THE SCIENCE OF INSOLVENCY

HEARING

BEFORE THE

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

COMMITTEE ON SCIENCE AND TECHNOLOGY

HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

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May 19, 2009

THE SCIENCE OF INSOLVENCY

TUESDAY, MAY 19, 2009

House of Representatives,
Subcommittee on Investigations and Oversight,
Committee on Science and Technology,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:07 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Brad Miller [Chairman of the Subcommittee] presiding.

BART GORDON, TENNESSEE
CHAIRMAN

RALPH M. HALL, TEXAS
RANKING MEMBER

U.S. HOUSE OF REPRESENTATIVES

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Subcommittee on Investigations and Oversight

Hearing on

The Science of Insolvency

Tuesday, May 19, 2009
10:00 a.m. – 12:00 p.m.
2318 Rayburn House Office Building

Witness List

Dr. Jeffrey Sachs, *Director, The Earth Institute at Columbia University*

Dr. Simon Johnson, *Ronald A. Kurtz Professor of Entrepreneurship, MIT Sloan School of Management*

Dr. Dean Baker, *Co-Director, Center for Economic and Policy Research*

Mr. David John, *Senior Research Fellow, Heritage Foundation*

HEARING CHARTER

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT COMMITTEE ON SCIENCE AND TECHNOLOGY U.S. HOUSE OF REPRESENTATIVES

The Science of Insolvency

TUESDAY, MAY 19, 2009
10:00 A.M.–12:00 P.M.
2318 RAYBURN HOUSE OFFICE BUILDING

Purpose

On Tuesday, May 19, 2009 the Subcommittee on Investigations and Oversight of the Committee on Science and Technology will hold a hearing to focus on what it means for a financial institution to be "solvent" given the complexity of global financial markets. In order to do this, the Subcommittee will tap the insight of economists into how the tools of their discipline can be used in making determinations of current solvency and projections of future solvency on an objective, scientific basis.

Economics aspires to be a science. The insights of economics have been used to inform almost every aspect of domestic policy. The National Science Foundation is the major funding resource for economic research in the Federal Government. What, then, do those whose perspectives are shaped by "the dismal science" have to say about the current financial morass?

Balance sheets of financial institutions have become far more difficult to understand as the percentage of the assets listed therein consisting of direct loans (which have a relatively straightforward valuation) has diminished and that of derivative instruments has grown. Even with regards to assets based on more common financial instruments (mortgages, for example) what has the turmoil in the real estate market meant for accurately valuing and accounting for those holdings? This complexity for valuing balance sheets has been particularly difficult for the large institutions at the center of the financial system. These are the firms which have traded increasingly in the complex instruments—collateralized debt obligations (CDO), credit default swaps (CDS), and the like—whose connection to the underlying assets from which their value is derived can be far from transparent. Compounding the transparency problem is the fact that such instruments, rather than being standardized, are often born of specific deals and thus do not lend themselves to conventional trading, by which the value of major equities and commodities are established.

Questions over the solvency of major financial institutions arose suddenly, on the heels of a boom period during which values seemed to spiral ever upward and, consequently, mechanisms of valuation went largely unchallenged. In retrospect, that growing value looks like the edge of an unsustainable bubble, driven largely by real estate. Valuation has become even more complex owing to an April decision by the Financial Accounting Standards Board (FASB) tying valuations of financial assets less tightly to current market prices and thereby increasing firms' flexibility in assigning value to them.[1]

Earlier this month the Federal Reserve announced the results of the "stress test" performed on the 19 U.S.-owned banks whose assets exceeded $100 billion at the end of 2008. This test's design combined the Fed's choosing "two alternative assumed paths for the U.S. economy," having supervisors make "judgmental adjustments to the firms' loss and revenue estimates," and deciding on the assumptions of what the Fed Chairman, Ben Bernanke, called "objective, model-based estimates for losses and revenues that could be applied on a consistent basis across firms."[2]

Such factors as FASB's decision and the Fed's methodology invite a discussion of the reliability and rigor of the modeling used in financial assessments, as well as what truly constitutes objective criteria. Can we find worthwhile data and reliable models to determine solvency at a time when markets are suddenly viewed as unre-

[1] "Under New Accounting Rule, Toxic Assets May Be Revalued," *Washington Post,* April 3, 2009, p. A15.

[2] Speech, Federal Reserve Chairman Ben S. Bernanke, Jekyll Island, GA, May 11, 2009, available at *www.federalreserve.gov/newsevents/speech/bernanke/20090511a.htm*

liable sources of information about value? Among the questions addressed in examining this issue will be:

- How can a financial instrument be assigned value in the absence of a market for it? What models and other techniques are available? Are new ones needed?
- Do objective standards for solvency exist? When it comes to determining a firm's solvency, does a financial institution constitute a special case as compared to, say, a retail or industrial firm?
- Was the stress test sufficiently rigorous? Was it fair? Did it look at appropriate factors and make valid assumptions?

Witnesses

The Subcommittee will take testimony from four prominent economists regarding these questions. We are looking for insights into how economists evaluate the current situation to give us a better sense of the state of the science, and the state of information that we rely on, to make legislative and policy choices.

Dr. Dean Baker, Co-Director, Center for Economic and Policy Research

Dr. Simon Johnson, Ronald A. Kurtz Professor of Entrepreneurship, MIT Sloan School of Management

Dr. Jeffrey Sachs, Director, The Earth Institute at Columbia University

Mr. David John, Senior Research Fellow, Heritage Foundation

Chairman MILLER. Good morning. Before we begin, I think I should note that ProPublica, a distinguished organization, has announced the winners of the ProPublica prizes for investigative governance, and the prize for federal investigation, legislative branch, is to the Majority staff of the Subcommittee on Investigations and Oversight, House Committee on Science and Technology, for Toxic Trailers—Toxic Lethargy. Dr. Broun, it doesn't say a word about the Minority or, for that matter, about Members at all. But on behalf of all the Members of the Committee, I want to congratulate our Majority staff and say if there's any small way that the Members have been able to help you in your work, we are pleased to do it.

Mr. BROUN. Mr. Chairman, I reserve my right to object.

Chairman MILLER. Again, good morning and welcome to today's hearing, *The Science of Insolvency.*

Several committees have jurisdiction of economic issues, but economics is also the subject of significant federally funded research within this committee's jurisdiction. And economics, after all, has never really shaken Thomas Carlyle's term "the dismal science."

This subcommittee has championed scientific integrity as necessary to inform policy decisions. There is plenty of room for debate about policy implications, but scientific facts should be assessed by scientists without political interference.

If we have ever needed sound, neutral evaluations of economic facts upon which to base policy, it is now.

Dr. Simon Johnson, one of our witnesses today, in his written testimony, says that we have "a desperately ill banking sector."

Congress and the Administration are working to treat the illness, but there has been remarkably little discussion of the precise nature of the illness. The diagnosis, the determination of what is wrong with our economy, appears to be a factual question, not a policy decision, but it is a factual question with enormous policy implications.

The factual premise of our policy to this point appears to be that our banks are facing a rough patch, because many of their assets are illiquid, because there is no active market for those assets and persnickety accounting rules make those banks appear to be on shaky ground, but the assets are really fine and the banks are too. The determination, or discovery, of value appears to be the core competency of markets, and some who now argue that the markets are befuddled in valuing complex financial assets have for years genuflected when the word market was spoken.

Others argue, I think including some of our witnesses today, that the markets are correctly valuing the assets, and the problem is that the assets are simply not worth much, and that many of our banks are insolvent.

Edward Yingling, President of the American Bankers Association, told the *New York Times* that "claims of technical insolvency" at many of our banks was just "speculation by people who have no specific knowledge of bank assets."

It is true that banks' assets and liabilities are not public knowledge, but many credible economists are not persuaded when regulators peek into the black box of banks' assets and liabilities and declare that there is nothing to worry about. And the regulators not so long ago told us that any problems in the financial sector arising from mortgage defaults would be easily contained.

What should we make of the stress tests? When the stress tests were first announced, they were described as a rigorous examination of how our largest banks would perform in the event of a severe recession. The markets reacted with some consternation to that announcement. Then we heard about the stress tests which show that our 19 largest banks were all solvent. Then we heard that all the banks were solvent, but some needed more money to stay in business, which was my perhaps unsophisticated understanding of what it meant to be insolvent. Then we began hearing which banks might need additional capital and how much. Paul Krugman said that the leaks of the stress test results seem like trial balloons to see what would be believable. It almost sounded like one of the running jokes in the old television show, Get Smart. CitiGroup is solvent and needs no more capital. Would you believe that CitiGroup does not need any more capital? No, would you believe CitiGroup only needs $5 billion in capital? How about $10 billion? The results of the stress test are now in, and they show that 10 of 19 biggest banks need to raise a total of $75 billion in new capital by the fall. Dr. Johnson, though, sometime back told the *New York Times* that our banks needed a minimum of $500 billion in new capital and perhaps as much as $1 trillion in a severe recession. Dr. Johnson's estimate is generally consistent with those of various economic analyses, including international monetary funds, Goldman Sachs economists, Institutional Risk Analytics, among others, that have appeared in the press.

So where do we really stand? What shape are our banks really in and what shape is our financial system in generally? And what are the policy implications of all of that?

I now recognize the distinguished Ranking Republican Member, Dr. Broun of Georgia, for an opening statement.

[The prepared statement of Chairman Miller follows:]

PREPARED STATEMENT OF CHAIRMAN BRAD MILLER

Good morning, and welcome to today's hearing, *The Science of Insolvency*.

Several committees have jurisdiction over economic issues, but economics is also the subject of significant federally funded research authorized by this committee. And economics, after all, has never quite shaken Thomas Carlyle's term "the dismal science."

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What should we make of the stress tests?

Mr. BROUN. Mr. Chairman, before I begin my opening statement, I want to wish you a happy birthday, and I wish you many happy returns. I hope it is a great birthday for you. I celebrated mine last week, so you and I are almost twins.

Chairman MILLER. That would have been an unpleasant delivery.

Mr. BROUN. Gives a whole new definition to interstate commerce or something, I think.

Thank you, Mr. Chairman. Let me welcome the witnesses here today and thank them for appearing. Today's hearing on *The Science of Insolvency* may seem like foreign territory for our committee. Terms like derivatives, credit default swaps, collateralized debt obligations, and interest rate swap aren't used in this room as much as propellant mass fraction, albedo effects, and TeraFLOPS.

That being said, there are similarities. Over the last 30 years, Wall Street has increasingly leveraged mathematics, physics, and science to better inform their decisions. Even before the Black-Scholes Model and the Gaussian Copula function—boy, those are big words for a Southerner, I will tell you—were developed to determine value and analyze and mitigate risk, bankers and economists were looking for a silver bullet to help them beat the market.

Despite the pursuit of a scientific panacea for financial decisions, models are simply tools employed by decision-makers and managers. They add another layer of insight but are not crystal balls. Leveraging a position too heavily or assuming future solvency based on modeling data alone is hazardous to say the least.

This is a theme this committee has addressed several times in the past. Whether it is in regard to climate change modeling, regulating chemical exposures, determining spacecraft survivability, predicting future bank solvency, or attempting to value complex financial instruments, models are only as good as the data and assumptions that go into them. Ultimately, decisions have to be made based on a number of variables which certainly include models involving science, but as a witness at a previous hearing stated, "Science describes, it does not prescribe."

This committee struggles with the complexities of modeling, risk assessment, and risk management regarding physical sciences. Attempting to adapt those concepts to finance is even more complex. As AEI Resident Fellow Alex Pollock recently wrote, "The transcendent mathematical genius, Isaac Newton, having first made a lot and then lost even more of his own money in the collapse of the South Sea Bubble, wrote in disgust, 'I can calculate the motions of the heavenly bodies, but not the madness of people.' You can apply math to finance, but that does not make it a science."

With that, Mr. Chairman, I would like to add a statement from Mr. Pollock to the hearing record by attaching it to my statement. I ask unanimous consent that that be done.

[The information follows:]

American Enterprise Institute
for Public Policy Research

May 18, 2009

The Honorable Paul Broun, M.D.
Ranking Member
Subcommittee on Investigations and Oversight
Committee on Science and Technology
U.S. House of Representatives

Dear Dr. Broun,

Thank you for the opportunity to submit these thoughts for the Subcommittee's hearing on "The Science of Insolvency." I am Alex Pollock, a Resident Fellow at the American Enterprise Institute, and these are my personal views. Before joining AEI on 2004, I spent 35 years in banking, including twelve years as President and CEO of the Federal Home Loan Bank of Chicago, and I have both experienced and studied numerous financial booms and busts.

Is Economics a Science?

As the charter for this hearing says, "Economics aspires to be a science." But in this it does not succeed—neither does finance.

Financial crises keep happening. My banking career started during the credit crunch of 1969, which was followed shortly afterward by the failure of the Penn Central railroad (doubtless a "systemically important" railroad) and panic in the commercial paper market. Skipping ahead a few crises, we find the financial crisis of 1989-91, with the final collapse of the regulated savings and loans, a terrific commercial real estate bust, and severe insolvency problems for regulated commercial banks, of which more than 1,400 failed in the decade ending in 1991.

Here's a familiar-sounding headline: "Banks Entering Era of Painful Change—More Bailouts, Bankruptcies, Layoffs Likely." The date? July 22, 1991.

Major regulatory reforms and reorganization marked the time, including three Acts of Congress: the Financial Institution Reform, Recovery and Enforcement Act of 1989; the FDIC Improvement Act of 1991; and the Housing Act of 1992. Such actions would insure, the then-Secretary of the Treasury said, "This will never happen again."

But it did happen again.

Could it happen again if economics and finance were science? To paraphrase financial observer James Grant: science is progressive, finance is cyclical.

The transcendent scientific genius, Isaac Newton, having first made a lot and then lost even more of his own money in the collapse of the South Sea Bubble, wrote in disgust, "I can calculate the motions of the heavenly bodies, but not the madness of people." You can apply math to finance, but that doesn't make it science.

But why should this be? Don't we learn from experience? Doesn't economic knowledge increase? And how about having computers, vast amounts of data and information, new mathematical models to guide lending and investing decisions?

The former CEO of Household International, first bought by HSBC and then brought low by the subprime mortgage collapse, is said to have bragged that his operation had 150 Ph.D.s to model credit risk. The idea that improved knowledge will keep us out of trouble is not new. "Disraeli had asserted that the boom of 1825 would not turn to bust because the period was distinguished from previous ages by superior commercial knowledge," but there was a big bust anyway.

Our 21st century housing bubble, now deflated, was inflated despite—indeed partially because of—amazing computer power, reams of data, and sophisticated models operated by exceptionally bright analysts informed by Nobel Prize-winning financial theories. These computerized models created a sense of security, just as did the "superior commercial knowledge" of 1825.

As the great investment guru, Benjamin Graham, wrote in his classic The Intelligent Investor:

> "The concept of future prospects…invites the application of formulas out of higher mathematics to establish the present value of the favored issues. But the combination of precise formulas with highly imprecise assumptions can be used to establish, or rather to justify, practically any value one wishes…. Mathematics is ordinarily considered as producing precise and dependable results: but in the stock market [or in the subprime mortgage-backed securities market] the more elaborate and abstruse the mathematics, the more uncertain and speculative are the conclusions."

Models and Recursiveness

Consider Moore's Law of Finance: "The model works until it doesn't." Perversely, the more everyone believes the model, and the more everyone uses the same model, the more likely it is to induce changes in the market that make it cease to work.

In this cycle the market and the regulators became enamored with the statistical treatments of risk, whereas the most important issue is always the human sources of risk. These human sources include short memories and the inclination to convince ourselves that we are experiencing "innovation" and "creativity," when all that is happening is a lowering of credit standards by new names.

For example, with the spread of "stated income" loans, the disastrous previous experiences with "no doc" and "low doc" loans seem to have been forgotten. Such loans are a notable temptation, or even invitation, to a little lying in order to facilitate the dream of buying the house whose price will always keep rising.

Human elements of risk also include optimism, gullibility, short-term focus, genuine belief in momentum or the extrapolation of so-far successful speculation, group psychology or the lemming effect, and inevitably fraud.

We should not be surprised that as optimism increases, so does credulity. As Walter Bagehot observed:

> "The good times of too high price almost always engender much fraud. All people are most credulous when they are most happy. . . . Almost everything will be believed for a little while."

The subprime boom and bust cannot be discussed without considering securitization of subprime pools through tranched, senior-subordinated structures based on mathematical models. The lower tranches of subprime MBS were extremely highly leveraged to credit risk. They were often gathered into CDOs and further tranched, thus creating securities hyper-leveraged to credit risk.

Some of these tranches went to buyers who were greatly surprised by the vast losses. This must put us in mind of Stanton's Law:

> "Risk migrates to the hands least competent to manage it."

This is because the more competent can manage their risk by passing it on to the less competent.

But there is another possibility: "when genius fails," the extremely clever may believe too much in their own models and cleverness, then find out they had much more risk and much less science than they thought—and so the fall of famous Wall Street firms.

Belief—For Example, Belief in House Prices

How should economics and finance deal in the surges of overoptimistic belief—of course followed by surges of overpessimistic fear?

We had a housing bubble and it was huge. (So did a number of other countries.) That is the indubitable fact: What is its theoretical explanation?

In the bubble, according to the Case-Shiller national house price index, U.S. average house prices increased by an enormous 90% from early 2000 to the peak in mid-2006. Since then, they have fallen about 30% from the peak, back to about the level of 2003.

We are now two and one-half years into the deflation of the housing bubble with accompanying defaults, foreclosures and massive losses to lenders, borrowers, home builders, investors and taxpayers. National average house prices have gotten about back to their longer-term trend line. As gravity pulls a thrown object back down, house prices are coming back to their trend: in retrospect, this hardly seems a surprise.

"But," the earnest and rational voice of one of my colleagues insisted, "did they really believe house prices couldn't go down?"

Indeed, how could anybody believe that the prices of houses don't go both up and down? For that matter, how could anybody believe that the price of anything couldn't go down as well as up? That is surely the nature of a price.

Perhaps here poetry is more useful than mathematics:

> So subtly is the fume of life designed
> To clarify the pulse and cloud the mind.

The speculative pulse is likely to speed up and the mind become especially clouded in crowds. James Grant, astute and acerbic chronicler of the foibles of financial markets, suggests that "in order to have a really big asset price bubble, a critical mass of human beings is all that's required."

But how about the professionals? Did the financial professionals of the mortgage originating and investing markets, or even more important, of the credit rating agencies who were rating mortgage-backed securities, believe house prices couldn't go down? No, they didn't.

They were well aware that in the last three decades there have been notable housing and mortgage busts, with house prices of formerly hot markets falling and then high defaults and losses on mortgage loans.

In fact, the severe "oil patch" default and loss experience became a key stress test the rating agencies used in rating mortgage pools. Note the irony that "stress tests" are now considered a key element of financial regulatory policy.

The professionals knew very well that painful housing and mortgage busts had occurred and assumed they would continue to happen-- on a regional basis.

But it was thought that this would not, and perhaps could not, happen on a national average basis. The U.S. is a truly big country, with an even bigger economy including a great variety of regions and economic characteristics. Oh, national average house prices could go sideways for a while, while general inflation reduced them in real terms, but not actually fall in nominal terms, it was commonly said. "History is definitive," pronounced the American Banker, "the national average price of a home may remain flat for a number of years, but it doesn't fall."

Even the mortgage finance professionals, steeped in data and models, by and large thought that house prices would not fall on a national basis, let alone by 30%. But they did.

The belief that they couldn't fall made it possible for them to do so—in the paradoxical and recursive way of financial markets.

Risk and Uncertainty

Correctly to forecast and moreover control the financial future is a literally impossible task. This is because of the exceptionally complex and very rapid recursiveness of financial markets and the resultant Uncertainty. This "Uncertainty," with a capital "U," means, remembering the classic definition of Frank Knight, that you not only do not know the odds of events, but you cannot know the odds.

It is in vain to think that it or anybody can or could foresee all future financial problems or prevent all future bubbles and busts. Everybody, no matter how intelligent and diligent, no matter how many economists and computers are employed, makes mistakes when it comes to predicting (let alone controlling!) the future.

Because uncertainty is fundamental, sometimes disastrous mistakes will continue to be made by entrepreneurs, by bankers, by borrowers, by central bankers, by government agencies, by politicians, and by the interaction of all of the above.

Knight wrote: "If the law of change is known, no [economic] profits can arise." Likewise: "If the law of change is known, no financial crises can arise."

But in economics and finance, the law of change is never known.

So change reflecting uncertainty goes on, bringing booms and busts periodically, and Adam Smith's "progress of opulence" on the trend.

Professor George Kaufman observed: "Everybody knows Santayana's line that those who fail to study the past are condemned to repeat it. When it comes to financial history, those who do study it are condemned to recognize the patterns they see developing, and then repeat them anyway!"

Economics and finance might be science, if it weren't for people.

Thank you again for the chance to share these views.

Yours truly,

Alex J. Pollock

Chairman MILLER. Without objection and so ordered.

Mr. BROUN. I look forward to the witnesses' testimony on the science underlying asset valuation and the methodologies behind the recent stress tests.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Broun follows:]

PREPARED STATEMENT OF PAUL C. BROUN

Today's hearing on *"The Science of Insolvency"* may seem like foreign territory for our committee. Terms like Derivatives; Credit Default Swaps, Collateralized Debt Obligations, and Interest Rate Swap aren't used in this room as much as Propellant Mass Fraction, Albedo Effects, and TeraFLOPS.

That being said, there are some similarities. Over the last 30 years Wall Street has increasingly leveraged mathematics, physics, and science to better inform their decisions. Even before the Black-Scholes Model and the Gaussian Copula were developed to determine value and analyze and mitigate risk, bankers and economists were looking for a silver bullet to help them beat the market.

Despite the pursuit of a scientific panacea for financial decisions, models are simply tools employed by decision-makers and managers. They add another layer of insight, but are not crystal balls. Leveraging a position too heavily or assuming future solvency based on modeling data alone is hazardous to say the least.

This is a theme this committee has addressed several times in the past. Whether it is in regard to climate change modeling, regulating chemical exposures, determining spacecraft survivability, predicting future bank solvency, or attempting to value complex financial instruments, models are only as good as the data and assumptions that go into them. Ultimately, decisions have to be made based on a number of variables, which certainly include models involving science, but as a witness at a previous hearing stated "science describes, it does not prescribe."

This committee struggles with the complexities of modeling, risk assessment, and risk management regarding physical sciences. Attempting to adapt those concepts to finance is even more complex. As AEI Resident Fellow Alex Pollock recently wrote

"The transcendent mathematical genius, Isaac Newton, having first made a lot and then lost even more of his own money in the collapse of the South Sea Bubble, wrote in disgust, 'I can calculate the motions of the heavenly bodies, but not the madness of people.' You can apply math to finance, but that does not make it a science."

With that, Mr. Chairman, I would like to add a statement from Mr. Pollock to the hearing record by attaching it to my statement. I look forward to the witnesses' testimony on the science underlying asset valuation and the methodologies behind the recent "stress tests."

Chairman MILLER. Thank you, Dr. Broun. I ask unanimous consent that all additional opening statements submitted by Members also be included in the record, and without objection it is so ordered.

[The prepared statement of Mr. Wilson follows:]

PREPARED STATEMENT OF REPRESENTATIVE CHARLES A. WILSON

Thank you Chairman Miller for holding this important hearing.

As a Member of both the Science and Technology and Financial Services Committee, I am eager to examine, dissect and hopefully fix the financial mess that we have gotten ourselves into.

This hearing looks to examine our financial crisis in a different way, in a way that I am very interested in hearing. While I have sat through many hearings, this is the first of its kind.

Panelists, thank you for joining us today. I look forward to hearing from you all. I intend to focus several things, including: reregulation, what do you all believe are the most important areas to focus on; the stress tests on banks . . . is a substantive exercise, are we looking at the right indicators; and, on the taxpayers going forward. Are they bearing too much of the cost of the bail-out, how can we make sure that they are protected?

Again, thank you Chairman and thank you panelists. I look forward to our hearing today.

Chairman MILLER. It is my pleasure to introduce our distinguished panel of witnesses. Dr. Jeffrey Sachs is the Director of The Earth Institute at Columbia University. Dr. Simon Johnson is the Ronald A. Kurtz Professor of Entrepreneurship at MIT Sloan School of Management. Dr. Dean Baker is the Co-Director at the Center for Economic and Policy Research, and Mr. David John is the Senior Research Fellow at the Heritage Foundation.

As our witnesses should know, you each have five minutes for your spoken testimony. Your written testimony will be included in the record for the hearing. When you have completed your spoken testimony, we will then begin with questions, and each Member will have five minutes to question the panel. We may do more than one round.

It is the practice of the Subcommittee to receive testimony under oath. This is an investigative subcommittee. It seems unlikely there would be any perjury charges arising from this, we would have to prove that you knew what the truth was and that you departed from it and what the truth was, which seems an impossible task with this panel. Do any of you have any objection to swearing an oath? You also have a right to be represented by counsel. Do any of you have any counsel here? The witnesses all said that they did not object to swearing an oath and that none had counsel.

Will you now please stand and raise your right hand? Please stand, yes. Do you swear to tell the truth and nothing but the truth? All of the witnesses did take the oath.

We will now begin with Dr. Jeffrey Sachs. Dr. Sachs, please begin.

STATEMENT OF DR. JEFFREY SACHS, DIRECTOR, THE EARTH INSTITUTE, COLUMBIA UNIVERSITY

Dr. SACHS. Thank you very much for this hearing and for the invitation to appear before this subcommittee, Mr. Chairman. I do not have written testimony submitted in format but I would like to submit testimony afterwards if that is all right with the Committee.

Thank you for holding the hearing on *The Science of Insolvency* in the financial sector. A lot is known about this, though not a lot is known about the precise value of assets on the books of our banks right now. What is known about the science of insolvency of financial institutions is that banks require regulation because they are highly leveraged and they are maturity transformers, and what that means, of course, is that very modest movements in the valuation of assets held by banks and near-banks—I will include investment banks for this purpose—can lead to insolvency and can lead also to self-fulfilling runs by short-term creditors, a very important concept in banking regulation.

When bank assets become impaired, it may turn out that quite rational short-term creditors panic and withdraw their credits to these institutions. This can be depositors or purchasers of money market instruments such as commercial paper.

We have known all of this for 75 years since the Great Depression. The Great Depression put in a system of regulation that included four components: lender of last resort facilities by the Fed, deposit insurance, banking regulation by a variety of institutions, and mechanisms for intervention in capital-impaired institutions, mainly by the FDIC.

At the essence of the current crisis is that the shadow banking system of the broker-dealer firms on Wall Street went outside of that regulatory regime. This is a crisis that started mainly not within our commercial banks but mainly in our investment banks. They did not have lender of last resort, they did not have tough regulation, they did not have capital adequacy standards, and they by and large did not have receivership mechanisms under FDIC.

So we have a whole banking structure that didn't have a regulatory structure that was appropriate for the risks of leveraged maturity transformers. That is how we got to where we are right now, oddly speaking.

When a crisis hits, there are two costs of the crisis. One is, short-term liquidity seizes up in the economy. That has happened world wide, especially after the Lehman default. And second is that the impairment of the bank capital means that the financial institutions restrict their lending. They de-leverage. And so the economy as a whole gets less lending on a longer-term, medium-term basis.

In terms of the sharp downturn, it is the restriction of liquidity which is the major cost. In terms of the speed and robustness of the long-term recovery, it is the impaired capital that is the main interest. We have been suffering through a liquidity crisis in recent months. We will now have for several years a more sluggish recovery because of less capital in the financial sector, but that will be a prolonged matter.

When we turn to how this Administration, the preceding one, and the Fed have handled this crisis, Lehman was a big mistake, of course, in how it was handled because by letting Lehman simply file for bankruptcy, that invited the kind of creditor panic that ensued. What has happened since then has been a lack of a structured approach. There has been a lot of, I would say, clever, short-term response. The Fed has really done post-Lehman a reasonable job of pushing an enormous amount of liquidity into the economy to prevent an outright collapse of liquidity, but on recapitalization, there has not been a strategy even to this moment.

What the stress tests tell us I believe is not how the banks would perform under the worst circumstances, certainly not. They tell us that there is a fighting chance of muddling through right now if the economy modestly—performs moderately well going forward. That is fair enough. We learn something from this stress test. What we still don't have, however, is a mechanism to deal with the firms that are truly impaired or events in which the outcomes of the macro-economy are significantly worse than were in the stress test, which is also a very realistic possibility.

My own view, and I will conclude here, I know I am over time, is that the FDIC receivership model is and should be the basic model that we hold to. Four standards that I would put forward that we do not have in place yet: that shareholders and bondholders should be the first to absorb losses, not the taxpayers; taxpayers should be getting value for money injected, and we are not seeing that yet; the recapitalization process should be transparent, it is not; and that it should be relatively speedy, and it is not. So the four criteria of a good workout are not yet in place.

I will close by saying that I believe the specific mechanism of the PPIP so-called, the public-private-investment partnership, fails on all counts. It is unfair, non-transparent, and likely to be very costly to the taxpayer. I believe that in view of the relatively good news and real news of the stress test, the PPIP should be set aside; and what we should be asking from the Administration are clear plans for how a real receivership would be operated if that turns out to be necessary in the event that the macro circumstances are worse than the stress tests allowed for.

Thank you very much.

Chairman MILLER. Thank you, Dr. Sachs. Dr. Johnson for five minutes.

STATEMENT OF DR. SIMON JOHNSON, RONALD A. KURTZ PROFESSOR OF ENTREPRENEURSHIP, MIT SLOAN SCHOOL OF MANAGEMENT; SENIOR FELLOW, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS

Dr. JOHNSON. Thank you very much. I think your introduction, Mr. Chairman, hit the nail on the head which is the science here, the science around insolvency, the science around how we think about insolvency and about how to handle insolvency of large banks has basically failed. The sophisticated models around the valuation of banks' balance sheets have obviously failed, otherwise we would not be in this crisis. I think we should just take that as a premise and ask, what are the implications on a practical side of an immediate policy and from a longer-term scientific side.

I think there are three major implications of this deep, profound failure. The first is, we should go back to basics and think much more about the incentives of the people involved with the banking system. So I don't think we know the exact nature of insolvency and solvency in these financial institutions, but we have learned and we can see very clearly that the incentives for the people who run these banks have been bad, they have been distorted, and now they have become much worse. We can argue for a long time about the extent to which particular executives might or might not have believed in the past their institutions were too big to fail, meaning that if they were insolvent or faced a liquidity run of the kind that Professor Sachs outlined, that they would receive government support. Now, it is uncontroversial. Now, they know they are too big to fail, and they are receiving a massive amount of credit from the Federal Reserve which I have also supported from a short-term preserve-the-credit-system perspective, but we have to recognize the effectiveness on their incentives. There is a potential Fed-based bubble developing. The executives of these banks have learned that they can take massive amounts of risk, now it is with other people's money, and they will not face the consequences of these actions. So there is a big distortion behind all of the problems that got us into this. The confusion, the noise of the past six months has made it much easier to take or to tunnel wealth and property and cash out of these banks, and going forward the prospect is extremely bleak on that basis.

The second point is in terms of you handle any kind of banking situation that enters into the kind of crisis as, again, Professor Sachs nicely outlined. The rule of—it is always the case in all countries you have this kind of confusion about who is solvent and who is not. The basic heuristic procedure, as used by the International Monetary Fund where I used to work as Chief Economist, and as endorsed and pushed by the U.S. Treasury, directly and through the IMF and all other country situations that I have been aware of is try and do a systematic tough stress test where the emphasis is on the tough and the emphasis is on looking at what would happen in a severe recession and recapitalizing on that basis. Now, it is true you may be able to muddle through without doing that, and what the government is doing is clearly a forbearance, muddling-through strategy, but your banking system will be short of capital, and there is no way that that either helps you get a robust recovery going or gives you the right kind of incentives. If anything, the evidence suggests, and the savings and loans from the 1980's in the United States is always held up as the best example of this, you get even more strange, distorted, perverted incentives on the part of bank executives where they take excessive risks, they gamble for resurrection, for example, or other kinds of perverse pathologies develop in terms of bank executive behavior.

So the science is bad. It is broken. The incentives are getting worse for the banks. That we know. That is not a sophisticated, mathematical modeling observation. That is very basic economics and political incentives, and we haven't handled it in this country in the standard way these problems are handled elsewhere.

The third point and the final point I would emphasize is about consumers. Now, you may or may not like the idea of consumer protection around financial products. It has not been a standard in this country, and other countries have addressed protection of consumers and the regulation of financial markets to only a very limited degree in this sense. Protecting consumers vis-à-vis financial products in the same way they are protected with regard to automobiles or baby cribs or potential lead paint on the toys that children buy. But we know the incentives are bad in the banking system. We have not made progress in fixing them. The stress test was not, for perhaps good reason, perhaps bad reason, applied in the standard way. I would be very worried about the way consumers are treated. For example, the increase in fees on consumers' credit cards right now or the ways in which consumers either have access or don't have access to refinancing possibilities, what are the terms and interest rates behind those. All of this is very murky. There is a great deal of confusion out there. It is very easy to take advantage of people, particularly when they are under duress because of recession, particularly when they are confused about what their real alternatives are. And I think that consumers need to have this kind of protection. I think it is long overdue, and particularly in recognition of the deeper failings of science in and around the banking system and the fact that mathematical models are honestly never going to really give you the kind of assurance that the banking system is going to be well-run. I think protecting the consumers is basic, it is fundamental, it is absolutely essential at this point.

Thank you very much.

[The prepared statement of Dr. Johnson follows:]

PREPARED STATEMENT OF SIMON JOHNSON[1]

Main Points

1) The U.S. economic system has evolved relatively efficient ways of handling the insolvency of non-financial firms and small- or medium-sized financial institutions. It does not yet have a similarly effective way to deal with the *insolvency of large financial institutions.* The dire implications of this gap in our system have become much clearer since fall 2008 and there is no immediate prospect that the underlying problems will be addressed by the regulatory reform proposals currently on the table. In fact, our underlying banking system problems are likely to become much worse.

2) The executives who run large banks are aware that the insolvency of any single big bank, in isolation, could potentially be handled by the government through the same type of FDIC-led receivership process used for regular banks. However, these executives also know that if more than one such bank were to fail (i.e., default on its obligations), this could cause massive economic and social disruption across the U.S. and global economy. The prospect of such disruption, they reason, would induce the government to provide various forms of bail-out. They also invest considerable time and energy into impressing this point onto government officials, in a wide range of interactions.

3) As an example of the ensuing bail-outs, in its latest iteration the current administration has (a) run *stress tests in which the stress scenario was not severe,* (b) determined that banks are solvent, but some should raise small amounts of capital, (c) at the same time continued to provide large amounts of government subsidy through FDIC-guarantees on bank debt, large credit lines from the Federal Reserve, and cheap capital from the Troubled Assets Relief Program.

4) *The government strategy today* is forbearance, as in the early 1980s, in which you wait for the economy to recover by itself and hope that this brings the banks back to financial health. This is risky because: it may not work (depend-

[1] This testimony draws on joint work with James Kwak, particularly *The Quiet Coup* (*The Atlantic,* May 2009), and Peter Boone. Italic text indicates links to supplementary material; to see this, please access an electronic version of this document, e.g., at *http://BaselineScenario.com,* where we also provide daily updates and detailed policy assessments.

ing on the defaults seen in "toxic" assets); it may lead the banks to engage in undesirable short-term behavior (with either too much or too little credit, depending on how exactly their incentives are distorted); and it rewards banks for previous irresponsible actions (and therefore encourages more of the same in the future).

5) As a consequence of both this general failure to deal with big bank insolvency and the specific problems induced by current government policy, big bank executives have an incentive to reduce the probability that their bank fails for idiosyncratic reasons but they are much less concerned about their bank failing in a manner that is synchronized with other banks. These bank executives *have a strong incentive to copy* the actions and policies of other big banks.

6) By not changing incentives for powerful bank insiders, we are lining ourselves up for another big "moral hazard trade"—think of this as a bail-out by the Federal Reserve of everyone, but especially banks. Current and future bank executives will take risk again—but next time it will be risk with the public's money. A housing bubble led to the current difficulties but the meta-bubble is a rise in financial services as a share of the economy, which has been underway since the 1980s. In the latest manifestation of the ensuing shift in economic and political power towards the financial sector, an unsustainable "Fed bubble" is potentially underway. This may lead to outcomes that are considerably worse than what we have seen so far.

7) Everyone agrees that insolvent banks are a bad thing. Since September 2008, we have learned about the additional difficulties that follow when no one knows if banks are insolvent are not. There are many manifestations of this problem, including: illiquid markets for toxic assets; accounting tricks, like the *FASB rule change* and the *preferred-for-common stock conversion;* and stress tests that turn out to be not very stressful, with outcomes that are apparently negotiable and *mostly about public relations.*

8) There is a striking contrast between how we deal with small/medium-sized banks (using an FDIC intervention) and large banks—only the latter can obtain never ending bail-outs. The solution would be some kind of regulator able to take over any financial institution, but also better ways of measuring asset value, capitalization, etc. In line with that general approach, Thomas Hoenig has *a strong proposal* for our current situation, which is to use negotiated conservatorship, as was done with Continental Illinois. However, even his approach needs to be supplemented with quickly breaking up and selling off troubled banks; this is a daunting administrative task, but *better than the alternatives.*

9) The critical weakness in our system is that bank executives get to keep their jobs and their money. All key insiders should be fired when their banks become insolvent (as part of the government intervention and support process), irrespective of the reason for that insolvency. They should also be subject to large fines, equal to or in excess of the value of their total compensation while leading the bank that failed. As things currently stand, powerful insiders have learnt that they can gamble heavily and never lose personally or professionally.

10) Our national debt will increase substantially as a result of direct bank bail-outs and, more importantly, the discretionary fiscal stimulus needed to keep the economy from declining—as well as the standard deficit due to cyclical slowdown (a feature of the "automatic fiscal stabilizers"). This will constrain our future actions as a nation. For example, it may limit our options in terms of health care reform, with severe adverse social, economic, and budgetary implications.

11) The costs to consumers from our broad and deep banking crisis come in many forms. For example, in a period of financial confusion, it is easier to raise fees on consumers—they will have a harder time switching to other credit companies and many of them need the credit in order to survive. Supporting consumption is a key part of our economic recovery, but we are letting credit card issuers hit consumers hard; this is evidence of prior uncompetitive behavior (i.e., limiting entry, in order to raise prices later).

The remainder of this testimony provides further background regarding how this particular system (or lack of system) for handling financial insolvency developed. It also recaps some of the policy paths not taken in recent months, and suggests that our current trajectory with regard to banks is far from ideal. We need to find new ways to address the problems that arise when bank executives think their institutions are Too Big To Fail; this includes applying antitrust law in new ways.

Background

The depth and suddenness of the U.S. economic and financial crisis today are strikingly and shockingly reminiscent of experiences we have seen recently only in emerging markets: Korea in 1997, Malaysia in 1998 and even Russia and Argentina, repeatedly.

The common factor in those emerging market crises was a moment when global investors suddenly became afraid that the country in question wouldn't be able to pay off its debts, and stopped lending money overnight. In each case, the fear became self-fulfilling, as banks unable to roll over their debt did, in fact, become unable to pay off all their creditors.

This is precisely what drove Lehman Brothers into bankruptcy on September 15, and the result was that, overnight, all sources of funding to the U.S. financial sector dried up. From that point, the functioning of the banking sector has depended on the Federal Reserve to provide or guarantee the necessary funding. And, just like in emerging markets crises, the weakness in the banking system has quickly rippled out into the real economy, causing a severe economic contraction and hardship for millions of people.

This part of my testimony examines how the United States became more like an emerging market, the politics of a financial sector with banks that are now "too big to fail," and what this implies for policy—particularly, the pressing need to apply existing antitrust laws to big finance.

How could this happen?

The U.S. has always been subject to booms and busts. The dotcom craze of the late 1990s is a perfect example of our usual cycle; many investors got overexcited and fortunes were lost. But at the end of the day we have the Internet which, like it or not, profoundly changes the way we organize society and make money. The same thing happened in the 19th century with waves of investment in canals, railroad, oil, and any number of manufacturing industries.

This time around, something was different. Behind the usual ups and downs during the past 25 or so years, there was a long boom in financial services—something you can trace back to the deregulation of the Reagan years, but which got a big jolt from the Clinton Administration's refusal to regulate derivatives market effectively and the failure of bank regulation under Alan Greenspan and the George W. Bush Administration. Finance became big relative to the economy, largely because of these political decisions, and the great wealth that this sector created and concentrated in turn gave bankers enormous political weight.

This political weight had not been seen in the U.S. since the age of J.P. Morgan (the man). In that period, the banking panic of 1907 could only be stopped by coordination among private-sector bankers, because there was no government entity able to offer an effective counterweight. But the first age of banking oligarchs came to an end with the passage of significant banking regulation during and in response to the Great Depression. But the emergence of a financial oligarchy during a long boom is typical of emerging markets.

There were, of course, some facilitating factors behind the crisis. Top investment bankers and government officials like to lay the blame on low U.S. interest rates after the dotcom bust, or even better—for them—the flow of savings out of China. Some on the right of the spectrum like to complain about Fannie Mae or Freddie Mac, or even about longer-standing efforts to promote broader home ownership. And, of course, it is axiomatic to everyone that the regulators responsible for "safety and soundness" were fast asleep at the wheel.

But these various policies—lightweight regulation, cheap money, the unwritten Chinese-American economic alliance, the promotion of homeownership—had something in common, even though some are traditionally associated with Democrats and some with Republicans: they all benefited the financial sector. The underlying problem was that policy changes that might have limited the ability of the financial sector to make money—such as Brooksley Born's attempts at the Commodity Futures Trading Commission to regulate over-the-counter derivatives such as credit default swaps—were ignored or swept aside.

Big banks enjoyed a level of prestige that allowed them to do what they liked, for example with regard to "risk management" systems that allowed them to book large profits (and pay large bonuses) while taking risks that would be borne in the future—and by the rest of society. Regulators, legislators, and academics almost all assumed the managers of these banks knew what they were doing. In retrospect, of course, they didn't.

Stanley O'Neal, CEO of Merrill Lynch, pushed his firm heavily into the mortgage-backed securities market at its peak in 2005 and 2006; in October 2007, he was *forced to say,* “The bottom line is we . . . I . . . got it wrong by being overexposed to sub-prime, and we suffered as a result of impaired liquidity . . . in that market. No one is more disappointed than I am in that result.” (O’Neal earned a $14 million *bonus in 2006;* forced out in October 2007, he walked away with a severance package worth *over $160 million,* although it is presumably worth much less today.)

At the same time, AIG Financial Products earned over *$2 billion in pretax profits* in 2005, largely by selling underpriced insurance on complex, poorly-understood securities. Often described as “picking up nickels in front of a steamroller,” this strategy is highly profitable in ordinary years, and disastrous in bad years. As of last fall, AIG had outstanding insurance on over $500 billion of securities. To date, the U.S. Government has committed close to $200 billion in investments and loans in an effort to rescue AIG from losses largely caused by this one division—and which its *sophisticated risk models* said would not occur.

“Securitization” of sub-prime mortgages and other high risk loans created the illusion of diversification. While we should never underestimate the human capacity for self-delusion, what happened to all our oversight mechanisms? From top to bottom, executive, legislative and judicial, were effectively captured, not in the sense of being coerced or corrupted, but in the equally insidious sense of being utterly convinced by whatever the banks told them. Alan Greenspan’s pronouncements in favor of unregulated financial markets have been echoed numerous times. But this is what the man who succeeded him *said in 2006:* “The management of market risk and credit risk has become increasingly sophisticated . . . banking organizations of all sizes have made substantial strides over the past two decades in their ability to measure and manage risks.”

And they were captured (or completely persuaded) by exactly the sort of elite that dominates an emerging market. When a country like Indonesia or Korea or Russia grows, some people become rich and more powerful. They engage in some activities that are sensible for the broader economy, but they also load up on risk. They are masters of their mini-universe and they reckon that there is a good chance their political connections will allow them to “put” back to the government any substantial problems that arise. In Thailand, Malaysia, and Indonesia prior to 1997, the business elite was closely interwoven with the government; and for many of the oligarchs, the calculation proved correct—in their time of need, public assistance was forthcoming.

This is a standard way to think about middle income or low income countries. And there are plenty of Americans who are also comfortable with this as a way of describing how some West European countries operate. Unfortunately, this is also essentially how the U.S. operates today.

The U.S. System

Of course, the U.S. is unique. And just as we have the most advanced economy, military, and technology in the world, we also have the most advanced oligarchy.

In a primitive political system, power is transmitted through violence, or the threat of violence: military coups, private militias, etc. In a less primitive system more typical of emerging markets, power is transmitted via money: bribes, kickbacks, and offshore bank accounts. Although lobbying and campaign contributions certainly play a major role in the American political system, old-fashioned corruption—envelopes stuffed with $100 bills—is probably a sideshow today, Jack Abramoff notwithstanding.

Instead, the American financial industry gained political power by amassing a kind of cultural capital—a belief system. Once, perhaps, what was good for General Motors was good for the United States. In the last decade, the attitude took hold in the U.S. that what was good for Big Finance on Wall Street was good for the United States. The banking and securities industry has become one of the top contributors to political campaigns, but at the peak of its influence it did not have to buy favors the way, for example, the tobacco companies or military contractors might have to. Instead, it benefited from the fact that Washington insiders already believed that large financial institutions and free-flowing capital markets were critical to America’s position in the world.

One channel of influence was, of course, the flow of individuals between Wall Street and Washington. Robert Rubin, Co-Chairman of Goldman Sachs, served in Washington as Treasury Secretary under President Clinton, and later became Chairman of the Executive Committee of Citigroup. Henry Paulson, CEO of Goldman Sachs during the long boom, became Treasury Secretary under President George W. Bush. John Snow, an earlier Bush Treasury Secretary, left to become Chairman of Cerberus Capital Management, a large private equity firm that also counts Vice President Dan Quayle among its executives. President George H.W. Bush has been an advisor to the Carlyle Group, another major private equity firm.

Alan Greenspan, after the Federal Reserve, became a consultant to PIMCO, perhaps the biggest player on international bond markets.

These personal connections—which were multiplied many times over on lower levels of the last three presidential administrations—obviously contributed to the alignment of interests between Wall Street and Washington.

Wall Street itself is a very seductive place, imbued with an aura not only of wealth but of power. The people who man its towers truly believe that they control the levers that make the world go 'round, and a civil servant from Washington invited into their conference rooms, even if just for a meeting, could be forgiven for falling under its sway.

The seduction extended even (or especially) to finance and economics professors, historically confined to the cramped hallways of universities and the pursuit of Nobel Prizes. As mathematical finance became more and more critical to practical finance, professors increasingly took positions as consultants or partners at financial institutions. The most famous example is probably Myron Scholes and Robert Merton, Nobel Laureates both, taking positions at Long-Term Capital Management, but there are many others. One effect of this migration was to lend the stamp of academic legitimacy (and intellectual intimidation) to the burgeoning world of high finance.

Why did this happen, and why now? America is a country that has always been fascinated with rather than repelled by wealth, where people aspire to become rich, or at least associate themselves with the rich, rather than redistribute their wealth downward. And roughly from the 1980s, more and more of the rich have made their money in finance.

There are various reasons for this evolution. Beginning in the 1970s, several factors upset the relatively sleepy world of banking—taking deposits, making commercial and residential loans, executing stock trades, and underwriting debt and equity offerings. The *deregulation of stock brokerage commissions in 1975* increased competition and stimulated participation in stock markets. In *Liar's Poker,* Michael Lewis singles out Paul Volcker's monetary policy and increased volatility in interest rates: this, Lewis argues, made bond trading much more popular and lucrative and, it is true, the markets for bonds and bond-like securities have been where most of the action has been in recent decades. Good old-fashioned innovation certainly played its part: the invention of securitization in the 1970s (and the ability of Salomon Brothers to make outsized amounts of money in mortgage-backed securities in the 1980s), as well as the invention of interest-rate swaps and credit default swaps, vastly increased the volume of transactions that bankers could make money on. Demographics helped: an aging and increasingly wealthy population invested more and more money in securities, helped by the invention of the IRA and the 401(k) plan, again boosting the supply of the raw material from which bankers make money. These developments together vastly increased the opportunities to make money in finance.

Not surprisingly, financial institutions started making a lot more money, beginning in the mid-1980s. 1986 was the first year in the postwar period that the financial sector earned 19 percent of total domestic corporate profits. In the 1990s, that figure oscillated between 21 percent and 30 percent; this decade, it reached as high as 41 percent. The impact on compensation in the financial sector was even more dramatic. From 1948 to 1982, average compensation in the financial sector varied between 99 percent and 108 percent of the average for all domestic private industries. From 1983, it shot upward in nearly a straight line, reaching 181 percent in 2007.

The results were simple. Jobs in finance became more prestigious, people in finance became more prestigious, and the cult of finance seeped into the culture at large, through works like *Liar's Poker, Barbarians at the Gate, Wall Street,* and *Bonfire of the Vanities.* Even the convicted criminals, like Michael Milken and Ivan Boesky, became larger than life. In a country that celebrates the idea of making money, it was easy to infer that the interests of the financial sector were the same as the interests of the country as a whole—and that the winners in the financial sector knew better what was good for American than career civil servants in Washington.

As a consequence, there was no shadowy conspiracy that needed to be pursued in secrecy. Instead, it became a matter of conventional wisdom—trumpeted on the editorial pages of the *Wall Street Journal* and in the popular press as well as on the Floor of Congress—that financial free markets were good for the country as a whole. As the buzz of the dot-com bubble wore off, finance and real estate became the new American obsession. Private equity firms became the destination of choice for business students and hedge funds became the sure-fire way to make not millions but tens of millions of dollars. In America, where wealth is less resented than celebrated, the masters of the financial universe became objects of admiration or even adulation.

The deregulatory policies of the past decade flowed naturally from this confluence of campaign finance, personal connections, and ideology: insistence on free flows of capital across borders; repeal of the Depression-era regulations separating commercial and investment banking; a Congressional ban on the regulation of credit default swaps; major increases in the amount of leverage allowed to investment banks; a general abdication by the Securities and Exchange Commission of its enforcement responsibilities; an international agreement to allow banks to measure their own riskiness; a short-lived proposal to partially privatize social security; and, most banally but most importantly, a general failure to keep pace with the tremendous pace of innovation in financial markets.

American Oligarchs and the Financial Crisis

The oligarchy and the government policies that aided it did not alone cause the financial crisis that exploded last year. There were many factors that contributed, including excessive borrowing by households and lax lending standards out on the fringes of the financial world. But major commercial and investment banks—and their fellow travelers—were the big beneficiaries of the twin housing and asset bubbles of this decade, their profits fed by an ever-increasing volume of transactions founded on a small base of actual physical assets. Each time a loan was sold, packaged, securitized, and resold, banks took their transaction fees, and the hedge funds buying those securities reaped ever-larger management fees as their assets under management grew.

Because everyone was getting richer, and the health of the national economy depended so heavily on growth in real estate and finance, no one in Washington had the incentive to question what was going on. Instead, Fed Chairman Greenspan and President Bush insisted repeatedly that the economy was fundamentally sound and that the tremendous growth in complex securities and credit default swaps were symptoms of a healthy economy where risk was distributed safely.

In summer 2007, the signs of strain started appearing—the boom had produced so much debt that even a small global economic stumble could cause major problems. And from then until the present, the financial sector and the Federal Government have been behaving exactly the way one would expect after having witnessed emerging market financial crises in the past.

In a financial panic, the critical ingredients of the government response must be speed and overwhelming force. The root problem is uncertainty—in our case, uncertainty about whether the major banks have sufficient assets to cover their liabilities. Half measures combined with wishful thinking and a wait-and-see attitude are insufficient to overcome this uncertainty. And the longer the response takes, the longer that uncertainty can sap away at the flow of credit, consumer confidence, and the real economy in general—ultimately making the problem much harder to solve.

Instead, however, the principal characteristics of the government's response to the financial crisis have been denial, lack of transparency, and unwillingness to upset the financial sector.

First, there was the prominent place of policy by deal: when a major financial institution, got into trouble, the Treasury Department and the Federal Reserve would engineer a bail-out over the weekend and announce that everything was fine on Monday. In March 2008, there was the sale of Bear Stearns to JPMorgan Chase, which looked to many like a gift to JPMorgan. The deal was brokered by the Federal Reserve Bank of New York—which includes Jamie Dimon, CEO of JPMorgan, on its board of directors. In September, there were the takeover of Fannie Mae and Freddie Mac, the sale of Merrill Lynch to Bank of America, the decision to let Lehman fail, the destructive bail-out of AIG, the takeover and immediate sale of Washington Mutual to JPMorgan, and the bidding war between Citigroup and Wells Fargo over the failing Wachovia—all of which were brokered by the government. In October, there was the recapitalization of nine large banks on the same day behind closed doors in Washington. This was followed by additional bail-outs for Citigroup, AIG, Bank of America, and Citigroup (again).

In each case, the Treasury Department and the Fed did not act according to any legislated or even announced principles, but simply worked out a deal and claimed that it was the best that could be done under the circumstances. This was late-night, back-room dealing, pure and simple.

What is more telling, though, is the extreme care the government has taken not to upset the interests of the financial institutions themselves, or even to question the basic outlines of the system that got us here.

In September 2008, Henry Paulson asked for $700 billion to buy toxic assets from banks, as well as unconditional authority and freedom from judicial review. Many economists and commentators suspected that the purpose was to overpay for those assets and thereby take the problem off the banks' hands—indeed, that is the only way that buying toxic assets would have helped anything. Perhaps because there was no way to make such a blatant subsidy politically acceptable, that plan was shelved.

Instead, the money was used to recapitalize (buy shares in) banks—on terms that were grossly favorable to the banks. For example, Warren Buffett put new capital into Goldman Sachs just weeks before the Treasury Department invested in nine major banks. Buffett got a higher interest rate on his investment and a much better deal on his options to buy Goldman shares in the future.

As the crisis deepened and financial institutions needed more assistance, the government got more and more creative in figuring out ways to provide subsidies that were too complex for the general public to understand. The first AIG bail-out, which was on relatively good terms for the taxpayer, was renegotiated to make it even more friendly to AIG. The second Citigroup and Bank of America bail-outs included complex asset guarantees that essentially provided nontransparent insurance to those banks at well below-market rates. The third Citigroup bail-out, in late February 2009, converted preferred stock to common stock at a conversion price that was significantly *higher* than the market price—a subsidy that probably even most *Wall Street Journal* readers would miss on first reading. And the convertible preferred shares that will be provided under the new Financial Stability Plan give the conversion option to the bank in question, not the government—basically giving the bank a valuable option for free.

One problem with this velvet-glove strategy is that it was simply inadequate to change the behavior of a financial sector used to doing business on its own terms. As an unnamed senior bank official said to the *New York Times,* "It doesn't matter how much Hank Paulson gives us, no one is going to lend a nickel until the economy turns."

At the same time, the princes of the financial world assumed that their position as the economy's favored children was safe, despite the wreckage they had caused. John Thain, in the midst of the crisis, asked his board of directors for a $10 million bonus; he withdrew the request amidst a firestorm of protest after it was leaked to the *Wall Street Journal.* Merrill Lynch as a whole was no better, moving its bonus payments *forward to December,* reportedly (although this is now a matter of some controversy) to avoid the possibility they would be reduced by Bank of America, which would own Merrill beginning on January 1.

This continued solicitousness for the financial sector might be surprising coming from the Obama Administration, which has otherwise not been hesitant to take action. The $800 billion fiscal stimulus plan was watered down by the need to bring three Republican senators on board and ended up smaller than many hoped for, yet still counts as a major achievement under our political system. And in other ways, the new administration has pursued a progressive agenda, for example in signing the Lilly Ledbetter law making it easier for women to sue for discrimination in pay and moving to significantly increase the transparency of government in general (but not vis-à-vis its dealings with the financial sector).

What it shows, however, is that the power of the financial sector goes far beyond a single set of people, a single administration, or a single political party. It is based not on a few personal connections, but on an ideology according to which the interests of Big Finance and the interests of the American people are naturally aligned—an ideology that assumes the private sector is always best, simply because it is the private sector, and hence the government should never tell the private sector what to do, but should only ask nicely, and maybe provide some financial handouts to keep the private sector alive.

To those who live outside the Treasury-Wall Street corridor, this ideology is increasingly not only at odds with reality, but actually dangerous to the economy.

The Way Out

Looking just at the financial crisis (and leaving aside some problems of the larger economy), we face at least two major, interrelated problems. The first is a desperately ill banking sector that threatens to choke off any incipient recovery that the fiscal stimulus might be able to generate. The second is a network of connections and ideology that give the financial sector a veto over public policy, even as it loses popular support.

That network, it seems, has only gotten stronger since the crisis began. And this is not surprising. With the financial system as fragile as it is, the potential damage that a major bank could cause—Lehman was small relative to Citigroup or Bank of America—is much greater than it would be during ordinary times. The banks have been exploiting this fear to wring favorable deals out of Washington. Bank of

America obtained its second bail-out package (in January 2009) by first threatening not to go through with the acquisition of Merrill Lynch—a prospect that Treasury did not want to consider (although the details of exactly who forced whom to do what remain rather murky).

In some ways, of course, the government has already taken control of the banking system. Since the market does not believe that bank assets are worth more than their liabilities—at least for several large banks that are a large proportion of the overall system—the government has already essentially guaranteed their liabilities. The government has already sunk hundreds of billions of dollars into banks. The government is the only plausible source of capital for the banks today. And the Federal Reserve has taken on a major role in providing credit to the real economy. We have state control of finance without much control over banks or anything else—we can try to limit executive compensation, but we don't get to replace boards of directors and we have no say in who really runs anything.

One solution is to scale-up the standard FDIC process. A Federal Deposit Insurance Corporation (FDIC) "intervention" is essentially a government-managed bankruptcy procedure for banks. Organizing systematic tough assessments of capital adequacy, followed by such interventions, would simplify enormously the job of cleaning up the balance sheets of the banking system. The problem today is that Treasury negotiates each bail-out with the bank being saved, yet Treasury is paradoxically—but logically, given their anachronistic belief system—behaving as if the bank holds all the cards, contorting the terms of the deal to minimize government ownership while forswearing any real influence over the bank.

Cleaning up bank balance sheets cannot be done through negotiation. Everything depends on the price the government pays for those assets, and the banks' incentive is to hold up the government for as high a price as possible. Instead, the government should thoroughly inspect the banks' balance sheets and determine which cannot survive a severe recession (the current "stress tests" are fine in principle but not tough enough in practice; a point which *Saturday Night Live has noticed*). These banks would then face a choice: write down your assets to their true value and raise private capital within thirty days, or be taken over by the government. The government would clean them up by writing down the banks' toxic assets—recognizing reality, that is—and transferring those to a separate government entity, which would attempt to salvage whatever value is possible for the taxpayer (as the Resolution Trust Corporation did after the Savings and Loan debacle of the 1980s).

This would be expensive to the taxpayer; according to the latest IMF numbers, the bank clean-up itself would probably cost close to $1.5 trillion (or 10 percent of our GDP) in the long-term. But only by taking decisive action that exposes the full extent of the financial rot and restores some set of banks to publicly verifiable health can the paralysis of the financial sector be cured. The indirect and hidden costs of postponing a proper bank clean up would be much larger—for example, as measured by the consequent increase in government debt.

But the second challenge—the power of the oligarchy—is just as important as the first. And the advice from those with experience in severe banking crises would be just as simple: break the oligarchy.

In the U.S., this means breaking up the oversized institutions that have a disproportionate influence on public policy. And it means splitting a single interest group into competing sub-groups with different interests. How do we do this?

First, bank recapitalization—if implemented right—can use private equity interests against the powerful large bank insiders. The banks should be sold as going concerns and desperately need new powerful shareholders. There is a considerable amount of wealth "on the sidelines" at present, and this can be enticed into what would essentially be reprivatization deals. And there are plenty of people with experience turning around companies who can be brought in to shake up the banks.

The taxpayer obviously needs to keep considerable upside in these deals, and there are ways to structure this appropriately without undermining the incentives of new controlling shareholders. But the key is to split the oligarchy and set the private equity part onto sorting out the large banks.

The second step is somewhat harder. You need to force the new private equity owners of banks to break them up, so they are no longer too big to fail—and making it harder for the new oligarchs to blackmail the government down the road. The major banks we have today draw much of their power from being too big to fail, and they could become even more dangerous when run by competent private equity managers.

Ideally, big banks should be sold in medium-sized pieces, divided regionally or by type of business, to avoid such a concentration of power. If this is practically infeasible—particularly as we want to sell the banks quickly—they could be sold whole, but with the requirement of being broken up within a short period of time. Banks that remain in private hands should also be subject to size limitations.

This may seem like a crude and arbitrary step, but it is the most direct way to limit the power of individual institutions, especially in a sector that, the last year has taught us, is even more critical to the economy as a whole than anyone had imagined. Of course, some will complain about "efficiency costs" from breaking up banks, and they may have a point. But you need to weigh any such costs against the benefits of no longer having banks that are too big to fail. Anything that is "too big to fail" is now "too big to exist."

To back this up, we quickly need to overhaul our anti-trust framework. Laws that were put in place over 100 years ago, to combat industrial monopolies, need to be reinterpreted (and modernized) to prevent the development of financial concentrations that are too big to fail. The issue in the financial sector today is not about having enough market share to influence prices, it is about one firm or a small set of interconnected firms being big enough so that their self-destruction can bring down the economy. The Obama Administration's fiscal stimulus invokes FDR, but we need at least equal weight on Teddy Roosevelt-style trust-busting.

Third, to delay or deter the emergence of a new oligarchy, we must go further: caps on executive compensation—for all banks that receive any form of government assistance, including from the Federal Reserve—can play a role in restoring the political balance of power. While some of the current impetus behind these caps comes from old-fashioned populism, it is true that the main attraction of Wall Street—to the people who work there, to the members of the media who spread its glory, and to the politicians and bureaucrats who were only too happy to bask in that reflected glory—was the astounding amount of money that could be made. To some extent, limiting that amount of money would reduce the allure of the financial sector and make it more like any other industry.

Further regulation of behavior is definitely needed; there will be costs, but think of the benefits to the system as a whole. In the long run, the only good solution may be better competition—finally breaking the non-competitive pricing structures of hedge funds, and bringing down the fees of the asset management and banking industry in general. To those who say this would drive financial activities to other countries, we can now safely say: fine.

Of course, all of this is at best a temporary solution. The economy will recover some day, and Wall Street will be there to welcome the most financially ambitious graduates of the world's top universities. The best we can do is put in place structural constraints on the financial sector—anti-trust rules and stronger regulations—and hope that they are not repealed amidst the euphoria of a boom too soon in the future. In the meantime, we can invest in education, research, and development with the goal of developing new leading sectors of our economy, based on technological rather than financial innovation.

In a democratic capitalist society, political power flows towards those with economic power. And as society becomes more sophisticated, the forms of that power also become more sophisticated. Until we come up with a form of political organization that is less susceptible to economic influences, oligarchs—like booms and busts—are something that we must account for and be prepared for. The crucial first step is recognizing that we have them.

Biography for Simon Johnson

Simon Johnson is the Ronald A. Kurtz (1954) Professor of Entrepreneurship at MIT's Sloan School of Management. He is also a senior fellow at the Peterson Institute for International Economics in Washington, D.C.; a co-founder of *http://BaselineScenario.com,* a widely cited web site on the global economy; and a member of the Congressional Budget Office's Panel of Economic Advisers.

Mr. Johnson appears regularly on NPR's Planet Money podcast in the *Economist House Calls* feature, is a weekly contributor to *NYT.com*'s Economix, and has a video blog on The New Republic's web site. He is also co-moderator of the *Washington Post*'s The Hearing, an on-line discussion centered around economics-related debates in Congress.

Professor Johnson is an expert on financial and economic crises. As an academic, in policy roles, and with the private sector, over the past 20 years he has worked on severely stressed economic and financial situations around the world. His research and policy advice focus on how to limit the impact of negative shocks and manage the risks faced by countries.

From March 2007 through the end of August 2008, Professor Johnson was the International Monetary Fund's Economic Counselor (Chief Economist) and Director of its Research Department.

In 2000–2001 Professor Johnson was a member of the U.S. Securities and Exchange Commission's Advisory Committee on Market Information. His assessment of the need for continuing strong market regulation is published as part of the final report from that committee.

He is co-founder and a current Co-Chairman of the National Bureau of Economic Research's (NBER) project on Africa. He is also faculty director of MIT Sloan's new Moscow initiative and a former member of the Global Advisory Board of Endeavor, which promotes entrepreneurship in Latin America and around the world.

Chairman MILLER. Thank you, Dr. Johnson. Dr. Baker for five minutes.

STATEMENT OF DR. DEAN BAKER, CO-DIRECTOR, CENTER FOR ECONOMIC AND POLICY RESEARCH

Dr. BAKER. Thank you, Chairman Miller. I appreciate the opportunity to address the Committee on these issues.

I want to make three main points in my comments this morning. First off, I think that the problem of troubled assets has been widely misconstrued. It is a problem first and foremost of mortgages, bad mortgages, not mortgage-backed securities or other complex derivative instruments. Secondly, that there really is no problem of the lack of market. There is a market there, and there is absolutely no reason to believe it is not properly pricing these assets, and thirdly, when it comes to the stress test that although there is some reason to question the quality of the stress test, whether they are harsh enough, that policy seems to be inconsistent with the conclusions that the Treasury has drawn from the stress test.

Starting with the first point, one of the benefits we got from the stress test was just a clear delineation of what assets are at risk, and there we could see very clearly the analysis of the 19 banks showed that less than six percent of the troubled assets, or I should say the losses that were projected in the stress test, were attributed to mortgage-backed securities. The mortgage-backed securities, I should say non-agency mortgage-backed securities, some to less than $200 billion and many of those were not sub-prime and many of those are of older vintages, and therefore presumably not as troubled as, say, a sub-prime mortgage issued in recent years.

So that is not the main story. The main story very clearly is mortgages, the losses projected from mortgages in this severe scenario were over $200 billion. That accounted for more than 30 percent of the total losses, far and away the largest single category. So it is clear that the trouble assets are mortgages, more than anything. It is not mortgage-backed securities.

The second point is that we have a market for mortgages. This idea that somehow there is no market, I mean, all you have to do, FDIC has acquired tens of billions of dollars in mortgages, and they are auctioning them off on an ongoing basis. You could simply look that up on the web site, and you could find out the price of those mortgages. I eyeballed this. Other people have calculated it. It is around 30 cents on the dollar is a typical price that a non-performing mortgage commands.

Now, the question is, is that an unreasonable price? And I just looked up—again a quick analysis, I looked up what had happened to the prices for the bottom tier of houses in the most bubble-inflated markets. This is taken from Case-Shiller data, very good series on house prices, and the reason for picking this—I wasn't just cherry-picking—the idea was that where would you find the most troubled mortgages? Well, you would expect to see them in subprime markets, in these bubble markets, places like Phoenix and Miami, Tampa, San Diego where prices had gone through the roof in the peak years of the housing boom that have now gone through the floor.

So if we look at those prices—I included a short table in my testimony—you see that in many cases the prices have fallen by more than 50 percent, and in the worst case in Phoenix, the prices had fallen by 65.9 percent. Now that is data as of February of this year, and I point out that we since have about four months since that data, since those numbers were calculated. Prices in these markets are falling three to four percent a month.

So if you say, okay, imagine that you have a mortgage on one of these houses where you are looking at a very high probability of foreclosure, how much will you get after the cost of foreclosure, which typically they estimate at 25 to 30 percent of the face value of the mortgage, 30 cents on the dollar looks perhaps even high in many of these cases.

So there is very little reason to think that we somehow have a market failure here. To my mind, 30 cents on the dollar indicates a perfectly reasonable price. I am not in the market for buying bad mortgages, but there is no obvious reason to question the market's judgment in this case.

The last point—in terms of the stress test, again, I would agree with the prior statement from both Dr. Johnson and Dr. Sachs. I think it is questionable whether these were adequate. Just to give a couple quick points. The unemployment rate that is assumed as a year-round average for 2009 in the severe scenario is 8.9 percent. We of course hit that number in April, and I don't know anyone who doesn't expect it to go much higher. We are losing 600,000 jobs a month. They expect a 22 percent rate of house price decline over the course of 2009. House prices are declining at a two percent monthly rate. That gives you 24 percent. So it is very hard to paint that as a worst-case scenario. But be that as it may, the Administration's interpretation of the stress test were that essentially the banks would for the most part, with the possible exception of GMAC, find that they would be able to raise the capital necessary from the private sector to maintain their capital requirements. If that is the case, it is hard to justify the level of government assistance we currently see, and it would be reasonable to ask when the special programs would be phased out. So specifically here I am thinking of the special lending through the FDIC where we have the FDIC ensuring government bonds or bank bonds issued by the government—I am sorry, issued by the banks. Secondly, the lending facilities that the Fed is creating, and thirdly and perhaps most egregiously, the AIG window which I don't think we have been given a very good explanation as to what the rationale was behind the payouts that AIG has made or might make in the future.

Finally, again, agreeing very strongly with Dr. Sachs, the PPIP I think is a very large subsidy to the banks that perhaps there have been arguments for subsidizing them in the event that they really were on the edge of insolvency. But if we accept the results of the stress test, it is very hard to justify what could be a trillion-dollar program, and again, I agree very strongly with Dr. Sachs, that it is likely to be poorly run and lead to many opportunities for gaming and very large losses for taxpayers.

Thank you.

[The prepared statement of Dr. Baker follows:]

PREPARED STATEMENT OF DEAN BAKER

Thank you, Chairman Miller, for inviting me to testify before the Subcommittee and to share my views on the problem of insolvency facing the U.S. banking system. I wish to make three main points in my comments:

1) There is little logic to the claim that there is no market for "troubled assets," since in fact such assets are being sold on a regular basis by the FDIC;
2) There is little reason to believe that the current market prices for these assets are unreasonably low and that they will be selling for substantially higher prices in the foreseeable future; and
3) If the major banks are fundamentally sound, as suggested by the recent stress tests conducted by the Fed and Treasury, then there can be little justification for the various forms of subsidies, such as the Fed's special lending facilities, which allow banks to borrow at below-market interest rates.

I will address these issues in turn.

On the first point, it has been widely asserted that the central problem facing the banks is that they have large amounts of assets on their books that are not currently marketable due to the disruptions in national and international financial markets. I would argue that there is no obvious failure of the market. In fact, the "troubled assets" that the banks hold are being sold by the FDIC (among other institutions) on a regular basis, which must auction off mortgages and other assets from the banks that it has taken over in recent months.

There has been considerable confusion about the nature of the troubled assets held by the banks. While banks do hold some amount of mortgage-backed securities, these securities are in fact a relatively small portion of their troubled assets. In its analysis of the bank stress tests, the Fed reported that the 19 bank holding companies it examined collectively held only about $200 billion in non-agency mortgage-backed securities. Furthermore, not all of these securities were of recent vintage or backed by non-prime mortgages, so the amount of these securities that could reasonably be placed in the troubled asset category would be even less than $200 billion.[1] The Fed estimated the losses on these assets in the more adverse scenario at $35.2 billion, less than six percent of the total projected loss in this scenario. By contrast, the losses on mortgages were projected at $185.5 billion, more than 30 percent of total losses, by far the largest single category.[2]

In short, the troubled assets on the banks' books are overwhelmingly mortgages, both first and second or other junior liens, not mortgage-backed securities. The FDIC has acquired large quantities of mortgages from its takeover of several dozen failed banks over the last year. It auctions these assets off on an ongoing basis. The results of these auctions are available on the FDIC web site.[3] Non-performing mortgages typically sell in these auctions at prices in the vicinity of 30 cents on the dollar.

It is not clear on what basis these auctions can be said not to constitute a market. While the downturn and the constricted credit conditions affect the market, it is simply inaccurate to claim that there is no market for these assets. The major banks are undoubtedly not pleased at the prospect of having to sell off their loans at these prices, but this merely indicates that they are unhappy with the market outcome, just as a homeowner might be unwilling to sell her house at a loss. However, the unhappiness of the seller does not mean that there is no market.

The second issue is whether there is some reason to believe that the prices that these loans currently command is unrealistically depressed and that they will command a substantially higher price in the near future. On its face, there is little evidence to support this view.

[1] The structure of the banks' assets is discussed in Board of Governors of the Federal Reserve System, 2009. "The Supervisory Capital Assessment Program: Overview of Results," pages 8–9, available at [*http://www.federalreserve.gov/newsevents/bcreg20090507a1.pdf*]

[2] Board of Governors of the Federal Reserve Board, 2009, Table 2.

[3] The FDIC web site reporting the results of its auctions can be found at *http://www2.fdic.gov/closedsales/LoanSales.asp*

Most of the loans that fall in this toxic category were presumably non-prime loans issued to buy homes near the peak of the housing bubble in the years 2004–2007. Most of these loans presumably went to buy lower-end homes in the most inflated bubble markets—places like Los Angeles, San Diego, Miami, and Phoenix.

In these cities, house prices have fallen sharply from their bubble peaks. The table below gives the decline in nominal house prices from their bubble peaks for homes in the bottom third of the housing market, as reported in the Case-Shiller tiered price index. The data show that prices of homes in the bottom third of several of these markets have already declined by more than 50 percent from their bubble peaks. In Phoenix, the most extreme case of the cities included in the Case-Shiller index, the price of houses in the bottom third of the market are already down more than 60 percent from their bubble peaks.

City	Decline from Peak	Date of Peak
Phoenix	65.9 percent	July 2006
San Francisco	58.7 percent	May 2006
Los Vegas	54.2 percent	July 2006
Miami	52.6 percent	March 2007
Los Angeles	51.7 percent	February 2007
San Diego	50.2 percent	April 2006
Tampa	46.4 percent	July 2006
Washington, DC	46.0 percent	June 2006

Source: S&P/Case-Shiller Home Price Indices (February 2009).

Furthermore, house prices are continuing to decline rapidly. Prices for homes in the bottom tier are falling at a rate of three to four percent per month in the Case-Shiller index. The most recent data in the Case-Shiller indexes was for February. (The data is obtained at closing. Since there is typically more than a month between when a contract is signed and when closing takes place, the February data primarily reflect market conditions in January.) It is therefore likely that the price of houses for homes in the bottom third of these markets are already at least ten percent lower presently (May 2009), than indicated in the February data.

In the peak years of the bubble, 2004–2007, it was common for home buyers to purchase homes with little or no money down. If a mortgage written against these homes is now non-performing, and the house has lost 60 percent of its value, then it is very plausible that the current market value of this mortgage is 30 cents on the dollar or less, based on the underlying value of the collateral. The costs associated with carrying through the foreclosure are likely to take up a large portion of the proceeds from the resale of the house.

In fact, there have been several press accounts of instances where lenders have stopped carrying through foreclosures in some especially depressed markets.[4] They have decided that the money from selling the home would not cover the cost of carrying through the foreclosure. In many former bubble markets or some very depressed non-bubble markets, such as Detroit or Cleveland, prices of 30 cents on the dollar may be high for non-performing loans.

There is little reason to expect prices to bounce back from current levels. The run-up in house prices in the years 2004–2007 was quite obviously an asset bubble. There was no obvious change in the fundamentals of the housing market either nationally or in the most affected cities that could have justified this increase in house prices. Furthermore, the increase in house prices was not associated with any remotely corresponding increase in rents. If the fundamentals of the housing market had been responsible for the run-up in house prices, then there should have been some comparable increase in rents in this period. Instead, real house prices were mostly fairly stable. The plunge in house prices in the last two and a half years is now bringing them back in line with rents. There is no obvious reason that house prices should turn around and go back toward their bubble peaks.

In short, the current market valuation of the banks' toxic assets seems like an appropriate valuation based on the available evidence. It is understandable that the

[4] For example, see "No Sale: Bank Wrecks New Homes," *Wall Street Journal,* May 5, 2009; A3.

banks are unwilling to take large write-downs on these loans, especially if it will raise questions about their solvency, but there is no reason to believe that there is any real problem in the market for these assets. In short, in designing plans to relieve the banks of their toxic assets, the Treasury and the Fed are trying to fix a problem that does not exist.

The final point that I want to address is the role of the Federal Government in the bank bail-out in the context of the recently released stress tests of the country's 19 largest banks. There are serious grounds for questioning the usefulness of the stress tests, most obviously the fact that the economic assumptions in the adverse scenario are now a relatively optimistic scenario given recent economic data.

However, what is more striking is that policy does not appear to be consistent with Secretary Geithner's assessment of the stress tests. Mr. Geithner has indicated that the tests suggest that the banks are essentially healthy. While they showed that several banks would need to raise additional amounts of capital, with the exception of GMAC, it seems likely that the capital shortfall could be made up either through capital raised in private markets or by converting the preferred shares already held by the government into common stock.

If it is in fact the case that the banks can weather this crisis without further assistance from the government, then it is reasonable to ask why the government is continuing to provide extraordinary assistance. Specifically, if the banks are able to stand on their own, is there really a need for the special lending facilities that have been created by the Fed and have more than $2 trillion outstanding in loans to the banks and other institutions? The FDIC is guaranteeing several hundred billion dollars of bonds issued by banks in the last eight months and has authorized the banks to issue tens of billions of dollars of additional debt with a government guarantee.

The government continues to fund AIG to pay off counter-parties (mostly banks) who would have incurred large losses without the government's intervention. And the government stands prepared to subsidize the purchase of as much as $1 trillion in troubled assets from the banks' balance sheets through the Public Private Investment Partnership (PPIP) program.

These programs all involve substantial subsidies from taxpayers to the banks. Arguably, such subsidies are necessary if the survival of systematically important institutions is at risk. However, if these institutions are essentially solvent, as Mr. Geithner suggests based on the stress test results, then it seems appropriate to put an end to these taxpayer subsidies, or in the case of PPIP, to cancel the program before it is put in place. There is an important public interest in maintaining a functioning financial system. There is no public interest in subsidizing banks. If the banks are able to stand on their own without further public assistance, then they should be given that opportunity.

Biography for Dean Baker

Dean Baker is the author of *Plunder and Blunder: The Rise and Fall of the Bubble Economy, The United States Since 1980, The Conservative Nanny State: How the Wealthy Use the Government to Stay Rich and Get Richer, Social Security: The Phony Crisis* (with Mark Weisbrot), and *The Benefits of Full Employment* (with Jared Bernstein). He was the editor of *Getting Prices Right: The Debate Over the Consumer Price Index,* which was a winner of a Choice Book Award as one of the outstanding academic books of the year. He appears frequently on TV and radio programs, including CNN, CBS News, PBS NewsHour, and National Public Radio. His blog, "Beat the Press," features commentary on economic reporting. He received his B.A. from Swarthmore College and his Ph.D. in economics from the University of Michigan.

Chairman MILLER. Thank you, Dr. Baker. Mr. John for five minutes.

STATEMENT OF MR. DAVID C. JOHN, SENIOR RESEARCH FELLOW, THE HERITAGE FOUNDATION

Mr. JOHN. Thank you for having me. This is quite a panel to be on actually. Some of the great people in our field.

I would like to make four points and four relatively quick points about the stress tests and the use of models in general and on the financial institution situation in general.

First off, I would argue that the stress tests, regardless of whether they were a worst-case-scenario or not, actually achieved their purpose which was to distract people. If you look at the way the financial stocks were selling, the fear that was in the market at the time the stress tests were announced, we had CitiBank selling below $1 for about 20 minutes or so. We had great concern that the financial situation as a whole was going to be a disaster and collapse. However, with the stress test, people were forced to focus on the future to wait for some data, regardless of how good it was, and the net result was that the hysteria seems to have subsided to a large extent, at least for now, and it did so without spending hundreds of billions of dollars to do so. So I would say that is a pretty cost-effective activity, at least for a short-run move.

Second, are these valid numbers, and I think the answer is perhaps. I had an interesting situation the afternoon that Lehman collapsed in that I was in Scotland with a group of investment bankers after a conference with the British government looking at pension issues. And as the bankruptcy was announced, everyone's Blackberries went off except mine—I felt a little left out—because they had calls from financial institutions around the world saying, oh, my God, in this situation, do you have any idea what our assets are worth? And these were financial institutions both very well-capitalized and those who were not and a few that subsequently failed.

We have made a great deal in finance and various of the other social sciences in the last several years of assuming that we can put everything together in a formula and that this will give us an accurate price or an accurate prediction, et cetera. Unfortunately, reality doesn't always understand the formula and sometimes does things slightly differently, the net result being that the old computer term of garbage in, garbage out actually does apply in most financial activities, and we have to recognize that the stress tests are educated guesses. Now, they are educated guesses that may not be worst-case scenarios as I thoroughly believe that they are not. But in this situation, they are reasonable-case scenarios. And as a result, they serve a purpose. The one thing we do know which we didn't know in January was that the top 19 financial institutions are not going to collapse into a heap of rubble some time in the next 15 or 20 minutes or so. It may well be that they do so some time as the recession deepens. But at least we have got enough information to keep people calm for the moment.

Does this mean that the banking crisis is over? Absolutely not. As the recession continues and deepens, we will continue to see new problems with asset classes. One of the ones that was noted very heavily in the stress test was problems that are developing in the credit card portfolios. Today's *Wall Street Journal* looks at local banks and points out that it is mostly smaller banks that do commercial real estate construction loans which are now about to hit a very serious situation. Commercial real estate is about five percent of GDP as is residential real estate. So this could be fairly serious.

But going forward, we have learned a few things and we have got some definite things to put into place. We discussed earlier the need for a resolution process. A resolution process is crucial, but it is also crucial to remember that not everything is too big to fail. The top 19 banks were chosen basically because they had over $100 billion. There was no real science there. It is a complete mistake to assume that all of these top 19 banks are too big to fail or should all remain in business, and as we have already seen in the takedown of Washington Mutual and the sale, or rather comedic sale, of Wachovia, larger banks can be dealt with. There are a few out there that are too big to fail.

Last but not least, there is an interesting question of if we are going to deal with a systemic regulator, what that systemic regulator is supposed to do. I have seen lots of discussion about how to structure one but very little as to how it is actually going to work, and one of the problems that we run into is that in case after case after case, the problem originates in the unregulated section, and these are unregulated sections that may not have existed six months or six years before.

So we are in a position right now where the good news is that we aren't in imminent disaster. The bad news is that we have a lot of work to do to make sure that this type of situation doesn't reoccur.

Thank you.

[The prepared statement of Mr. John follows:]

PREPARED STATEMENT OF DAVID C. JOHN

My name is David C. John. I am a Senior Research Fellow in Retirement Security and Financial Institutions at The Heritage Foundation. The views I express in this testimony are my own, and should not be construed as representing any official position of The Heritage Foundation.

The stress test on the top 19 banks was a successful way to distract fearful investors from the obsession that several of those financial institutions were on the brink of failure. By promising an analysis of the most threatened banks, the Treasury and financial regulators induced investors to focus on the future, and as a result, the financial markets calmed down until the results were released. While less than perfect (as all modeling is), the results show that the largest 19 banks in the financial services industry is better capitalized than many consumers and experts feared just a few months ago.

However, the most important question is what happens next. While risks remain, the banks' gradual return to health should signal the end of government's extraordinary intervention into financial services and especially efforts to micro-manage the day-to-day activities of these companies. As part of this transition, adequately capitalized banks should be not only allowed but encouraged to repay government investments in them.

Banks Healthier Than Expected

With the exception of perhaps one or two smaller banks, even those 10 banks that must increase their capital levels are not in dire shape and should be able to raise the needed capital fairly easily. The size of certain losses (especially on credit cards) will be substantial, but almost all of the major banks will be able to weather them, and those that cannot are small enough to be sold to healthier banks.

While individual consumer's accounts were never at risk because they are fully insured by the FDIC up to $250,000 per account, they can feel reassured that the worst predictions of massive bank failures are increasingly unlikely to come true. In addition, customers of smaller banks or credit unions can rest assured that, with very few exceptions, those financial institutions appear to be strong and relatively unaffected by the recession. As the recession continues, certain of these smaller banks that made commercial real estate construction loans may run into difficulty as that sector continues to slow, but none of them are large enough to cause systemic risks, and all can be resolved in the usual way.

Stress Tests Are Not New or Unusual

Major banks and bank regulators have been using stress tests—a computer simulation of what would happen to a bank's finances under certain economic conditions—for several years. The results released today are nothing more or less than a way of distracting a worried market until real information about the condition of major banks was available.

However, it is important to keep in mind that while the stress tests show that most banks are healthy stress tests are a prediction, not a guarantee. Economic and financial modeling is an approximation of real life, and it is always possible that reality will not turn out as the model expects. As a result, it is possible that one or more of these 19 banks will have problems as the effects of the recession continue to be felt.

Failure Must Be Possible

The press has loosely characterized all 19 banks that were stress tested as "too big to fail," a term meaning that their failure would have large consequences on the rest of the financial system and on the economy as a whole. Treasury Secretary Timothy Geithner added to this impression by stating that none of the 19 will be allowed to fail. This is a serious mistake.

While the failure of the largest of these banks would have serious consequences, the rest are not too big to fail and do not pose systemic risks. This includes the couple of stress-tested banks that may have trouble raising sufficient capital. Treasury decided to stress test any bank with more than $100 billion in assets. In the last year, Wachovia, which had substantially more assets than that, ran into trouble and was taken over with little problem.

By indicating that none of these 19 banks will be allowed to fail, the Obama Administration has dangerously expanded the "too big to fail" problem. As the Administration itself has indicated previously, failure must be an option for financial firms if the market is to work. Certainly not all of these 19 financial institutions are "too big" to be allowed to fail.

Going Forward

Now that there is public information about the how large banks are likely to fare in a serious recession, the information should be used to allow well-capitalized banks to be freed from government control and for taxpayers to be freed from investment in them.

- **Allow Troubled Asset Relief Program (TARP) Repayment.** Stress tests are predictors. They do not guarantee that problems with banks will not appear at a later date. But there is no reason to keep banks that did well on these stress tests under a program designed for a systemically failing financial system. Firms must be allowed out of TARP without unnecessary conditions. This will also allow these banks to end the politically motivated interference into their day-to-day activities.
- **No Forced Subsidy.** Firms that do need additional capital should raise it from private sources. In no instance should these firms be forced to take taxpayer money or cede ownership rights to the Federal Government if it can raise capital from the private sector or meet capital standards by selling off assets. If any bank other than a select few cannot raise the needed funds from private sources, it should be merged into a healthy bank, taken over by new investors, or allowed to fail.

Time for an Exit Strategy

Six months ago, the financial services sector was in deep trouble. For the most part, that is no longer the case today. While there is still a possibility that certain banks—both large and small—could face problems, the sector is no longer in crisis. Now it is time for the Obama Administration, the Federal Reserve, and other regulators to end programs like TARP and, as credit markets continue to recover, gradually close the special financing mechanisms and other credit-assistance programs that were seen as necessary during the time of crisis.

These programs—and the micro-management of financial institutions that came with them—should not be a permanent part of the financial landscape. Now that there is clear public information about the conditions of the largest U.S. banks, it is time to return their control to the private sector.

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Biography for David C. John

David John is a Senior Research Fellow at The Heritage Foundation, a prominent Washington think tank. A 30-year veteran of Washington policy debates, John serves as Heritage's lead analyst on issues relating to pensions, financial institutions, asset building, and Social Security reform. He has also spoken on corporate governance, financial regulation, financial literacy, and asset building in lower income communities.

In addition to his Heritage Foundation activities, John also serves as the Managing Director of the Retirement Security Project, a joint project of Georgetown University and the Brookings Institution that is funded by the Pew Charitable Trusts. RSP focuses on ways to improve retirement savings in the United States.

David John is one of five experts who "exert more influence" on the Social Security debate than anyone else in Washington. In addition, he has a detailed knowledge of the U.S. financial regulatory system, and has worked with a number of financial companies and industrial groups on ways to improve compliance and reduce regulatory burden. He helped to develop a number of bills that would modernize portions of the regulatory system, and when he worked in the private sector, devised successful legislative strategies to get those changes implemented.

He has also worked with Brookings Institution scholar J. Mark Iwry to come up with a "third way" to promote retirement self-reliance: the Automatic IRA. Their approach would encourage most workers not covered by an employer-sponsored retirement plan to build their own low-cost, diversified individual retirement accounts. It would work much like a direct paycheck deposit to a bank account—a feature now common in the American workplace. Unless workers choose to opt out, they would be automatically enrolled in the generic savings program, with a pre-set contribution rate and diversified investment portfolio. The contribution amount and portfolio selection could be adjusted by workers to meet their individual needs. This approach would let workers accumulate pre-tax retirement savings in every job they hold, even when their employers offer no such benefit of their own.

This is just one of John's many professional achievements. Since coming to Heritage in 1998, he has written and lectured extensively on a number of financial and retirement topics. During this time, he has testified before a number of House and Senate committees on subjects ranging from Social Security and pension reform to improving the Nation's flood insurance program.

John has testified before the House Ways and Means Committee on issues such as steps that should be taken to improve Social Security for women and minorities, how to increase the information that the public can receive about Social Security programs, and how the United Kingdom's pension system operates. He also testified before both the Senate Special Committee on Aging and the House Education and the Workforce Committee on proposals to strengthen the funding of defined benefit pension plans, before the House Budget Committee and the Senate Banking Committee on aspects of adding a savings element to Social Security, and before the Senate Finance Committee and the House Education and Labor Committee on improving the number of workers who can save for retirement.

John has been published and quoted extensively in many major publications, including the *Wall Street Journal, Financial Times, Washington Post, New York Times, Chicago Tribune, Los Angeles Times, Philadelphia Inquirer, Washington Times, Forbes, Business Week,* and *USA Today*. He has also appeared on CBS News, NBC News, PBS' Nightly News Hour, CNBC, CNN, MSNBC, the Fox News Channel, BBC radio, and many other national and syndicated radio and television shows.

John came to Heritage from the office of Rep. Mark Sanford (R–SC). He was the lead author of Sanford's plan to reform Social Security by setting up a system of personal retirement accounts. His Capitol Hill service also includes stints in the offices of Reps. Matt Rinaldo (R–NJ), and Rep. Doug Barnard Jr. (D–GA). While working for Barnard, John helped write one of the first bills that would have eliminated restrictions on banks to sell securities and insurance. He also worked on this issue in Rep. Rinaldo's office and in the private sector.

In the private sector, John was a Vice President at the Chase Manhattan Bank in New York, specializing in public policy development. In addition, he worked for three years as Director of Legislative Affairs at the National Association of Federal Credit Unions, and worked as a Senior Legislative Consultant for the Washington law firm of Manatt, Phelps & Phillips.

John earned a Bachelor's degree in journalism, an MBA in finance, and a Master's degree in economics from the University of Georgia in Athens.

DISCUSSION

Chairman MILLER. Thank you. I think that Dr. Broun has gone for votes in another committee that he serves on but will be back shortly.

I now recognize myself for five minutes of questioning.

IMPLICATIONS OF A STRESS TEST

Mr. John, how you described the stress test is not really that dissimilar to how others have described it, including those who helped design it. Chairman Bernanke analogized it in a hearing in the Financial Services Committee to the bank holiday in the New Deal as perhaps not really being that rigorous a test but building confidence. And several of you have used the term "run." In the 1930's, in the Great Depression, before there was deposit insurance, the run was by the depositors to get their money out before the bank went under. With deposit insurance which is now $250,000, surely everyone knows that whatever else becomes of the banks, it is not going to be the case that their deposits are not made whole, however much. I mean, whatever liabilities or whatever unsecured creditors or bondholders, for instance, might get, certainly depositors are going to get their money back.

Whose confidence are we worried about in these stress tests? Are we worried about investors we are trying to attract to the banks? Are we worried about the public at large? Are we really worried about depositors? Anyone? Dr. Sachs, you seem to be——

Dr. SACHS. I think, Mr. Chairman, we are mainly worried about short-term, money market, commercial paper, and other kinds of instruments that can seize up. We are not so much worried about—I would say we are almost not at all worried about depositors under FDIC. They showed no interest in budging at all through all of this, and rightly so. But what did seize up was interbank lending and many other—the commercial paper market and many other kinds of short-term credit lines. That is where the big damage of the real economy also occurred between last September and now. As I said, the longer-term recovery will depend on the overall health of the banking sector, longer-term lending, and many other things. But the sharp squeeze was the breakdown of short-term credit and the near collapse of the commercial paper market. I think that the Administration has gone way overboard in protecting everybody, including long-term bondholders to try to avert another post-Lehman event. I think the post-Lehman event was a result of what we know happened in the money markets, but essentially what the administration has done is to throw an implicit, maybe even inching up to explicit, guarantee over all liabilities of the banking sector, including bondholders, long-term bondholders, who don't run because there is no run on long-term assets. They trade, but there is no run.

And so in this sense, I believe that the taxpayers are being put at far too much risk for far too little real benefit of averting panic.

Chairman MILLER. Dr. Johnson.

Dr. JOHNSON. I would just add to that that I think there were broader, confidence-building measures that were put in place by Congress at the behest of the Administration, including the fiscal stimulus enacted in February. And I think the stress tests bought some time for those effects to begin to come through the economy. In addition, the big support provided by the Fed in terms of lines of credit, and of course, the FDIC guarantees were put in place last fall.

So I don't think the stress test per se convinced people, but people felt the real economy was bottoming out, and that fed through into a greater confidence that the banks are not going to get substantially worse and that helps the points that Professor Sachs is making. But I think it is not just the magic of not quite telling the truth with the stress test, it is a broader confidence-building measures that have actually been quite helpful.

Dr. BAKER. If I could just very quickly comment, I do worry a little bit about the magic of not quite telling the truth, and again, to Dr. John's comments, I do worry that we might have persuaded a lot of investors to perhaps throw their money away on bonds or stocks issued by the major banks in part as a result of the stress test, and to my mind, that is not good policy if that is in fact the case.

THE STATE OF MORTGAGES

Chairman MILLER. Okay. You don't have to elaborate. I do have one more question, although my time is expired. Dr. Baker, your description of the problem being in mortgages is very different from what we have heard. We have heard that the great majority of mortgages, particularly the problem mortgages, were sliced and diced is usually the term you hear, that they were put into pools and then divided into tranches, and then there were security bonds sold in the tranches and that it was high nigh impossible to put a mortgage back together.

But your impression is or your analysis is that actually there are plenty of whole mortgages in portfolios out there?

Dr. BAKER. Exactly. I mean, the point the banks were trying to slice and dice and put them in the mortgage-backed securities with the idea of offloading them so they are not on their books, and these stress tests—I mean, one of the great things about the stress test was we can see who has what. For the most part, they were successful in that. So they still hold a lot of mortgages on their books, but to a large extent, they were successful in offloading the mortgage-backed securities. So at the moment, they are someone else's problem.

Chairman MILLER. Do we know who that someone else is?

Dr. BAKER. Pension funds. Well——

Chairman MILLER. Dr. Johnson.

Dr. JOHNSON. Well, we know many of the most toxic versions, including the collateralized debt obligations are held in Europe. So there was a lot of selling of these overseas which is why it is a global financial problem. And the Europeans, of course, are way behind, even in terms of doing anything like a stress test on their banks, and that will come back to haunt us, too, most likely.

Chairman MILLER. That actually was one of the questions I had for later, but my time is expired. Ms. Dahlkemper.

DETERMINING THE RIGHT SIZE FOR FINANCIAL FIRMS

Ms. DAHLKEMPER. Thank you, Mr. Chairman. We often talk about the fact that these firms are too big to fail, and we are willing to expend billions of dollars to save them. Dr. Johnson suggests it is too big to allow it to continue at this size. How do we right-size our financial firms? I am going to open this up to if any of you want to address this. Dr. Sachs.

Dr. SACHS. I am not sure that it is literally the problem of too big to fail because it is not really the—even the collapse of one of these institutions that has the macro-economic significance. What has macro-economic significance is when a failure turns into a more generalized market phenomenon of panic or unwillingness to lend or seizing up of liquidity. Lehman Brothers was not all that big in the size of the institution or its portfolio relative to any denominator of GNP or financial instruments. But it did lead to the largest panic in history in absolute size by far.

So it is really how these crises are handled and resolved, rather than the size of the institution per se in my view. And I think there is a question about the resolution of bank holding companies as opposed to commercial banks per se, because while I am not an expert in this, the broad sense is that the FDIC's jurisdiction being only over the commercial banks and lacking jurisdiction in all of the ancillary pieces of a CitiGroup or Bank of America in the holding company makes an orderly resolution all that much more difficult.

So I think there is a structural problem that involves the holding company, not its absolute size but the legal structure around resolution. And then I think that there is a big problem; in my view, the essence of the economics of this is how an institutional failure impacts short-term liquidity. That is not absolutely a function of the size of the failing institution, it is a function of how a panic unfolds and whether there are proper mechanisms for orderly resolution. Again, to my mind what we are doing right now with the Administration is implicitly saying all those bonds are also good. We are doing extraordinarily unpleasant things in PPIP and so forth, using taxpayer money at great risk to protect almost perhaps a trillion dollars of longer-term assets that I don't think give much help to the macro-economics of the situation at all.

Ms. DAHLKEMPER. Dr. Johnson, did you want——

Dr. JOHNSON. So I want to go a little bit further, and I think that the issue of size is important. I agree it is not a sufficient condition for avoiding these kinds of problems in the future, but I think it may be a necessary condition. It is absolutely true, as Professor Sachs says, that the notion of size is too big or too big to fail is much smaller than, say, standard measures of antitrust would pick up for you and say aha, here we have something we can go after with a standard antitrust action.

But let me make the point like this. There are many banks in this country—most banks in this country can fail. Banks fail all the time. The FDIC takes them over; there is a well-run, well-organized receivership process. In fact, we are world-class in closing down small banks, medium-sized banks. Big banks, we are hopeless it turns out, okay? At least we have not done very well recently. It is a very tough problem. Banks that are big relative to other banks in our system, and of course, our big banks are small relative to what they could become and relative to what they are in Europe. The biggest banks in the UK, for example, are 10 times relative the scale of their economy, 10 times what we have here.

So it could get a lot worse, a lot more complicated. And I think the way to go about this, I mean, we have to look at all the possible tools. There is some discussion of finding ways to apply antitrust. This will be a new or not the standard application of antitrust, but it does go back to some of the initial principles around antitrust and the regulation of mergers, the legislation produced after World War II. There is also I think more regulation of behavior that can be done with regard to the amount of leverage you are allowed to take on. There is an issue of inter-connectedness, I think. So how do all the banks start acting in the same way, and if one of them fails, that creates a domino effect. That you have to get at through regulation of behavior, and I think while I am skeptical of the idea you can introduce a super-regulator and be done with these problems, I think regulators get captured, and super-regulators get super-captured.

Having that as part of a much broader set of legislative reform I think probably does make sense as long as you come at it from all possible angles.

Ms. DAHLKEMPER. Thank you. My time is expired.

Chairman MILLER. Dr. John, you can——

Mr. JOHN. I just wanted——

Chairman MILLER. Yes.

Mr. JOHN. Okay. Thank you. I appreciate it. Let me just add one quick thing because I happen to agree with most of what was said here. I think size is not necessarily the matter. Inter-connectedness is a matter. We have to look at what happens to overseas subsidiaries because while we all know pretty much what the U.S. Bankruptcy Code allows and how things are dealt with, we don't necessarily find the same kind of treatment to overseas subsidiaries. That was why at the point that Lehman closed when the New York office was continuing to some extent, the London office was filled with pictures of people carrying out their possessions. That is going to be a serious problem. And I think we can't emphasize too much the need to deal with the holding company. Doug Elliot at Brookings did an examination of what would happen at CitiBank, and the only way—assuming at the time that CitiBank was about to die, the only way you could deal with CitiBank essentially was to buy it from the shareholders, have the taxpayers buy a failed institution at a premium so it could be resolved because the U.S. law at this point does very well deal with bank subsidiaries, but most of the interesting activities of financial institutions actually occurs at the holding company level.

Ms. DAHLKEMPER. Thank you, Mr. Chairman.

Chairman MILLER. Thank you, Ms. Dahlkemper. Mr. Davis for five minutes.

THE VALIDITY OF STRESS TESTS

Mr. DAVIS. I want to thank the Chairman and Ranking Member for holding the hearing today to discuss the solvency of U.S. financial institutions given the complexity of the global financial marketplace.

As we are currently on the heels for receiving the results of the Federal Reserve's stress test of the 19 largest U.S.-owned banks, I think now is a good time as any to bring up solvency of our financial institutions, how solvency is determined and what it says about the state of the financial sector. As we heard earlier this month, according to Secretary Geithner's assessment of the test, these 19 banks were basically healthy, financially sound institutions, and so I have to ask, how many more taxpayer dollars will go toward subsidizing these healthy banks?

This may surprise you, but from the very beginning I opposed Wall Street's big bank bail-out the Congress and the Administration proposed because I am fundamentally against rewarding those who contributed so heavily to our economic crisis, those who put their own greed ahead of the financial and economic health of our entire nation.

I want to thank you all for being here. I got a couple of questions you could probably answer very briefly, and you have some already among your testimony. Do you think the stress test provided an accurate picture of the financial health of the top 19 banks? Either of you.

Dr. BAKER. I would say that I think it was an overly optimistic picture. As I say, I think the adverse scenario is an optimistic scenario at this point. Just to give you one example of the loss ratios they assumed in the adverse scenarios that we would have 18 to 20 percent losses in credit cards over the two-year period. We are already at a 15 percent loss ratio in the first quarter, and the unemployment rate is rising considerably. And if you just think about that dynamic through time, as people are unemployed for a longer period of time, they go through their resources, exhaust their unemployment benefits, it is inconceivable that the loss ratio on credit cards is not going to rise considerably from current levels and almost certainly far above the levels assumed in the stress test.

Mr. DAVIS. Anyone else?

Dr. JOHNSON. I agree with Dr. Baker. The stress test is supposed to show you the stress scenario, not right now, situations that say what could happen. Do you need more capital if the recession turns out to be prolonged, severe, and it didn't do that. Dr. Baker illustrated why.

Dr. SACHS. I think there is general professional concurrence that this was not a worst-case scenario, it was a moderate-case scenario, even a mildly optimistic case scenario. Things could get worse, and that is why it is important for the government to prepare for that eventuality without putting the taxpayer unduly on the line. It may not happen that the worst occurs, but it could happen. It is not ruled out by the stress test.

Mr. JOHN. The only thing I would add is that the one other value to the stress test was because we had data on individual banks, it starts to allow us to divide out which banks are able to survive and which banks are likely to run into severe trouble if the situation gets much worse.

ASSESSMENT CRITERIA FOR BANKS

Mr. DAVIS. I have always had difficulty of looking at investment bankers who knowingly invested in high-risk investments to reap higher profits, higher returns. And then we have asked the taxpayers to bail some of those folks out. That has just been a problem I haven't been able to arrive at.

I guess, could you give me some criteria that you think ought to be used for an accurate assessment of these banks? Any of you. What criteria would you have used?

Dr. BAKER. Well, I think the basic modeling of the stress test is okay. They just needed a worse scenario. I mean, for example, I was mentioning unemployment rates assumed 8.9 percent this year, 10.3 percent average for next year. If I were to say what sort of the worst-case scenario I could imagine, it would probably be about 9.3, 9.4 for 2009 and probably 11, 11.5 for 2010. And you might also want to carry this out and go beyond 2010 because the economy is very unlikely to see much of a recovery, even through 2011. So you might want to ask what does a three-year story look like.

So that would be sort of the outlines. They had the basic model set up. You just had to carry it a little further.

Dr. JOHNSON. I think if you want to take a macro-economic benchmark, you could use the downside scenario that the IMF has, for example. This is available to all member governments. I understand the idea of getting input from the IMF, from my personal experience, is not exactly welcomed by the U.S. Treasury. Nevertheless, it is a very sensible, global macro-economic picture. It takes care of interactions across countries. I think from everything I know about it, because I am not on the inside right now, it would come out exactly or pretty much where Dr. Baker just said.

Dr. SACHS. And I think that in addition to fine tuning the stress test, what we still lack is a public policy around what to do in the worst outcomes. That clearly does not exist right now. There is a tremendous amount of improvisation, but there is not a public policy.

Mr. JOHN. And I just very much agree with that last comment.

Mr. DAVIS. Thanks. I yield back my time. There's none left.

Chairman MILLER. Thank you. Mr. Wilson is next.

Mr. WILSON. Thank you, Chairman Miller. Good morning, gentlemen. Thank you for coming in this morning. Forgive me. I had to go in and out. Sometimes we have two different meetings going on at one time, and so if I am redundant and ask a question that has already been asked, please work with me on that.

INDICATIONS OF FURTHER ECONOMIC DOWNTURN

I start with Dr. Sachs. You say that the chances of an economic situation worse than the bad case in the stress test at a one and three, where would we look for an early indication that things are turning worse?

Dr. SACHS. It is clear that the demand side of our economy is going to drive either the speed of the recovery or a second dip into accelerated decline. And so month to month we are looking at household spending, consumer confidence, at housing starts, and the news is still quite mixed. And with the certainly a possibility of either a very flat, prolonged period which would mean rising joblessness without growth or even the possibility of a continued downturn. I think the ground is not solid beneath our feet just at the moment, and the macro-economic scenarios have a pretty wide dispersion of possible outcomes.

Mr. WILSON. Dr. Johnson, comment?

Dr. JOHNSON. Yes, Mr. Wilson. You might look at the front page of the *Wall Street Journal* today. They have a very nice—scary, sorry, scary analysis of the effect of commercial property losses on small- or medium-sized banks in the U.S. As you know, those banks have a large exposure to commercial real estate. This is what went wrong in previous recessions, and I think while we are rightly focused on the too-big-to-fail financial institutions, further hits to other parts of our financial sector should not be ruled out, and those are going to come back and hit households the way Dr. Sachs was outlining.

Mr. WILSON. Thank you. Dr. Baker.

Dr. BAKER. I was going to say, it is easy to see lots of sources of bad news, this being one, further falloff in construction which the numbers on housing construction today showed an even further decline. I am beginning to look like an optimist because it turns out worse than I had expected. But you know, areas like wage growth continue to trail off. One of the things that I have been relatively encouraged about was that wage growth had maintained its momentum into the beginning of this year, it seems to have collapsed. That leads to the prospect of sort of a deflationary spiral which would be very bad news. So it is easy to see lots of sources of bad news. It is hard for me at this point to see much good news on the horizon.

Mr. WILSON. Thank you. Dr. John.

Mr. JOHN. I am actually just going to agree with that. Every time I pick up the newspapers, I have to take a deep breath.

THE INFLUENCE OF A FINANCIAL OLIGARCHY

Mr. WILSON. It is frightening for all of us. Next question. Dr. Johnson says that our country's ability to develop appropriate policies to deal with the crisis is limited by the influence of financial oligarchy, and I haven't seen that word since freshman economics maybe, and dominates our view of the world. Do you agree? Let me do that again. Dr. Johnson——

Dr. JOHNSON. Yes, that is my—that is an accurate statement of my view. I think particularly there is a culture, a set of beliefs that are developed in Washington vis-à-vis the importance of Wall Street, the importance of big banks that is really in the way right now.

Mr. WILSON. That being said, what should we do about it?

Dr. JOHNSON. Well, I think you have to—this is one reason you have to take on these big banks. You have to challenge them, and you have to where appropriate and where possible down the road find ways to intervene them, find ways to take them over. And if you really decide that the outcome of all the regulation hearings you are going to have over the next six months, they are ultimately still too big to take over and close down, then you have to find ways to make them much smaller. Their economic power makes them politically powerful, and that then feeds back into deregulation and more ways to make money and more ways to take on risks that isn't appropriately controlled by them or anybody else.

Mr. WILSON. So if I am understanding you correctly, it becomes a vicious circle then?

Dr. JOHNSON. That is what we have seen over the past 25, 30 years, yes.

Mr. WILSON. Thank you. Dr. Baker, do you see that any differently?

Dr. BAKER. No, I see it very much the same way, and just to raise a concrete point, what I think was at issue was given the depth of the current crisis—and I am sure Dr. John will disagree on this one—but I think one of the immediate outcomes here of course is the millions of people facing the loss of their home and the fact that Congress to this point hasn't passed some form of relief, for example, temporarily changing the bankruptcy law. Again, that raises an issue for me as to whether Congress is responding to the power of the banks.

Mr. JOHN. And I would just say, I do disagree on the bankruptcy law situation. I have written against that, but I think one of the problems that we are facing here is that all of the supposed responses are coming from conventional wisdom, and conventional wisdom was how we got into this situation, and it is going to be a matter of looking a little bit larger, looking at some fairly different alternatives. I have great concerns as I mentioned with the idea of a systemic regulator. I don't know how it is going to operate. I don't think it can operate. I think we are setting ourselves up for a fall in that situation. I think that is true actually of most of the other solutions that have been made at this point.

Mr. WILSON. Thank you, Dr. John, and gentlemen, thank you. I yield back the balance of my time.

Dr. SACHS. Congressman, may I add a comment to your——

Mr. WILSON. Certainly.

Dr. SACHS. Thank you. I think we have one glaring problem which is that almost all of the decision-makers in this issue are tightly tied to Wall Street. And so there is almost no political scrutiny in terms of the actual policy preparation outside of the immediately concerned sector, and the revolving door phenomenon is so powerful here, that one is led to have very grave concerns. There was an article in the *Wall Street Journal* today about the role of BlackRock in every single function of advising, pricing, buying, and that is just an example of what is underway right now. Many of us feel that hundreds of billions of dollars of taxpayer money are being put at risk without proper balance and scrutiny.

But a second point that I would add is that we have a Credit Control Act in this country that I believe is not being applied properly in these circumstances because every time the Fed or the FDIC or other institutions make loans, put guarantees on, do other things, that is supposed to be scored, and when the FDIC says that its participation in PPIP doesn't really raise any risks, that in my view, in paraphrasing, does not rise to scientific scrutiny. In other words, when taxpayer money is put at risk in these bail-outs, we have a legal framework I believe, if I understand it correctly, that absolutely needs to be invoked to say what are the risks? What are the probabilities? How much money could be lost? What happens when we guarantee $306 billion of CitiBank? What happens when we put a leverage to allow private buyers to perhaps overpay for toxic assets? Under our law, that has to be quantified in terms of taxpayer risk. I don't see that being done right now.

Mr. WILSON. Thank you, Doctor. I apologize, Mr. Chairman, for going over time.

Chairman MILLER. That is all right. It was Dr. Sachs as much as you. I don't think I have ever heard taking our largest banks into receivership and selling them off in bits and pieces as the conventional wisdom before.

Dr. Broun, for five minutes. Welcome back. I trust that you did not prevail in any of your recorded votes in the other committee?

Mr. BROUN. Actually, I was at Homeland Security, and we had a unanimous vote about a resolution of inquiry. So it was something that I needed to be at, and I apologize for having to leave. And I apologize to the panel for having to leave.

But to begin with, I want to say, Dr. Sachs, I am extremely disappointed in your not providing written testimony because you make it extremely difficult for us as a Congress to do our job. I had the right to object to seating you. I did not do that, but your failure to give us written testimony prior to your testimony here makes it extremely difficult for all of us. And I hope this will never happen again if you ever come back to Congress, not only this committee, but any others because it is very disconcerting for me and very disappointing to me for that.

THE ROLE OF A MARKET-BASED SYSTEM

Mr. John, in your testimony you mentioned that failure must be an option for financial firms if the market is to work. Is there any way to avoid a massive failure in a market-based system, and are there some regulations or reforms that would cause the market to operate with fewer peaks and valleys?

Mr. JOHN. Well, not really. I mean, when it comes down to it, every system of regulation is going to attempt to keep things calm and quiet, but the fact is that the market innovates. If it doesn't innovate in New York, it is going to innovate in London or Hong

Kong or somewhere along that line or it may innovate in Greenwich, Connecticut, as in the term of a long-term capital markets or something along that line. The only way that the financial markets can be completely stabilized is if you basically try to turn them into a form of utility offering only a set type of product to a select group of constituents and customers, et cetera, knowing full well that something else is going to burst outside and offer something that is even better. Consumers are not well-served with that area. If you look at interest on checking accounts, that didn't occur in banking, it occurred in the credit union industry some time around 1979, 1980 or so. So no, I don't think that there is. The fact is that because of the speed of innovation in the marketplace—regulators are always going to be fighting the last war in attempting to create the Maginot Line, and that is fine. And what worries me about this is not that we shouldn't try but that there is going to be a level of expected success which is then going to be disappointed. We have seen this time after time after time.

Mr. BROUN. Well, I thank you, Dr. John. The point I am trying to make here is that a normal marketplace does have peaks and valleys——

Mr. JOHN. Constantly.

Mr. BROUN.—and I think that the peak that we had in the housing market which brought down the economy was created by government regulation, overregulation in my opinion, particularly with the *Community Reinvestment Act* from Carter and then reauthorized under Clinton, and then with Freddie and Fannie doing what they were doing, and then ACORN acting as thugs to threaten banks is what created this problem, and I believe the marketplace is the best way to solve this problem and everything else, not through government regulation or government intervention. So I appreciate that answer.

ENCOURAGING LENDING

In talking with my community bankers, they are really locked down by FDIC and by the government regulations that they have today, and they are unable to loan money for the simple reason that the regulators are preventing them from doing so. I would like to hear from any of the four of you or all four, what can we do to start the cash flow in our local banks so that we can start developing a stronger economy because what we are doing right now today is not working. Open to any one of the four. Dr. Johnson.

Dr. JOHNSON. I think that the most important thing for any part of the banking system is to make sure that the banks have sufficient capital and at the level—I think you were out of the room when we were discussing the latest data printed in the *Wall Street Journal* today with regard to the losses and the potential losses at smaller- and medium-size banks. I think there is an issue of stress testing those banks. Any bank that is undercapitalized is going to be reluctant to lend. At the same time we have to recognize there is a big problem on the demand side for loans so that many borrowers don't want to go to the banks anymore. So I think there is a demand and a supply side that need to be addressed here. And I would completely agree that we are struggling on both dimensions.

Mr. BROUN. Well, my time is up. Maybe we can get written statements from all of you. And Mr. Chairman, I appreciate your forbearance, and I just want to make a statement that mark-to-market accounting has not worked, particularly in this downturn of our economy, and we have got to find some other method of finding out what the capital lapse is and what the regulators are doing now today to the banks. They are undercapitalized a lot because of regulatory burdens upon the banks where their true capital is not being considered, and with that, I will yield back. Thank you, Mr. Chairman.

Chairman MILLER. Thank you, Dr. Broun. Mr. Grayson for five minutes.

POTENTIAL RULES TO LIMIT SYSTEMIC RISK

Mr. GRAYSON. Thank you, Mr. Chairman. Let us assume, gentlemen, that you wanted to create hard, fast, clear rules against institutions that pose systemic risk and would require a government bail-out. Let us assume that you were the ones deciding what those rules should be or what they would be, and let us assume that you did not want to leave it up to the wisdom or lack thereof of a particular person put in the position of judging systemic risk. What rules would you establish? Let us start with Dr. Baker.

Dr. BAKER. I don't know if I can give you an exact set of rules. I mean, size would certainly be a factor, but again, deferring to the comments made by both Dr. Johnson and Dr. Sachs earlier, those would not be the only—that would not be the only factor. But I really don't know that you could get around the judgment of the particular regulators. I mean, I think basically at the end of the day you would have to say can the FDIC deal with this institution, and we have had the issue raised about resolution authority, and I think it would be desirable for the regulators to have resolution authority in the event of a major bank with a large bank holding company with large operations apart from the bank. I think that would certainly be desirable. I don't think that is absolutely essential, by the way. I think it has been striking how the government has been very effective in steering the course, say, with Chrysler and General Motors, even though it obviously has no resolution authority of the sort that it would with a bank. So I think it would be desirable to see Congress pass legislation like that, but I don't think that should be used as an excuse for not having dealt with CitiGroup or some of the other banks that may actually be insolvent.

Mr. GRAYSON. Dr. Johnson, what rules would you establish?

Dr. JOHNSON. I would pick up on a point that was just beginning to emerge in the exchange between Dr. John and Dr. Broun a moment ago which is, I think you need banks to operate much more like utilities as they did in the 1950's and '60s. And I think you need a risk-taking part of the financial system, but it shouldn't be the banking system. As I looked at these great paintings that you have along the wall here, it reminded me of the era of innovation and breakthrough technologies we had after World War II driven largely by private-sector, a lot of private-sector innovation as well as sensible use of public money in a system where at a time when the banking system was very tightly regulated in terms of the banks that made payments, the banks that took deposits, and there was a separation of the payments part of the economy, the part that, you know, if that collapses, we have got a very big problem and the very simple credit-making part of the economy, including the very positive role of a lot of smaller banks that were also part of this regulatory structure with the risk-taking venture capital, new venture creation part of the economy. I am a professor of entrepreneurship at MIT. No one could be more pro-entrepreneur than I am, and I think that is completely consistent with keeping the rest of the banking system much more tightly contained. Go back to the 1950's and '60s in terms of bank regulation.

Mr. GRAYSON. Dr. Sachs, what substantive rules would you establish to simply prevent institutions from reaching the point where they pose systemic risk?

Dr. SACHS. I believe that at the core, even though we have a commercial banking crisis, that this was a shadow banking crisis. It was the essence of this. And as I mentioned in my opening remarks, the four elements of proper banking regulation that have protected us from a massive commercial banking run and crisis for decades are deposit insurance, strong regulation over capital adequacy, lender of last resort facilities, and a mechanism for resolution. We lacked all of that with Wall Street. All of that. That led to a bubble in the housing sector and in other sectors that brought the whole economy into this upturn and then massive downturn, and we still apparently lack clear legal structures for resolution of bank holding companies.

So I believe that we have the makings, though not being properly used right now, for this strict commercial banking sector. We do not have a regulatory system around the near banking sector, which is a big failure. We do not have a clear resolution mechanism for the bank holding company structures, like CitiGroup or Bank of America and we need it for that.

I do not believe personally that if we need to intervene in Bank of America or CitiGroup, if that turns out to be the outcome that that is going to be a calamity per se. I think we have structures that can do that with respect to the commercial bank components of those even big institutions. I don't regard that as beyond what we have. I think we are throwing a lot of arbitrary things into this situation right now in a way out of reaction to a panic that was set off by mistakes in the shadow banking sector last fall with the failure of Lehman.

MORE ON THE SIZES OF FINANCIAL INSTITUTIONS

Mr. GRAYSON. Dr. Baker, how do you know when an institution is too big to fail?

Dr. BAKER. Well, again, that would inevitably be a judgment call, but I mean basically, the question here is——

Mr. GRAYSON. Is that inevitable? Is it really inevitable? That it's a judgment call.

Dr. BAKER. Well, let me put it this way. The judgment call we had the opportunity to see back in the fall when Treasury Secretary Paulson and Federal Reserve Board Chairman Bernanke and Timothy Geithner at the New York Fed made the decision that Lehman brothers was not too big to fail and ended up being, I think, wrong, at least in the sense that they needed to have some sort of orderly process, orderly resolution which clearly was not put in place. Could you have known in advance? Perhaps, but clearly they made a very big mistake. So I am a little—I certainly have been very critical of all three of those gentlemen, but you know, I do respect their intelligence, and I think they had much more data than I did and they still made a very big mistake.

So I don't think you could have a simple formula that will always tell you that, you know, this bank is too big to fail or this bank is not.

Dr. JOHNSON. You should war game it. One of the things that regulators don't do enough, and the International Monetary Fund does a little bit but also not enough, is play out scenarios where you have a massive shocks of the kind that, you know, are not in your briefing memos but this is really what happens in the actual world. You should see what happened if you go through exactly how you are going to deal with particular banks failing, and if you feel you can't intervene under certain circumstances in a particular bank, because it is too scary, that bank is too big to fail.

Mr. GRAYSON. Thank you, Mr. Chairman. This has been an excellent hearing from my perspective, and I really am glad we conducted it.

Chairman MILLER. Thank you, Mr. Grayson. Mr. Bilbray for five minutes.

MORE ON THE MARKET-BASED APPROACH

Mr. BILBRAY. Mr. Chairman, I appreciate it. Mr. John, one of the big concerns I had was when we watched this, it seemed like instead of following the Swiss model we might have been following the Japanese model, which I think history says strung out the difficulties for over a decade. In your testimony, you mentioned failure must be an option in financial firms. Is there any way to avoid massive failure that some people were projecting in a market-based system and are there some of the reforms that are possible to keep the valleys from being too deep and the peaks from being too high?

Chairman MILLER. I think you meant Swedish model.

Mr. BILBRAY. Swedish. I am sorry.

Mr. JOHN. Swedish, yes. I don't know that there is a way to avoid them necessarily. I mean, if I were going to answer the previous gentleman's questions about how do you set up something along that line, the simple fact is the 1950's are over and they are not going to come back. We could hypothetically set up a series of check cashing agencies and consumer lending agencies. I think we have them, and I think they are called credit unions at this point. But that is not realistic for finance at this point in time, and it is certainly not realistic for high finance.

Two, four, three banking was the joke many years ago where you took in money at two percent, you loaned it out at four percent, and at 3:00 you were on the golf course. But that is not reality anymore, and it is not going to be. Anything that is going to be done in the future has got to be flexible because while we have some very brilliant and highly dedicated regulators out there, we also have some exceptionally high-paid lawyers, accountants, and financial talent finding ways of getting around these various and sundry rules. I would say they would have to be very, very flexible, and I think we have to expect that there is going to be a failure, meaning that whatever regulations are put out there are probably not going to work in the long run and need to be re-examined regularly.

Mr. BILBRAY. Go ahead.

Dr. JOHNSON. If we follow the logic of what Dr. John is saying, it says this, that we can't change the system, we are stuck with what we have got, there is going to be systemic failure down the road, we are going to have to throw in taxpayer money. According to the CBO, we are going to go from around 40 percent debt to GDP to at least 60 percent. I think realistically we are going to go closer to 80 percent of GDP. And that says that is a 40 percentage point increase in debt GDP from one, you know, pretty substantial financial crisis. If we have another one, if we have one every 10 years, we will bankrupt the country. There is an issue of solvency of the Nation here, and while the changes may be difficult, I completely accept that. I recognize fully the political power of Wall Street, for example, and the technical issues involved. How many financial crises can we afford to have in the next 20 years?

FINANCIAL CRISES AS SYMPTOMS OF OTHER PROBLEMS

Mr. BILBRAY. Dr. Johnson, my concern is one thing that is not talked about enough is that the housing crisis was not a crisis, it was a symptom of a deeper problem, that we keep chasing symptoms, Mr. Chairman, rather than going around and saying, wait, where are we going? And Dr. Baker, I will give you a chance to address this, too, but one of the things that Government Oversight, that Greenspan brought up was that the dirty little secret of trying to operate a healthy economy where energy is costing more than labor was not sustainable. And the fact is that one thing we didn't see, this bubble in the housing market wasn't just loans given out but why were loans given out is because so many of our dollars were going overseas in the form of petrol dollars being exported, and when you were in those countries that were receiving so much petrol dollars from all over the world, where is the one place you put a lot of assets that you knew were secure, at least you assumed was secure, was going back and buying paper in American real estate. And as Greenspan pointed out, there was a bubble—they knew the bubble was there but didn't know how inflated it was. And the fact is that so much of this was a by-product of the fact that we still went 30, 40 years with not addressing the energy issue, and in fact, created an artificial bubble in the market that ended up now being targeted as the problem rather than a symptom of a problem. Gentlemen, I will open that up.

Dr. BAKER. I think we could argue over what was symptom, what was cause, but in any case, I was able to come up with a fairly precise measure of the bubble. I would put it around $8 trillion just looking at the long-term trend in house prices. And it was guaranteed that when that burst, that would lead to a very, very severe downturn, and basically I think it was an inexcusable failure on the part of the Fed to have failed to attack that bubble. So I mean, I think to my mind, we are looking at a lot of issues here. How can you have perfect regulation? And we certainly want to improve the quality of our regulation. We had a colossal failure from an institution that had the authority, had the ability to crack down on the bubble, and basically it was incredibly negligent.

Mr. BILBRAY. Dr. Johnson.

Dr. JOHNSON. So Mr. Bilbray, the point that Dr. Greenspan of course is making is with regard to global imbalances, with regard to the capital that was available from the savings of countries, not only in the Middle East but also in China and Japan and the effect that that had on real interest rates around the world.

Now, I am completely in favor of us consuming less energy, becoming more energy efficient for many reasons, and that would have the positive effects that you are indicating which is you would buy—you would have a smaller current account surplus, other things being equal in some countries. All parties would have smaller current account surpluses, and that would contribute.

But the bigger issue I think is what was the role of this global so-called savings glut, okay, and what did the Federal Reserve do about it? Now, Chairman Bernanke, before he was Chairman of the Fed, was warned about this. Nothing was done. I think Dr. John's point about regulators failing systematically is absolutely right, and we have to build this into our understanding of how the world operates, how regulators really operate. The bigger picture around regulation, of course, is the deregulation and the Fed stepping back and Alan Greenspan himself saying very publicly, and now largely recanting, the view that we could let the market sort this out and that pricking bubbles is not what central banks should do. They should clean up afterwards. Well, cleaning up afterwards turns out to be incredibly expensive. This time it was about energy. This time it was about that version of the current account imbalance, perhaps a little bit, but the broader picture is about deregulation and it is about allowing the financial system to go up and go down. It turns out when you go down, it is a lot of public debt you are going to incur in the clean-up. We just can't afford to do that repeatedly.

Mr. BILBRAY. Thank you, Mr. Chairman.

Chairman MILLER. Thank you, Mr. Bilbray. Just one point quickly. The *Community Reinvestment Act* only applies to banks and thrifts with federally insured deposits, and only 20 to 25 percent of subprime lending in the 2004 to 2006 period, which is the problem period, were by institutions subject to the CRA. According to the Federal Reserve Board, six percent of the loans were actually subject to the CRA because they were a CRA lender in a CRA assessment area, the neighborhoods in which CRA encouraged lending; and the Federal Reserve Board concluded that the CRA had nothing to do with the foreclosure crisis.

Are any of you aware of any scholarship, any authority that contradicts that? Okay.

Second, I have listened closely for six years to all the testimony on the Financial Services Committee about mortgage lending from the time that I have been in Congress, which is a little more than six years now, and I do not recall any witness ever complaining that they were making loans they really didn't want to make, that they thought were foolish loans because the CRA was making them do that. Do any of you remember any complaints like that during that period? Okay.

ON SYSTEMIC RISK IN THE FINANCIAL SECTOR

Dr. Johnson, you said that you thought banks should go back to being utilities which is pretty much what they were in the '50s and the '60s. Paul Krugman, who, in addition to being a notorious liberal, is a Nobel laureate in economics, so maybe we should take him seriously, has said much the same thing. You said we should make banks boring again. Your Atlantic article points out that just a couple years ago, in addition to a compensation system that was almost twice what most people make, when in the past it was about what most people made, that the financial sector made more than 40 percent of corporate profits. Obviously what we have now is a pretty sick financial system, a pretty sick banking industry, but that is not a real healthy one, either. One that bounces from that to this and back is certainly an unhealthy one. Was part of the problem that banks were making too much money, and second, you know, the money appears to be gone. It appears to be paid out in profits or as bonuses or dividends or something, but it is not now available to help the banks get through the trouble that they are in now; and as all of you pointed out, taxpayer money is subsidizing banks to keep them alive.

IMF estimates that about 17 percent of loan exposures at American banks are consumer lending; another 52 percent mortgage lending; commercial mortgages are only six percent, corporate, 15; other, I don't know what that is, is 11, it is other; and securities is four percent, consumer residential mortgage, 42 percent; commercial mortgage six percent; corporate 32 percent; other 16 percent. I mean, it certainly sounds like the industry was making a lot of their money from consumers. Is that correct? Is that consistent with what all of you know or believe?

Dr. Johnson in your opening testimony, you talked about the value that there might be in having better consumer protection for financial products. Do any of the rest of you see that as part of the way we should approach systemic risk to make sure that the sector is not trying to bring in too much money off consumers? Dr. Baker.

Dr. BAKER. I mean, one of the points I think we would all agree, but I will let everyone speak for themselves, is that part of the story of innovation is—I think innovation creates an environment in which you are more likely to see systematic risk, and in the event that you limit innovation, you know, on the one hand you can have a downside that there can occasionally be a financial product that will have benefit for consumers that you will delay the introduction, but you will also limit the extent to which you can expect to see systemic risk. You won't have someone, a bank or a financial institution, coming out with some new product that will get a huge amount of business and then later end up exploding in our face as what happened with subprime mortgages.

Chairman MILLER. Dr. John—Mr. John. No, Dr. John. I am sorry.

Mr. JOHN. Actually, I am a Mr. John, but Dr. John is my father. I think one has to be very careful, however, that if you look at the regulatory system, and particularly the state-based regulatory system for insurance, you often see that under the guise of safety and soundness, et cetera, that good products are actually sidelined and not allowed, and this in turn allows market share to be kept at its current level, rather than facing competition that might change that market share. So this is something that one has to be very careful about.

Chairman MILLER. Dr. Sachs, I want to come back to that.

Dr. SACHS. Mr. Chairman, I think it is also important to address these crises more from the balance sheets and behavior of the institutions, rather than the consumer per se actually because there are many ways that financial bubbles arise, and they are not all consumer driven. We had a developing country debt crisis in the 1980's when the banks heavily invested in a very different kind of security. The regulation needs to enforce capital adequacy, a balanced portfolio. We should add in this discussion that the Federal Reserve made tremendous mistakes not only in regulation but in monetary policy per se, in stoking this bubble. So many things went into this, but I don't believe that ultimately we are going to get a handle on stopping financial crises by addressing the end product of lending per se, rather than the behavior of the financial intermediaries themselves, what their balance sheets look like, the kinds of risk that they are allowed to take, the capital standards, the nature of the oversight, the guarantees that implicitly or explicitly are given by government.

And we should remember, I believe, one more critical point which is what makes these crises dangerous are the links between the bank failure and the liquidity of the economy. That is the tight link, not the mere loss of an institution that goes bankrupt. That happens quite frequently in a market economy. It is the seizing up of liquidity. So that is why we need regulation to prevent a bank failure from spilling into a kind of Lehman panic, which is the essence of the sharp decline that we are experiencing.

ANALOGOUS ISSUES IN INSURANCE REGULATION

Chairman MILLER. I would like to pursue this question with Dr. Broun's indulgence.

Dr. John, the insurance regulation model at the state level is to require—well, it is roughly equally divided between requiring prior approval and just filing followed by beginning to use, beginning to sell insurance products. But the filing requirements and the approval requires filing of policy forms so that a regulator or in a public filing, anybody, can see exactly what is being insured against so that there is not quite the asymmetry of information that there are in insurance policies that really accept from insurance the risk that a consumer might think that they were getting covered. And second, show the actuarial numbers to support the pricing, to support the premium for two reasons. One is to make sure that consumers are not being gouged but also to make sure the insurance companies are not charging too little and putting their solvency at risk. It certainly appears that insurance companies who are subject to that kind of regulation have come through this much better than the mortgage market. But you think that we would be better off not—and some of them were arguing to be turned loose the way the mortgage market was just a couple of years ago. Do you still think that is a good idea?

Mr. JOHN. I don't think necessarily that is a good idea, but the fact is that these 50 states regulate insurance in many different ways. Some of them do it precisely as you said and in a very responsible manner, but we have seen situations where various products which would have been beneficial to consumers were blocked or delayed significantly in certain states, mainly so companies that didn't offer that type of product could either develop it or so that they could continue to keep their market share. This is one of my deep worries about the idea of a financial product safety commission, which is that regulation in theory works fine in some cases but it is subject to political influence. It is subject to normal human interactions, and it is very possible to delay products, to delay innovations, charge that they are too risky, et cetera, and the net result being that something that would actually be very beneficial to consumers never sees the light of day.

Chairman MILLER. Okay. Anyone else have comment? Dr. Johnson.

Dr. JOHNSON. Yes, I think that this idea of pursuing the insurance type model makes a lot of sense to me. You know, there is cost to any regulation, and I think Dr. John is right that you have capture and you can ossify your market structure, that is true. But we are trying to balance the cost of deregulating, and your contrast between what happened with insurance where, for whatever reason, there was some holding back of the industry that wanted to tear ahead with what happened in and around the mortgage market where essentially it was a free-for-all. That contrast is really quite striking, and I think we should draw from it the kind of lessons that you are indicating.

Dr. BAKER. I would just like to say that I agree with that. To my mind, again, there obviously are trade-offs here, and I think that the risks of under-regulating swamp the potential loss from delaying the onset of the introduction of a new product. So that is really what we are asking about here.

Chairman MILLER. Is that what we are under now is the swamping, the inundation from the swamping?

Dr. BAKER. In my mind, yes. Absolutely.

Chairman MILLER. Doctor, my time has long expired, but I will be similarly indulgent within reason of the other Members. Dr. Broun.

LARGE LOAN LOSS RESERVES

Mr. BROUN. Thank you, Mr. Chairman, and maybe you and I can discuss over dinner how the Community Reinvestment Act and ACORN played a part in all this housing problem. There is certainly a lot of risk that can be spread around to many, many factors, and that is not just the only risk, but the bankers that I talked to were not happy to make the loans that they made but were very happy to have Freddie and Fannie be able to bail them out and sell off those high-risk loans that some of them or a lot of them turned out to be what is now called toxic assets and certainly the Fed had a big part to play in all that, too.

It is often said that hindsight is 20/20. However, given the current state of the financial markets, do you think it was a mistake for the SEC to oppose the idea of building large loan loss reserves? Would it make sense to create a system of loan loss reserves similar to the system that Spain has created with their housing market problems that they had over there? To the whole panel. Dr. Johnson.

Dr. JOHNSON. I think that the broader—yes, I think there was too much—back to sort of the original purpose of the hearing which is the science and to what extent, what is the sensible science around evaluating the risks of lending. People bought into these models far too much, and I think that was a mistake. I am not singling out the SEC. I think it was very broad across the regulatory agencies, across pretty much all branches of government bought into the idea that somehow we had made a lot of progress in terms of thinking about risk, quantifying risk, and that the people who earned enormous amounts of money on Wall Street, really had cracked this very tough, age-old human problem. The bottom line is they hadn't. We still don't understand risk or we still are subject to being tripped up by our own misperceptions of what risk was in the past, and I am afraid, you know, the SEC is no exception to the broad set of people—academics are definitely included in this as well, by the way—who fundamentally misunderstood and mischaracterized risk and drew the wrong implications from faulty science.

Mr. BROUN. Do you think the Spanish model is a good model for us to look at?

Dr. JOHNSON. Frankly, I followed the Spanish situation closely when I was with the IMF. I haven't looked at it in the last two months. What I saw then, and I had a very close colleague, a senior person at the IMF who was the former governor of the Central Bank of Spain, Mr. Jamie Caruana. He warned repeatedly everyone involved in the Spanish housing market about over-exuberance and about mismanagement of risks by regulators and by banks, and he turned out to have been absolutely correct on that. The Spanish housing market is a disaster. I would have to go back and look at exactly individual pieces of the policy to see if I could glean something useful from it, but the broad picture of what has been done in Spain, how the peaks and the valleys have been managed is a terrible tale. It is going to end up much worse for their citizens than even for our citizens.

Mr. BROUN. Mr. John.

Mr. JOHN. I actually have nothing to add in this case.

THE LOAN-TO-VALUE RATIO

Mr. BROUN. Okay. Anybody else. Moving on, much of the financial crisis has been blamed not only on the bubble in the housing market but also on pressuring the banks to give loans with the loan-to-value ratio close to 100 percent and sometimes many loans were given that were above the value, which statistically show a high rate of default when you have those kinds of loans. If banks were to return to the convention loan-to-value ratio of 80 percent, do you believe it would help avert future financial crises? Mr. John.

Mr. JOHN. Well, I think it would but I think we have to look at the subsidiary costs of that also. I mean, we have direct proof that foreclosure and problems with paying go up directly with—or inversely I guess—with the size of the down payment. So if you have a 20 percent down payment, you have got a lot of your own money at risk and it is going to be much less incentive to walk away. The flip side of it however is that if we want homeownership to be spread across a very broad section of the economy, and speaking as a conservative I can say that homeownership has a direct correlation with reductions in teen pregnancy, with reductions in crime, and a variety of other situations there, that you want to be very careful that in the process of creating safety and soundness in the banking industry you don't price a significant portion of the population out of the housing market.

Mr. BROUN. Dr. Baker.

Dr. BAKER. I just would agree largely with what Mr. John said. Obviously, you will price more people out of the housing market in terms of buying homes, but I think that has actually been a problem of our housing policy that has been very one-sided, that for a lot of people in many circumstances it doesn't make sense for them to be homeowners, and I would like to see us have a policy that doesn't treat someone as a second-class citizen simply because they are renters. So I think a policy that was focused on ensuring that people had good housing as either renters or owners, we have consistently had roughly one-third of our households as renters. There has been a little bit up or down as you go year by year, but that has been the basic story as far back as you want to go, and I think we are always going to have to envision a situation where much of the population is renters and that idea that involves second-class citizenship is a bad one.

Mr. BROUN. Amen. I couldn't agree with you more. I don't think we have a God-given Constitutional right to own a home. Dr. Johnson.

Dr. JOHNSON. I think this loan-to-value question is a good one. It raises an interesting issue, again back to the purpose of this hearing which is, where did the models go wrong? What was the analytical counterpart perhaps to the political economy and the regulatory failures and so on and so forth? And I think at least one plausible explanation—I don't have proof and I know I am still under oath—so let me just say it is an impression at this point, is that there was an expectation the price would keep going up, and the lenders were not wrong in their calculation of the default rate, but they were completely wrong in their calculation of the losses they would incur because they thought the house prices would keep going up. And they knew that, you know, when you foreclose on a property you lose a substantial amount of value, but they didn't mind because they thought house prices would keep going up. Now, I raise this because of course, 80 percent loan-to-value would be helpful relative to 100 percent of the situation, but how much craziness would happen and how much you could sort of expect a recurrence of some version of this would depend on what kind of price bubble you get into. And I don't think the next issue is going to be housing. We don't usually rerun exactly the same bubble, but for sure, we rerun bubbles every couple of years at the level of the global economy. And I think we convince ourselves, this time it is different, this time there has been a fundamental shift in prices. We are going from a low level to a high level, and you could lose out big time with 80 percent loan-to-value ratio depending on how much you miss your thinking on this price transformation.

Mr. BROUN. Dr. Sachs.

Dr. SACHS. I think there is plenty of evidence that even during the lending boom there was a great deal of awareness that the terms of these loans were simply not prudent and that loans were being made that were unlikely to be paid off, and the regulatory forbearance on that was irresponsible in my view. So had the lending standards been better enforced and had the dangers of these loans which were recognized at the time by professionals in the real estate market then observed, we would have avoided at least some of this. We should not be making loans on the basis of ever-continuing increases of prices. Prices don't ever continue to increase in real terms. That is what you get in bubbles, not what you get in an economy over the long-term, and regulators should know that. And regulators were warned that repeatedly by many participants in this process.

Mr. BROUN. Dr. Sachs, many Members of Congress were warned about the impending bubble, too, and Congress refused to do anything about it in spite of repeated warnings from many sources that proved to be right unfortunately.

Mr. Chairman, I yield back.

Chairman MILLER. In my clock, you had another minute, so you yielded that back. Dr. Johnson, it is true, you are under oath, but again, a perjury prosecution would require a showing of what the truth was and that you knew what the truth was and consciously departed from it. So I think all of you can relax about that.

Mr. Bilbray.

THE PURSUIT OF PROPERTY

Mr. BILBRAY. Yes, a comforting concept there. You know, I think we are really underestimating a lot of the discussion here. I guess when we were talking about second-class citizens to own property or not property, but let us remember right from the get-go, you know, the whole concept, life, liberty and the pursuit of happiness was really originally life, liberty and the pursuit of property. Most people—historians understand. The pursuit of happiness was synonymous with the pursuit of property, and I guess, Dr. Baker, the problem, I guess the fine point here is not the guarantee of property, it is just the pursuit of it. So I think that we have got to recognize, this runs really deep in our national psyche, the concept of moving from being a serf or a renter to being a property owner right down to the fact of leaving the security of the Eastern Seaboard to venture out into the wilderness so that you could own a piece of, you know, turf, something that motivated people out of England, France, and other parts of the world. So, you know, I just think that that psyche is really something that we underestimate as being part of the American experience. Would you agree with that, Dr. Baker?

Dr. BAKER. Well, certainly I don't want to take away opportunities for people to own homes, but I think what we have to do is try and—as designing policy, design policy that makes sense. And what that means is for a lot of people, it simply doesn't make sense to own a home in certain circumstances. If you are in an unstable family or employment situation, you expect to be moving in a year, two years, or three years, you are almost certainly going to lose money buying a home, you know, even apart from issues of bubble price.

Mr. BILBRAY. But would you agree that our problem was that we moved from guaranteeing the right of pursuit to trying to guarantee the right of possession?

Dr. BAKER. That is perhaps a way to put it, yes. I think we put too much emphasis on ownership, home ownership.

Mr. BILBRAY. I want to clarify that because I think that when we got into it, both sides were very guilty of the concept of needing to expand, you know, the middle class through the housing strategy, and it almost ended up being where you had the left and the right with different agendas, moving in the same direction without really keeping our eyes open about that. I see the right looking at this as a great way to create more capitalists, more people with property so they defend the property aspect, and the left may be looking at this as a way of being able to actually re-engineer a welfare program to allow access to a population that traditionally had not been allowed to. Dr. Johnson.

Dr. JOHNSON. I agree that what you are discussing is part of the ideology behind some of the housing froth. I don't think it is the deeper issue, I don't think it explains how we got into the deregulation. But I remember I read something right on this point this morning by Chairman Miller, actually, so I quote him with some hesitation because I might actually know the truth and get it wrong here.

Chairman MILLER. I think you should treat that as authoritative.

Dr. JOHNSON. Which as I recall, Chairman Miller dug up some numbers on how much of the subprime mortgages came from refinancing of existing homes, and the people who had entered into unstable families, who had family problems, who had hit a rough patch, and it was a very large proportion of subprime mortgages, originally from people who already owned homes. It wasn't in other words expanding the pool of ownership in the way you are describing, it was, you know, I think you could say, people who had been taken advantage of by unscrupulous lenders.

Mr. BILBRAY. Or people doubling down.

Dr. JOHNSON. Maybe, and that there is this very good book, of course, new book by Ed Andrews, a *New York Times* correspondent, Busted, where he goes through his own very personal circumstances that induced to make him an absolutely terrible financial decision, and he is a business correspondent for the *New York Times.* I think that this—I don't want to put words into Chairman Miller's mouth but I think this is a much deeper issue of the sort of regulation of behavior. Why do we make these mistakes? Why do very sophisticated people make these mistakes? And I think a lot of it is about our personal circumstances and being taken advantage of when times are tough.

Mr. BILBRAY. Well, I think there is also the issue that those of us in Washington really encouraged this to a large degree. Our taxation codes give a great incentive. There is a whole lot of across-the-board kind of inspiration here. But let us go back and try to find, you know, where—and this may fall right into a category a Republican normally doesn't want to talk about.

THE MODEL OF CREDIT UNIONS

Let us talk about the institutions that seemed to have functioned, the credit unions. Is it because they weren't allowed to go out into certain fields, they were limited in that? Let us talk about where the credit unions were during this process. Why don't they seem to be at the point of this crisis, though they are getting a residual problem? It is more residual, not specific to their industry. Let us look at the success there.

Dr. BAKER. I would say that the answer is that they were boring. You know, they know their customers, they weren't trying to expand 20, 30 percent a year. They weren't trying to get into very complex mortgages that, you know, they may not have fully understood themselves. Basically they were following old practices, and those turned out to be good practices from the context of this housing bubble.

Mr. BILBRAY. Boring? I can imagine my wife using that as the example of why our marriage has lasted 26 years. Go ahead.

Dr. JOHNSON. I bank with a credit union and with a small bank. One is in Massachusetts where I used to live and one is in Washington, D.C. These are exactly boring, safe institutions. You go in there, you know exactly what they are talking about. They don't offer the most sophisticated products. There are people who are offering cheaper mortgages. I have had two mortgages, one in Massachusetts, one here. And they are plain vanilla mortgages, and they know exactly what they are going to do, which ones they are going to sell, to whom they will sell them, and which ones they hold. And in fact, in both cases, I took mortgages that these people hold on their own books because it just seems much more straightforward. It is very, very boring. They, you know, make some money but no extremely high money and they pay some of it back to their members. I think that is exactly what we are talking about in terms of going back to a previous type of basic banking.

Mr. BILBRAY. Thank you.

Mr. JOHN. I am going to agree very quickly, and I have the same relationship in that I have a relationship with a small bank and I have a relationship with a credit union. My small bank is very similarly operated to the credit union except for the fact that it has made a fair amount of construction loans in our area, and that is going to be interesting to see how those construction loans play out as time goes forward. The credit unions did very well, but the one place, the one blip that they got involved with was corporate credit unions which some of us actually had dealt with 15 years ago, and they had precisely the same problem then, which was the one area where they tried to get into the more exotic instruments. A corporate credit union is a credit union for credit unions, and there was a similar situated bank, Silverton, which went bust a few weeks ago also, and when they got outside of their comfort range, that was when they got into trouble.

Mr. BILBRAY. In fact right now, where they are running into trouble is not their loans but the loans that their clients had gotten from somebody else, and that is coming back to hurt them. You have a comment on the credit unions before my——

Dr. SACHS. I was going to say that I think it is important to keep the focus on the Federal Reserve Board, the SEC, and the behavior of a few large Wall Street Firms because this is where this particular episode arose, and this is a failure mainly of regulation at the heart of the system. And I would put the core of responsibility at the Federal Reserve Board.

Mr. BILBRAY. Mr. Chairman, I appreciate the time, and let me just say, I was around when we were looking at all of this at Energy and Commerce, and let me tell you something. I heard bankers have to again and again and again say that because of their federal charter, because of their federal oversight, they should be exempted from all kinds of other things that other people and they should basically be able to move it, and it's almost like an elite attitude that they, somehow the rules shouldn't apply to them. And all during the late '90s I just remember the bankers saying, you are right, but we are a federally chartered bank so thus we should be exempt from this, this, and this. Thank you, Mr. Chairman.

FUTURE DIFFICULTIES

Chairman MILLER. Thank you, Mr. Bilbray. We are probably getting close to the end, but I do have a couple more questions.

Dr. Sachs said that we had a realistic shot of muddling through this, which I assume means that we will do essentially what we did in the early '80s through some kind of back-door subsidies that will not provoke quite the rage of very low interest rates from the Federal Reserve, then loaned at a much higher rate. The banks might actually kind of earn their way back to solvency, but I guess one question is what are the downsides of doing it that way? But second, you have all mentioned that there are other shoes that might still drop.

Dr. Johnson, you mentioned the European banks were much less far along than we were which is kind of hard to imagine in recognizing loss. One thing I have heard is that there is a distinct possibility of sovereign debt default in Eastern Europe which could bring down the entire European banking system, and that might in turn bring down ours after all else.

What other shoes are there to drop and if no other shoes drop and we do muddle through, what are the downsides of having muddled through?

Dr. BAKER. Well, certainly some of the other shoes other than what you just mentioned but also, if the downturn is worse, if the drop in house prices is worse, say, than was assumed in the stress test, we are going to be looking at much bigger bank losses, and that by itself could be another shoe. But one other point, this gets back to the Europe issue, and I have not seen this pursued. Maybe someone has pursued it, but I just haven't seen it. With AIG, much of the payments that were made through AIG were to European banks, and I assume that was for a reason. Again, the government had no legal obligation to make those payments. So I do wonder to what extent, you know, we have an issue of those banks concealing at this point or not owning up to very bad losses connected with the U.S. market and then what the implications would be, both politically and economically, if at some point they have to realize those losses.

Chairman MILLER. And I have heard that explained as the reason AIG made the payments to European banks was their connections to American banks. Anyone else? Dr. Johnson.

Dr. JOHNSON. I think the European situation is very difficult. I am not expecting, at this point, sovereign defaults. They have large loans from the IMF supported by the United States, of course, and they are rolling over a lot of their external creditors; but their external creditors are mostly Western European banks. Their equivalent of subprime is crazy loans to real estate in Eastern Europe which has got a whole other levels of weirdness and stupidity to it. They didn't heed any warnings that they were given, so you know, we are all in very good company there. I think you have a very big slowdown in Europe. You got to big global recession coming. You know, there will be some isolated defaults, but not the precipitate collapse that we might have seen or might have been worried about three or four months ago. Still, that is bad, and that is a big drag on the U.S. economy, and that feeds into the kinds of problems that Dr. Baker is talking about.

In terms of the downsides, think about this one. If the banks are authorized, approved, and encouraged and on their way back to solvency, then what are the regulators going to be saying when they raise credit card fees or find ways to squeeze extra value out of people who, you know, whose credit has become impaired, who can't easily switch to another lender? This situation is ripe for predatory practices of all kinds, taking advantage of consumers because we were telling the banks, go out and earn you way back. And we know that there are lots of loopholes around the regulatory protection for consumers. I understand this might feel like closing a barn door after, you know, a particular kind of horse has left. But I do think that consumers are in the line of fire right now with regard to bank practices, and I do worry going forward about the ways in which consumers are going to get sideswiped by all kinds of potential financial, you know, bubble-building technology that we are going to cook up in the future and convince ourselves this time it is different. It is never different. It is always the same, and it is always the consumers and the taxpayers, the regular, ordinary citizens who get hammered in the end.

Chairman MILLER. I saw an estimate that banks expect to collect $40 billion in overdraft fees this year which is more than four times what they have collected in the past.

Dr. JOHNSON. And this they will get away with under existing consumer protection, the existing antitrust regulation. But think of it like this. There is a stickiness to your relationship with the bank. At the time of crisis, it is harder to switch, okay? So you are locked in much more. Well, locking in is exactly what has gotten information technology companies into trouble. All right? And I think the Department of Justice is beginning to think a little bit along these lines. They should be encouraged to think a lot more about the kinds of exercise of monopoly power and pricing power you get in a period of total confusion when people's credit scores have been hurt through circumstances beyond their control.

Chairman MILLER. Dr. Sachs, did you——

Dr. SACHS. Broadly speaking is the macro-economic situation which is going to determine whether the muddling through works or whether we get another serious dip, further dip, in the economy; and then all these scenarios will be brushed aside. The muddling through scenario has the advantage that it will not necessarily involve another large amount of taxpayer dollars. That is the advantage of it. The downside is that it could mean a somewhat slower recovery because of bank capital only being gradually rebuilt.

The other aspect of the muddling through, though, is that the Administration continues to pursue measures like this public-private partnership to rebuy toxic assets which in my view are likely to be very costly, even under the favorable scenario that they are presenting as a result of the stress tests. So I am not too happy about the continuing risks that taxpayers face in all of this, and that is why I believe the bottom line is the continuing lack of a resolution strategy and a continuing lack of clarity about what the policies really are because at this stage at least, I would say, muddling through is reasonable if it protects the taxpayers. If it further endangers taxpayers, I think it needs to be examined and if it turns out to be inadequate, we need a backup that doesn't put us on the line first as taxpayers, but rather puts the bondholders and the shareholders in line first in a way which doesn't create another panic. That is what I would like the Administration to come forward with.

MR. BROUN'S CLOSING REMARKS

Chairman MILLER. My time is expired. Dr. Broun.

Mr. BROUN. Mr. Chairman, just for the sake of time, I am not going to go through another set of questioning of our panel. I want to thank you all for coming. If we could, I would like to give you all some written questions for you to respond to, and I appreciate the response to those things. But I just want to make one final comment, and it is kind of a follow-up on something that Dr. Johnson said. I believe very firmly if we don't stop spending money as a government, all of this is not going to make any difference because we are borrowing and we are actually stealing from our grandchildren's future. And we are going down a road that I think is going to be disastrous. We are going down the same road that FDR went down during the Great Depression. Keynesian economics I don't think has ever worked, and it is not going to work with even greater and greater federal spending, and we need to get out of this financial crisis. And I believe very firmly in the marketplace. I think that is the way to do it, and I think over regulating the system is going to do nothing but guarantee mediocrity and is going to further delay the return. So with that, Mr. Chairman, I will yield back.

FURTHER AREAS OF INQUIRY

Chairman MILLER. Thank you, Dr. Broun. I think we have ended our question. This sort of question is not another round of questions, but for purposes of our committee thinking about what our role may be, the jurisdiction of the Science Committee and therefore the Oversight Subcommittee of the Science and Technology Committee is research, scientific research or research. And the NSF, National Science Foundation, is within our committee's jurisdiction. A great deal of economics research is done by NSF. They have on their web page the Nobel laureates in economics who have done research pursuant to grants from the NSF they note with some pride. Measurement is part of our committee's jurisdiction. We obviously do not have the jurisdiction to pass legislation on this topic, but we can kind of add to the debate and the knowledge about the scholarship on economics.

Do any of you think, either now or can suggest later, other areas of inquiry for this subcommittee on this topic? Dr. Johnson.

Dr. JOHNSON. I think you indicated at the beginning, and actually this is in Dr. Broun's testimony as well, that you have to pay close attention to how science is applied in presumably public projects but also more broadly. So I think you could look, if I understand correctly, at exactly who developed these models, how were these models applied, and on what basis? What was the miscalculation if you like in terms of thinking about risk? And that would be extremely informative for you and for us because really understanding the thinking, what were they thinking? What on earth were they thinking is a very good question. These are extremely smart people who built these models. They worked very closely with the phenomenon. Was it a conceptual failure? Was it purely a failure of incentives, was it a failure of oversight? Was it a failure of governance within the structures? That sounds to me like exactly what you would look at when there was a problem with the space shuttle for example which, again from the paintings, I think you have some jurisdiction over. That strikes me as being an excellent topic to pursue, that is the application of science to these problems of fundamental social value.

Chairman MILLER. Dr. Sachs.

Dr. SACHS. One other area that might be interesting is that there is considerable amount of research and writing about resolution issues. What do you do with the bad bank? And I believe that the link of the science to the policy-making is a very important issue, because a lot of that sits outside, complains about policies, but doesn't get incorporated into the policy-making. So thinking about what is the research on resolution issues and how can it be better applied in our current circumstances might be very valuable.

Chairman MILLER. You don't all have to have an answer to this question. But if you have one—Dr. Baker.

Dr. BAKER. Yes, just quickly, just carrying on what Dr. Johnson said. I think certainly we do want to get to the bottom of the extent to which, you know, the mistakes were sort of ones of bad science or bad incentives, and certainly, as the Administration considers rules on incentive structures and financial institutions, that would be very, very helpful. And the question will be, do we need to fundamentally alter those incentive structures to prevent this sort of thing from occurring again?

Mr. JOHN. Last but not least, I think it would be very useful to look at the actual role of the United States in the global financial markets. One of the things that I have wondered throughout is to what extent we actually had control over our own destiny and to what extent we were floating on a boat that was in a global stream. It would be intriguing to see, especially in conjunction with the resolution authority, how the resolution authority works in the United States is one thing, but how it works with a very complex global financial institution is something else very different.

Chairman MILLER. Well, I said that wasn't really a round of questioning, but Dr. Broun, do you have any other questions? Okay.

CLOSING

Well, thank you very much. This has been very distinguished panel and a very helpful discussion. I want to thank all of you for testifying today. Under the rules of the Committee, the record will remain open for two weeks for additional statements from the Members as well as any follow-up questions. Dr. Sachs, you said you wished to prepare some written testimony that you would submit for the record. And with that, the witnesses are excused and the hearing is now adjourned.

[Whereupon, at 12:10 p.m., the Subcommittee was adjourned.]

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