FORMER FED CHAIRMAN BEN BERNANKE REFLECTS ON HIS CAREER, THE ECONOMY, AND THE WAY FORWARD

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Excerpts from Dr. Bernanke's Remarks

Do you miss the power when you were running the Fed and running the financial world? No, not at all, because the power – [laughter].... Now I can get the newspaper in the morning, you know, look at the story and say, gee, that's a significant problem. Somebody ought to do something about that. [Laughter, chuckles.]
Do you ever say, well, geez, maybe I'll just send an email to Janet Yellen[1], say, here's some advice, or do you stay out of that? No, I wouldn't do that.
In high school, you got a 1590 out of 1600 on your SATs, the highest in the state. Missed one question.
You reveal in your book, that going to Harvard was not something that was on your mind, but an African-American who had befriended you had gone to Harvard, really persuaded you.... His name is Ken Manning... His family knew our family.... And Ken was and is a very brilliant, precocious man. And he had gone...to some kind of program, which got him eventually into Harvard, and then he went to Harvard Graduate School, and now he's an MIT professor. And he took it on himself, you know, to persuade my parents that I should go to Harvard. He pressed it and convinced everybody....
How was it at Harvard? I found economics, actually.... what I liked about it was that it was sort of a combination of humanities, you know, and how people live and how to help people, and so on the one hand, on the other side, of course, it was quantitative. And so I took it....
All of a sudden you get a call and say, would you like to be the Chairman of the Council of Economic Advisers? [The Council] provides the President and the executive branch with guidance on a whole variety of different issues related to economics. It's a great job. It's just a really interesting job, to be the Chairman of that. You get involved in all the policy discussions. So I was delighted to have – I mean, this was, as far as I'm concerned, one of the best jobs in Washington for an economist.
Then a call, would you be willing to consider being on the Fed board? I went to talk to the President [George W. Bush], and at one point he asked me a bunch of questions about...inflation and so on, he said, so do you have any political experience? And I said, well, sir, it won't count for much in this office, but I have served two terms as an elected member of the Montgomery

[1] Dr. Janet Yellen is Chair of the Federal Reserve Board of Governors.

Township, New Jersey, Board of Education. And he said, well, that counts for a lot. That's very important work.... And that was it. That sealed the deal. [Laughter.]....So he appointed me.

QUESTIONS BY PRESIDENT RUBENSTEIN ABOUT THE GREAT RECESSION OF 2008, WHICH IS THE SUBJECT OF DR. BERNANKE'S NEW BOOK; THE U.S. ECONOMY; AND OTHER POLICY ISSUES [Please see text for extended responses by Dr. Bernanke].
When did you realize that we were heading into a really serious recession?
In hindsight, is there anything that you could have done?
Now, under the law, as I understand it, it's now not possible to do again what you did with AIG[2] . Is that right?
So after the Lehman-AIG weekend, ultimately you just went to Congress for TARP[3] authority. Were you shocked when the House voted it down the first time?
in the end, how much money was put up under TARP for –
And how much did you get back for that?
Profit?
So when you first went up to Congress to explain to Congress, before the TARP actually passed, that the economy was going to collapse, what was the reaction of Members of Congress when you said it might go into a depression?
What do you think the economy's status is today? Are you worried about a recession? Are you worried about deflation? What is your greatest concern?
Are you worried about deflation and very low growth in Europe now?
So what about China? Are you comfortable that the numbers the Chinese government publishes as their official numbers are accurate? And are you worried about the Chinese economy's growth rate?
So do you foresee a situation in the United States ever where we have a negative interest rate?
The Fed has seven members, but for a while it's only had five members because the Senate doesn't seem to want to approve any more members. Can the Fed operate very long with just five members?
So any regrets about not seeking to stay longer as Chairman of the Fed, or were you happy you left when you left?
Now do you drive your own car?

DAVID M. RUBENSTEIN: Welcome, everybody, members and guests of The Economic Club of Washington, welcome to our ninth event of our 29th season. I'm David Rubenstein, president of The Economic Club of Washington. Welcome to this luncheon event in the Grand Ballroom of the Mandarin Oriental Washington, DC, Hotel. Welcome all.

We're very honored today to have as our special guest Ben Bernanke, who is a distinguished fellow in residence in economic studies at the Brookings Institution and also has

[2] AIG is American International Group.
[3] TARP is Troubled Asset Relief Program.

had another position in Washington, DC, as Chairman of the Federal Reserve Board of Governors. We're very honored to have Dr. Bernanke with us.

Dr. Bernanke served as the Chairman of the Federal Reserve Board from 2006 to 2014. He was the 14th Chairman of the Board. Before that he had a distinguished career in academic life and also in public service. So let me take you back to the beginning.

He is a native of Dillon, South Carolina. And how many people know where Dillon, South Carolina, is? OK. So you all know that's where South of the Border is. Well, if you drove down there in the 1970s, your waiter during the summers might have been Ben Bernanke – [laughter] – because he worked there as a waiter.

And he actually had a precocious career growing up there. He was so talented in first grade that after just two weeks in the first grade they skipped him to the second grade. That's pretty impressive.

He was the spelling bee champion of South Carolina and came to Washington, I think at the age of 13, to compete in the National Spelling Bee. But he didn't win, because he misspelled the word "edelweiss," and that's because "The Sound of Music" had never played in Dillon, South Carolina. [Laughter.]

In high school he was valedictorian of his class, not surprisingly, and had the highest SAT score in the entire state, got a scholarship to Harvard, went to Harvard, graduated *summa cum laude* in economics, not surprisingly, in 1975. In 1979 he got his Ph.D. at MIT.

From that point, he went to teach from 1979 to 1985 at the Graduate School of Business at Stanford and taught economics, and then he was lured back to the East Coast by Princeton University, which made him a tenured faculty member at the age of 31. He taught at Princeton Economics Department for many years and became, from 1998 to 2002, the chairman of that department.

Then he got a call from Glenn Hubbard asking whether he'd perhaps be interested in government service. He was recruited to serve on the Federal Reserve Board, where he served for several years, and then was recruited to serve as the Chairman of the Council of Economic Advisers under President Bush, From that position he then became Chairman of the Federal Reserve Board of Governors.

He is interested in many other things other than economics. One of them is baseball. He was originally a devoted Los Angeles Dodgers fan, then became a devoted Boston Red Sox fan, and now is a devoted, very committed Washington Nationals fan. [Laughter, applause.]

And I should say he's also a distinguished author. He's written many great books on economics. His specialty was the Great Depression. He later became, obviously, a specialist in the Great Recession. We'll talk about that as well.

But I would like to recommend this book that he's written and I have read – and it's quite good – *The Courage to Act*, which he actually wrote himself. Everybody who writes a book these days doesn't write himself, but he did. And I highly recommend it if you want to get a picture of what happened during those days, the Great Recession.

So let's start, and thank you very much for coming.

BEN S. BERNANKE: That was an unbelievable recitation of my CV. [Laughter.]

MR. RUBENSTEIN: Well, it was pretty – pretty accurate. I don't know.

DR. BERNANKE: Yes, exactly.

MR. RUBENSTEIN: So one day you wake up and you're the most powerful man in the financial world, and the next day you're driving your car to Brookings. So do you really miss the power that you had in those days when you were running the Fed and running the financial world?

DR. BERNANKE: No, not at all, because the power – [laughter] – there's the power over here and the responsibility over here, you know. Now I can get the newspaper in the morning, you know, look at the story and say, gee, that's a significant problem. Somebody ought to do something about that. [Laughter, chuckles.]

MR. RUBENSTEIN: Well, and thinking about that, do you ever say, well, geez, maybe I'll just send an email to Janet Yellen, say, here's some advice, or do you stay out of that?

DR. BERNANKE: No, I wouldn't do that.

MR. RUBENSTEIN: Did any of your predecessors ever call you with advice?

MR. BERNANKE: No. No, I mean, I met occasionally with Alan [Greenspan] and with Paul [Volcker], more as a courtesy than anything else. The only advice I got from Alan was, the last day before he left, we had breakfast together in his private dining room up by the cafeteria at the Fed, and he said, the one thing I would tell you, he says, always sit at the table so you can see the clock, because then you know when the meeting is over, and you can get to your next meetings. So that was pretty much all the advice I got. [Laughter.]

MR. RUBENSTEIN: All right. Well, that's good. Well, that was pretty good advice.

DR. BERNANKE: Yeah.

MR. RUBENSTEIN: So I do want to get into the Great Recession and so forth, but I feel you have such an interesting background, I just would like to go through some of the things I mentioned. What was it like growing up in Dillon, South Carolina? It's not a big metropolis. You were a very modest-sized Jewish community there. So what was it like? And did you actually serve dinners and so forth at South of the Border?

DR. BERNANKE: Well, sure. So my family had been there since 1941, when my grandfather moved and bought a drugstore there. And my father and uncle were the town pharmacists. They were known as Dr. Mort and Dr. Phil, because there was only like one doctor in the entire town –

MR. RUBENSTEIN: Right.

DR. BERNANKE: – and so people would come to them and ask them for, you know, medical advice of various kinds.

And it was a small Jewish community. We had – I don't know – about 50 people within a 20-mile radius. So in some ways it was like being a fish out of water, and that made me want to look at the bigger world.

MR. RUBENSTEIN: Right.

DR. BERNANKE: But in other ways it was actually a very interesting formative experience, because, you know, it's not a rich area. A lot of people work really hard. I worked construction. I waited tables. I did wait on tables at South of the Border. I was even Pedro. And Pedro is the – [laughter] – the mascot.

MR. RUBENSTEIN: Right.

DR. BERNANKE: And you could tell by my coloring and my beard, you know, I actually had the right look. [Laughter.] So I did that a couple of times.

MR. RUBENSTEIN: So who were the best tippers in those days?

DR. BERNANKE: South of the Border – it's south of the North Carolina-South Carolina border. It's halfway between New York and Miami. And so you had the snowbirds coming down, you know, driving down –

MR. RUBENSTEIN: Right.

DR. BERNANKE: – and it was a two-day drive in those days. People didn't fly. And they would stop and stay overnight south of the border.

So these guys, you know, you know, New Jersey, New York, those were the best tippers. Southerners are wonderful, hospitable people, but they are lousy tippers. [Laughter.]

MR. RUBENSTEIN: So I guess the private equity people – they were good tippers, right? [Laughter.]

DR. BERNANKE: Well, they didn't identify themselves at the time. [Laughter.]

MR. RUBENSTEIN: All right.

DR. BERNANKE: Did they have private equity? [Chuckles.] No.

MR. RUBENSTEIN: No. So – OK. So you do extremely well. And I want to make sure I got the facts right. On "edelweiss," did –

DR. BERNANKE: Yes.

MR. RUBENSTEIN: – you never heard of the word, I assume, when you were asked –

DR. BERNANKE: No, I did not. I did not.

MR. RUBENSTEIN: But you were the spelling bee champion of South Carolina.

DR. BERNANKE: I was indeed. I was indeed. And I was very disappointed at losing –the national finals was in the Mayflower Hotel, not too far from here.

MR. RUBENSTEIN: Right.

DR. BERNANKE: And I missed that word, and I was very disappointed, because the winner got to be in the Ed Sullivan audience and acknowledged from the stage by Ed Sullivan.

MR. RUBENSTEIN: Wow.

DR. BERNANKE: So that was like –

MR. RUBENSTEIN: But whoever won probably didn't wind up becoming Chairman of the Federal Reserve. [Laughter.]

DR. BERNANKE: No. Spelling is not the major qualification. [Laughter.]

MR. RUBENSTEIN: Right, right. OK. Right. So when you were in high school, you got a 1590 out of 1600 on your SATs, the highest in the state. So –

DR. BERNANKE: Missed one question.

MR. RUBENSTEIN: Missed one – well, do you ever wonder what it was?

DR. BERNANKE: I have no idea.

MR. RUBENSTEIN: So did you practice – like today a lot of people have these tutors and so forth. Did you have a lot of tutoring?

DR. BERNANKE: No, I didn't even know what was going on. It was like, what are we doing in March? You know, are we going to go over to take this – OK. Yeah. OK. I don't know. So I'm good at taking tests, actually, but – not everything in the world, but some things I can do.

MR. RUBENSTEIN: So it turns out, you reveal in your book, that going to Harvard was not something that was on your mind, but an African-American who had befriended you had gone to Harvard, really persuaded you – and I point that out because, you know, it wasn't actually the case that, let's say, a lot of African-Americans were mixing with white Jewish families in those days.

DR. BERNANKE: No. No.

MR. RUBENSTEIN: How did this friend become so close to you?

DR. BERNANKE: Well, his name is Ken Manning, and he's now a professor at MIT. And his family knew our family through the drugstore, where they traded. And Ken was and is a very brilliant, precocious man. And he had gone several years earlier to some kind of program, which got him eventually into Harvard, and then he went to Harvard Graduate School, and now he's an MIT professor, as I said. And he took it on himself, you know, to persuade my parents that I should go to Harvard. And at the time, I had no idea of how that might happen, and he sort of pressed it and convinced everybody and –

MR. RUBENSTEIN: So you applied and you got in?

DR. BERNANKE: Yeah.

MR. RUBENSTEIN: Did you apply anywhere else, or –

DR. BERNANKE: No, I applied a lot of places, yeah. I did OK.

MR. RUBENSTEIN: I assume you got in everywhere, of course.

DR. BERNANKE: I did OK, yeah.

MR. RUBENSTEIN: And so the story is that your mother was afraid you might lose your Jewish identity if you went to Harvard. Didn't she know everybody at Harvard is Jewish – [laughter] – or she didn't know that?

DR. BERNANKE: I don't know. Maybe it wasn't quite as true in 1971. Actually, she was most afraid that I didn't have the right clothes. So she had this image of like 1950s Harvard, you know, where people have little beanies, and they're all dressed up, and they have valets and everything, you know. But of course in the '70s at Harvard everybody was wearing blue jeans –

MR. RUBENSTEIN: Right.

DR. BERNANKE: – and smoking dope and all kind of stuff. [Laughter.] Anyway, so if she'd known that, I wouldn't have gone at all, probably. [Laughter.] But –

MR. RUBENSTEIN: So you get to Harvard, and a lot of kids from fancy prep schools and so forth. So were you intimidated, or not really?

DR. BERNANKE: Sure. Sure I was. And I didn't do that well at the beginning, because I had never – you know, never had learned how to study, never – you know, I was way behind in all my classes and everything, so it took a while.

MR. RUBENSTEIN: So you graduated *summa cum laude*, so you must have turned things around.

DR. BERNANKE: I did – I did turn it around. [Laughter.] I found economics, actually. One of my problems was I had no idea what I wanted to study. Everything looked interesting to me, so I would be taking all kinds of things all over the place. And then I took some economics courses. Actually, the professor in my econ course was Marty Feldstein, who is still a prominent economist. And what I liked about it was that it was sort of a combination of humanities, you know, and how people live and how to help people, and so on the one hand, on the other side, of course, it was quantitative. And so I took it – thought of it as a compromise between all the other things I was interested in, but I really enjoyed it.

MR. RUBENSTEIN: And so then you had the choice: Do you go to get your Ph.D. at Harvard or MIT? And MIT was the place you chose. How come you chose to go to MIT?

DR. BERNANKE: Well, Dale Jorgenson, who was my senior thesis adviser at Harvard, you know, said, go to MIT; it's the best place.

MIT is very interesting because we wouldn't expect to see a top economics department in an engineering school, but Paul Samuelson, the famous economist, had come there as a young man, and he'd brought others there. And at the time, when I was there, it was really a hothouse of talent and I learned a lot from – you know, you were just describing your acquaintance Ken Rogoff, who is a professor at Harvard –

MR. RUBENSTEIN: Right.

DR. BERNANKE: And there's just this sort of a – that was sort of the kind of people that we were –

MR. RUBENSTEIN: But you never played him in chess, though, right?

DR. BERNANKE: I did play him once. We're really off-topic here, David, but – [laughter] – Ken at one time had the record for simultaneous blindfolded chess games – 16 simultaneous blindfolded chess games. So in a party we had at our house, we decided, we have five, six people here, you know, let him – so he would sit in the kitchen and call out – you know, we would all be out in the other room, moving our – and I was the last guy to fall. But at the time I felt it was like being rolled over by a steamroller. I mean, he was just unbelievable.

So he was a terrific chess player. He knew Bobby Fischer. But he decided to be an economist, and I think he probably made a good career choice, actually.

MR. RUBENSTEIN: OK. A higher calling.

DR. BERNANKE: Yeah.

MR. RUBENSTEIN: So you got your Ph.D. at MIT, and then why did you decide to go to the West Coast, to Stanford?

DR. BERNANKE: Well, because a lot of exciting things were happening out there, you know, a lot of interesting people, and it didn't hurt that they were offering a lot more money. That wasn't a bad thing either – [laughter] – you know, about –

MR. RUBENSTEIN: Right. [Laughter.]

DR. BERNANKE: So it was actually a really good place to go, because there was a lot of interesting work going on that was useful to me in thinking about the issues of credit and finance that I wanted to study.

MR. RUBENSTEIN: So I should have said that while you were at MIT you met your wife on a blind date –

DR. BERNANKE: Mmm hmm. [Affirmative.]

MR. RUBENSTEIN: – and you proposed to her just two months later.

DR. BERNANKE: Yeah, yeah.

MR. RUBENSTEIN: Well, that's unusual, that your –

DR. BERNANKE: Is it? I don't know. I –

MR. RUBENSTEIN: Two months is a long time. [Laughter.] I waited about seven years. [Laughter.] But anyway –

DR. BERNANKE: No, I'm a decisive guy.

MR. RUBENSTEIN: OK.

DR. BERNANKE: Yeah.

MR. RUBENSTEIN: All right. So you're at Stanford. You have an opportunity to be a tenured professor there. At the age of 31 you get an offer to go back to Princeton. Why did you decide to move back East?

DR. BERNANKE: Tough call. Lot of good people. There were some – Princeton was a very good department. But you know, we'd been at Stanford, California, for six years. We had young kids. My wife said Princeton would be a great place to raise kids, which it was. And so we ended up going back there, but I don't regret it. I like both places quite a bit, still visit them both.

MR. RUBENSTEIN: And you say in your book that you ultimately became the Chairman of the Economics Department, and your big decision was whether you have doughnuts or bagels at the economic conference meetings.

DR. BERNANKE: That was very contentious, yes. [Laughter.]

MR. RUBENSTEIN: So how did you decide to specialize in the Great Depression as an area of expertise?

DR. BERNANKE: Well, it actually probably goes back to in graduate school – you didn't mention Stan Fischer, who was my thesis adviser, Ph.D. adviser in at MIT. People probably know he's now the Vice Chairman of the Fed, and he was previously also the Central Bank Governor in Israel.

But I went to see him, and I asked him, you know, should I take up macroeconomics and monetary economics. And he said – he gave me a copy – an 800-page book – of Friedman and Schwartz's famous *Monetary History of the United States*, and he said, take this book, and if you can get through it without falling asleep, you should be a monetary economist. And I read the book, and it was about the history of monetary policy and monetary economics in the United States going back to the Civil War, and including a lot of interesting stuff on the Great Depression. And I just was so fascinated by it, and the thing about monetary economics is that this is stuff that really matters. It really affects people's lives in really palpable ways, and the Great Depression just being one example where monetary policy and other issues related to the gold standard and the like helped drive the country and the world into a 12-year depression, which in turn led to World War II and so on.

So it was very exciting to me, and the Depression was a great puzzle, trying to understand how that could happen. And so I majored in these things and began to write about history. And I must say that one of the great lessons I learned was that the world is complicated, and history is a very important lens to look at, you know, what's going on.

MR. RUBENSTEIN: OK. So you rise up. You're at Princeton. You're doing well. You're an expert in the Depression and probably the Nation's greatest expert on the Great Depression. And then you get a call from Glenn Hubbard, who I think was then the head of the Council of Economic Advisers for President Bush 43, says, would you like to go into public service? And how did it come about that you got the meeting with President Bush? And how was your meeting with President Bush?

DR. BERNANKE: Well, they were trying to fill a spot on the Board of Governors[4]. People probably know that the board has seven people who are appointed by the President, confirmed by the Senate, and the Chairman is one member of that seven-person board.

MR. RUBENSTEIN: Right.

DR. BERNANKE: And they had a two-year spot, basically, there, and the question was, would I be willing to consider being on the Fed board? And I thought to myself, well, you know, I'm studying monetary policy my whole career. Maybe here's a chance to do something with it.

And so I said I would interview, and I went down to Washington. I talked to Josh Bolten, President Bush's adviser, who is actually – I saw here today. But then I went to talk to the President, and at one point he asked me a bunch of questions about –

MR. RUBENSTEIN: Did he ask you any question that stumped you on the –

DR. BERNANKE: No, no, he didn't ask me – but eventually, after we got through – after we got through the sort of simple questions about inflation and so on, he said, so do you have any political experience? And I said, well, sir, it won't count for much in this office, but I have served two terms as an elected member of the Montgomery Township, New Jersey, Board of Education. And he said, well, that counts for a lot. That's very important work.

MR. RUBENSTEIN: Right.

DR. BERNANKE: And that was it. That sealed the deal. [Laughter.]

MR. RUBENSTEIN: All right. Wow. OK.

DR. BERNANKE: So he appointed me, and I explained to my wife that this was only going to be a temporary thing, a couple years, I'd come back, and we kept our home in New Jersey, and I would drive home every weekend.

MR. RUBENSTEIN: Right.

DR. BERNANKE: And I had an opportunity to be on the board and to work with Alan Greenspan and the people who were there at the time.

MR. RUBENSTEIN: OK. So you're doing that, and then all of a sudden you get a call and say, would you like to be the Chairman of the Council of Economic Advisers? I guess Glenn Hubbard was leaving. And did you have any second thoughts about that?

DR. BERNANKE: No. See, the Chairman of the Council of Economic Advisers, which – by the way, happened this week – we're going to have an event in Brookings, you know, commemorating the 70th anniversary of that institution – it's like an internal consulting firm

[4] President Rubenstein had asked Dr. Bernanke about joining the Council of Economic Advisors. Apparently Dr. Bernanke thought the question was about membership on the Board of Governors of the Federal Reserve System.

inside the White House. And what it does is it provides the President and the executive branch with guidance on a whole variety of different issues related to economics. And it's a great job. It's just a really interesting job, to be the Chairman of that. You get involved in all the policy discussions.

So I was delighted to have – I mean, this was, as far as I'm concerned, one of the best jobs in Washington for an economist. And so I expressed interest, and I told Princeton, you know, three years, not two, but I promised to be back. And I went over and I was the council chairman for a while.

MR. RUBENSTEIN: OK. So when you were doing that, you were meeting with the President, and I understand from time to time he would point out that you, you know, wearing a dark – you wear a dark suit –

DR. BERNANKE: [Chuckles.] No.

MR. RUBENSTEIN: – but you had brown socks, and he said, where did you get those brown socks? And you explained where you got those brown socks.

DR. BERNANKE: Well, they were tan socks.

MR. RUBENSTEIN: Tan. Sorry.

DR. BERNANKE: Let's be historically accurate.

And I was in a meeting in the Oval Office, and I was trying to explain something, you know, and I was – in my usual very high-class way I was wearing a gray suit and tan socks. And he – the President, you know, I was nattering away about the GDP[5] or something, and he leaned over, and he pulled up my pants leg, and he said, you know, man, he says, this is the White House. He said, we have certain standards here. [Laughter.] And why are you wearing tan socks with a brown or gray suit, as the case may be, and I said, Mr. President, well, I got them four for $10 at the Gap – [laughter] – and this is a fiscally conservative Administration, and so on.

So anyway, so that was basically the end of that part of the meeting, and then we went on to some other things. [Laughter.] But overnight I conferred with Keith Hennessey, who was the deputy NEC[6] director, and the next day, when the President walked into the Oval Office, every man in the room, including Vice President Cheney, was sitting like this – [demonstrates] – and wearing tan socks.

MR. RUBENSTEIN: Tan socks. Wow. [Laughter.] OK, but you've given up tan socks for –

DR. BERNANKE: I have. I can afford the black ones now.

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[5] GDP is gross domestic product.
[6] NEC is National Economic Council..

MR. RUBENSTEIN: OK. Right. OK. All right. [Laughter.] Right. OK.

So after doing that for about two years, obviously the President was impressed with your capabilities, and he asked you if you'd like to be the Chairman of the Federal Reserve, replacing Alan Greenspan. And you accepted, and you were confirmed.

So when you become the Chairman, is it much different than being on the Federal Reserve Board? And how did you deal with the difference?

DR. BERNANKE: No, it's very different. I mean, it's the same institution, the same issues, but the Chair has obviously leadership responsibility, and the Fed is a consensus organization. The Chair has to lead that consensus building.

The other thing that surprised me – and it shouldn't have surprised me so much – was that being Chair has a very heavy political component to it, in the sense that the chair has to confer frequently with both the executive branch and the Congress. I spent a lot of time, you know, not just testifying, as Janet Yellen is today, but meeting individually with Congressmen on the phone, you know, trying to keep people apprised of what was happening and hearing from them what their thoughts were. So that was a very big difference, in my experience.

MR. RUBENSTEIN: All right. So you're the Chairman of the Federal Reserve Board, a great job, one you probably never anticipated getting when you were teaching at Princeton or so forth, and then all of a sudden the economy begins to go South. When did you realize we were heading into a really serious recession?

DR. BERNANKE: Well, the recession came after the crisis. I think one misconception about the crisis is that it was all about subprime mortgages. Subprime mortgages – we saw that, we understood that – at least in 2006, you know, shortly after I became Chair, we talked about that; in 2007 we talked about that.

But you know, the subprime mortgage crisis was important, but it was more like a trigger. It was sort of like the pebble that started the avalanche.

MR. RUBENSTEIN: Right.

DR. BERNANKE: So as late as, you know, spring of 2007, even though I was testifying and talking about subprime mortgages, talking about foreclosures, about these concerns, about these issues, you know, we did not at that point think that the whole financial system was going to implode.

MR. RUBENSTEIN: OK.

DR. BERNANKE: Of course in the summer of '07 there were a couple of hedge funds that were closed by Bear Stearns, and in August of '07 BNP Paribas announced that it couldn't value its subprime securities. And beyond that point, in the fall of '07 the stress in the financial markets began to get much more severe, and at that point – I think it would have been sort of the end of

August ’07 –our focus was switched away from worrying about inflation, which was a problem, toward trying to address the budding crisis, which was just spreading out from the subprime into the whole credit market.

MR. RUBENSTEIN: So one weekend, the famous weekend, I guess you’re told there’s a problem at AIG[7] and a problem as well at Lehman Brothers. So what was that weekend like?

DR. BERNANKE: Well, that’s a year later already. This is September of ’08, and by this time, we had been through the acquisition of Bear Stearns and all the controversy that that spawned. We had been through the takeover of Fannie and Freddie. And it was clear at that point that the financial panic was building.

I mean, one of the things that I learned from my studying of history was about the importance of banking panics or financial panics, which was something that plagued the U.S. economy going way back into the Revolution, practically. And that’s what was building in the U.S. Creditors, suppliers of funds were withdrawing – it was essentially a bank run. And it was getting very bad, and by mid-September of 2008 we understood we were in a very serious situation.

It’s worth noting that, you know, going into Lehman weekend, that the strong prevailing opinion by journalists in the media and by economic writers and so on was that it was time to let a company fail. *The Wall Street Journal* said, you know, if we believe in capitalism, we have to let this company fail. *Financial Times* said Secretary Paulson ought to take the weekend off. So that was basically the mindset at that point.

We had just come from Jackson Hole, which is the annual meeting of the Fed and other central banks, in Wyoming, and there the very strong view had been, we’ve got to stop this bailout stuff. You got to let it go.

We didn’t buy it. We really didn’t buy it. We were afraid that if Lehman collapsed, that it would make the crisis much worse, and it would just create more fear, and we didn’t know what consequences it would have.

So we did try very, very hard to prevent the failure. We had 12 Wall Street firms – major Wall Street firms represented by their CEOs – at the New York Fed. And we had two potential buyers for Lehman: Bank of America and Barclays.

And you know the story, basically. There were essentially three tools that we used through the crisis to prevent firms from failing. One was to put capital in from TARP[8]. That, of course, didn’t come till later, so we didn’t have the capital.

Second was to have the firm acquired by another firm, as we did with Bear Stearns, for example, but you know, Bank of America basically said, there’s such a big hole in the balance sheet, we can’t conceivably do this, unless you give us, you know, a gift of a lot of money.

[7] AIG is American International Group.
[8] TARP is **Troubled Asset Relief Program.**

The third method, which actually worked for AIG, was making a loan against good collateral. And Lehman was collapsing; it didn't really have any going value concern, and it didn't have enough collateral to justify or to sustain a loan.

So essentially we didn't have any way to save the company, and consequently it failed. I think the consequences of it were even worse than we thought, but we were certainly aware that it was going to be very, very dangerous.

MR. RUBENSTEIN: But in hindsight, is there anything that you could have done? I understand what you said, and in the books by Mr. Paulson and Tim Geithner, they consistently say there was nothing you could do, but now in hindsight, is there anything you think you could have done that could have saved –

DR. BERNANKE: I really don't think so. I mean, the ex post facto analysis of Lehman showed that it really was a bankrupt company –

MR. RUBENSTEIN: All right.

DR. BERNANKE: – and that indeed there were accounting issues, Repo 105 and things like that, that turned out to make the problems even worse than we thought, because they'd been disguised in various ways.

MR. RUBENSTEIN: OK.

DR. BERNANKE: Let me say, in a broader sense, I think it was kind of inevitable in the following way, which was that after Lehman failed, that's when the government, when Congress said, OK, we've got to take strong action. And that's ultimately where TARP came from and so on.

I think if somehow or another miraculously we had saved Lehman, the next thing would have gone. But so – on AIG, that same weekend you are able to save AIG. Any regrets about that? And now, under the law, as I understand it, it's now not possible to do again what you did with AIG. Is that right?

DR. BERNANKE: That's right. So no, I don't have any regrets. I think that given that Lehman had already put the system into cardiac arrest, I think AIG's collapse would have made things significantly worse. I thought it was a very tough – it was a very tough experience. I remember Paulson and I going to President Bush and – you know, and Paulson had talked to the President and explained what was likely to happen. But we had to go to him together and say, you know, we have to lend $85 billion to a failing insurance company in the middle of a financial crisis. How's that sound? [Laughter.]

And to his credit – I mean, to his credit, President Bush, you know, said, you got to do what you got to do, you know, and you do it. I'll explain it. But you need to go talk to Congress.

So Paulson and I went to an ad hoc meeting of the senior members of the Banking and Finance Committees, from Senate/House leadership. We went over there, and we had about 20 people. We were explaining, you know, what was happening, what we thought we had to do, and we were taking questions, you know. Will it stop the crisis? We don't know. Will you get your money back? Well, we hope so.

After a while, with questions sort of petered out, and Senator Reid, you know, had sort of his face in his hands, and at this point he looked at me and Paulson. He said, Mr. Secretary, Mr. Chairman, he says, I want to thank you for coming over here and explaining all this to us – it's been very helpful – and for taking our questions, he said. But he said, I want you to understand one thing. Nothing you've heard here tonight constitutes congressional approval for what you're about to do. He said, this is your decision and your responsibility.

[Chuckling.] And that was a very, very lonely feeling, I have to tell you But again, I think that while it – while it – the AIG was the gift that kept on giving. You know, we had the bonuses and all these other things that were just such terrible political disasters. But again, I do feel that if we had not done it, that it would have been even worse.

MR. RUBENSTEIN: It would have been worse.

DR. BERNANKE: Now just to answer the other part of your question, the changes that had been made to the Fed's emergency lending authority, so-called 13(3) authority, would now prohibit that. But importantly – and we supported this – that has been replaced by a more formal mechanism, called the orderly liquidation authority, that would allow the Fed and the FDIC[9] to put a failing firm into receivership in a way that would take into account the implications to the rest of the system.

MR. RUBENSTEIN: OK.

DR. BERNANKE: So I personally am much more comfortable with us – with having that, because then the Fed wouldn't have to take all this responsibility. It would be a much more formal and preapproved approach. And so no, I'm not concerned at all about the loss of that authority.

MR. RUBENSTEIN: So after the Lehman-AIG weekend, ultimately you just went to Congress for TARP authority. Were you shocked when the House voted it down the first time?

DR. BERNANKE: Well, very unhappy, not completely shocked. I mean, obviously it was very unpopular. I talk in the book about calling a senator and saying, you know, how are your constituent calls going on this TARP issue? And the senator said, well, it's 50-50. He said, 50 percent "no" and 50 percent "hell no." [Chuckles, laughter.]

But I just have to say that, you know, while TARP is still poison and, you know, on the campaign trail, if you voted for TARP, you know, it's a terrible thing, it was one of the most

[9] FDIC is Federal Deposit Insurance Corporation.

successful programs the government's ever put in place. It stopped the crisis, it stabilized the financial system, and it made a profit. I mean, so obviously very unpopular, and I'm glad that there are now better methods for dealing with these problems, but I think it was necessary.

MR. RUBENSTEIN: Well, in the end, how much money was put up under TARP for –

DR. BERNANKE: Well, the total amount, $ 700 billion, was allocated. But I think – in terms of banks, I think it was on the order of $250 billion.

MR. RUBENSTEIN: And how much did you get back for that?

DR. BERNANKE: Got every penny back, with interest.

MR. RUBENSTEIN: Profit?

DR. BERNANKE: And profit, yeah.

MR. RUBENSTEIN: So when you first went up to Congress to explain to Congress, before the TARP actually passed, that the economy was going to collapse, what was the reaction of Members of Congress when you said it might go into a depression?

DR. BERNANKE: Well, they looked pretty pale, you know. [Chuckles.] You know, we went and we explained, Paulson and I, and Chris Cox, who was the head of the SEC[10] – we explained. And I was the one who had to explain what the economic consequences might be of a complete meltdown in the financial system. And you know, I tried to draw on my history and so on. So I talked about the Depression, but I also talked about other experiences, like Japan and Sweden's crisis in the '90s and so on, and I shook them up pretty good, I think, but actually I sort of underestimated, I think, the impact, because the impact, of course, on jobs, on the economy was enormous.

MR. RUBENSTEIN: So after TARP was ultimately passed and was implemented and so forth, later you, as the Chairman of the Fed, began another program, which others have called – you don't like the name – quantitative easing. And you don't like the name because it's too hard to understand or complicated or –

DR. BERNANKE: Well, I mean, it's not a big deal, but the quantitative easing was originally done by the Bank of Japan, and in many details, which are not worth going into, it was very different from the program we had. And I wanted to emphasize that our approach was a different one.

MR. RUBENSTEIN: OK. And you prefer the name –

DR. BERNANKE: Credit easing, because it was about trying to loosen up the credit markets, trying to get mortgage markets working again, for example.

[10] SEC is Securities and Exchange Commission.

MR. RUBENSTEIN: OK. So in hindsight, do you think credit easing number one worked and credit easing number two worked and credit easing number three worked, all, we –

DR. BERNANKE: Well, I mean, I don't think that's really in serious dispute. I mean, all the academic studies have found that it did affect financial conditions and in turn affected the economy. I'm not saying it was a perfect tool. It obviously was something that was used because we were essentially out of ammunition in terms of interest rate cuts. But looking broadly around the world, you see that the two countries that did the best in terms of recovery were the U.S. and the U.K., which are the two countries who used this tool early on. And other countries, like Japan and Europe, have subsequently, you know, followed.

MR. RUBENSTEIN: Let's talk about the economy today. What do you think the economy's status is today? Are you worried about a recession? Are you worried about deflation? What is your greatest concern?

DR. BERNANKE: Well, we have a very interesting situation, which is in some ways analogous to where we were in the '90s, which is that the domestic U.S. economy looks to be in pretty good shape. It's being driven by a fairly strong household sector. You know, people – jobs have come back. Wages are beginning to rise. Debts have been paid down. Markets are stronger, certainly compared to a few years ago.

So you have strengthening consumer spending. The housing sector, of course, has been relatively weak in the recovery, but it's continuing to improve. So overall, you have a domestic U.S. economy which has got some momentum, has been moving forward, creating jobs. There's the issue of very slow productivity growth, which is a somewhat separate issue, but in terms of the cyclical recovery, you're seeing a good dynamic.

But the risk and the threat, of course, is mostly coming externally. We have a slowing Chinese economy, and the combination of slower China, weak commodity prices, strong dollar is affecting emerging markets around the world, which in turn is creating stress in financial markets. And all the strong dollar, the weak export markets, and financial stress is feeding back on our economy and is becoming a significant headwind. So that's the battle, in some sense, that's going on now.

MR. RUBENSTEIN: Are you worried about deflation and very low growth in Europe now?

DR. BERNANKE: Well, Europe moved into a better policy situation. I mean, I do think that it took them many years, but the European Central Bank has adopted some of the unconventional policies that the Fed pioneered six years earlier, and on the fiscal side, you know, the fiscal policy was very, very tight in Europe, much tighter even than the United States because of the austerity and so on that they were running. And that austerity period seems to be over, and budgets are more neutral now in Europe.

MR. RUBENSTEIN: Right.

DR. BERNANKE: So between less resistance from fiscal policy and a better, more supportive monetary policy, you expect to see a little bit more growth. They are, however, also facing the international concerns that we have in the United States, and if anything their exporters are even more exposed to emerging markets than we are.

MR. RUBENSTEIN: So what about China? Are you comfortable that the numbers the Chinese government publishes as their official numbers are accurate? And are you worried about the Chinese economy's growth rate?

DR. BERNANKE: Well, I think they've gotten better. Chairman Greenspan used to laugh that they put out their quarterly GDP figures on the last day of the quarter, they didn't actually have to wait, collect anything. [Laughter.]

The data have gotten somewhat better, but you know, what's happening there is that they are trying – as we, the United States, have urged them to – they're trying to make a transition to change their growth model. For a long time their growth model was a very centrist, top-down kind of model focused on heavy industry, exports, construction, and they're trying to move from that to a more services/consumer-oriented type economy, which is difficult to do. I think they're making progress. It was predictable. So in some sense the slowing that we're seeing there was something that we all expected to happen. Maybe the timing is a little bit different, but we expected to see that happen. But that's the challenge they're going through, and of course the services side of the economy is even harder to measure, probably, than the heavy industry side.

So I think one of the big problems is that between the fact that their policymakers are not always so transparent about what their objectives and intentions are, and the fact that the data and other information is not at the standard we would see in the United States, that a lot of the concerns that are rising are just because people are very uncertain about what exactly is happening there. We know that the outward-facing part of China, the heavy industry/commodity-using/exporting sector, is declining. But to some extent that's part of the plan. They want to reduce their reliance on that sector and move to a more modern services-oriented sector.

MR. RUBENSTEIN: Oh, so let me ask you about – in the U.S. – I realize you're not going to comment on your successor and what the Fed's doing. No Chairman really does that once he leaves. But if you were to be a betting person, would you bet that interest rates might go up at some point this year, or you wouldn't – [laughter] – you wouldn't be a betting person?

DR. BERNANKE: No, I don't – I'm – I don't – I don't make bets.

They've made pretty clear what their scenario is. Their scenario is one in which the labor market continues to improve. As the labor market improves, that should put pressure on wages and prices and begin to create motion of inflation towards 2 percent.

MR. RUBENSTEIN: Right.

DR. BERNANKE: And if that is the scenario that in fact transpires, then they'll have to at some point, you know, tighten policy to keep inflation near its target.

Of course they don't know any more than anyone else does, you know, what the effect is going to be of the global slowing and the financial stress that we're seeing. And to the extent that throws things off course, obviously they'll have to adjust to that.

MR. RUBENSTEIN: So do you foresee a situation in the United States ever where we have a negative interest rate? So in other words, that other governments are implementing a policy where essentially you pay to have a bank take your money – do you see that possibility here?

DR. BERNANKE: Well, it's a possibility that, you know, of course we didn't do in the recovery. It's a possibility that a few members of the Fed have talked about a little bit. So it's certainly something that might be down the road, possibly. I don't think it's very likely. I mean, one of the issues is that a negative interest rate would have unanticipated consequences on the functioning of money markets, and perhaps make it difficult for those markets to operate normally.

So there would be a lot of technical issues to be addressed before that happened. Anyway, I don't think that's a near-term concern.

MR. RUBENSTEIN: OK. You were very well-known for transparency at the Fed, compared to some of your predecessors. You had press conferences and so forth. But you didn't think that the Fed should be so transparent as to be audited. You consider that different because auditing it would be more interference with what the Fed does as opposed to transparency. Is that your thinking?

DR. BERNANKE: So audit the Fed has nothing to do with auditing. So auditing – everyone here thinks of auditing as, you know, going over the books, right, looking at all the financial statements, and the Fed already does that, completely. There's an outside private-sector auditing firm that goes over all the books. All of the securities that the Fed holds are on the website.

MR. RUBENSTEIN: Right.

DR. BERNANKE: You can look up, to the CUSIP[11] number, everything the Fed owns.

The Government Accountability Office, the GAO, which is the investigative arm of Congress, has the authority to go in and look at basically anything it wants to, and it has.

MR. RUBENSTEIN: OK.

DR. BERNANKE: It's looked at all the crisis-era programs, looked at everything, and basically given the Fed a clean bill of health.

[11] CUSIP is **Committee on Uniform Securities Identification Procedures.**

So what auditing the Fed would do is that currently in the law there is one area where the GAO is not allowed to do an audit, do a review, and that is in monetary policy decision-making. OK. So what is at stake here is whether or not Congress could ask the GAO to review the December policy decision and, you know – and look through – get the papers, get the documents and basically investigate whether or not the Fed should have raised interest rates in December. I don't think that's a good idea, and I guess the way I would put it in a slightly jocular way, would be if you like the way Congress is running fiscal policy, why not put them in charge of monetary policy – [laughter] – because that's what it would amount to.

MR. RUBENSTEIN: OK.

DR. BERNANKE: I really think that this would be really bad intervention of political considerations into what's supposed to be a technical nonpartisan, objective policy-making decision.

MR. RUBENSTEIN: OK. Now the Fed minutes of the FOMC[12] meetings are released five years after the meetings occur, and just recently the meetings' minutes have been released, and they reveal that when you were considering things like quantitative easing and other things, there was a big discussion among members of the Fed, and some were very much against it, though they went along with your policy. Do you have any comments on releasing these things after five years? Do you think it should be sooner than five years? Do you think it's a good idea to release them at all?

DR. BERNANKE: Well, there's a trade-off, which is, you know, releasing those materials, including every comment that everybody makes, does inhibit the discussion at the meetings some because, you know, it used to be that the FOMC meetings were pretty much free-floating, you know, free-form discussions about every issue that could come up, and since the transcripts started being released in the mid-'90s, people come with a written statement and they read their statements. So the discussion has been inhibited by that.

That being said, I understand the desire for transparency, and I think five years is probably long enough that it doesn't really interfere with current policy-making. So I don't object to the current situation, but there is a trade-off there. There is some cost to doing it that way. And I would just note that no other central bank in the world does it.

MR. RUBENSTEIN: OK. And your press conference – you used to hold press conferences. The Fed never did – the Fed Chairman never did that before. Do you think that's a good policy and should be continued?

DR. BERNANKE: You know, life hands you all different kinds of surprises, obviously, a million more than most people, but when I came to the Fed in 2002 as a Governor, the main thing I wanted to do was to try and increase the Fed's transparency, make the Fed more open about its goals, its policies, explain what it was doing, why it was doing that. That's why I wanted, for example, an inflation target, the 2 percent target that the Fed has.

[12] FOMC is Federal Open Market Committee.

And so we did a lot of things along those lines. I think the press conferences are one of the more successful ones, and it's an opportunity for the Chair to explain the committee's thinking and to take questions from the media, and I think it's a good step towards openness.

MR. RUBENSTEIN: You said earlier the Fed has seven members, but for a while it's only had five members because the Senate doesn't seem to want to approve any more members. Can the Fed operate very long with just five members?

DR. BERNANKE: Well, we operated with five members – I mean, through a very difficult period we operated with five members from basically my entire chairmanship, throughout the crisis. So it can be done, but it's – you know, it's unfortunate that there seems to be a habit now that in the last year and a half or two years of the President's term he can't get anybody through, approved for – you know, for the Fed board, and that does leave the Fed shorthanded, because the Fed, besides making monetary policy, has many other responsibilities in regulation and supervision and other areas, and if you're going to hold the Fed responsible for doing these things well, you need to make sure they have the people in place to make those decisions.

MR. RUBENSTEIN: And when you're Chairman of the Fed, it'd be very embarrassing if the Chairman of the Fed had a policy that he couldn't get the rest of the Fed to go along with. So do you kind of talk to people in advance and say, this is what I would like you to do, or do you just kind of say, here's what I want, and they fall in line?

DR. BERNANKE: No, you have to – I mean, Janet apparently calls pretty much everybody on the committee. I used to call not everybody, necessarily, but I made a lot of phone calls, had a lot of discussions on the hallway where the other board members are.

The Fed is a consensus organization. The idea – longstanding idea is that the Chairman tries to bring along the whole committee or as many people as possible to create a central plan that everybody, you know –

MR. RUBENSTEIN: Right, right.

DR. BERNANKE: – or most people can support. In doing so, there's a lot of consultation, and people of course, individual members, who are influential and can – and can make a good argument, you know, eventually begin to bring people over to their side, and it's a little bit of a – it's a little bit of inertia, but over time, you know, influential members of the committee can shift the consensus –

MR. RUBENSTEIN: But did you ever call up a vote for something and you didn't know what the outcome was going to be before you started?

DR. BERNANKE: No, no. [Chuckles.]

MR. RUBENSTEIN: You didn't do that. OK.

And you're pointing out in your book that – I would say it's a good idea not to do that, but – and you point out in your book that your predecessor would start every meeting at the Federal Reserve by saying here is what his view was. You used to wait until the end of the meeting to comment. And what's the reason for that?

DR. BERNANKE: Well, no, there were two rounds. The first round was the lengthier round, where everybody sort of gave their view of what's happening in the economy. That was called the economic go-round. And the second round was called the policy go-round, where everybody gave their opinion of what we should do today.

And the way Greenspan ran it was that there would be the economic go-round, everybody would talk about how they saw the economy, what was happening. Then in the policy go-round, the second round, Greenspan would speak first and say, I think that, you know, we should do this, and the rest of the go-round was more or less people reacting to his initial discussion.

So I kind of thought – little did I know, but I kind of thought that that was sort of cutting off the discussion by too much, and I wanted to foster a more collegial, interactive kind of discussion. And so what I would do is, I would have that second go-round, and then I would – at the end I would say, here's what I heard, and then I would, you know, talk about what I thought we should do.

I don't know how different it really was in terms of the actual outcomes, but it gave everybody more chance to lay out their views and have a good discussion.

MR. RUBENSTEIN: So any regrets about not seeking to stay longer as Chairman of the Fed, or were you happy you left when you left?

DR. BERNANKE: No, I was clear. I told the President that I wasn't interested in staying any longer, that eight years was plenty for me, and as I said at the beginning, I'm glad now to be a civilian again.

MR. RUBENSTEIN: And if you look back on your term at the Fed, is there anything you wish you had done differently?

DR. BERNANKE: [Chuckles.] Not taken the job. I don't know. [Laughter, applause.]

MR. RUBENSTEIN: OK. But generally, you're pretty happy with what happened, or –

DR. BERNANKE: Well, I mean, seriously, some very terrible things happened – the crisis and the recession – and you always have to ask yourself, you know, what could have been done to avoid it? I have difficulty identifying any obvious action, but I hope at least that we can say that we've learned a lot from what's happened and that we make the system stronger and avoid such crises in the future.

MR. RUBENSTEIN: And you point out in something you've said that your mother pointed out – when you left the Fed, you were 60 years old, and your mother was concerned you hadn't driven in eight years and that you might not be able to drive a car again. Has that concern been valid?

DR. BERNANKE: You can see her level of interest is sort of constant over time.

MR. RUBENSTEIN: Right, right, right, right.

DR. BERNANKE: You know, it's always the very mundane issues.

MR. RUBENSTEIN: But now you drive your own car?

DR. BERNANKE: I drive my own car. I drove from home to Brookings the first day after I was out of office, and so far, so good.

MR. RUBENSTEIN: When you're out shopping or things like that, people don't bother you, ask for your economic advice or where interest rates are going? Nobody does?

DR. BERNANKE: No. Once in a while people say hello, but I'm happy to – again, not to have all the – all the paraphernalia of –

MR. RUBENSTEIN: So now that you're at Brookings, and as the co-chairman of Brookings, we're obviously honored to have you there and hope you'll stay there for a long time, but do you have any career plans you'd like to reveal to The Economic Club of Washington? [Laughter.]

DR. BERNANKE: [Chuckles.] Only my therapist. [Laughter.] No.

No, I'm very happy being at Brookings. It's a great home base for me. I'm doing a variety of different things. Of course I finished the book and did a book tour in October/November. I'm very pleased with that. It's had a good reception.

I've written some papers. I have a whole series of lectures planned for the spring at different universities, including Duke, we were talking about.

MR. RUBENSTEIN: Right.

DR. BERNANKE: So I have a lot on my plate, and I'm happy to do that.

MR. RUBENSTEIN: And your children have decided not to go into economics. Is that correct?

DR. BERNANKE: Yeah, I think there's some cause and effect there. I – [laughter]. Yeah, they're both in medical areas.

MR. RUBENSTEIN: So on behalf of the country, I want to thank you for a great job you did as Chairman of the Fed. It was very helpful to get our country through that very difficult time. Thank you very much. [Applause.] Thank you for the great job. Thank you.

DR. BERNANKE: Thank you. [Applause continues.]

MR. RUBENSTEIN: I want to give you a gift, the Club gift. It's a map of the District of Columbia, a copy of the original map of the District of Columbia. OK. So thanks.

DR. BERNANKE: You may not know this, but an identical copy of this, for the last time I spoke here –

MR. RUBENSTEIN: Right.

DR. BERNANKE: – is in the Chairman's dining room at the Fed. So it's right in the front, in the face of Janet Yellen.

MR. RUBENSTEIN: OK. Now you have one for yourself.

DR. BERNANKE: Every time she has lunch, she's looking right at this map.

MR. RUBENSTEIN: OK.

DR. BERNANKE: All right. Thank you very much.

MR. RUBENSTEIN: Thank you. Thank you very much for a great talk. Thank you.

DR. BERNANKE: Thank you. [Applause.]

Ben S. Bernanke

Ben S. Bernanke is a Distinguished Fellow in Residence with the Economic Studies Program at the Brookings Institution and also serves as a Senior Advisor to PIMCO and Citadel. From February 2006 through January 2014, he was Chairman of the Board of Governors of the Federal

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Before his appointment as Chairman, Dr. Bernanke was Chairman of the President's Council of Economic Advisers, from June 2005 to January 2006. He had already served the Federal Reserve System in several roles. He was a member of the Board of Governors of the Federal Reserve System from 2002 to 2005; a visiting scholar at the Federal Reserve Banks of Philadelphia (1987-89), Boston (1989-90), and New York (1990-91, 1994-96); and a member of the Academic Advisory Panel at the Federal Reserve Bank of New York (1990-2002).

From 1994 to 1996, Dr. Bernanke was the Class of 1926 Professor of Economics and Public Affairs at Princeton University. He was the Howard Harrison and Gabrielle Snyder Beck Professor of Economics and Public Affairs and Chair of the Economics Department at the university from 1996 to 2002. Dr. Bernanke had been a Professor of Economics and Public Affairs at Princeton since 1985.

Before arriving at Princeton, Dr. Bernanke was an Associate Professor of Economics (1983-85) and an Assistant Professor of Economics (1979-83) at the Graduate School of Business at Stanford University. His teaching career also included serving as a Visiting Professor of Economics at New York University (1993) and at the Massachusetts Institute of Technology (1989-90).

Dr. Bernanke has published many articles on a wide variety of economic issues, including monetary policy and macroeconomics, and he is the author of several scholarly books and two textbooks. He has held a Guggenheim Fellowship and a Sloan Fellowship, and he is a Fellow of the Econometric Society and of the American Academy of Arts and Sciences. Dr. Bernanke served as the Director of the Monetary Economics Program of the National Bureau of Economic Research (NBER) and as a member of the NBER's Business Cycle Dating Committee. In July 2001, he was appointed Editor of the *American Economic Review*. Dr. Bernanke's work with civic and professional groups includes having served two terms as a member of the Montgomery Township (N.J.) Board of Education.

Dr. Bernanke was born in December 1953 in Augusta, Georgia, and grew up in Dillon, South Carolina. He received a B.A. in economics in 1975 from Harvard University (*summa cum laude)* and a Ph.D. in economics in 1979 from the Massachusetts Institute of Technology.

Dr. Bernanke is married and has two children.