capital. And so what we did, we had something that worked extraordinarily well, but was extraordinarily unpopular.

So we had something that let us go out with lightning speed, put capital into 700 banks, and it turns out that that money that went into the banks and insurance companies all came back, plus a \$50 billion profit. But more importantly, it averted catastrophe. It kept the system from going down.

I would argue that it stands -- it was very novel, so it stands in stark contrast with what is historically done. What is historically done is you put capital into banks, you have punitive terms. And so the only banks that take it are those that have failed or are about to fail. That's what the Europeans did. The Brits put capital into two banks, the only ones that were willing to take it just as they were going down, and so their banking system remained undercapitalized long after ours and our recovery worked

much better. But this made what we did more unpopular.

And then what really hurt, really, really hurt, was after this was all done, in 2009, when the banks were earning big money, they turned around and paid big bonuses. And that was more than I could stomach, you know. It was -- I just thought it was beyond bad. But it showed a stunning lack of self-awareness and I think that threw fuel on the fire.

But so I'm saying we did -- we knew what the public wanted to hear, right? We may not be politicians, we may not be great communicators, but it didn't take much to know what the public wanted to hear. They wanted to be tough on bankers. They didn't want to reward the arsonists, et cetera. But we were trying to protect the public. And if we were dealing with a banking system after it had collapsed, okay, it would have been a lot easier to do the kinds of things they did at the time.

MR. SORKIN: Is there any room, either between everybody on this panel or even just in your own heads, to have done it any differently today?

MR. BERNANKE: On this question?

MR. SORKIN: On this question.

MR. BERNANKE: We're facing some very tough constraints, which is we wanted to keep the banking system alive and to put capital in the strong banks. And unless Congress is willing to give us the authority to force in capital, which we're not going to do, it had to be an all-voluntary program. So that did put some constraints on how punitive the terms could be, including things like insurance payments and so on. So that was the constraint that Hank was facing and a very tough one.

Now, the Fed and the other regulators did try to make some changes. For example, changing the structure of compensation so that you could get clawbacks, where after two or three years if you did a trade, you got paid for that, but if the trade went bad, then you had to pay back, you know, those kinds of things to make it a more longer-term type of relationship between performance and reward. So there were some

changes made in terms of how compensation is paid.

But there was always this problem that if you wanted to keep the banking system open and healthy, it had to be voluntary on the part of the stronger banks, and that put some constraints on what could be done.

SECRETARY PAULSON: Let me also say something here. I think fundamentally what we did was, even if we had constraints, was fundamentally unpopular, it crossed a red line. Putting capital into institutions in the U.S. has never been popular. And I look what other people did around the world, I don't think what the Europeans did -- the Europeans did all kinds of tough measures on compensation and I don't think what they did was any more popular. The fact is people don't like banks and during a financial crisis they really don't like banks. And yet, if you're too tough on the banking system, then you make it very hard on the public.

MR. SORKIN: What were you going to say?

SECRETARY GEITHNER: I think it's the central dilemma. It's why financial crises are typically so damaging is because most countries, most governments, faced with the politics of trying to prevent the system from collapsing, wait and they let it burn. And they get either too close to the edge of collapse or they let it collapse, so their only options are to nationalize. And that's fundamentally what turns financial -- that creates the risk of panics and what makes panics so damaging to the economy as a whole.

And, you know, we adopted a different strategy. We spent a lot of time looking at what countries had done across financial (inaudible) and we adopted a different strategy. And our strategy was to try to act earlier, a little more preemptively, not early enough because we didn't have the authority, but a little more preemptively, and to recognize that what makes sense in a normal, messy recession with respect to some individual bank failures doesn't work in a panic where the risk level is great. And that fundamental thing that what you need to do in a panic is sort of the opposite of what

seems fair and normal in normal times is the fundamental dilemma in the design of strategy. And it's why the gap between what is the most effective strategy to protect the broadest interests of the average person is so in conflict with the natural politics of the time or the general sense of what people think is moral and just.

MR. SORKIN: But again, the question, even embedded in there, is, yes, it worked and there was an efficiency to it. Would it have been as efficient or, even putting efficiency aside, was there an opportunity to do any part of it differently?

SECRETARY GEITHNER: I mean, not -- I think for the reasons Hank may have said, you know, if you decided to wait until the government owned very bank, they'd all collapsed or half of them collapsed or any bank, you would have vast degrees of freedom to try to figure out what you wanted to do. That would have been I think the irresponsible, immoral choice. So the paradox of this and the central dilemma, and I think the central lesson, of a financial crisis, because, again, you've seen all the alternative choice countries have made, is that it's better for the broader interest to act early, but it makes the politics harder to manage.

You know, where we nationalize institutions, where the government took the predominant ownership of the institutions, we did the classic, sensible things. We fired the management and the board. We limited dramatically future compensation. We did that where we had the option for doing it. But by just choosing a strategy that was designed to leave the system in private hands and get it back to functioning as quickly as possible, we left ourselves with limited choices to try to find a better balance between the politics.

MR. SORKIN: Let me ask you a policy question and there is no counterfactual to this, so we will never know and I imagine it's a confluence of all of these things. But from a priority perspective, if you were to talk about the importance of things that took place after the crisis, TARP is one of them, clearly; the stress test would be another. And I remind everybody the stock market continued to fall after TARP was

enacted. And then there was what the Fed was doing.

How do you rank those in priority order in terms of --

SECRETARY PAULSON: Left out the fiscal.

MR. SORKIN: And the fiscal piece.

MR. BERNANKE: Which is more important, a heartbeat or respiration?

(Laughter)

SECRETARY PAULSON: I tell you, though, I want to say one thing. I think what -- when I think about what I am really, really grateful for, you know, in terms of working with these two guys, it was just -- I could not have had better partners. But when I look at Ben Bernanke, chairman of the Fed, and you normally don't think of academic -- you know, when you talk about academia, you don't think or at least I don't think of courage. Right? (Laughter) Just show you my bias. But to me the courage, people forget how -- the extraordinary things they did and the withering criticism he was subjected to.

And so I would say overall, when I look at the recovery and the fact that we were growing at 2 percent from the third quarter of 2009, I think that's extraordinary. And so I don't think you -- you know, I think Ben gave the right answer, but in terms how do you -- you needed all of them. And without any one of those pieces, I think we would have been a lot worse. But I think Ben at the Fed to me was critically important.

MR. SORKIN: I want to talk about one of the big issues we have not mentioned yet and is probably one of the big mysteries, if not debates, that continues to linger 10 years later, and that is around Lehman Brothers. I want to read to you, this is editorial page, op-ed, *New York Times*, the morning after Lehman Brothers failed. And I should tell you the *Wall Street Journal* op-ed page was almost identical to this.

This is what the paper said: "It is oddly reassuring that the Treasury Department and Federal Reserve let Lehman Brothers fail, did not subsidize the distress sale of Merrill Lynch to Bank of America, and tried to line up loans for AIG rather than

make a loan themselves. Government intervention would have been seen either as a sign of extreme peril in the global financial system or of extreme weakness on the part of federal regulators."

And it's an interesting op-ed because going into that weekend, the conventional wisdom I imagine even in the room was that if Lehman Brothers failed, the market was prepared for it. No. You say no.

SECRETARY GEITHNER: I mean, let's just go back a little bit because it's important to go back. In March, Bear Sterns came to the edge of the abyss and we made the judgment then, a very important judgment we made then, which is that the system was so fragile that we were not confident it could sustain the effects of default by a substantial financial institution in that moment.

And we decided it was in the interest of the country to do what we could to reduce that risk, but we also decided that for a weak investment bank that lost the credibility of the market, undergoing a run, business is bleeding away, that the Fed alone had no option to save it by lending. That what we could do is try to find a willing buyer large enough to provide the mix of capital and guaranties necessary for them to get through this, to be absorbed into the larger hand.

In the Lehman case we made the same judgment. We thought it would be, although the system had a lot of time to adjust to the possibility of Lehman failing, the system was much more fragile. Lehman was larger. We thought it was necessary, again, to try to do everything we could to reduce the risk that they fail. But we thought our only option was to try to find a willing buyer and ultimate we failed in that.

Why did we fail in that? Because we were willing to make it -- to incent a willing buyer to acquire it. It failed because Lehman was much weaker. And the system was much more fragile, so the universe of plausible buyers was much more limited. And there was nobody really strong enough to be willing to step in, even with the prospect of some assistance. And that left us with no choice.

But we thought it was going to be bad and it was bad. It was much worse than we thought, what we envisioned. And, you know, it's a good lesson. It's good you began that. Remember, people thought it was a deep mistake for us to intervene to prevent Bear Sterns failing. And the predominant view prevailing, even in September with the system much closer to the edge of panic, was that it would be a mistake to prevent Lehman from failing. And there was a relief when we were -- they thought we chose not to present. And they were mistaken in their belief because it was our view that we should try to save them.

Our problem was that our means at that point -- and remember, we stretched the Fed's authority well beyond what most normal humans were comfortable with and that had proved deeply inadequate to save the system from the risk of a panic, from tipping into panic. Because we learned something that most countries over time, which is that, in the end, you need a more powerful mix of guaranties and capital to stop a run and to get a broken system going again.

And ultimately, Congress in its wisdom, largely to the credit of Hank and Ben, gave us a sufficient set of tools that we could avert the risk of a Great Depression, but not soon enough to give us the authority to prevent all the damage that happened.

MR. SORKIN: Mr. Chairman, speak to this. All three of you have just said that this wasn't really a choice when it came to the failure of Lehman, that you didn't have the ability, that you didn't have the authority to effectively save the company because you didn't believe that there was enough collateral.

That is a comment that was made several weeks after the failure of Lehman Brothers. In the moment it was not something that people in the room even remember being talked about. Speak to that issue because I think that there are still many people who don't believe and may never believe that this was not a choice.

MR. BERNANKE: Well, Tim has put out a very useful Q&A with Andrew Metrick on the details of the Lehman decision. We had only one tool, which was lending

against collateral. We were unable to put capital in. That would only come later with TARP. We were unable to give guaranties.

You had a situation where you had an investment -- this was not a commercial bank with a large amount of loans to use as collateral and with a sustainable level of funding, deposit insurance, and the like. This was an investment bank that was funded largely by short-term wholesale funding that had mostly encumbered collateral. Its assets were a mix of market assets whose businesses depended very heavily on instantaneous confidence because its customers, its counterparties were bleeding away very quickly.

And so it was not -- the thing I want to say is this was not some kind of narrow, legal judgment. It was not like saying, oh, we can do it, but it's just on the other side of legality. That wasn't the way we were thinking about it. We were thinking about it in terms of is it feasible? Is it viable?

And our fear was -- and I have to say that I was having conversations continuously. I was in Washington preparing for the FOMC meeting. I was talking continuously to Hank and to Tim. Our belief was that making a loan against the collateral that was available would at best sustain the company for a few days, that it was not a viable business, that all we would do is end up bringing a lot of bad assets under the Fed's balance sheet and maybe protect a few creditors. But it would not be sufficient to keep the company alive, and that was the critical element.

And so, again, not a narrow legal judgment. It was a judgment about feasibility, and that is something on which we have never wavered. I mean, I think that is -- you know, despite some contradictory opinions, I think that's also the overwhelming view of academics and judges and others who have looked at the future balance sheet.

MR. SORKIN: And when you hear people like Warren Buffett say, you know what? The Fed is the lender of last resort. Maybe it would have been legal, maybe it wouldn't have. I would have just done it and I would have let them sue me afterwards.

MR. BERNANKE: Well, he's a wonderful man, but he didn't have the information that we had.

SECRETARY GEITHNER: I mean, can I say slightly --

MR. SORKIN: Yeah, please.

SECRETARY GEITHNER: This is a really important thing because we live with this in the future. There's just a lot of magical thinking about what central banks can do and what protections they can provide. And can they provide some artificial support to asset prices? Can they levitate them? Can they save all these things? And that magical thinking persists throughout this. It was certainly true in the crisis.

But these tools the Fed were given were designed to be limited. And I have not seen the credible case that lending up to the value even generously determined of available collateral for a bleeding business with its assets underwater would have been effective in preventing its failure. Remember, we'd exhausted the universe of possible buyers.

So, you know, people think it was a different decision than we made (inaudible). It was the same decision. It was just a different outcome. It was the same decision because the judgment we made was the only choice was to try to find a stronger pair of hands to provide a mix of capital guaranties. The government could not provide that because TARP had not existed yet.

MR. SORKIN: Hank, should have you said that the day afterwards? Because I will say you left the impression --

SECRETARY PAULSON: I sure did.

MR. SORKIN: -- for some period that there was a choice being made here.

SECRETARY PAULSON: Yeah, I sure did. You know, communication is a very tricky thing during a financial crisis. And I was always looking toward saying something that would increase the market stability.

And that night, you know, Morgan Stanley's liquidity had been bleeding away. John Mack was on the phone with me Sunday night. I was in my hotel room. I got on a plane and flew back to Washington. And John Mack was saying I don't know how long we can live. The sharks are going to be all around us.

So I flew back and I got -- I found myself standing up in the White House Press Room. And I felt like if I said guess what, there's not a single power that the United States of America has that will save a disintegrating investment bank, and we did not have the authority to do it, I think Morgan Stanley would have gone down immediately. And that was my judgment, so I tried to put as good a face on it as I possibly could.

And the other thing I say now, and it's pretty clear to me now looking back at it 10 years later, that at the time we were desperately trying to get this done and we came quite close. And if we'd had a buyer with the banks that were going to take the bad assets, I think we would have been in a situation where the Fed could have made a Bear Sterns-type loan. And all of us would have rejoiced at that.

But as I look at it now, I get back to something that Ben says about the tools, the system was fragile. We had Merrill Lynch, AIG, Lehman going down on the same weekend. We had WAMU, Wachovia, Citigroup sitting out there. That there was so much dry tinder that regardless of what had happened, you know, if B of A had bought Lehman, then Merrill Lynch would have gone down and it would have been worse. We were ultimately -- it was going to take capital, guaranty authority, fiscal authority, we were ultimately going to have to go to Congress. So if it hadn't been Lehman, it would have been something else.

So it was a terrible outcome, but one thing it did do what it shocked the political system and we were able to go get TARP. And even then Congress voted down the -- the Republicans voted it down the first time. So it was nightmarish.

The one thing I can say with 100 percent certainty is that all three of us really -- we might not have known how bad it was going to be, but we knew it was going

to be bad, and we wanted to avoid it.

MR. SORKIN: Let me ask you about some of the politics of this at that time because there was pressure on everybody. We were in the middle of a presidential election, which people often seem to forget. As you said, the House did not pass TARP the first time. It was your own party that was making it difficult.

SECRETARY PAULSON: Thanks for that. (Laughter)

MR. SORKIN: When you look at the politics of today, if this crisis happened today, what do you think would happen? What do you think would happen?

SECRETARY PAULSON: Are you asking me?

MR. SORKIN: I'm asking anyone who wants to take it. But --

SECRETARY PAULSON: Well, I would say there's a lot of dysfunction in Washington today, no doubt about it. But I don't want -- I know what people expect me and want me to say, but I don't ever want to bet against the United States of America and our political system during a crisis. A crisis can bring people together.

And I was thinking back, you know, that when I came to Washington in July of 2006, a lot of things hadn't been going right for President Bush. And people talk about a low approval rating like 40 percent. Well, he was in the high 20s and this was a poisonous atmosphere.

And I remember going up to Congress and how poisonous it was early on. And I'm just saying I'm very grateful that we had a year before the crisis hit where I had a chance to get to know and get some things done with members of Congress. We were very lucky in terms of some of the people that were in leadership positions there, like Barney Frank and Chris Dodd and John Gregg. And I had a President that was really, really encouraging us to work on a bipartisan basis. So there's a lot of things that worked.

But a crisis can bring out the best, so, again, you're not going to get me to say we couldn't do it today. Because if we couldn't do it, it would be just catastrophic.

I can't imagine what would happen to our country if we hadn't got the TARP.

MR. SORKIN: Can I get either of you to say it? That was a joke.

SECRETARY GEITHNER: I mean, I think it's good to point out that the core of the financial system, I mean, the basic defense of capital and leverage restrictions and liquidity funding is really dramatically more conservative than it was in '07. And that will buy us a margin of safety for some period of time. And you want to make sure you preserve those defenses, you don't let them erode over time through changes in regulation or just falling behind the curve of innovation. But those are much stronger and much more broadly applied.

And we do have some tools we didn't have in '07 for dealing with a failing complicated institution. But the Congress also took away and limited some of the tools that were essential in this crisis and will be probably essential in any future crisis. And what the consequence of that means, independent of the politics of the moment, is that it has to get really terrible for Congress to be willing to provide the tools that you ultimately need.

And that means that as a country we're choosing to run a system that creates the risk again, at some point in the future, that things have to get really terrible again before there's the freedom to act. And that's the consequential choice. I don't think it's a choice made with intelligent design and great wisdom.

But even in a well-functioning political system with a bipartisan spirit of cooperation, where people focused on country above party, which I think largely was the case in the fall of '08, you choose to run a system without the (inaudible) freedom to fight a panic, it'll have to get terrible. You'll get too close to the risk of a Great Depression before Congress will ultimately authorize the authority.

And I think that's a choice no serious country makes around the world today. And I don't think it's the right choice for us as a country.

MR. SORKIN: Mr. Chairman, all three of you wrote an op-ed that ran in

the *New York Times* over the weekend speaking to this issue about the next crisis and what tools we have and what tools we don't have to deal with this. If, in fact, a large, major financial institution in this country had a significant problem, think of one of the top three or four banks in this country, do you think that we would actually follow through using the tools and methods that are laid out for us? Or do you think that there would be a political will at that point to say we can't roll the dice and see if this works? We're going to actually have to step in all over again.

MR. BERNANKE: Well, there have been some improvements and Tim mentioned, you know, stronger banks and higher capital and so on. I think an important improvement is this orderly liquidation authority, which gives a more systematic preprogrammed way to deal with a failing financial firm. Now, people have different views about how successful it would be, particularly in --

MR. SORKIN: In practice, right.

MR. BERNANKE: In practice in a crisis.

MR. SORKIN: Theoretically, it sounds great.

MR. BERNANKE: Yeah, I know, but I can tell you as a former bureaucrat that if you have a procedure that is in place and Congress has approved, you're certainly going to try it. You are going to try it. And I think we have somewhat different -- I think I'm a little more optimistic maybe than Tim and Hank. They can speak for themselves about this OLA process because I've talked to the FDIC about it and gotten some sense about how it would be put in practice.

But at a minimum, even we just were talking about Lehman, I think if we had had that OLA procedure it would not have eliminated the problem. It would not have solved the problem. But I think it would have created a more orderly and less destructive resolution than what the uncontrolled bankruptcy that, in fact, we had.

So I think, yes, it will be tried. And if you have a single firm that's in trouble and the rest of the system is broadly okay, I think it could very well work.

SECRETARY GEITHNER: Can I tell a story?

MR. BERNANKE: Yeah, please.

SECRETARY GEITHNER: I mean, this is a very elegantly designed set of tool with new authority that Congress made possible. But I think even in the wildest dreams of the architects of that authority it wasn't designed to say us from the risk of a panic. And when the FDIC first came to me when I was in the Treasury and walked me through how it work, and I asked them, well, how would it have worked if I applied it in the fall of '08? Would it have worked?

And they said -- I thought they were right about it -- they said, well, of course, we did it for one. The risk is you have to do it for four more. And the only way to offset the damage is for the Fed to lend freely to the financial system and ultimately for Congress to make it possible to guarantee liabilities of the system. So I think even at that point they were modest in their ambitions for it.

But it's a well-designed thing and, as Ben said, if you face a situation where the world is otherwise relatively stable and you have a single institution who's managed themselves to the edge of failure, yeah, you should let that process work.

MR. SORKIN: One of the issues we have not really talked about at all is QE1, 2, 3, and more. One of the great critiques of all of the programs post the crisis, but particularly QE, is this idea that it exacerbated and created an even greater sense of inequality in this country. And I hope you can speak to that. I know it's something you've thought a lot about and you've written about.

MR. BERNANKE: Yeah, I think there are some folks who don't like QE and as each argument fails, they move down the ladder. And so now you have hedge fund managers writing in the *Wall Street Journal* how QE's creating inequality, as if they cared. (Laughter)

I've never seen an academic paper that asserts that QE creates inequality. Yes, it supports asset prices as does any successful economic program

would cause stock prices to help recover. But it also has contributed to 16, 17 million new jobs. What is more important for the middle class than job creation?

It also supports house price increases. It lowers interest rates that borrowers, including mortgage borrowers, have to pay.

So I think the evidence of that is very, very limited. If, in fact, there are concerns about inequality, which, of course, there are, I think the right way to approach it is through fiscal policy. The Fed has a single tool, basically interest rate policy. Its job is to stabilize employment and to keep inflation close to target.

Again, I don't think it has first order effects on inequality, and they're transitory probably in any case. If there are concerns, which there are, then fiscal policy's the right way to deal with it. But I really think this is really a non-issue for QE.

MR. SORKIN: This is a follow-up question from someone in the audience who wrote it on a card. This is for Ben directly. How did you think about political pressure to undertake -- or not to undertake rather QE2? How did you factor that into policymaking? Did you consult congressional leadership?

MR. BERNANKE: No. We were unwillingly consulting congressional leadership because they sent us a letter saying not to do QE2, which we ignored because our mandate was to try to achieve full employment and price stability. And we felt that in order to do that we needed to take further steps. We no longer could cut interest rates further, so QE was, at that point, the only option we saw. So we did as the Fed is supposed to do, which is we made policy based on our mandate and our tools and we ignored the political advice.

MR. SORKIN: I want to talk to you all about potentially how you might see a future crisis. We have a question that's just come in that says will an increase in electronic trading and a decrease in market-making make the next crisis worse?

And I'd add that earlier this week J.P. Morgan wrote a report called what they are predicting as "The Great Liquidity Crisis." They say it'll hit financial markets. It'll

be marked by flash crashes in stock prices and social unrest. And that the trillion-dollar shift to passive investments -- computerized training strategies and electronic trading desks -- will exacerbate sudden severe drops. They go on to predict that, "Central banks will be forced to make unprecedeted moves, including direct purchase of equities or could even be negative income taxes." What do you guys think of that?

SECRETARY GEITHNER: I think the right way to think about the risks in the system is that there's no way to anticipate the full range of things that can cause a system to break down. There's no capacity to anticipate preempt. Where you can't run the system confident, you'll be able to anticipate preempt. There's a huge diversity of things that go bad.

And you should design the system so it's robust enough and resilient enough to withstand as broad a range of tests or shocks, whatever other source is possible. And that's what the reforms post-crisis have tried to do. But as I think we learned in the crisis, that requires not just a strong set of defenses in terms of capital and funding stability, but it requirements a strong emergency arsenal when those defenses fail.

So it's good to worry about all the potential sources of shocks, but you should be humble and skeptical about the ability of people to identify and, therefore, preemptively diffuse those things. You should work at it. It's a forever war. But recognize that in the end what you want to do is to make the system more resilient against the natural failures of people to be able to anticipate and preempt.

MR. SORKIN: Are there any areas that you think about, Hank, specific groups? And what do you think about this passive investment move that's really changed the face of the way the markets work?

SECRETARY PAULSON: So I'll make two. First of all, I ascribe to everything that Tim said. This is difficult to predict. I do believe that we tend to fight the last war and what I'm more concerned about, I'm not concerned about a problem in our

banking system where all the focus is.

So, sure, could some of those risks materialize? I am concerned about liquidity with -- banks aren't precluded from doing their traditional market-marketing role. I was never a big believer in the Volcker Rule. I thought that was not the right way to go. I'm more concerned about risks outside of the U.S.

But basically I come back to what Tim says. And so in addition to having the arsenal, I think it's important -- I look at it and say we've got the strongest, deepest, most competitive economy in the world. Fewer than problems in other economies, but we've got problems. And so I tend to think about it and say now when our economy is strong we should be moving to fix those problems.

And what I think about the problems that really concern -- and I would say basically the best defense we have against a financial crisis is having a strong economy. We're going to be less susceptible to the problem and we're going to be better able to respond.

And so I'm much more concerned with things like the fiscal deficit, dealing with that, because I think that debt bond is a big concern. And then I come back to some of the things that Ben talked about because I'm looking at some serious structural economic issues that predated the crisis, that contributed to the crisis, and continue unabated.

And this income disparity issue and with wages having been flat for so long, and as I look at the crisis, I mean, households had doubled their borrowing in the 10 years before the crisis because people were pressed. They were borrowing to live beyond their means.

So as I look at it, I think our economic system and our democracy have a hard time working with that level of disparity. And so to me fixing some of those problems and some of the issues like immigration that divide us politically and economically are the things where my focus is.

So rather than staying up at night trying to -- it was like I remember after the financial crisis, we're getting Goldman Sachs -- not the financial crisis, after 9-11. And we were getting Goldman Sachs up and going again. And I remember sitting around a room and people started brainstorming all the different ways that terrorists could kill us. You know, could they get in the water? What about the vents? What about whatever? And I finally said enough is enough. I mean, you're going to go nuts thinking about all of this. We've got to get Goldman Sachs up and going again and so on.

And I think here we could dream about all the different ways the next crisis could hit us, but the key thing is fixing our economy, making it as strong and resilient as possible, making sure we have the right defenses, and that's the right tools and that's the best you can hope for.

MR. SORKIN: Hank talked about a debt bomb, Ben. How do you feel about that? And how does that manifest itself ultimately?

MR. BERNANKE: Well, I don't think -- I'm not a debt hawk in the sense I think there's some imminent crisis or some kind of run on the dollar or anything like that likely.

SECRETARY PAULSON: Neither do I.

MR. BERNANKE: However, we are on a track whereby the share of GDP devoted to paying interest is going to be rising and rising and rising, and it's going to begin to swallow up the rest of the fiscal budget, which it's already beginning to do, and reduce our flexibility for whatever emergency we face, whether it's a war or a financial crisis or whatever it might be in the future. So it is a concerning in a long-term sense that we're not planning how to use our national resources for an aging society, for defense, for all the other things that we need to prepare for.

So I think it's more like an allocation of resources problem to me rather than a near-term financial crisis risk.

MR. SORKIN: So you worry about -- I mean, if every financial crisis

ultimately is about debt and it's about leveraging the system, where is it today?

SECRETARY GEITHNER: Well, the household sector has brought overall debt down pretty substantially relative to income. It's modestly higher in the corporate sector. It's dramatically lower in the financial sector. And the sovereign, the government's balance sheet, it's eroded somewhat, but we're still a tremendously in terms of the things that matter to overall fiscal sustainability.

So, you know, I think I would say that we're pretty fortunate in our mix of challenges relative those many countries face. And if you worry about the financial imbalances that typically create the dry tinder for a financial crisis, I would say you'd want to look largely outside the U.S. And we won't be -- can't be indifferent to; could be affected by those. But I think we have, probably because of the progress that was made in this country, I think we have the luxury as a country now to focus our resources and political capital on the whole range of other economic challenges that preceded the crisis and the crisis could not solve.

MR. SORKIN: Two more questions, one from the audience. I don't know if there are any more. Do you have some more, as well? It's really a follow-up to the question we had talked about earlier, this op-ed that you folks had written in the *New York Times* over the weekend.

This question says: "In the op-ed, related to the op-ed, what tools has Congress taken from the public specifically and why should we worry about it?" So what are the actual tools and if there are lobbyists in this room, we should go lobby to make sure those tools don't get taken away. What should they be lobbying for?

SECRETARY GEITHNER: A lot of the emergency authority, like the capital programs and TARP, expired. But what Congress did is limited the FDIC's ability to provide broad guarantees to the banking system without congressional approval, limited the Fed's ability to use its emergency authority to lend to individual non-bank financial institutions, like AIG or Bear Sterns, and put some limitations on the

effectiveness of those emergency tools and limited the Treasury's ability to use the Exchange Stabilization Fund to guarantee money markets, all things that were very valuable and essential in the crisis.

They could be restored quickly, but, you know, as we learned it's hard in a crisis even when things feel terrible to get the politics to work in favor of mustering the will to legislate. And it seems implausible now that this is a moment you could find the will to restore the -- strengthen the arsenal to what's typical across most countries. It seems implausible to say that, but I suspect the politics of that are easier in the moment today than they might be as you're slipping towards the abyss.

MR. SORKIN: An international question, specifically this one related to China, but we can broaden it out more broadly, as well. I'll ask it to our Chinaphile expert her, Hank Paulson. Is one of the intentions of this project to develop lessons for the perhaps inevitable financial crisis that may happen in China at some point in the future or is the Chinese system too different? And I'd also broaden it out to say what kind of lessons do we think that other foreign governments should be thinking about?

SECRETARY PAULSON: Well, first of all, I would say that the world is becoming a smaller place and we're very interconnected. So when you look if China were to have a serious economic issue, it would affect us in a number of ways because they're responsible for driving a good percentage of global economic growth. And so it's not just the U.S.-China relationship, number one.

Number two, and I think it's been well written about that there is a lot of leverage at the subnational level in China. So there are plenty of risks. These things are unpredictable. But China has the advantage that most of its debt is in renminbi, it's in their currency. They have a financial system that's relatively closed. They've got a strong fiscal situation with the national government. And their population doesn't have a lot of leverage. So I would be more focused on volatility there and what would happen.

China has not discovered a better economic model and they've got

plenty of problems. So I often tell people when they're looking at China that I think we're really right to -- you know, forgetting about tactics, because I might argue about tactics, but it is unacceptable for them not to continue to open their markets to competition.

But I don't discount the role that China plays in terms of the global economic system. It's a significant one. But I'm not predicting a financial crisis in China.

MR. SORKIN: Tim and Ben, how much of what took place here is applicable in other countries?

MR. BERNANKE: I think a lot of it is applicable. And I would mention again the Yale Program on Financial Stability which is trying to develop lessons not just from our crisis, but from dozens of other crisis. I mean, one of the things that was so interesting in some sense about our crisis was that it was an old-fashioned banking panic at some level except it took place in a very different institutional setup with electronic deposits as opposed to depositors running on the bank in the street. So many of the same principles, the same issues were there, but just in a different institutional setup.

And so I think it is actually very useful what the Yale program is doing to try to look at policy responses and what -- in a variety of contexts, both emerging market and advanced economies. And one of the things that comes out of that effort is that there are a lot of commonalities. This basic economics is kind of the same across panics. It's just that the institutional setups and the details are different, but we can learn. And during the crisis we looked at the experiences of Sweden and Japan and many other examples, trying to see what we could learn from their experiences.

SECRETARY GEITHNER: Not to be unfair to the generals, you know, people talk about generals and wars and the risk of just fighting the last war. If only. I mean, you know, these things they repeat. They have the same basic dynamics. They ultimately require the same basic solutions. They happen to countries around the world at a pretty tragic pace with tragic consequences, but they happen to the same country kind of rarely. Long intervals of relative stability before you have them, so memory fades

of what you need to do.

And one thing we're trying to do is to -- you know, Ben likes to say the enemy is forgetting -- is to try to preserve the body of knowledge that was created from the experience we had and other countries had in this crisis about what works, what doesn't, so that our successors and those in other countries have a better set of tools and they can narrow the gap between diagnosis and action in the future. That's our hope. But I think these are more common than you would like in their basic dynamics.

MR. SORKIN: Okay, so final question from me. We talked a lot about the policy stuff and you guys clearly -- and maybe it was the crisis itself, but you guys actually became genuinely good friends over all of these years, but I would argue even before that. All three are unique with unique distinctions and differences in terms of the kinds of people you might want in a perfect scenario in the midst of a crisis. How much do you think this is really not about the policies that we're talking about at all, but is about the people that are going to do it?

You know, you look today at an administration where there's leaks everywhere and everybody's backbiting and this and that. Maybe crises bring people together so that doesn't happen. But how much do you put this at the very individual level?

SECRETARY PAULSON: Well, I would just simply say the tools and authorities are important. People sitting in seats are also important. I think that I would just say looking at it personally, I couldn't have asked for two partners with these sort of extraordinary and complementary skills and backgrounds that Ben and Tim have. So I ask myself sometimes why did it work as well as it did with the three of us?

And we had a year beforehand. We communicated all the time. And they know I was on the phone probably too much, you know. (Laughter) So we communicated all the time. I think all three of us are by definition team players. I mean, that was -- all three of us are team players.

I think the fact, as I thought about it, that our backgrounds and experiences and personalities were so different made it work because in many ways we weren't competitive. We each had different things that we brought to the party and we appreciated what each other had.

We also were in a crisis. It helped also that we started with, big-time, that we started with the common philosophy that it was a risk we didn't want to take to have a major financial institution go down, so we never debated that.

So we were able to pool our -- and then we needed each other. It was in the middle of a crisis and we pooled our skills and our authorities and the tools we used. And then each person -- you know, partnerships don't work if you don't think everyone's pulling their weight. And so we each understood what the other was doing and we built sort of trust and confidence in each other.

But I look at it and I just can't tell you how much admiration I have for those two. But it is -- and it was institutional. We talked last night with our -- I mean, Ben laid down the law at the Fed, Tim at the New York Fed and then the Treasury. Tim always said I don't like peacocks. I want people, they got to be members of a team. And so I think that was important.

SECRETARY GEITHNER: I just want to say this really important thing, which is in our system of government where in the Executive Branch we replace the top four levels of government every time there's a change in the administration. The system depends a lot on the quality of people that occupy the Civil Service and particularly the Treasury, the talent at the FDIC, and the depth of talent and experience at the Fed and the New York Fed.

And I think one of the great advantages we had, I think -- and of course we admire each other and very lucky in our partnership and in the support of the two presidents we worked for. You know, I would say the huge advantage we had is that we had a team of people, exceptional integrity, smart, creative people who are just

overwhelmingly focused on trying to figure out what was the best of the bad choices.

What would be the most effective thing?

And that's something you have to sustain and preserve and nurture. You have to create the incentives that make it attractive and possible for people to come and spend a meaningful part of their lives in these institutions. And we're more dependent on that as a country because we replace a larger swatch of the government at these regular intervals. An important thing to recognize.

Again, we're pointing out the costs of letting the defenses weaken or erode over time, the importance of a broader arsenal, the importance of knowledge about what works. But, you know, a lot of this is about the depth of talent in the institutions that ultimately would be necessary in a crisis.

MR. SORKIN: Mr. Chairman, this is your house, you have the last word.

MR. BERNANKE: Well, it was a pleasure and an honor to work with these two men. I think one of the things that was important is the avoidance of turf battles. And if you look at military histories, you see even in a World War that the different services and the different groups are sometimes pushing against each other trying to protect their turf. We early on had a sufficient agreement about what the challenge was and what the risk was and that we had common goals. And we were willing to work for those common goals even sometimes at the expense of our individual bureaucracies or departments. So that was really critical.

And I was going to say and I want to reiterate what Tim said about the quality of the bench and the quality of the people who are doing the analysis. Because we talk about all these programs and these complicated capital injections and stress tests, these required dozens if not hundreds of people who understood the technicalities of banking and regulation and supervision, who were able to implement these programs successfully with, as far as I can recall, no scandals, no favoritism, no errors, nothing. It was just done extremely well. And the quality of that execution was actually a very

important part of this.

SECRETARY PAULSON: And they worked for no bonuses. (Laughter)

MR. SORKIN: We're going to leave it there. Chairman Bernanke, Secretary Paulson, Secretary Geithner, thank you.

SECRETARY PAULSON: Thank you.

MR. SORKIN: Thank you very, very much. (Applause)

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#### CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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