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# NOMINATION OF BEN S. BERNANKE

# **HEARING**

BEFORE THE

# COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

ON

THE NOMINATION OF BEN S. BERNANKE, OF NEW JERSEY, TO BE A MEMBER AND CHAIRMAN OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

NOVEMBER 15, 2005

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# NOMINATION OF BEN S. BERNANKE OF NEW JERSEY, TO BE A MEMBER AND CHAIRMAN OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

#### TUESDAY, NOVEMBER 15, 2005

U.S. Senate, Committee on Banking, Housing, and Urban Affairs, Washington. DC.

The Committee met at 10 a.m., in room SD-106, Dirksen Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

#### OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman Shelby. The hearing will come to order.

This morning, we are meeting to consider perhaps the most important nomination that ever comes before this Committee, that of the Chairman of the Federal Reserve System. This will be the first time in nearly 20 years that the Congress has had a new nominee for its consideration. President Bush has made a superb appointment in naming Dr. Benjamin S. Bernanke to serve as a Member and as Chairman of the Board of Governors of the Federal Reserve System.

The Federal Reserve would have a big enough job to do if it were tasked with serving only as a central bank for the United States. However, as the United States continues to lead the world economy, sound stewardship of the Federal Reserve affects the global marketplace. The Federal Reserve also shoulders the responsibility for supervising some of the world's most complex financial holding companies. In addition, as technology continues to evolve, the Federal Reserve must adapt and innovate to provide an effective payment system for our economy.

Chairman Alan Greenspan has been the face and the voice of the Federal Reserve for over 18 years. During his tenure, the U.S. economy and the financial system withstood a number of significant challenges, including the stock market crash of 1987 and the Asian debt crisis. His tenure also includes the 1991–2001 economic expansion, the longest in American history. These are among the reasons Chairman Greenspan is considered by some to be the greatest central banker of all time.

Stepping into Mr. Greenspan's shoes will be a tremendous challenge. While it may seem a daunting task to follow as distinguished a Chairman as Alan Greenspan, we should be mindful of two things. In 1987, many observers were concerned about whether

an economist name Alan Greenspan could successfully follow in the wake of the vaunted Paul Volcker. We now know how the experiment turned out. Each person who sits in the Chairman's seat has the opportunity to make that position his own and to become a

leader in his own right.

Second, many have observed that President Bush has selected the best possible candidate to serve as the next Federal Reserve Chairman. Dr. Bernanke may well be the finest monetary economist of his generation. With his distinguished career as an academic, he is eminently qualified and extremely well-versed in monetary policy issues.

Furthermore, Dr. Bernanke is more than an esteemed academic. Dr. Bernanke served with distinction as a Member of the Board of Governors of the Federal Reserve System. This experience gives him an inside knowledge of the Federal Reserve and also financial markets. In speaking out on a variety of important economic issues, he earned tremendous respect and confidence from policy-

makers in this country and around the world.

Dr. Bernanke's other professional experiences are also significant here. Prior to becoming a Member of the Board of Governors of the Federal Reserve, Dr. Bernanke served as Chairman of the Economics Department at Princeton University. Before arriving at Princeton, Dr. Bernanke had been an Associate Professor of Economics and an Assistant Professor of Economics at the Graduate School of Business at Stanford University. His teaching career also included serving as Visiting Professor of Economics at New York University and the Massachusetts Institute of Technology.

Dr. Bernanke also served as the Director of the Monetary Economics Program of the National Bureau of Economic Research. He received a B.A. in economics in 1975 from Harvard University summa cum laude, and a Ph.D. in economics in 1979 from the Mas-

sachusetts Institute of Technology.

Dr. Bernanke, this Committee knows that you have an important job in front of you. We are also confident you have the right set of skills to lead the Federal Reserve System.

We look forward to hearing your statement today and the inter-

esting discussion that will follow.

But I want to say at the outset that we have seven roll call votes scheduled beginning around 10:45, so we are going to continue this hearing until probably 10:55 or something like that, and then recess until 3 o'clock and go forward, if it is okay with you.

Senator Dodd.

#### STATEMENT OF SENATOR CHRISTOPHER J. DODD

Senator DODD. Thank you very much, Mr. Chairman, and, Mr. Bernanke, welcome to the Committee. We had a chance to chat on the phone the other day, and this is a challenging opportunity the President has given to you. I know you must be grateful to him, and we are looking forward to your testimony here today.

As my custom is, I will withhold, as I am sure most of my colleagues will, probably, any final judgment on your nomination until we have completed the process here. But I want to acknowledge at the outset that the President, in my view, has made a superb decision in nominating you. Your academic credentials, as the Chair-

man has pointed out, are tremendously impressive, if not unsurpassed.

In fact, I made the comment to the nominee coming in, Mr. Chairman, that when overlooking the list of the number of publications the nominee has authored over the years, I suppose we should be thankful he is not a nominee for the Supreme Court of the United States. We would spend a year examining his written

credentials from those publications.

The chairmanship of the Federal Reserve, as the Chairman has pointed out, is not just another Government job, obviously. It is, arguably, the most important position in our country with respect to our Nation's economy. The decisions made by the Chairman and his colleagues on the Board affect every single citizen in a very profound way. The Federal Reserve is responsible, as we know, for setting interest rates and ensuring the safety and soundness of financial institutions. It represents U.S. interests and negotiations with foreign and international regulators, and its Chairman bears the responsibility for protecting consumers from unscrupulous, illegal, and predatory financial practices.

As we have seen repeatedly over the years, the opinion of the Federal Reserve Chairman on economic policy matters goes beyond the institution's official jurisdiction and carries an enormous amount of weight that can have significant implications. One need look no further than 2001, when your predecessor Alan Greenspan's support for the President's tax cuts, however qualified it may have been, was perceived as a major cause for their enactment—which has led to deep budget deficits, I might add, and the

widening inequality of wealth in this Nation.

We know from previous experience that the position of the Federal Reserve Chairman requires several important qualities, such as intelligence, experience, and good judgment, most importantly in the face of a crisis. The markets need to know they can trust the Chairman of the Federal Reserve, and developing this trust requires an understanding of the need for independence from the President and the Administration, particularly from the one run by the President who has appointed the Chairman, and especially in your case, Dr. Bernanke, from an Administration in which you are still currently employed as a spokesman for a specific economic and political agenda.

Successful Chairmen have also been able to balance the dual mission of the Federal Reserve as embodied by the Federal Reserve Act, "to promote effectively the goals of maximum employment, sta-

ble prices, and moderate long-term interest rates."

In the 1990's, we had a remarkable period of both price stability and high employment. Obviously, that was due in part to technological innovation and the development of the technological sector. But there is little doubt that the preconditions for economic growth were laid earlier in the decade when a newly elected Democratic President joined with the Republican-appointed Federal Reserve Chairman to pursue a commitment of fiscal responsibility and effective monetary policy. The result was a reduction in poverty rates, an increased standard of living for the middle class, and the first budget surplus in three decades.

So, Dr. Bernanke, I look forward to discussing with you today these issues and how we can return to achieving the results that we had only a few years ago. And, again, I welcome your nomination. I congratulate you on having received it and look forward to working with you.

Thank you, Mr. Chairman.

Chairman Shelby. Senator Sununu.

#### STATEMENT OF SENATOR JOHN E. SUNUNU

Senator Sununu. Thank you, Mr. Chairman.

It is a pleasure to have you in front of us, Dr. Bernanke. I get the sense that you have put on some a charm offensive over these past weeks, and I imagine you received a number of awards in your academic career. But you probably were not voted the most likely to conduct a charm offensive on the U.S. Senate. Your reviews of the various meetings you have had with Members I think have been very positive, and it is just a credit to your professionalism, in part, because it is not an easy task to come before us and to be prepared to answer all these questions. People want you to weigh in on all kinds of policy issues, some of which you are probably qualified to comment on, some you may not be.

As the Chairman and others have pointed out, you do come with very impressive credentials, a great academic and educational background, although I think having been educated at both Harvard and MIT, it is probably a sign of having a conflicted person-

ality to a certain degree.

We do not have the facts in front of us to support the conclusion that you are the most qualified or finest economist of your generation. But for the purposes of this hearing, I am willing to assume that and to work from there.

I look forward to hearing from you about your approach to monetary policy. Price stability is absolutely critical. I think it is due or it has resulted in large measure to the great performance of our economy cited by Senator Dodd. And while everyone expects or hopes for a pretty smooth transition, there are differences in approach that you will take relative to Chairman Greenspan.

Your support for greater transparency and your success in advocating for real changes that result in a more open Fed deserve great commendation and recognition. I will be interested to hear more about the progress that can be made along those lines and more about any changes that might be made to improve the clarity

in the approach that the Fed takes to targeting inflation.

So, I certainly wish you well and look forward to your testimony. Thank you, Mr. Chairman.

Chairman Shelby. Senator Sarbanes.

#### STATEMENT OF SENATOR PAUL S. SARBANES

Senator Sarbanes. Thank you very much, Mr. Chairman. First of all, I want to thank you for scheduling this hearing in a very timely manner. I join my colleagues in welcoming Dr. Ben Bernanke to the Committee. He is no stranger. He has been here before, both to be a Member of the Federal Reserve Board of Governors and then to be Chairman of the President's Council of Economic Advisers.

Of course, he has now been nominated to a 14-year term as a Member of the Board of Governors and also nominated to be the Chairman of the Federal Reserve Board of Governors, a 4-year

As I understand it, Mr. Chairman, we are going to reconvene, because of this series of votes that are scheduled, again in the after-

Chairman Shelby. Three o'clock.

Senator Sarbanes. Yes. The Federal Reserve Act of 1913, which established the Federal Reserve System, set the 14-year terms for the Members of the Board of Governors of the Federal Reserve. I think that clearly reflected the intention of Congress at the time in enacting this legislation to place the Federal Reserve Board and its individual Members beyond the reach of any given Administration and the political pressures of the moment.

Actually, the 14-year term is the longest we give to any official in the Government other than the lifetime appointments for mem-

bers of the Federal judiciary.

I think it is fair to say or it certainly has come to be the case that the credibility of the Federal Reserve rests in large part on broad confidence in its independence in the judgments it makes, and obviously, if that confidence were to be undermined, the stature of the Board would be gravely diminished, and that in turn would have serious consequences, I think, not only for our national economy but also, indeed, for the world economy.

So, obviously, we are looking forward to hearing from Dr. Bernanke about this important role of the independence of the Fed-

eral Reserve in rendering its judgments.

My colleague Senator Dodd has made reference to the other major point I wanted to make, and that was the Federal Reserve Act provides as the goals that the Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long-run growth of the monetary and credit aggregates commensurate with the economy's long-run potential to increase production so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates. And this is conveniently referred to as "the twin mandates of the Federal Reserve," addressing both maximum employment and stable prices. That is another issue that I look forward to exploring with Dr. Bernanke in the course of these hearings.

Actually, we had to contend for quite a while with this nonaccelerating inflationary rate of unemployment, something that Chairman Greenspan, to his credit, never accepted. That was the theory that if the unemployment rate got down to a certain level, beyond that you would inflation; and, therefore, as it approached that unemployment rate, the Fed would have to start raising interest rates to cool off the economy, even if we did not see manifested inflationary signs. So it was a preemptive strike against inflation, but it also, of course, ended up being a preemptive strike against em-

ployment, if it had been followed.

Fortunately, that was not the case, and we have seen in recent years that we have been able to go down—and we are now at 5 percent, but we have been able to go down below that to a 4-percent unemployment rate without an inflationary problem. And I am

anxious to explore that with Dr. Bernanke as well, since I think

jobs is a very important purpose of economic policy.

Let me just add one other dimension which is not often talked about when we talk about the Fed, and that is, the Board has responsibility, supervisory and regulatory authorities to assure the safety and soundness of the Nation's banking and financial sector and protecting the credit rights of consumers. In the area of consumer protection, the Board has broad jurisdiction and authority to implement regulations for a whole host of consumer laws: The Community Reinvestment Act, Truth in Lending, Truth in Saving, Home Mortgage Disclosure, Home Ownership and Equity Protection Act, the Equal Credit Opportunity Act, and a number of others as well. And while public attention is focused on the Board's monetary policy responsibilities, I think it is important to recognize its jurisdiction and authority with respect to these regulatory issues. The Board can play a very significant role in improving consumer rights and enforcing consumer protections.

Finally, Mr. Chairman, I notice that the papers this morning are already setting out an agenda. I would just quote one paragraph to give one example of it. "If confirmed, Bernanke will take over the Fed at a moment of rising economic unease. The U.S. trade and budget deficits are soaring. The once-blistering housing market may be cooling. Rumors continue to rumble through Wall Street of dangerously overextended hedge funds ripe for collapse. The next Fed Chairman could face significant challenges, as Greenspan did,

within months of taking office."

Welcome to the Committee this morning, Dr. Bernanke.

[Laughter.]

Thank you, Mr. Chairman. Chairman Shelby. Senator Dole.

### STATEMENT OF SENATOR ELIZABETH DOLE

Senator Dole. Thank you, Chairman Shelby. I also certainly want to extend a warm welcome to Dr. Bernanke, to his family,

and his friends this morning.

This is the most significant nomination this Committee will consider. The role of the Chairman of the Board of Governors holds great influence over our economy and financial system. The Federal Reserve is charged with conducting the Nation's monetary policy with the goals of maximum employment, stable prices, and moderate long-term interest rates. These goals can at time conflict, requiring a steady hand at the helm to keep us on a track toward long-term sustainable growth.

Two weeks ago, the Federal Open Market Committee again raised its target for the Federal funds rate and the discount rate by 25 basis points. This was the 12th straight increase in the Federal funds rate. The release noted robust underlying growth in productivity and temporarily depressed output in employment due to elevated energy prices and hurricane-related disruptions in economic activity. These observations reflect how hard we were hit this hurricane season, but they also appear to indicate a positive track for economic expansion in the coming years.

While the outlook is certainly encouraging, I continue to be concerned about the slow pace of job creation, particularly in my State of North Carolina. North Carolina continues to experience dramatic losses in employment, especially in the traditional industries of textile and furniture manufacturing. The national economy may be trending positively, but we must continue to focus special attention on the areas where people have lost their jobs with companies that struggle to compete with the dramatically lower cost structures of foreign companies.

Congress continues to debate the pros and cons of free trade, and I believe we must work toward trade agreements that benefit American workers and consumers and support jobs and growth in

our industries.

During my confirmation hearing many years ago to serve as Secretary of Labor, I spoke about the gap between skilled and unskilled workers. In the changing economic environment, this gap has widened, and there are fewer and fewer opportunities for lower-skilled workers. We must do everything in our power to make sure that these people do not fall through the cracks. As we discussed in my office, we must focus greater attention on educating our less-skilled workers so they can take advantage of the new jobs that are being created. To this end, I believe that we should take steps to improve trade adjustment assistance and continue to make strengthening our community colleges a very top priority.

I also remain concerned, of course, about high energy prices, the rising costs of raw materials, and the growing size of our trade deficit. In spite of these concerns, however, I have confidence that the very forces that stimulate economic growth—free but fair trade, ever improving global communications, higher education, training for our workforce, and, of course, hard work—these forces indeed will put us on a course toward great opportunity for North Caro-

linians and for all Americans.

Dr. Bernanke, as we have all said, has a keen intellect and impressive credentials and comes before us, Mr. Chairman, with an extensive list of accomplishments, a wealth of experience, and a reputation for consensus building, particularly during his time on the Board of the Federal Reserve. And I tend to think that his good Carolina roots are a great strength as well.

Dr. Bernanke has my strong support, Mr. Chairman, for Chairman of the Board of Governors of the Federal Reserve. While I am sure the Committee does have many questions, I hope he will earn

our swift approval.

Thank you, Mr. Chairman.

Chairman Shelby. Senator Johnson.

### STATEMENT OF SENATOR TIM JOHNSON

Senator Johnson. Chairman Shelby, Ranking Member Sarbanes, I am pleased to be here this morning. And, Dr. Bernanke, welcome. I congratulate you on your nomination and thank you for meeting

with me this past week.

Today's hearing is no doubt one of the most important that this Committee will hold during this Congress. It is not every day that we consider the nomination for a new Chairman of the Board of Governors of the Federal Reserve. In fact, the last such hearing was over 18 years ago. Therefore, it is critical that we are thorough

in our questioning and that we cover a broad range of relevant issues.

The Fed is not only charged with serving as the Nation's central bank and lender of last resort, but it also supervises and regulates banks and, perhaps most importantly, formulates and executes monetary policy in order to promote stable economic growth, hope-

fully with an eye toward both inflation and employment.

The Fed Chairman is an influential economic figure. He must be attuned to the U.S. economy and the world economy. He holds one of 12 votes and, therefore, must not only build consensus but also confidence. It is my expectation that the Fed Chair, even when he is a former White House adviser, refrains from being a cheerleader for White House policies of either political party and instead maintains the independence and credibility of the central bank through greater transparency in its decisionmaking.

As my colleague Senator Dodd noted, your predecessor, although properly credited with a great many accomplishments, has been roundly criticized by some for intervening in a tax policy debate in Congress that in the end contributed significantly to a transition from enormous budget surpluses to today's massive budget deficits. It is increasingly apparent how important sound and complementary monetary and fiscal policy is to the U.S. economy as the Federal deficit increases, national savings falls, pensions and Social Security become less secure, health care costs skyrocket, and en-

ergy prices remain volatile.

In addition to the formulation of monetary policy, the Board of Governors has a significant bank regulatory and supervisory responsibility, including promoting the safety and soundness of the banking system and ensuring compliance with the Nation's banking laws and regulations. This Committee continues to hear from our Nation's financial institutions about the increased and often overwhelming burden of bank regulations. It is the number one concern raised by both small and large banks in my home State, and I hope that the Fed will pay close attention to this issue. And while I am interested in your views on rising energy prices and the impact on the trade deficit, I would also like to hear your thoughts on the role of consolidated supervision and protecting the safety and soundness of the Nation's banking system and the long-standing policy of maintaining a separation of banking and commerce.

Dr. Bernanke, your credentials, both academic and professional, are exemplary. I appreciate having had the benefit of meeting with you last week in my office, and I look forward to hearing from you today as we move forward in an expeditious fashion on the nomination process. Congratulations.

Chairman Shelby. Senator Martinez.

# STATEMENT OF SENATOR MEL MARTINEZ

Senator Martinez. Thank you, Mr. Chairman.

Dr. Bernanke, welcome, and it is good to see you back in the Committee again. I know we have had the privilege of confirming you on two other occasions, and I want to just extend my congratulations to you for the confidence the President has expressed in you by naming you to this very significant post.

When we met last week, I expressed my concerns about the rising interest rate environment and its impact on our Nation's housing market. Florida's median housing costs have continued to rise, especially in cities where basic infrastructure is already overwhelmed by population demands. However, employee wages have not risen in response to the rapidly increasing cost of living. Additionally, the October report from the Federal Reserve Bank of Atlanta shows increases in fuel and building supply costs, all of which will continue to contribute to the rising costs of housing.

We are facing a housing crisis in Florida, and I am afraid it may get worse before it gets any better, and I do not think that Florida really is unique to the Nation in this regard. Pockets of Florida are still recovering from the hurricane season of this year and last, and we are still assessing the damages from the recent Hurricane Wilma. According the State, the challenge is always the same: The lack of housing affordable to working families. Low interest rates over the past several years have created record homeownership rates on a national level, but have also encouraged very creative financing with interest-only loans and short-term ARM's. Both of these, and others, make monthly mortgage payments susceptible to increases in the Federal funds rate for homeowners who choose these options for financing.

During our conversation, you indicated your commitment to providing more transparency and disclosure to the public to reduce market uncertainty and encourage investment. You also talked about increasing financial literacy and how that may help borrowers and lenders understand the implications and risks associated with varying mortgage products. This is something I worked with very intimately when I served during my time as Secretary of HUD. I do believe that financial literacy is crucial to today's consumers.

We also discussed the need to legislate fundamental changes to the regulatory structure of the housing GSE's. While we agreed that these Enterprises play a crucial role in the housing market, they have strayed from their original mission, which is to focus on creating housing opportunity for low- and moderate-income families. I believe this Committee reported out a very good piece of legislation in July that would require fundamental changes in how these Enterprises are regulated.

Before we can move a bill to the floor for full consideration, we need to also reach some consensus on the issues of portfolio limitations and the creation of an affordable housing fund. I would be interested in hearing your views on both of these two crucial issues.

I look forward to your tenure as Chairman. I do have every expectation of your confirmation and look forward to working with you in your new capacity, and I again commend you and congratulate you for this fine distinction.

Thank you, Mr. Chairman.

Chairman Shelby. Senator Carper.

#### STATEMENT OF SENATOR THOMAS R. CARPER

Senator Carper. Thank you, Mr. Chairman, and, Dr. Bernanke, welcome today. I congratulate you on your nomination. Thank you

for the time that you were good to spend with me earlier this

month when you were visiting in our office.

You are, I think, two for two before this Committee, two for two before the Senate, and my guess is before we are finished here, you will be three for three. And given your experience, your education, your intellect, and, frankly, your demeanor, I think they all combined to prepare you well for the challenges that lie ahead. I would not underestimate those challenges, and I think Senator Sarbanes has alluded to them. They are considerable.

I want to return to a theme that a couple of my colleagues have mentioned, and then I will close, and the theme is the need for independence. You work for the President. You were chosen by him to head up his Council of Economic Advisers. You have been nominated by him for this post as well. But when you are confirmed, as I am sure you will be, it is critically important that you be independent, and I think you realize that. And we are counting on you to be that independent person.

I thank you for your service to this country and for your willingness to serve, and for anyone in your family who is here to share

you with all of us, we express our thanks as well. Chairman Shelby. Senator Bennett.

## STATEMENT OF SENATOR ROBERT F. BENNETT

Senator BENNETT. Mr. Chairman, I will save my comments for

the question period.

I join my colleagues, Dr. Bernanke, in welcoming you here and congratulating you on your appointment. I think the President has made a superb selection and I look forward to not only voting for you, but also working with you in the years ahead.

Chairman Shelby. Senator Reed.

### STATEMENT OF SENATOR JACK REED

Senator REED. Thank you very much, Chairman Shelby. This is an important confirmation hearing because of the tremendous influence that the Federal Reserve Chairman has on economic policy

in this country and indeed around the world.

I want to welcome the President's nominee, Dr. Bernanke. Welcome, doctor. We look forward, obviously, to hearing your views on many issues. Chairman Greenspan will be a hard act to follow and his successor's job will not be made any easier by the state of the economy. Yes, GDP has grown as the economy has been recovering from a recession in a very protracted job slump, but large structural budget deficits, a record current account deficit, a record low personal saving rate, rising consumer prices, and sluggish wage growth, all pose tremendous challenges to setting monetary policy.

Dr. Bernanke is an economist with strong academic and policy credentials, who has already pledged to maintain the Greenspanera commitment to controlling inflation and providing market stability. And I hope that also means maintaining flexibility in pursuing the multiple goals of price stability, high employment, and sustainable growth, rather than adopting a rigid adherence to any predetermined policy rule in responding to changing economic circumstances.

Indeed, a critical question for Dr. Bernanke will be how he would balance the goals of fighting inflation with allowing sufficient employment and wage growth. These are difficult economic times for many Americans who are facing stagnant incomes and rising costs for health care, home heating, and education. We need a Fed Chairman who will be committed to guiding the economy toward creating broadly shared prosperity. Strong productivity gains have shown up in the bottom lines of corporations but not in the paychecks of workers. The typical worker's earnings are not keeping up with their rising living expenses, and both earnings and income inequality are increasing in our economy.

Both Chairman Greenspan and Dr. Bernanke have emphasized the importance of education and training for increasing opportunity and reducing inequality over the long-run. But rising inequality has been a problem for a long time and it is particularly acute now. Monetary policy alone cannot solve this problem, but I hope the new Fed Chairman will recognize the critical importance of fos-

tering a high employment economy.

I am also interested in Chairman Bernanke's views on whether the budget and trade deficits are dangerous imbalances that pose a risk to the economic outlook. I hope that we would all agree that raising our future standard of living and preparing adequately for the retirement of the baby boom generation require that we have a high level of national investment and that a high fraction of that investment be financed by our own national savings, not by foreign borrowing.

We followed such prosperity enhancing policies under President Clinton, but that legacy of fiscal discipline has been squandered

under President Bush.

Financial markets will surely hang on the new Fed Chairman's words about monetary policy and interest rates, but the new Chairman will not automatically inherit Alan Greenspan's considerable influence over a broad array of economic policy. While Chairman Greenspan's track record managing monetary policy is very impressive, his role in justifying the 2001 tax cut is problematic and now we are living with the consequences.

Dr. Bernanke was a respected independent economist long before taking the position as Chairman of the Council of Economic Advisers with the Administration. He has spent many years building a reputation as a politically independent economist, and I hope he will preserve that reputation if confirmed as Fed Chairman.

One bit of advice, Dr. Bernanke, do not forget what you learned on the School Committee.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Hagel.

#### STATEMENT OF SENATOR CHUCK HAGEL

Senator HAGEL. Mr. Chairman, thank you. I too welcome Dr. Bernanke to our hearing, and I look forward to voting for his nomination, and enthusiastically support the President's wise choice.

Mr. Chairman, thank you for the hearing, and I too will reserve any further comments to the questions. Thank you.

Chairman Shelby. Senator Stabenow.

## STATEMENT OF SENATOR DEBBIE STABENOW

Senator Stabenow. Thank you, Mr. Chairman.

Welcome, Dr. Bernanke. It is a pleasure to have you with us, and

look forward to many opportunities to work with you.

You have heard a lot of important words, transparency, accountability, financial literacy. As the author of the provision on financial literacy and the creation of the new Federal commission, I look forward to working with you on those important long-term issues

of education and financial literacy.

The position of the Federal Reserve Chairman is vital to the quality of life of every single American. It affects interest rates on credit cards, home mortgages, and investments. It impacts the safety and the soundness of our financial institutions and may lend stability or instability to global financial markets. It is a very, very critical position. There is a reason why many say the position of Federal Reserve Chairman is the second most powerful position in Washington, although some others may want to disagree with that, but it certainly in terms of impact affects each and every one of the people we represent, as well as ourselves and our country, in extraordinary ways.

While Chairman Greenspan I believe has done an excellent job, there is no doubt that you bring an academically impressive record, and eminently qualified to replace him, Dr. Bernanke. But we have a responsibility to know your views on growing the economy, as a number of my colleagues have talked about today, about maintaining an economy that produces good-paying jobs. All of your intellectual horsepower is going to be needed to revive what continues to be a struggling economy, particularly in the Midwest in our manufacturing economy and in my home State, the great State of Michi-

Throughout the past 6 months, Michigan has been in an incredible struggle. The high-profile bankruptcies at Northwest Airlines and Delphi have served to emphasize the lack of job security that Americans feel right now, and I believe what is happening in Michigan is very much a wake-up call for the entire country. Many who have devoted a career to a company are being told that their incomes are too high, their health insurance is too much, or their pensions are too costly. Essentially their way of life is being threatened, and the middle class of our country is being threatened.

One by one each of these benefits is being cut back, and if the employees protest the company threatens bankruptcy and unveils the specter of using the judicial process to slash labor costs, and

again, the way of life of middle class Americans.

A healthy economy needs to be based on more than a race to the bottom, and I believe that very strongly, and believe the Fed has an important role in whether or not this is a race up or a race down. A race down is a lose/lose for our country and for every American, and we need to change that.

It must produce good-paying jobs. Our economy has to be dynamic as well to easily assimilate those who are forced from their old jobs into new jobs. A healthy American economy must be more than a service economy. We make things and grow things in this country. We make things and grow things in my home State. We do it very well. I do not believe we should concede in a global marketplace that we no longer make things or grow things. Again, I think we would lose our middle class.

A healthy economy must be rooted in reality as well. Global competition is here to stay, and we must wake up to the reality that China, Japan, and others are competitors, and treat them like competitors. As the President begins his tour of Asia this week, I want to reemphasize the need for this country, our country, to insist on fair trade, a level playing field for our businesses and our workers. Currency manipulation and counterfeiting are destroying jobs in Michigan and in America. It can be fixed. We just simply need the political will to make the changes to do it.

In 2003, Dr. Bernanke, you said the current account deficit cannot be sustained at its current level. I would agree, and I believe we have the tools to change that. No matter what the inflation numbers show, no matter what the job numbers show, the current approach that we are taking to our economy is destroying our way of life in Michigan, and I believe is an incredible threat to our

country.

As the current Chair of the Council of Economic Advisers, Dr. Bernanke, you are the President's point person on economics. It is important for me to know and for the people of the State of Michigan to know that as the Federal Reserve Chair you will be your own man, and capable of separating yourself from these policies. They are not working. And I welcome you to come to Michigan, and I can show you, sit you down with the faces of business people, workers, and families that can show you that they are not working.

These are difficult times for average Americans. The position to which you have been nominated impacts all of us in very real ways. Your views on how we will maintain growth is of vital importance to our future as a Nation. I look forward to your testimony.

Thank you.

Chairman Shelby. Senator Allard.

## STATEMENT OF SENATOR WAYNE ALLARD

Senator ALLARD. Thank you, Mr. Chairman, for holding this hearing. You always make it a priority to move nominations promptly, and I particularly commend you for that policy today.

The position of Federal Reserve Chairman is one of the most important in the country and possibly the world, and I appreciate that we are taking up that nomination today. I was pleased when President Bush announced his intention to nominate Ben Bernanke to Chair the Federal Reserve Board of Governors. Dr. Bernanke is widely respected, and will maintain continuity with the policies and strategies that have allowed our country to prosper. The reaction of Wall Street and the investment world would also seem to confirm the positive view of Dr. Bernanke's nomination.

Dr. Bernanke brings a uniquely advantageous mix of both academic and practical experience. After spending 20 years at Princeton, including as Chairman of the Economic Department, Dr. Bernanke is well-respected and frequently quoted in academic circles. He is considered one of the world's leading experts on the subject of how central banks such as the Fed should set interest rates

and cause the money supply to expand or contract.

Rather than limiting himself to purely academic knowledge and research, Dr. Bernanke also has outstanding real world credentials that have allowed him a fuller understanding of the job for which he is nominated. His service as a Fed Governor can be viewed as an apprenticeship for the chairmanship. Through his service as a Governor he became aware of the challenges facing the Fed, as well as the strategies that have made it successful in meeting past challenges. It will allow him to ease the transition between Chairmen.

Additionally, Dr. Bernanke has continued his public service as Chairman of the President's Council of Economic Advisers, a position for which I was also pleased to support his confirmation. I am encouraged that Dr. Bernanke has indicated the importance of fighting inflation and of increasing transparency at the Fed. I was particularly pleased in my discussions with him that he is going to

stress improved transparency.

I also appreciate that Dr. Bernanke has acknowledged that the final determination on debts and deficits rightfully lies with the

President and Congress.

Dr. Bernanke, thank you for appearing here today before the Banking Committee. I appreciate this opportunity to once again discuss your views on a variety of matters. You have always made yourself accessible to me personally, as well as to this Committee, and I am pleased to support your nomination and hope that the Committee will be able to vote promptly.

Thank you.

Chairman Shelby. Dr. Bernanke, will you stand and raise your

right hand and be sworn?

Do you swear or affirm that the testimony that you are about to give is the truth, the whole truth, and nothing but the truth, so help you God?

Mr. Bernanke. I do.

Chairman Shelby. Do you agree to appear and testify before any duly-constituted committee of the Senate?

Mr. Bernanke. I do.

Chairman Shelby. Please sit. Your written testimony will be made part of the record in its entirety. You can sum up what you want to say here. Do you have anybody you want to introduce, any family members or anything here this morning? You may proceed.

#### STATEMENT OF BEN S. BERNANKE OF NEW JERSEY, NOMINEE, TO BE A MEMBER AND CHAIRMAN OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Mr. Bernanke. No, Chairman. I would like to briefly read testimony if I may?

Chairman Shelby. Yes.

Mr. Bernanke. Thank you.

Chairman Shelby, Senator Sarbanes and Members of the Committee, I thank you for the opportunity to appear before you today and for the expeditious scheduling of this hearing. I would also like to express my gratitude to President Bush for nominating me to be a Member and Chairman of the Board of Governors of the Federal Reserve System. If I am confirmed, I will work to the utmost of my abilities to fulfill the important responsibilities of this office.

I recently testified before this Committee in my capacity as Chairman of the President's Council of Economic Advisers. Today, however, I appear before this Committee in a different capacity, as the President's nominee to lead the Federal Reserve System. In this prospective new role, I would bear the critical responsibility of preserving the independent and nonpartisan status of the Federal Reserve, a status that, in my view, is essential to that institution's ability to function effectively and achieve its mandated objectives. I assure this Committee that, if I am confirmed, I will be strictly independent of all political influences and will be guided solely by the Federal Reserve's mandate from Congress and by the public interest.

With respect to monetary policy, I will make continuity with the policies and policy strategies of the Greenspan Fed a top priority. Several aspects of the policy strategy that has evolved under Chairman Greenspan, and under Chairman Volcker before him, deserve

special note.

First, central bankers in the United States and around the world have come to understand that ensuring long-run price stability is essential for achieving maximum employment and overall economic stability. In recent decades, the variability of output and employment has decreased markedly, and recessions have become less frequent and less severe. I believe that the Federal Reserve's success in reducing and stabilizing inflation and inflation expectations is a major reason for this improved economic performance. If I am confirmed, I am confident that my colleagues on the Federal Open Market Committee and I will maintain our focus on long-term price stability as monetary policy's greatest contribution to general eco-

nomic prosperity and maximum employment.

Second, monetary policy at the Fed has been executed with both careful judgment and flexibility. To cite one prominent example, Chairman Greenspan's risk-management policy approach attempts to take into account the possible consequences of not only the most likely forecast outcomes, but also of a range of lower probability outcomes. Implementing this approach requires sophisticated judgments about possible risks to the economy, as well as the flexibility to respond quickly to new information or unexpected developments. Risk analysis of this type is a necessary component of successful monetary policymaking. To be sure, the need for flexibility does not imply that a good policy is undisciplined, as Chairman Greenspan himself has emphasized. Monetary policy is most effective when it is as coherent, consistent and predictable as possible, while at all times leaving full scope for flexibility and the use of judgment as conditions may require.

Finally, under Chairman Greenspan, monetary policy has become increasingly transparent to the public and the financial markets, a trend that I strongly support. A more transparent policy process increases democratic accountability, promotes constructive dialogue between policymakers and informed outsiders, reduces uncertainty in financial markets, and helps to anchor the public's expectations of long-run inflation, which, as I have argued already, promotes

economic growth and stability.

One possible step toward greater transparency would be for the FOMC to state explicitly the numerical inflation rate or range of

inflation rates it considers to be consistent with the goal of longterm price stability, a practice currently employed by many of the world's central banks. I have supported this idea in my academic writings and in speeches as a Board Member.

Providing quantitative guidance about the meaning of "long-term price stability" could have several advantages, including further reducing public uncertainty about monetary policy and anchoring

long-term inflation expectations even more effectively.

I view the explicit statement of a long-run inflation objective as fully consistent with the Federal Reserve's current policy approach, including its appropriate emphasis on the role of judgment and flexibility in policymaking. Most important, this step would in no way reduce the importance of maximum employment as a policy goal. Indeed, a key justification for this action is its potential to contribute to stronger and more stable employment growth by further stabilizing inflation and inflation expectations. In any case, I assure this Committee that if I am confirmed, I will take no precipitate steps in the direction of quantifying the definition of long-term price stability. This matter requires further study at the Federal Reserve, as well as extensive discussion and consultation. I would propose further action only if a consensus can be developed that taking such a step would further enhance the ability of the FOMC to satisfy its dual mandate of achieving both stable prices and maximum sustainable employment.

My comments so far today have focused on monetary policy. Of course, the Federal Reserve's responsibilities extend well beyond this area. Since its founding, the Federal Reserve has been given substantial responsibility for protecting the stability of the Nation's financial system, which is a precondition for stability of the broader economy. For example, the Fed works closely with other regulators to ensure the safety and soundness of the U.S. banking system, and over the years it has played a constructive role in managing and mitigating diverse types of financial crises. If I am confirmed, I will work to enhance the stability of the financial system and to ensure that the resources, procedures, and expertise are in place as needed to respond to any threats to stability that may emerge.

The Federal Reserve, along with other regulators, is also engaged in trying to ensure that consumers are treated fairly in their financial dealings: That their privacy is protected, that they receive clear and understandable information about the terms of financial agreements, and that they are not subject to discriminatory or abusive lending practices. The Fed also enhances consumer welfare through programs to promote financial literacy and community economic development. These are important responsibilities, and if I am confirmed, I will give them my close attention and support.

I have emphasized this morning the importance of intellectual continuity in policymaking. A more fundamental source of continuity, however, is the superb staff and leadership of the Federal Reserve System. If I am confirmed, I will have the privilege of drawing on the great strengths of this institution to ensure a continuity of the policy process that transcends any single person. I very much look forward to this opportunity.

Let me conclude by offering special thanks to Chairman Greenspan for his collegiality and support when I served on the Board of Governors and for his exemplary leadership of the Federal Reserve System. One may aspire to succeed Chairman Greenspan, but it will not be possible to replace him.

Thank you. I would be happy to take your questions.

Chairman Shelby. Thank you, Dr. Bernanke. It is well known that you have been a proponent of inflation targeting, which is pleasing to this Senator. Have your views on inflation targeting, Dr. Bernanke, as an academic, been tempered by your more recent experience as a policymaker, both at the Board of Governors of the Federal Reserve and in your present job as the top economic adviser to the President of the United States?

Mr. Bernanke. Chairman Shelby, my views on inflation targeting now are that it represents continuity with the existing approach of the Federal Reserve System, which focuses on maintaining medium- and long-term inflation stability as the primary contribution that the Fed can make to maintaining stability of the general economy. We see, for example, in the last 20 years, that the economy has become more stable, that employment growth and output growth have been stronger and more stable, that recessions have been less frequent. I attribute that to the maintenance of stable inflation and inflation expectations.

So, in that respect, the inflation targeting ideas that I had espoused simply are an attempt to perhaps codify or strengthen this important commitment of this Federal Reserve to maintaining low

I also think of this as a continuation of the Fed's recent progress toward greater transparency in policymaking. Over the past 10 years, the Fed has become increasingly more open about its processes, about its decisionmaking, and I believe this is just a single step and indeed just an incremental step that would add to that transparency.

But, in particular, I would like to emphasize to those who may be concerned that, in no way, do I intend to make any significant change in the overall approach to monetary policy that has been

developed under Chairman Greenspan.

Chairman Shelby. Dr. Bernanke, do you believe an inflation targeting regime is consistent with the Federal Reserve's other goals, that is, of long-term sustainable growth and full employment, or full as we can get?

Mr. Bernanke. Chairman Shelby, I subscribe entirely and wholeheartedly to the dual mandate. I believe the Federal Reserve has an important responsibility to maintain strong and sustained employment growth. I believe, though, that the best way that the Fed can do that, or one of the best ways, is to maintain, in the medium- and long-term, low and stable inflation and inflation expectations. To the extent that the inflation targeting approach, which may not be a good name for the process, but to the extent that naming a long-term inflation objective can help to stabilize those expectations, keep inflation under control, I think it actually significantly advances our ability to meet the dual mandate and to increase employment growth.

Chairman SHELBY. Is it your view that price stability is very important to all Americans?

Mr. Bernanke. I certainly agree with that, Chairman.

Chairman Shelby. Thank you. When your nomination was announced by President Bush, you indicated, "My first priority will be to maintain continuity with the policies and policy strategies established during the Greenspan years." But when you are confirmed, as I predict you will be soon as Chairman of the Federal Reserve, it will be the Bernanke-led Federal Reserve. Could you elaborate on your statement for the Committee here today? Specifically, can you discuss your views on the importance of price stability that I just referenced, and do you view the pursuit of infla-

tion targeting regime, which we have been talking about, as being consistent with the policy strategies of the Greenspan era?

Mr. Bernanke. Yes, Chairman. In my statement, I emphasized three elements of the Greenspan strategy. They are, first of all, maintaining low and stable inflation in the medium-term; second, using flexibility and judgment in making monetary policy—I do not subscribe to any rigid or mechanical rule in policymaking—and the third, using transparency to inform the public and the markets about policy and its intentions. In all these respects, I intend to be continuous with Chairman Greenspan. I expect also, though not to be static and to evolve over time. In the case of Chairman Greenspan, transparency changed over time, evolving into a greater degree of transparency. I expect going forward, to look for other opportunities to increase the transparency of the Federal Reserve. Naming the long-term inflation objective, which I again emphasize would be done only if there is a broad consensus that it is appropriate, would be one potential step for increasing that transparency.

So good monetary policymaking evolves over time, as we learned from the experience of other countries and from our own experience. I intend to be flexible and to learn from experience, but I believe the right starting point is where we currently are, that Chair-

man Greenspan has demonstrated in his policymaking.

Chairman Shelby. Dr. Bernanke, you have spoken before of transparency at the Fed and so forth. Do you believe that there would be a point at which transparency would be or could be counterproductive to effective implementation of monetary policy?

Mr. Bernanke. Yes, Chairman Shelby, I do. Transparency has an important role in helping the public understand policy intentions and policy goals. However, transparency should not be allowed to interfere with the decisionmaking process itself. To the extent that, for example, some have suggested that the FOMC meetings be televised.

Chairman Shelby. FOMC, tell the public what that is. We know.

Mr. Bernanke. I do not think that, for example

Chairman Shelby. Open Market Committee?

Mr. Bernanke. I am sorry. The FOMC, the Federal Open Market Committee, that is the decisionmaking body that determines monetary policy. One extreme form of transparency would be simply to televise the meeting at which the discussion takes place. My concern about that suggestion is that it would inhibit discussion, that it would affect the decision process, that it would create volatility in financial markets. I believe that is an example of a transparency which might be a step too far in terms of affecting the decision process itself.

Chairman Shelby. Thank you.

Senator Sarbanes.

Senator Sarbanes. Thank you very much, Mr. Chairman.

Let me continue on the inflation targeting issue since it has been

put into play here right at the outset.

In 2000, you and several colleagues wrote an opinion piece in *The Wall Street Journal* entitled "What Happens When Greenspan is Gone?" You were certainly looking ahead, I must say.

[Laughter.]

In that article you stated, "We think the best bet lies in a framework known as inflation targeting, which has been employed with great success in recent years by most of the world's biggest economies, except for Japan." The European Central Bank uses inflation targeting, and they set the target at 2 percent. But most observers see their experience has been one of slower economic growth and higher unemployment, and usually, actually, although not always, higher inflation.

higher inflation.

What we have achieved in the United States without an inflation target—and I just want to show three charts in that regard. One is GDP growth in the United States versus Europe. Our GDP growth as a general proposition has done better. The next inflation, United States versus Europe. And except for this period here—and we are on the way back down—we have done a better job. And then the final chart is the unemployment rate, United States versus Europe. There, as we see, the United States has consistently had a substantially lower unemployment rate than the Europeans have.

So on unemployment rate, inflation, and GDP growth, we are doing better than the leading practitioner I would guess of inflation targeting.

David Wyss, Standard and Poor's Chief Economist, summarized the lesson of these charts this way: The experience of the European Central Bank does not give people a lot of confidence about inflation targeting. That was in a BNA report just a few weeks ago.

If inflation targeting works so poorly in Europe compared to our

performance, why should we go down that path here?

Mr. Bernanke. Senator, just as a preliminary remark, it is certainly the case the U.S. economy has outperformed the industrial economies of Europe in the last decade or so, and I would ascribe that primarily to a set of structural differences: The flexibility of our labor markets, for example, compared to European labor markets, regulatory tax policies, and other policies. So, I do not ascribe the very real differences that you point to as being primarily related to monetary policy.

Having said that, I think it is important to note that the European Central Bank itself does not describe its own policy as inflation targeting, and its policies are very distinct from the ones I would advocate in one very important sense, that the mandate of the European Central Bank is for price stability and price stability only, with other considerations to be taken account of only insofar

as price stability is met.

Senator SARBANES. And what do you think of that? Mr. BERNANKE. I disagree with it entirely.

Senator SARBANES. All right. Now, let me ask you the next follow-on—and I am hurrying along because we get limited in the

time we have to ask questions.

Of course, Chairman Greenspan publicly opposed inflation targeting. In the book on inflation targeting that you edited several years ago, some academics recommended that the Federal Open Market Committee unilaterally establish inflation targets. Former Fed Governor Ned Gramlich has argued that any move toward inflation targeting would require the approval of the Congress, and he made this statement: "The question of whether the United States does or does not adopt a formal inflation-targeting regime is not up to the Federal Reserve. The Federal Reserve Act now requires the Fed to strive for maximum employment and balanced growth, along with price stability and moderate long-term interest rates. Until the Congress changes these guidelines, the Fed will continue to pursue these goals."

Do you agree with Governor Gramlich?

Mr. Bernanke. I disagree somewhat with his premise, Senator. Inflation targeting comes in many flavors. Some countries have taken a more hawkish stance in terms of putting inflation first among equals or even first among the objectives of policy. As I said, I subscribe entirely to the Humphrey-Hawkins mandate, which puts employment growth and output growth on a fully equal footing with inflation in terms of the Federal Reserve's objectives.

I believe in the types of changes that I am proposing—which are not major changes—in the way policy is conducted or any change in objectives; are modest bit of additional transparency, which I believe would help the Federal Reserve achieve the stated, mandated

objectives the Federal Reserve Act.

Since this is not a change in objectives or a change in fundamental operating procedure, in my view the kinds of suggestions I am making would not require a change in the law. If I thought they did, I would not follow them through because I am not interested in changing the mandate of the Federal Reserve.

Senator SARBANES. Well, you certainly could not do it unilaterally. You would have to come to the Congress in order to do that,

would you not?

Mr. Bernanke. To change the law, certainly.

Senator Sarbanes. Yes.

Mr. Bernanke. Of course. So, I would not be interested in pursuing that matter with Congress if I thought that it involved changing the mandate of the Federal Reserve.

Senator Sarbanes. E.J. Dionne wrote just a few weeks ago, "A Fed Chairman who beats inflation at the cost of middle-income living standards will not be regarded as a success."

What do you think about that observation?

Mr. Bernanke. Senator, I think it is a false dichotomy. Middle-income living standards, and poverty, for that matter, are best addressed through strong, stable employment growth. It is low-income people who suffer most from recessions. It is low-income people who suffer most from high levels of inflation. The understanding that central banks currently have is that by maintaining inflation at a low and stable level, avoiding a situation where inflation gets out of control—as it did, for example, in the 1970's—you

can create more stable, more solid, and more substantial growth in employment.

I am entirely in favor of maximum employment. I believe this is a method to achieve it. If I did not think it was, I would not pursue it.

Senator SARBANES. My time has expired. I just want to leave you

with the impression of these two charts again.

This is the unemployment rate in the United States versus Europe, and, of course, the Europeans Central Bank is the one that is cited for using inflation targeting. They set a 2-percent figure. This is the unemployment rate. This is 4 percent here. This is 6 percent there.

In the United States, substantially and consistently below the

unemployment rate in Europe.

Mr. BERNANKE. Senator, it was below that rate 20 years ago before ECB was even created. I believe there are other factors that contribute to that difference.

Senator SARBANES. We will have to separate them out, but a number of people think that the European Central Bank focus on inflation targeting as its only objective, which is what it has been given, has led to a loss of economic growth, GDP growth, and the unemployment situation, without getting a particularly better performance on the inflation front compared to the United States.

Mr. Bernanke. Senator, I disagree with that objective. I think the dual objective is the correct one.

Senator ŠARBANES. Okay.

Thank you, Mr. Chairman.

Chairman Shelby. Senator Sununu.

Senator Sununu. Thank you, Mr. Chairman.

Let me begin with an observation about your concern with regard to having cameras in Open Market Committee proceedings. We have had televised Senate debate for some time now, and I think you will find political posturing for the benefit of the cameras is practically unheard of.

[Laughter.]

Let me engage you in a modest hypothetical. It is the end of December 2007, and we are into the second year of the Bernanke Fed. The charm offensive has continued. The titans on Wall Street are wearing tan socks in deference to the intelligent but very plain-spoken Chairman of the Fed.

For the past 6 months, the announced target rate has been 1.5-to 2.5-percent inflation as a target for the Fed, but for the final quarter of 2007, inflation has been running at an average of 4.2 percent.

What do you say? What do you do? And how do the markets re-

spond?

Mr. Bernanke. Senator, a little bit depends on the circumstances and where the inflation came from and the like. The inflation objective is explicitly a long-term or medium-term objective. It focuses, for example, on core inflation to avoid getting involved in short-term fluctuations in energy prices and the like.

My principal concern at that point would not be that inflation had temporarily risen above its normal range. For example, currently inflation is above the range that in the long-run would be desirable. But the concern would be that expectations about inflation going a year or two in the future had become unhinged or unanchored so that the public was losing its confidence in the Fed-

eral Reserve to maintain low and stable inflation.

I believe that maintaining that confidence is extremely important. It is important whether you have an explicit target or whether you do not have an explicit target. Under Chairman Greenspan, talk and action were combined to assure the markets that over a period of time—not necessarily within a quarter or two quarters, but over a period of time, perhaps lasting several years—the Fed would stabilize inflation in a region consistent with the objective of price stability.

So that is the approach I would take. I would certainly not try to return inflation to a target within a short period of time. I would simply try to assure the markets that over a long period of time the Federal Reserve was committed to price stability as a central

part of its monetary strategy.

Senator SUNUNU. What can you do to provide that long-run, longer-term assurance? And do you think that markets are sophisticated enough, rational enough, intelligent enough to recognize this difference between the longer-term objective with regard to core inflation and what you might perceive in your capacity as Fed Chairman as being a shorter-term anomaly?

Mr. Bernanke. I think the markets are quite able to distinguish. They pay a lot of attention now to core measures because they understand that the Fed is interested not in short-term inflation fluctuations but, rather, in the long-term trend of inflation and making

sure that it stays under good control.

Again, I think the primary means of winning inflation credibility is by demonstrating, over a long period of time, that the Fed is committed to maintaining price stability by doing that. By naming a potential range, which I emphasize is no fait accompli, is something that is going to be discussed and will be consulted with Members of Congress, but naming such a range does not change the underlying dynamic. It is only an attempt to provide a bit of additional confidence, a bit of additional assurance, or a bit of additional certainty to the markets about the Federal Reserve's long-term objective.

Senator Sununu. Has there been any attempt or any success at measuring improvements or the beneficial impact on stability or volatility in those central banks that have used targeting?

Mr. BERNANKE. Yes, Senator, there is an extensive literature. I could talk about it for quite a while.

Senator Sununu. You have 22 seconds.

Mr. Bernanke. It is not quite definitive because, of course, every country is different. But there is recent evidence by Board research, for example, from the United Kingdom and Sweden, which shows greater stability in their long-term interest rates after they became inflation targeters because the market has more confidence that inflation and long-term interest rates will remain stable and less concern about short-term fluctuations.

Senator SUNUNU. Thank you very much.

Thank you, Mr. Chairman. Chairman Shelby. Thank you. Senator Dodd.

Senator DODD. Thanks, Mr. Chairman, very much, and let me

thank our witness again for his presence here this morning.

Let me not go quite as far in advance as my colleague from New Hampshire has, going a couple of years, but let me talk about something that is looming, I think maybe in the next few weeks or months, and that is an energy shock which we may witness here. I do not know whether you would agree or not, but I suspect you might agree that handling an energy shock is one of the most dif-

ficult problems that the Federal Reserve has to respond to.

Last year, as a Member of the Board, you gave a speech in which you said, "Monetary policy cannot offset the recessionary and inflationary effects of increased oil prices at the same time. If the central bank lowers interest rates in an effort to stimulate growth, it risks adding to inflationary pressure. But if it raises rates enough to choke off the inflationary effect of the increase in oil prices, it may exacerbate the slowdown in economic growth. Whether monetary policy eases or tightens following an increase in energy prices ultimately depends on how policymakers balance the risks they perceive to their employment and price stability objectives."

I bring up this dilemma because a piece this morning, *The New York Times* ran an article about the potential threat of an energy price shock to our Nation's economy, and the article reads, "Unexpectedly warm weather has bathed much of the United States in recent weeks, but fears persist that a classic energy shock may be

unfolding as the Nation heads into winter."

The article goes on to quote the owner of a business whose monthly natural gas price—and it is in the natural gas price here I think we are looking at the major problem here. But they cite a business that doubled its natural gas bill from \$700,000 to \$1.4 million as an example of the threat posed by high energy prices to our larger economy. I might point in my State, 51 percent of my consumers use natural gas, and they are looking at about a \$276

increase, or a 27-percent increase this winter.

After the last major price shock hit our Nation's economy in the 1970's, it took a painful recession that had deep and lasting consequences for many people to bring inflation back under control. Given the soaring prices of oil and gas over the past few months and the possibility of further supply disruptions, what type of monetary policy prescription would you apply? I mean, I appreciate your article in which you cite the balancing things here, but then you were writing an article. Now you are going to become the Chairman of the Federal Reserve. You do not have the luxury of telling us on the one hand and on the other. We want Harry Truman's economist here, and that is, a one-armed economist here. What is the answer of the Chairman of the Federal Reserve if we face this type of a shock?

Mr. Bernanke. Senator, as I also discussed in that particular speech, the oil price impacts on the economy and the monetary policy response is an excellent illustration of the importance of having low, stable, and well-anchored inflation expectations. The contrast between the 1970's and now, with an energy price shock of a similar magnitude, is very instructive. During the 1970's, inflation expectations were very poorly anchored. There was very little con-

fidence that the Fed would keep inflation low and stable. When oil prices rose, those price increases fed through quickly into other prices and began to raise the general rate of inflation quite quickly. The Fed responded in a panicked way, by raising interest rates enormously, which then contributed to the deep recessions of 1975 and 1981–1982.

In a more recent episode, we have had extensive increases in energy prices, but outside of the energy sector, if we look at core inflation, core inflation remains very well-controlled, and as a result, the Federal Reserve has been able to raise interest rates from its low accommodative level, but to only 4 percent at this point, and the economy is growing strongly.

So, I think this is an enormously good illustration of why keeping inflation low, stable, and keeping expectations well-anchored is of tremendous benefit, not just on the inflation side but also on the

employment and growth side.

Senator DODD. So you would not anticipate taking any precipi-

tous action here in light of these price increases?

Mr. Bernanke. I believe that inflation expectations remain well-anchored. It is important to ensure they remain well-anchored. But as long as they remain well tied down and low and stable, I imagine that the economy will be much better able to absorb any further increases in energy prices than they were 30 years ago.

Senator DODD. Any indications you have as a result of your present employment that the anecdote cited here in *The New York Times* article about the business that virtually is doubling its energy costs as a result of price increases is more than just anec-

dotal?

Mr. Bernanke. There are real problems in the energy sector; in natural gas, in particular, there have been substantial increases in prices, largely because the United States is somewhat isolated in terms of natural gas. We do not have the capacity to import large amounts, and, therefore, when we lose domestic production, as we did following Katrina, the shortage of supply drives up prices.

Natural gas prices have been rising for some time, and this has proved a very heavy burden to chemical manufacturers, Alumina, other manufacturers in the United States. That is a real problem. I do not want to understate that problem at all. But, obviously, monetary policy per se can only try to avoid having those price increases spread into general inflation. Monetary policy cannot create more energy. It cannot really solve the energy problem.

Senator DODD. Let me jump quickly, because time is short here, to another area of questioning, if I can, although that is obviously a looming problem here. And if you are confirmed, we are going to

want to talk with you about this potential energy shock.

Let me address the issue of fiscal responsibility and deficit-financed tax cuts. You wrote in your macroeconomic textbook that you co-authored with Andrew Abel, you discussed the negative effect of budget deficits, and I thought a rather good paragraph here, you said, "The tendency of government budget deficits to reduce investment spending is called crowding out." You have used that line many times in your book. "Reduced investment spending implies lower capital formation and, thus, lower economic growth. The adverse effect of budget deficits on economic growth is probably the

most important cost of deficits and a major reason why economists advise governments to minimize their deficits."

Because of the negative effect of budget deficits, which you so eloquently describe, is it not possible that the cost of running a budget deficit could outweigh any benefit to be gained by a tax cut?

Mr. Bernanke. Senator, I agree that budget deficits are a problem. I think it is important to continue to reduce budget deficits. I am going to begin now, I think, a practice of not making recommendations on specific tax or spending proposals——

Senator DODD. I did not ask for that here. I am just asking whether or not the negative implications of a budget deficit could outweigh any benefits—without getting very specific. We won't talk about any specific tax cut, just as a general proposition.

Mr. BERNANKE. As a general proposition, it is possible. It depends on the scale of spending, the size of the deficit, and whether or not the debt-to-GDP ratio is thought to be stable or not.

Senator Dodd. So it could be more damaging to our-

Mr. Bernanke. It is possible.

Senator DODD. Let me ask you quickly as well, are you concerned at all about the record levels of debt being held by foreign creditors? We are now talking numbers that are getting close to \$1 trillion, I think it is. Does that worry you at all as the potential Chairman of the Federal Reserve?

Mr. Bernanke. Well, Senator, given that we have a large current account deficit—a complex issue which I am sure I will be asked to address and will be glad to address and given that that deficit needs to be financed, we are fortunate that foreigners, including foreign central banks, seem quite willing to hold U.S. Treasury debt and other financial instruments. So it is like asking how it feels to be very old. You consider the alternative. It is better to have willingness to hold our financial assets than not, given that we have a large current account deficit.

Senator DODD. But certainly better off if we did not have to have them hold it at all. Better to be young.

[Laughter.]

Mr. Bernanke. The issue is what to do about the current account deficit, and I would argue that we need over a period of time, to reduce the current account deficit. I believe that is possible to do. Once the current account deficit comes down, then the need to have foreign financing will, therefore, be reduced.

Senator DODD. So you are not alarmed about this at all.

Mr. BERNANKE. I believe that the current account deficit needs to come down over a period of time.

Senator Dodd. But you are not alarmed about foreign creditors

holding this debt?

Mr. Bernanke. I think that it is an essential implication of the fact that we have a current account deficit, that it needs to be financed, that we are better off with willing lenders than we are with unwilling lenders. If they were not willing to hold our obligations, interest rates would be higher the economy would not be as strong.

Senator DODD. Thank you. Thank you, Mr. Chairman.

Chairman Shelby. Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

Back to your comments to Senator Sununu, Dr. Bernanke, both of you talk about inflation here or inflation there and you use numbers. That assumes that we know what inflation is. That assumes that our measuring device is accurate. And I am not sure that is true. Do we use CPI? Do we used chained CPI? Do we use the PCE

price index, the CPI-U? Various measures of inflation.

Then the Tax Code has provisions that are indexed to CPI-U, and let me ask you, do you believe that CPI-U is the appropriate measure or would you rather move to something like the chained CPI or the PCE price index? Your predecessor always insisted that the CPI was overstated, and I would like your reaction to that, because we are talking about pegging to a number or trying to find a number or trying to hit a goal. But if the goal is measured improperly, we need X number of touchdowns, and the touchdown are only worth 4 points, and we are counting them at 6, why, we end up with the wrong kind of strategy.

A very bad analogy. I apologize for it.

Mr. BERNANKE. That is a very good question, Senator.

As you know, Senator, there was a commission some years ago headed by Michael Boskin with a number of other distinguished academics that reviewed the Consumer Price Index as a measurement of inflation, and it found for a number of reasons that it overstated inflation. Quality adjustment bias, substitution bias, and other technical matters were involved.

For that reason, for purposes of thinking about inflation and for purposes possibly even of indexing in the Government, I think consideration should be given to measures of inflation which adjust for some of these concerns. For example, chain-weighted measures of inflation tend to reduce the substitution bias that the Boskin Com-

mission pointed to.

With respect to choosing an inflation objective in the mediumterm, there are many considerations one would want to take into account—familiarity by the public, for example. I think that would need to be discussed by the Federal Open Market Committee and in our general consultations. To the extent that, say, the CPI overstates inflation by an approximately known amount, one could simply adjust the range of inflation rates that define price stability to allow for that bias.

So there are many considerations to be taken into account there,

and I do not want to prejudge that issue.

Senator Bennett. Okay. As I said, the Tax Code has provisions that are tied to CPI. Would you recommend that we change the Tax Code if we come to the conclusion that it is overstated—which Chairman Greenspan believes—and, thus, affect bracket creep and all of the other things that occur there?

Mr. Bernanke. Senator, of course, this is ultimately Congress' decision, but from a purely technical perspective, I believe there are better measures of inflation than the CPI-U, and in that re-

spect, one might want to consider alternatives.

Senator Bennett. That was at the heart of my proposal with respect to Social Security, looking at the way the inflation is measured.

Let us go to tax reform. Two versions of tax reform were forwarded by the President's tax reform commission to the Department of the Treasury for review. Frankly, I was a little disappointed. I was hoping for a clean sheet of paper approach, and I feel that they were nibbling around the edges. I think the current Tax Code, which has its philosophical basis in the 1930's, is no longer applicable to the 21st century. I have a novel and radical idea that the purpose of taxes should be to raise money to run the Government and not to direct economic activity toward or against

any particular bias.

We then run into the question of how much money does the Government need, and, historically, I have felt comfortable with 20 percent of GDP as the absolute top ceiling, and we have gotten by, regardless of where the Tax Code is. A combination of payroll taxes and income taxes have produced revenues somewhere in a band of 18.5 to 19.5 percent of GDP, with the river of revenue that came in when we changed the capital gains tax rate as part of the agreement made between Congress and President Clinton following the 1996 election, where the capital gains realizations were 5 times as much as CBO had projected that they would be. The Federal revenue went up to 22, 22.5 percent of GDP, and that was one of the figures that caused some of us to feel we could support a reduction in tax burden to come down to the 20 percent—below 20-percent ceiling.

Then we had September 11, we had the recession, we had the war, and the economy went into the tank, so that we fell down to about 16.5 percent of GDP. We are now rising comfortably back toward the 18.5 to 19.5 percent band where last year tax revenues were up 14 percent over the previous year, showing that these poli-

cies were working.

Where would you put the ceiling, regardless of what the tax structure is? Are you comfortable with saying 20 percent of GDP is all the Federal Government should be taking out of the economy? Or would you go with some of our friends who say no, it should be as high as 25 or 28, 29 percent of GDP and then we can pay for all of the wonderful things Congress wants to enact? Do you have an opinion as to where that number should be?

Mr. BERNANKE. Senator, I just note that as an empirical fact, over the last 40 years, the share of GDP collected as Federal taxes has been pretty stable at about 18.2 percent, something in that range. And you are right, we are not much below that at this point.

No, I would not be inclined to pick a specific number other than to observe that historically we have been stable around this 18-percent rate. The choices that Congress will face are really cost-benefit choices. Looking at individual programs, do they meet the cost-benefit test when you include in the cost the fact that the higher the share of GDP that you collect in taxes, the greater are the so-called deadweight losses or excess burdens associated with the inefficiencies of high taxes? I do not think that one can necessarily point to a single number, but I do believe that a rigid, rigorous cost-benefit analysis should be applied to different programs.

I would point out a concern, which may be what you are alluding to, that on current plans the three major entitlement programs— Medicare, Medicaid, and Social Security—are slated to take up about 16 percent of the GDP as of 2045. Together with the interest on the national debt, that would be pretty much the entire share of GDP that we are currently spending on the Government.

Senator BENNETT. It would be higher than that, according to the

projections I have seen.

Mr. Bernanke. So, in any case, it would involve either radical increases in taxes, radical cuts in other spending programs, or some combination. So, I do believe, if that is what you are alluding to, that certainly is a looming issue that needs to be addressed sooner rather than later.

Senator BENNETT. Thank you.

Chairman Shelby. Senator Bennett, thank you.

We have about 3 minutes left on this series of votes. Dr. Bernanke, we will recess until 3 o'clock.

The hearing is in recess.

[Recess.]

Chairman Shelby. The hearing will come back to order.

The Chair recognizes Senator Carper.

Senator CARPER. Thank you, Mr. Chairman. You have a memory like an elephant, so thanks for letting me lead off here.

Chairman Shelby. It is your time.

Senator CARPER. Yes, it is.

Dr. Bernanke, thank you for coming back and for accommodating our schedule. We apologize for all those votes and that you had to

truncate your day.

Just a couple of press interviews right around our lunch hour, and people were asking me, like some TV people and radio people wanted to know how things were going so far, and I described the hearings; I described a day-night double header in baseball: We did the day part of the game, and now, we are about to move into the twilight portion of the game.

I would like to just start by again thanking you for being here, for your willingness to serve our country. And I am just going to ask you to take a couple of minutes, if you will, and just describe what you see when you look at our economy: How we are doing, where we are strong, where we are not so strong and any thoughts you might have toward what we can do better. I would like to say that everything we do, we can do better, and how do you assess the situation, and how might we do better?

Mr. BERNANKE. Thank you, Senator.

That is a large question. I think in the near-term, the economy is in a strong recovery. The economy has been growing quickly for the last couple of years. Employment has been improving. The labor market is improving, and I am looking forward to that growth continuing next year despite the obviously serious impacts of the hurricanes.

One good feature of this growth has been the increase in productivity, which we saw again in the third quarter. The ability of this economy to continue to improve output per hour is remarkable and speaks very well for the innovativeness and the industry of the American people and speaks well for the future of the economy.

With respect to inflation, I think the main issue has to do with energy prices. The economy has withstood 3 years of increasing energy prices. So far, both growth and inflation have not been very badly affected; in particular, core inflation remains low, and I think an important consideration for the Federal Reserve going forward is that should energy price increases continue, they not feed into second round effects; they not become part of the baseline inflation rate.

So, I think the near-term situation is strong. There are certainly risks. We can get into many of them. Housing prices will probably stabilize. Energy prices are an issue. So there are some risks in the

near-term, but I think the baseline looks reasonably strong.

As some of our earlier conversations alluded to, I think the United States economy faces some very serious long-term issues, and just to tick them off for future discussion: First, fiscal, particularly over the next few decades, we have increasing obligations with respect to entitlements. We will need to find ways to restructure those entitlement programs or else pay for them. They represent a very serious challenge to our economy.

Second, education will come up in many of our discussions here, because in our world today—with enormous amounts of dynamism, openness, international trade, change—people need to be able to have lifetime learning to change, to be able to respond to new conditions. Education and training are going to be a crucial part of

that.

Third, I would mention technological leadership. We need to maintain that leadership here in the United States. There have been a number of reports here addressing that subject.

And finally, just this laundry list; perhaps more than you asked

for.

Senator CARPER. No, it is a good list.

Mr. Bernanke. We need to address the health care sector. There are many pockets of excellence, of course, in our health care system, but the costs are high, and they are rising. They have fiscal implications—for wages, for competitiveness—and I would put that along with these other long-term issues at the very top of the

things we need to address.

Senator Carper. Thanks. On the last point you mentioned with respect to health care, I mentioned to the people back in Delaware on Veterans Day, we had a number of assemblies around the State of veterans, and I mentioned that an unlikely model for us to consider emulating, at least with respect to harnessing information technology in the provision of health care actually comes out of the VA, a place which was a backwater just years ago but today is really setting the model.

You did not mention savings. We are lousy savers, as you know. In fact, the last couple of months, I think we have actually seen negative net savings. And I would just ask, is that a source of con-

cern to you? Should it be for us? What should we do?

Mr. Bernanke. I think it is an issue, Senator. I think part of the reason for the low savings rate in the last few years is that our wealth has risen for a variety of reasons. Our housing wealth has increased. The stock market has recovered somewhat. So, with their homes doing their savings for them, for example, people are less inclined to put aside something from their paycheck.

That has implications for our current account, for other issues. I suspect as we go forward that the savings rate will, of its own

accord, begin to rebound somewhat, but it is an important issue. The fiscal situation contributes to the saving issue, so I agree that

is something we need to look to over the long period.

Senator CARPER. Good. My time has expired. I would just say to my colleagues, Mr. Chairman, and to others, if you look at homeownership in this country, it is now up close to 70 percent. It is about 75 percent in my State. But there are some people, low- or middle-income people, who should be homeowners, would like to be homeowners. They have the ability to make a mortgage payment, but they just are not able to get there. They do not think they can

And for a lot of those people, the ability to accumulate savings has passed them by. And one of the things I hope we can do is fig-

ure out better to help them. Thank you.

Thanks, Dr. Bernanke, and good luck. I look forward to working with you.

Mr. BERNANKE. Thank you.

Chairman Shelby. Senator Reed.

Senator REED. Thank you very much, Mr. Chairman, and once

again, welcome, Dr. Bernanke.

One of the ways we were able to instill fiscal discipline during the 1990's was adherence to PAYGO rules. And I just wondered, do you agree that PAYGO rules should apply to taxes as well as to expenditures?

Mr. Bernanke. Senator, I think it is important for Congress to have well-developed structures, practices, and procedures for managing its budget, but I am not going to make a recommendation on that. I think that is outside of my realm of authority, and I think I would leave that to the Senate, and to Congress, to make up their

Senator Reed. Well, your predecessor was not equally inhibited. He seemed to suggest that PAYGO was an appropriate mechanism to deal with fiscal discipline, and frankly, sometimes, we need a little help on these issues, Dr. Bernanke. So, I appreciate your ceding us the ground, but this is a very serious issue, and it seems to me that we will not be able to restore the discipline here in terms of an orderly budget process unless we do something like that.

Let me ask the question again. You are an economist; I am a

lawyer, so I keep asking questions. If we do not subject tax cuts to PAYGO, then, essentially, in this economy, we are borrowing the money for these tax cuts. Is that accurate?

Mr. Bernanke. It depends on both the spending side and the tax side. To respond to your question in just a general economic way, I think there are several things to look at when you are examining a fiscal policy. One of them is deficits. Deficits are important, because they represent debt which is being accumulated and being passed on to future generations. But the share of the economy being devoted to Government spending is another important criterion. In particular, a balanced budget with Government spending at 25 percent of GDP is a very different proposition than a balanced budget with Government spending at 15 percent of GDP.

So, I am a little bit reluctant—both for the reasons I mentioned in terms of my prerogatives but also in terms of the economicsto put specific rules like that. I think that the Congress has to make judgments about the overall arc of the budget and make tradeoffs.

Senator REED. Well, then, let me ask this a final way. Assuming you are consistent in your viewpoint, you would not render an opinion if we increased expenditures without offsetting it.

Mr. Bernanke. I believe that it is within my purview to discuss broad issues of the share of Government spending and GDP, the share of taxes and GDP, deficits, fiscal stability, those issues. What I would like to do is refrain from making recommendations on specific matters of taxes and spending or specific approaches to paygo and the similar methods.

Senator REED. And we can assume that is going to be a policy after you are confirmed as Chairman?

Mr. Bernanke. That is my intention. Senator Reed. Thank you, Doctor.

Let me ask another question: Chairman Greenspan has explained as recently as last fall that it is, in his words, "Very rare and very few economists believe that you can cut taxes, and you will get the same amount of revenues. When you cut taxes, you gain some revenue back. We do not know exactly this is, but it is not small. But it is also not 70 percent or anything like that." You do not subscribe to the view that tax cuts pay for themselves, do you?

Mr. Bernanke. Senator, the revenue cost of a tax cut depends on the structure of the tax cut, whether it is one that improves economic growth or not, and so on. I think that generally, tax cuts, if they are well-designed, do increase growth and therefore do partially offset the revenue loss. But I think it is unusual for a tax cut to completely offset the revenue loss.

Senator REED. Thank you, Dr. Bernanke.

One other area of concern, and that is although interest rates have not gone—excuse me, we have had, over the last several quarters, increases by the Federal Reserve with respect to interest rates, but the long-term interest rates have hardly moved at all, and that is, I think, an issue that is beginning to draw a lot of professional attention as to why that might be.

Although these long-term interest rates have not gone up, the large Federal budget deficits we have seen recently have substantially reduced our national savings. I think that is correct, also, and the increase in national savings, I would assume, and I hope you do also, does harm our future prosperity and economy; is that accurate?

Mr. BERNANKE. It does increase the debt that we pass on to our children; that is correct.

Senator REED. Now, just recently, I think Chairman Greenspan has talked about the potential for foreign lenders to become disenchanted. Will interest rates not have to rise substantially in our current posture if foreign lenders are not forthcoming? Is that almost axiomatic?

Mr. BERNANKE. I do not expect to see foreign lenders change their holdings very significantly. The foreign holders are not doing us a favor. What they are doing is choosing a set of assets which they consider to be highly liquid, highly safe, from a country with a safe, strong legal system. So it is for that reason that American assets make up the bulk of international reserves.

I do not expect to see major changes in that. Moreover, there is broad interest in holding U.S. assets both by Americans, of course, but also by foreign, nonofficial sources as well, so I do not expect to see any such shift in demand for U.S. assets.

Senator REED. Thank you, Dr. Bernanke.

Thank you, Mr. Chairman.

Chairman Shelby. Senator Stabenow.

Senator STABENOW. Thank you, Mr. Chairman and welcome. Welcome back.

Mr. BERNANKE. Thank you.

Senator Stabenow. Dr. Bernanke, I wanted to talk a little bit more about this whole question of our U.S. assets, financial assets and other assets being held by foreign investors. We are told that about \$9 trillion in all, if you look at financial assets, large portions of which are easily sold and highly susceptible to shifts in the market sentiment, to interest rates, to other variables, even a modest slowdown in the net new inflows from private and official foreign sources could have a negative impact on an economy where foreign investment is about 25 percent of our gross national product, very alarming. And I would argue that since a large part of that is China and Japan, that it unduly impacts our ability to enforce trade laws and to address other issues with them, whether we want to acknowledge that or not. I have a hard time believing it does not have some impact there.

But it would appear to many of us that our trade deficits are leading us down an incredibly alarming path as well as our budget deficits. When you are looking back, do you see any instances where alternative monetary policy choices by the Fed could have moderated the buildup of these imbalances or had an impact on what is happening in terms of deficits?

Mr. Bernanke. No, I do not think that the Federal Reserve, whose mandate, after all, is domestic price stability and employment, has much role in terms of the current account deficit. The current account deficit is a very complex phenomenon. I believe it arises from essentially a global imbalance of saving and investment. Countries outside the United States have a lot of savings that they want to put into international capital markets and insufficient investment to make use of those savings.

The United States has been the recipient of those savings, and that is, in some sense, a good thing, because the United States is a very attractive destination for foreign capital flows. But it has also created this imbalance that we call the current account deficit.

I do believe the current account deficit needs to come down over a period of time. I think there are a number of elements needed to do that. Part of it would be to increase U.S. national savings through both private savings and public savings. It would also be useful for our trading partners to do a number of things, including allowing their exchange rates to float freely and be determined by the market and relying less on exports as a source of demand for their economies.

So we need to rebalance the global international system. I believe that can be done over a period of time, but it will not happen overnight. And I think the Federal Reserve's main objective should be to maintain domestic employment and price stability and to allow other factors to be predominant in curing the current account situation.

Senator Stabenow. Let us talk for a moment; you mentioned floating currencies. Currency manipulation is of great concern to me and many of my colleagues. We had a very strong vote; I believe it was 67 Members of the Senate, both parties, a year ago that sent a very strong message about how we want that to stop, particularly with China; China, and Japan is also a concern, whether it be as aggressive or an open process in Japan.

We have a process where the Treasury Secretary comes in every 6 months, gives us a report. This past summer, he issued his semiannual report and was not able to bring himself to recognize that China is, in fact, manipulating their currency. We all know it is happening. Everybody in my State knows; any businessperson

knows that is happening.

But once again, we have in November, now, this month, we will have access to another report. I fear that it will be the same as other reports, technically indicating that currency manipulation is not happening. Do you believe the Federal Reserve has a role to play in ensuring that economies around the world allow market forces to determine the value of their currency?

Mr. Bernanke. Senator, let me begin by saying that I think it is very much in China's own interest to allow their currency to float freely and be determined by the market. They are a very large country. They need to have independent monetary policy. It is difficult for them to continue sterilizing their interventions the way they have been doing, so I believe that they will come to the recognition, and I hope they do, that it is in their interest to allow their currency to be determined by market forces.

With respect to the Federal Reserve's role, the Treasury usually takes the lead in matters of currency negotiation and the like, but the Federal Reserve is active in providing advice and assisting in

whatever way possible, and I would certainly do that.

Senator Stabenow. I would just comment that when you are talking about China's best interests, I would just note that we have lost over 1.5 million manufacturing jobs in America, which is where my focus is, and our focus is on America, American businesses, and American jobs. We have lost over 1.5 million jobs because of currency manipulation.

And while I appreciate that we can hope that someday, China will get there, because it is in their interests, it has been long in our interests to have stopped this along with counterfeiting and a number of other issues that have created an unlevel playing field

for our businesses and our workers.

So, I realize that is not directly under your purview, but I would hope that your knowledge and leadership would be used as we talk about the broad economic factors that allow us to create those good paying jobs that we desperately need to keep and expand upon in this country, and certainly, what we are doing to enforce, or in this case, not enforce trade laws has a tremendous impact on that, and certainly, currency manipulation is one of those things.

Thank you very much, Mr. Chairman.

Chairman Shelby. Senator Bayh.

#### STATEMENT OF SENATOR EVAN BAYH

Senator BAYH. Welcome, Doctor, and I want to thank you for the visit you were kind enough to pay on me a week ago. I enjoyed our discussion. As I told you at the time, I look forward to supporting your nomination and was impressed by your combination of both theoretical and practical concerns, which is the combination that I think we need in a Fed Chairman.

Doctor, let me begin by asking a stylistic question, if I might. And I would like to quote from an article in today's *New York Times*, which concludes by saying, "As an academic economist and as a Fed Governor, Mr. Bernanke prided himself on speaking clearly and sometimes even bluntly." It then goes on to say that perhaps to satisfy the concerns of Members of Congress but also the bond market said to satisfy both constituencies, he may have to sacrifice his plain speaking.

Is that true? I, for one, am hoping that you can continue to speak your mind in a language the American people can understand.

Mr. BERNANKE. I will certainly try to speak clearly on all occasions, Senator.

Senator BAYH. Good. I guess we will have to be the judge of that as we go forward, but I hope you will endeavor to do that. Clarity and transparency, I think, are normally better than the alternatives, so I hope you will stick to your stylistic guns.

Mr. BERNANKE. Thank you.

Senator BAYH. Let me ask you about current account balances, if I might. And let me follow up on something that I think both Senators Reed and Stabenow were asking and also quote from today's *New York Times*. It says of the more than \$30 trillion in foreign investment tracked by the Bank of International Settlements in the first 3 months of 2005, 42.5 percent were in dollars, 39.3 percent were in euros. The dollar share was down 4 percentage points from around 3 years earlier, while the euro share was up by 5 percentage points.

The reason these statistics were cited by Chairman Greenspan was in furtherance of the notion that perhaps in accordance with portfolio theory, some countries had reached the tipping point in terms of their level of dollar-denominated assets. What is your take on that?

Mr. Bernanke. Senator, it is an open question. There is still what Chairman Greenspan calls the home bias, the fact that most countries still own a smaller share of dollar-denominated assets than the U.S. share in the world economy. And so, it is a question of judgment about how much more dollar assets foreign investors will want to hold. My sense is that there is still a broad appetite for dollar assets, both domestically and abroad, and as I indicated, I do not expect to see any major shifts in that appetite. Clearly, we will need to monitor the situation. We will need to watch the behavior of interest rates, the dollar, and other financial variables, but I see no indication of any major shift in these flows in the near-term

Senator BAYH. Let me ask a question that I posed to you in our meeting in my office, and that is the most likely course of events

is that there may be an orderly readjustment of the imbalances that currently exist, but from time to time, events happen that lead to disorderly movements. What should the appropriate policy response of our Government be if there were to be a precipitous decline in our currency, and what do we do about the conundrum where, if you raise interest rates in the short-run to defend our currency, it could have a stifling effect on the economy which, then, in the longer-term, could have a depressing effect on our currency? How do you strike the right balance there?

Mr. Bernanke. Senator, in answering the question, first, we are talking hypothetically.

Senator BAYH. I understand that.

Mr. Bernanke. So, I want to be sure everyone understands that. Senator Bayh. And by the way, forgive me for interrupting, but as a Member of this body and admonishing you to speak bluntly and clearly, perhaps we should look in the mirror. I want to just put that on the record, too.

Mr. BERNANKE. Thank you, Senator.

The Federal Reserve has important responsibilities for maintaining financial stability that involves ensuring ex ante that banks, for example, are managing their portfolios safely; that the clearing and settlement systems are well-designed and secure; that there are good arrangements in place for dealing with some kind of financial crisis no matter what its source should be; and ex post, should there be a problem that there be plenty of liquidity provided to the banking system and that the Fed would make sure that whatever problems arise be brought to some venue where they can be unwound, discussed, and assistance be given.

So broadly speaking, the Federal Reserve must deal with financial crises of all different kinds. There have been a variety of them. Should an untoward movement in dollars and interest rates cause financial stress, the same approach that the Federal Reserve has taken in other circumstances would be applied in this case.

With respect to the macroeconomic implications, it would depend on the overall impact on the economy. Again, the Federal Reserve's responsibility is maximum employment and price stability. So the impact of the change in the dollar, interest rates, asset prices, however those things would occur, there would have to be an evaluation about what the net change would have to be in order to make sure that the domestic economy is stabilized and is insulated from the impact of these changes.

Senator BAYH. I have exceeded my time, but it would be a sticky problem, would it not?

Mr. Bernanke. Surely, it would be a sticky problem, and that is why it is good to have an experienced staff and lots of experience in the institution for dealing with these crises.

Senator BAYH. I am going to defer to my colleagues and stick around for a few moments, but my concern in this regard is that if, in fact, other countries have reached the point at which they are not seeking to increase the percentage of dollar-denominated assets, then perhaps that increases the risk of an exogenous event of some kind leading to a precipitous readjustment of the currency, thereby presenting you with this possible hypothetical.

Mr. Bernanke. Senator, if I may, there is demand for dollar assets not simply by foreigners but by Americans as well. And American household wealth, for example, is about \$50 trillion. There is an enormous demand for dollar-denominated assets, and so, I do not expect that that demand would drop precipitously.

Senator BAYH. Let us hope. Thank you, Mr. Chairman.

Chairman SHELBY. Thank you, Senator Bayh.

Dr. Bernanke, last week, the Banking Committee, as you probably knew, heard from the banking regulators, including the Federal Reserve, and several industry experts regarding the proposed Basel II capital standards. While the regulators basically supported moving forward, some with a little caution in the wind, the outside experts, a lot of them former regulators, advised caution, raising concerns about lower capital ratios and failure to factor in all risks faced by banks.

What is your assessment of the Basel II proposal? I know you have been on the Fed as a Member. And if you are confirmed as Chairman, which I hope you will shortly, what will the Federal Reserve do to address the unanswered questions? And there are a lot of unanswered questions and concerns raised regarding Basel II.

Mr. BERNANKE. Well, Chairman Shelby, Basel II or something like it appears necessary. The banking system has become extraordinarily sophisticated financially. Basel I is no longer sufficient as a means of determining adequate regulatory capital for the banking system. The Federal Reserve, the other banking regulators, and international counterparties have worked for a number of years trying to determine an appropriate system that would appropriately account for the complexity of the banking system.

Basel II tries to embody the notion that the amount of regulatory capital should be based on modern risk management techniques, which try to evaluate the risks associated with different kinds of investments. It is true that there have been various concerns and disagreements along the way. My sense is that the banking regulators are proceeding in a very cautious and slow way. In particular, as you know, they have delayed the implementation following the QIS-IV results, and moreover, there is going to be a series of safeguards, including, for example, a slow transition parallel run where both Basel I and Basel II capital standards will be calculated, and there will be a floor based on the Basel I standards. There will be a continual process of evaluation, of feedback, and of comment.

There are various other safeguards as well, including the Pillar II, which allows regulators to make additional assessments of capital, depending on their evaluation. And finally, I should just mention, among many other elements, both prompt corrective action and the leverage ratio, which are two other "belts and suspenders' provisions, will remain in place to ensure that banks have suffi-

So while I am not involved personally in all of the details at this point, I expect I will be if I am confirmed. My sense is that regulators are moving very cautiously and very slowly to make sure that the regulatory capital is going to be sufficient to make the

banking system safe and sound.

Chairman Shelby. Thank you.

I want to touch on the Fed's role in crisis management, and I hope you will not be confronted with crisis management, but I know you will be. Over the past 20 years, the United States and world economies have benefitted when the Federal Reserve took swift and appropriate action to respond to various financial disturbances. Some now question whether the Federal Reserve will have a more difficult time in the event of a future crisis because of the large trade deficit and the large foreign official holdings of U.S. Treasury debt we have been talking about.

Do you agree or disagree with the assessment that the Fed may not have, may not have the same flexibility as it had in the past? And what measures, if any, would you, as Fed Chairman, lead the Federal Reserve in taking to prepare for its role in crisis management, which will come sooner or later?

Mr. BERNANKE. Chairman Shelby, it is certainly true that the economy has become much more open, that capital flows are much more important, that the current account is a much bigger issue, and that certainly makes more complicated the Federal Reserve's objectives, both macro objectives and financial crisis management.

Nevertheless, I do not believe that the ability of the Federal Reserve to respond, to meet its objectives has been substantially compromised by this opening. It just makes the problem more complicated, requiring more expertise. I think, in fact, that the financial system has benefitted over the years from the meeting of a variety of financial crises, including, for example, September 11, which has led to hardening and providing additional backup facilities.

The depth, liquidity, and flexibility of the financial markets have increased greatly. The strength of the clearing systems of the major financial centers has been improved. So certainly, I agree that we can never be complacent about financial crisis, and I will certainly make every effort to be prepared for whatever may come my way. But I do believe that progress has been made in strengthening the system to be more resilient in the face of shocks.

Chairman Shelby. Senator Sarbanes, would you like to ask any questions?

Senator SARBANES. Yes, I do indeed. Thank you very much, Mr. Chairman.

Dr. Bernanke, I have a number of questions I want to run through as quickly as I can. Before I do that, though, I do want to observe that—let me start, and then, I will come back to that.

On Basel II, which you just responded to the Chairman about, it seems to me you are being much too sanguine. They did the quantitative impact study. They found that more than half of the participating institutions would show a capital reduction of 25 percent or more; in some instances, up to 50 percent, which, of course raised a lot of red flags about the safety and soundness of the system and the adequate capital. Do you think that prompt corrective action and the leverage capital requirements could be maintained if risk-based capital levels fell significantly below the leverage ratio?

Mr. Bernanke. Senator, I guess the good news about QIS-IV is that it led the regulators to stop, take stock, and to try to understand the results.

Senator Sarbanes. Which only raises the question, how did we get so far down this path that when they ran it through the models, it brought this absolutely show-stopping result? How did that happen? I mean, we keep holding these hearings; Chairman Shelby, to his credit, has really exercised a lot of oversight over this repeatedly. Everyone says, well, we are working it all out. It is going to be good, you know; and then, all of a sudden, they do a quantitative run on the thing, and everyone says wow, how did we get to this posture?

How did that happen?

Mr. Bernanke. Senator, various issues have been identified that will help explain the results. I do not have to go through all of them; to give one example, some of the results were based on relatively good times and did not include some weak periods of the economy that give a higher loss rate. But what it does emphasize—and here, I agree with you, Senator—is that it is very important that this be done right, and we need to learn from these exercises. If they were purely mechanical, they would not be worth doing.

So we need to go slowly and cautiously and learn from these exercises and make sure that capital is adequate, and I agree with

that 100 percent.

Senator Sarbanes. Well, I want to commend to you—I will not pursue this question, because there are a number of others to ask, that there was a panel after we heard from the regulators, including former FDIC Chairman William Isaac and former FDIC Chairman William Seidman, and Isaac said a number of things, but I quote him: He says "Basel II will be used to reduce large bank capital ratios and either place small banks at a competitive disadvantage or force regulators to lower bank capital ratios." Neither option is acceptable public policy.

And Seidman, and these are two experienced people, said the original intent of Basel II was to more closely align minimum regulatory capital with actual risk, not to materially reduce overall capital levels within the banking system. And I strongly commend the testimony of that second panel to you as you move ahead to exam-

ine this question.

Let me ask you about remittances. I know this is an issue you have been interested in. A recent study by the Inter-American Development Bank said Latin American immigrants will send over \$50 billion in remittances to their family and friends in their countries of origin, the vast majority of which is from the United States.

We have been concerned about the state of the remittance market, especially that individuals are using methods of transmitting remittances that are outside the financial mainstream and therefore often subject to high fees and often to hidden charges in the form of unfavorable exchange rates.

You have studied this issue. You have said typical nonbank fees for remittances remain high on an absolute basis, and consumers who deal with the less scrupulous providers of remittance services may bear a significant financial cost. I think we have an opportunity here to get immigrants into the financial mainstream, using the remittance issue in order to do that.

Would it be your intention to work on this issue as Chairman of the Fed, and do you think there is a role that the Fed can play in helping to achieve this goal of greater fairness for the immigrants who are doing the remittances and their inclusion in the financial system?

Mr. Bernanke. Senator, yes, I do. As my same speech that you are alluding to discussed, I think this is an excellent opportunity for mainstream financial institutions to bring immigrant communities into their organizations, to give them not only remittance services but also other services, savings, borrowing, and the like. And it is an opportunity that many of these organizations are already undertaking.

The Federal Reserve is involved in this in numerous ways, through bank supervision and regulation but also through, for example, the Fed ACH system, which has been set up with Mexico to permit easier remittance payments, through financial education and in managing the risks that are involved in these activities.

So, I think it is an important issue. It is very important, obviously, for the immigrants themselves and for the countries that are receiving the remittances, and I will continue to be interested in that.

Senator SARBANES. Mr. Chairman, I see my time is up. I have a few more.

Chairman Shelby. You go ahead.

Senator SARBANES. Well, you have people who have not had their first round. And Bob Bennett is here, too.

Chairman Shelby. Senator Bennett.

Senator SARBANES. And Senator Schumer is here.

Senator Bennett. Thank you, Mr. Chairman, Senator Sarbanes, and I listened to this conversation about the current account and foreign ownership, and I have a fundamental question: Where else are they going to go?

Mr. Bernanke. Senator, that was part of my response.

Senator Bennett. Yes.

Mr. Bernanke. American assets are very attractive assets, and they will be an important part of any international portfolio and, of course, of Americans' portfolios as well.

Senator BENNETT. Sure; I mean, I would not want to invest a lot of my retirement money anyplace else but in the American economy, and it is a logical place. Where else are they going to go?

I would like to pursue a little bit another question. We talked about inflation. We talked about price stability and price stability being the target and the old idea that inflation and employment are tied together, and you cannot have high employment without overheating the economy. And so you have to make a choice, and I think we have broken that link and decided you can have price stability and tight labor markets at the same time, because we have seen some of that before the recent recession.

What causes inflation? That becomes the fundamental question here, and there are some who would suggest that inflation is caused by too much growth, and the way to control inflation is to control growth. But we have had low inflation, and we have had growth in excess of 3 percent of GDP, sometimes up to 4 percent of GDP without the sense that the economy was overheating.

Could you just explain that in your best professorial manner to a graduate student here who wants to know how you are feeling about this whole question of whether or not inflation is caused by too much growth, and if not, by what?

Mr. Bernanke. Senator, growth itself and growth capacity are ultimately determined by productivity, which again, depends on issues like regulation, taxation, innovation, technology, and the like, and also by employment growth—the number of workers available and the increase in their labor supply. So those are the fundamental factors that determine growth.

The amount of available growth varies over time according to economic conditions. It can be high. The United States has had good economic policies and good technologies that have promoted growth in recent years. So, in that sense, strong growth does not create inflation.

If financial conditions are such, though, that aggregate demand, aggregate spending is greater than even the growth that underlying conditions can permit, then, there can be increased pricing power, excess demand, and pricing pressures can increase. In that case, you can get some inflation.

I agree with your original statement, though, that in the longrun, the most important relationship is between low inflation and high growth. That is, when inflation is kept low and stable, and expectations are kept low and stable, then the economy will be more stable, and more growth will be possible. So, I think that is the most fundamental relationship between the two variables.

Senator Bennett. Well, I have always said wealth is created by two things: One is accumulated capital, and the other is risk taking and that we need policies, both fiscal policy and monetary policy, that encourage both the accumulation of capital and the willingness to take risks. I realize tax policy comes into that, because if you tax accumulated capital and thereby make it less attractive, or if you tax the rewards so that I take a risk, but I am not going to get that much of a reward out of it; but taking those two, the role of accumulated capital and risk taking in creating growth, talk about the Fed's role with respect to that, because you do not control taxation.

Mr. BERNANKE. No, the Fed's role is to keep inflation low and stable, and that makes markets work better. It reduces risks in the market, causes people to spend less time worrying about the value of money and more time about businesses and innovations and changes that will make the economy better. So that is, I think, the main contribution the Fed can make is to ensure long-run price stability. In the short-run, the Fed can respond to various shocks to the economy and try and keep things on an even keel, but all that works best when inflation is kept low and stable.

Senator Bennett. Thank you, Mr. Chairman.

Chairman Shelby. Senator Schumer. This will be your first round.

#### STATEMENT OF SENATOR CHARLES E. SCHUMER

Senator Schumer. Thank you, Mr. Chairman, and thank you for holding these hearings. I want to thank you, Mr. Bernanke, for being here. I apologize I could not be here earlier. I was over on the House side.

And we have had some extensive discussions, and you have answered most of my questions satisfactorily; a few I would like to go over even though we talked about them when we met: China; now, in May of this year, you told this Committee, I am quoting you, "For large economies like China and the United States, it is preferable to have a market-determined, flexible exchange rate. And China should move as expeditiously as possible toward loosening up its exchange rate. They are now ready to go to a more flexible rate regime, and I would encourage them to do that."

That states your views correctly and without any modification?

Mr. Bernanke. Yes, Senator.

Senator Schumer. Okay; let me ask you a couple of questions about that. First, do you believe that our current account deficit is sustainable?

Mr. BERNANKE. I believe we need to bring it down over a period

of time, yes.

Senator SCHUMER. Okay; do you think that China and its particular inability or unwillingness to let the currency float is contributing to that current account deficit?

Mr. Bernanke. It is a contribution, but there are many other factors as well.

Senator SCHUMER. Right.

Mr. Bernanke. Including the very high savings rate around the world and the export-led strategies of some other economies.

Senator Schumer. Right; do you believe the Chinese engage in mercantilist policies? You had said you did when we talked. Could you just elaborate a little bit?

Mr. Bernanke. They have adopted a development strategy, which other countries have also adopted which focuses on exportled growth; that is, that they are looking to export in order to help their economy grow. They see advantages in being able to sell to a global market, one that is more technologically sophisticated, and it has been proved a method that has helped them in their rapid growth process.

Senator Schumer. But they try to maximize imports and minimize imports; would that be fair to say?

Mr. BERNANKE. I am not sure about imports. In some cases, the imports are quite important; for example, China is a platform, and they bring in goods and services, bring in goods from other parts of Asia and reproduce them.

Senator Schumer. Right. But their goal is to increase their overall wealth. That is what a mercantilist policy would be.

Mr. BERNANKE. They have focused on exports as a way of trying to increase their growth, yes.

Senator Schumer. Now, second question is China did promise to allow market forces to affect the value of the yuan, and yet, the currency has moved as much in nearly 4 months as they said they would allow it to move in a day; in other words, the total amount

of movement. Is it your view that China has kept its promise to allow the yuan to move with market forces?

Mr. Bernanke. I think they need to do more to allow their exchange rate to become more flexible and more market-driven.

Senator Schumer. Obviously, it would not move so little if they were not intervening, and it would be better if they did not or at least gradually moved away from it; I assume you assume that is correct.

Mr. Bernanke. Yes.

Senator Schumer. Okay; could you just talk a little bit about a reasonable timetable for China to allow its currency to float freely? Are they ready to do it immediately? That would be one extreme. Should it take 10 years? That might be another extreme. Could you talk a little bit about what you think is a reasonable timetable for them? I am not going to pin you down to 2 years, 6 months, but just talk to us a little about that.

Mr. Bernanke. Senator, I think that they will go somewhat slowly. They want to make sure that their economy is ready for the flexible exchange rate. They are looking at the institutional factors involved in trading, the exchange rate, and the like. I would be very reluctant to give a timetable.

Senator Schumer. Are they moving too slowly now?

Mr. BERNANKE. I would like to see them make further progress on this issue.

Senator Schumer. Okay; thank you, Mr. Chairman. Time is up. Chairman Shelby. I believe it comes back—no, it comes back to you, does it not?

Senator BAYH. I would be on my second round.

Chairman Shelby. Yes, sir.

Senator Bayh.

Senator BAYH. Doctor, I would just observe I am a little concerned about a cavalier attitude with regard—not on your part, just in general—about the current account imbalance and the attitude of, well, where else are they going to go? I can see the Chancellor of the Exchequer having made a comment like that in the 1930's or the 1940's, and in fact, history evolved in a way that there was an alternative, and that is where the global currency flows went.

It is also possible that other countries might choose to make decisions that we would view as suboptimal in terms of the return on their investments for other reasons of state; for example, to pressure us on national security issues of some kind involving, just to pick at random, the issue of Taiwan, for example. There are occasionally nationalist issues that trump economic interests. And that is one of the reasons that I am somewhat concerned about just saying, well, the current account deficit can run forever at, what, 6 percent now and maybe larger. Eventually, this has to unwind in some way or other, and it had best be orderly rather than disorderly, so that is the nature of my questioning.

I would like to shift and ask about the budget imbalances, the different imbalances that we are running. I think in our conversation, we both agreed that there was some level at which an internal momentum begins to take hold when a deficit gets to a certain size and the interest payments begin to build and the snowball ef-

fect, for lack of a better term, and as I recall, that was around 2

percent or thereabouts; is that correct in your opinion?

Mr. Bernanke. Not precisely. A 2 percent deficit is about consistent with a stable ratio of debt-to-GDP. So maintaining a deficit at that level, while not optimal, it would be better to get it lower, at least does not have the property of raising the debt-to-GDP ratio. There can be periods of higher deficits. I expect we will see one with the costs of Katrina, for example.

Senator BAYH. Well, indeed, we are already in one. I think our current deficit-to-GDP is about 2.7 percent, excluding Katrina.

Mr. Bernanke. So as long as the deficit returns to a sustainable level over a period of time, then the debt-to-GDP ratio also will stabilize. But I am not disagreeing in the sense that I think it is very important, and here, my main concern is the long-run entitlement issues, which I have already alluded to, which are going to put very heavy burdens on the fisc. In order to prepare for those heavy burdens, I think we do need to begin to try to reduce the deficit, try

we will be prepared to deal with those long-term entitlement— Senator BAYH. Here is the reason for my question: If we are already at 2.7, then, we agree that we are above the rate at which the debt level-to-GDP begins to increase. Therefore, any decision, be it spending or on the tax side that increases the deficit only ex-

to reduce spending, try to bring the budget closer to balance so that

not?

Mr. Bernanke. If you take as a baseline the midsummer, midsession review earlier this year—

acerbates that situation; I think by definition, that is correct, is it

Senator BAYH. Remember my admonition from the *Times* about speaking bluntly.

Mr. BERNANKE. I will speak bluntly.

Senator BAYH. I am teasing.

Mr. Bernanke. That baseline had a declining deficit-to-GDP ratio over the next few years.

Senator BAYH. Which timeline was that, Doctor?

Mr. Bernanke. Over the next 5 years, the midsession review shows the deficit as a share of GDP declining over time. However, there are important risks to that projection. Obviously, since the summer, we have had Katrina, which will have a near-term impact. Another concern I would raise for you is the reliance for revenue on the alternative minimum tax, which the Congress is not willing to allow to actually take effect.

So it is, I think, important for Congress to consider whether either to allow the alternative minimum tax to actually take effect or alternatively to undertake a tax reform or other measures that

replace that revenue with some other form of revenue.

Senator BAYH. Let me ask you one final question: I am occasionally asked this, and it is always a little hard for me. But I find that a certain amount of reflection and introspection sometimes is—I can learn more sometimes from things that maybe did not go quite as I expected as much as I can from things that went as I expected.

Looking back in the different public policy pronouncements that you have made and situations that you thought you had analyzed correctly at the time, can you point to anything that just did not turn out quite the way you expected and what you learned from that instance?

Mr. Bernanke. Well, in 2003, there was an episode where there was clearly a miscommunication between the Federal Reserve and the bond markets, and it caused a significant fluctuation in the bond markets. This was over the issue of whether there was some risk of deflation going forward. And clearly, there was a misunderstanding about that risk. It impressed on me the importance of speaking clearly and communicating clearly and making sure that there is understanding on both sides about what the Fed is saying and what the Fed is intending to do.

Senator BAYH. Thank you very much, Doctor. I wish you the best.

Mr. Bernanke. Thank you.

Chairman Shelby. I believe it is back to me, Dr. Bernanke. In your previous tenure, Dr. Bernanke, when you were a Member of the Board of Governors of the Federal Reserve, you spoke regarding, "a global savings glut." Others have, too. Would you elaborate just for the record further on the potential causes of this behavior and whether our Nation's economy has ever experienced similar circumstances? And should this situation persist, how would this affect the Federal Reserve's economic projections if it would? We realize that there is capital in the world, which is money, I guess, savings.

Mr. Bernanke. The global savings glut idea attempts to point out that the current account deficit of the United States is not simply or entirely a product of U.S. economic policies. It is a global phenomenon created by global forces; in particular, I argued in the speech that over the last 10 years or so, the amount of savings around the world has exceeded desired investment in those same countries, for various reasons, including the aging of some industrial economies, the oil revenues of crude producers, and most importantly, the fact that emerging market economies over the last 10 years have gone from being significant borrowers in international capital markets to large lenders, to having large current account surpluses.

As a result, there have been enormous amounts of capital dumped into international capital markets, which helps to account for the fact that global interest rates are at record lows or, at least, at very low levels. The inflows of that capital into the United States, which is an attractive destination for this capital, and the resulting impact on asset pricing in the United States is, in my view, part of the reason why Americans have increased their consumption and reduced their savings, which has resulted in this current account deficit.

Now, as I have argued already today, I do not view the current account deficit as desirable. I think there are a number of reasons to try to end it, but in order to end it or at least to wind it down over a period of time, it is going to require action both within the United States and also within our trading partners. On the part of the United States, we need to increase our own savings relative to investment.

With respect to our trading partners, there needs to be, first, increased reliance on flexible exchange rates, as we already dis-

cussed, and also, more willingness on the part of our trading partners to rely on domestic spending—domestic government purchases or consumption—to drive their economies as opposed purely to an export-led strategy.

Chairman Shelby. Is it basically true that in a global economy where you have market forces working that capital would know no boundaries? It would look for its best investment, would it not?

Mr. Bernanke. That is correct, but at this point, some of the savings which is coming to the United States might well be served by going, say, to emerging market economies, which are, because they have perhaps inadequate infrastructures or insufficient transparency, are not receiving as much capital as, in some sense, would be ideal. I think a more balanced global situation will be one where there is a closer balance between saving and investment both in the United States and abroad.

Chairman Shelby. Senator Sarbanes.

Senator SARBANES. Just to follow up on the Chairman's point quickly, is some of that capital not coming from emerging market countries or developing economies?

Mr. Bernanke. Yes, Senator, a great deal of it.

Senator SARBANES. And what is the rationale for that? Why should they be sending capital into the world's most advanced economy? Is not something—at least what economics I learned, that is the wrong way for the flows to be going in terms of building up worldwide prosperity.

Mr. Bernanke. Senator, your basic point is right. Normally, you would expect to see capital flowing into emerging market economies rather than out of emerging market economies. The proximate cause of this switch, I would argue, were the financial crises of the late 1990's, which occurred in a variety of emerging market economies in East Asia, Latin America, and elsewhere and led them to be much more cautious about accepting capital inflows and to focus more on building up their reserves, building up their current accounts and looking more to an export-oriented strategy.

So, I think it is the effects of the financial crises, which, over a period of time, I expect will wane, but that was the main impetus, I believe, for this shift in strategy on the part of the emerging market countries.

Senator Sarbanes. Yes, but I take it you regard it as undesirable; I know in a speech, you said in the longer-term, however, the current pattern of international capital flows, should it persist, could prove counterproductive. Most important, for the developing world to be lending large sums on net to the mature industrial economies is quite undesirable as a long-run proposition.

Mr. Bernanke. That is correct.

Senator Sarbanes. You still agree with that statement, do you not?

Mr. Bernanke. In the short-run, and I agree with Senator Bennett, given that these countries have high savings, and they are unable to make full use of those savings domestically, it is understandable that they would send capital to the United States, which has very deep, liquid, and strong capital markets. Over a period of time—not immediately but over a long period of time—a greater

balance, which would involve more of these funds going into emerg-

ing markets, I think, would be desirable.

Senator SARBANES. You are on record as opposing the use of monetary policy to control asset bubbles, as I understand it, whether in the stock market or the housing market. Instead, you have stated a far better approach is to use micro-level policies to reduce the incidence of bubbles, to protect the financial system against

their effects.

The Wall Street Journal ran an article recently entitled "Concerns Mount About Mortgage Risks," which reported, "In the latest sign of how frothy the housing market has become, new data show the degree to which people are stretching to buy homes in a hot housing market. The data from the Mortgage Bankers Association show that adjustable rate and interest only mortgages accounted for nearly two-thirds of mortgage originations in the second half of last year.

Alan Fishbein, the Director of Housing and Credit Policy at the Consumer Federation of America, called it a game of musical chairs. Somebody is going to have the chair pulled out from under them when they find prices have leveled out and then try to sell,

only to find they cannot sell for what they paid for it.

Are you concerned about the potential for a bubble in the housing market? And specifically, does the drastic increase in the use of risky financing schemes, including interest only and even nega-

tive amortization mortgages, concern you?

Mr. Bernanke. Senator, as I understand, the Federal Reserve is reviewing these practices with the idea of issuing guidance about so-called "nontraditional mortgages." I think it is important to make sure that mortgages of the nontraditional type—whether they are interest only, option ARM's, or other similar types of mortgages—that first, they are consistent with safety and soundness on the part of the lenders, and second, that consumers who are using these mortgages fully understand the implications of holding these mortgages should, for example, housing prices decline or interest

I think it is very important to look at these instruments, and I believe that doing so would have, on the margin, some beneficial effects in reducing speculative activity in some local markets. However, overall, I think the main reason to look at these instruments is to make sure that banks are protected and that the consumers are protected against the potential risks of these instruments.

Senator SARBANES. Chairman Shelby and this Committee, and I have joined with him on it in expressing our concern that the Federal banking agencies are not taking a sufficiently aggressive and sophisticated attitude toward examining institutions with respect to money laundering. There have been some very bad examples.

What will you do to evaluate and improve the strength of the Fed's consolidated supervisory activity in this area? I am getting into the dimension of your responsibilities that involve your regulatory function, which does not always draw, I think, the attention that it warrants or requires.

Mr. Bernanke. Senator, the Bank Secrecy Act and the antimoney laundering rules are very important. Obviously, they bear on terrorist finance and money laundering by criminal organizations, and the Congress has passed a set of rules which require banks to be very careful to try to prevent such activities from occurring

It is an important responsibility of the Federal Reserve to enforce those laws. I will certainly be interested in those activities. As I understand, the Federal Reserve's approach to enforcing so-called "BSA/AML provisions" is a risk-focused approach, which means that the Federal Reserve attempts to evaluate whether the banks' or other financial institutions' procedures and processes are sufficiently good to ensure compliance with the law rather than trying to evaluate every individual transaction.

I think that is a good approach. It is one that allows the Federal Reserve to evaluate the overall ability of the institution to meet the law without incurring the heavy costs and the heavy regulatory burden of checking each and every individual submission.

Senator SARBANES. Well, I know I am intruding on Senator Ben-

nett's time. If I could just close out this question.

I have this concern: In some instances, the money laundering violation, which, of course, have an antiterrorism financing important dimension to them as well, have been, as it were, found and corrective action taken by the Federal Reserve System or State banking systems. But in other situations, and a number of large banks are involved in that, the violations have reached such a level of seriousness that they warranted criminal investigation by the Department of Justice, which, of course raises a question of how do you explain situations in which senior officials of major financial institutions are found to have come sufficiently close to the line that criminal investigations of their conduct, and of their institution, are appropriate?

In other words, where were the gatekeepers or the watchmen, which are the banking regulatory agencies, where were they at an earlier stage in this process instead of it having gone to the level or deteriorated to the level that criminal action by the Department of Justice was called for? It seems to me that is a fairly clear call for the financial institution regulators to be more active in meeting

their responsibilities.

Mr. Bernanke. I agree with that, Senator.

Senator SARBANES. Okay; thank you. Chairman SHELBY. Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

One last area I would like to explore with you, Dr. Bernanke, is your attitude toward commodity prices as an indicator of inflation. I remember many years ago the standard position was well, when the stock market is going up, you buy stocks. When the stock market is going down, you buy gold. And it is just very simple. You take the cyclical nature of things, and your hedge against everything going to pot is gold. And then, once the bottom has been reached, you sell your gold, and you start with stocks.

I do not know that anybody is that simplistic anymore except maybe on the advertising pages of some magazines where the people are trying to sell gold. But what about other commodities? I know an economist whom you know very well and whom I respect very tremendously, Wayne Angel, is always looking at a basket of commodities, not necessarily gold by itself but commodities gen-

erally, foreign exchange rates, indicators of where we should be in policy; you get an individual commodity like natural gas that is an anomaly because of the tremendous demand that has been created by natural gas. So maybe you take that out of the basket.

But just talk to us about your attitude toward commodities in general, some of these other basket issues, gold, foreign exchange rates, and so on in terms of what you see as their value as indica-

tors of where the economy is really going.

Mr. Bernanke. Senator, there is no perfect forecaster, no perfect indicator of inflation. Each of the variables you mention has an inflation component, so to speak. It reflects inflationary pressures. It may reflect other things as well. As you mentioned, natural gas or other energy commodities reflect supply and demand conditions arising from international pressures in international markets, for example. Exchange rates reflect inflation pressures. They may also reflect the balance of trade and other factors.

So there is no single, optimal indicator of inflation. My personal strategy, therefore, is to be very eclectic and to look at a wide range of indicators, and among those is commodities, gold, exchange rates, the whole list. I think interest rates, real side indicators, surveys, expectations—there is a whole list of variables which can be useful in forecasting inflation—and I think one has to be very open-minded about using whatever information one has.

Senator Bennett. Let us talk about productivity in the same way. Bob Woodward's book about Chairman Greenspan indicates a situation where he challenged existing data points on productivity and ended up forcing the Fed to restructure the way they monitored it. And he proved by saying, and I have heard him say this, and I am sure you have, too, well, this violates the laws of arithmetic. By taking an equation and putting in various pieces of the equation, he said the remaining piece, productivity, has to be higher than your measurement of productivity.

Obviously, an understanding of productivity fits into this whole discussion that we are having. Do you have any view as to the various measures of productivity and how it should be reported?

Mr. Bernanke. I draw two lessons from that late 1990's experience that Bob Woodward was referring to. The first is that you do not just look at the conventional measures. You look at the data quite deeply and try to understand how the data are constructed and how they relate to each other, because there may be anomalies that will be instructive, and that was the case in the late 1990's.

The other is that published Government data is not the only source of information. It is also important to talk to people in the marketplace, to talk to businesspeople. I think in the case of Chairman Greenspan, he had indications from businesspeople that they were making extraordinary gains in productivity based on new information and communications technologies.

So by putting together those clues, I think one tries to make an inference about the general state of the economy and productivity

being one of the major variables to look at.

Senator BENNETT. I have the sense that our failure to understand the impact of productivity in the information age is one of the reasons why we feel as confused as we do in some areas. We have industrial age mentality in the information age reality. And

that can be a problem. Just one last quick comment: You do not need to answer this. This is just an admonition.

One of my major focuses in the Senate has to do with cyber security. And I have raised this with Chairman Greenspan in the past. If I were someone who wished this country ill, I would be more anxious to find a way to hack into the computer system and shut down the Fed wire than I would to try to find a way to get a suitcase nuclear device into lower Manhattan, because the damage to the economy of shutting down the Fed wire would be greater than the damage by a nuclear explosion from a suitcase bomb virtually anywhere, whether it was lower Manhattan or Pennsylvania Ave-

nue or whatever it might be.

I hope in your stewardship as the Chairman of the Fed, you pay attention to cyber terrorism and the vulnerability that we have to those who might break in, and hack in. The more time I spend on this, the more concerned I become, and I know the financial community generally with its various firewalls and ways of trying to hang onto the data is moving ahead, but every time I look at it, the next generation of attackers is substantially more sophisticated than the one that was there just 18 months ago, and our ability to private security must always be working ahead on that. So among the other things you have to do, do not neglect that particular morsel as it gets put on your plate.

Mr. BERNANKE. Thank you, Senator. Chairman SHELBY. Senator Sarbanes.

Senator Sarbanes. I want to follow up Senator Bennett's point, but I want to not go as—because he is dealing with people who are very calculatingly trying to do this thing, but this year, several financial institutions as well as private companies, government agencies, universities, and other entities have reported breaches of Social Security numbers, credit and debit numbers, security codes, bank account information, and other sensitive information. In fact, *The Washington Post* had a story; they said, "American corporations that eat your personal information for breakfast have suffered troubling data breaches over the past year or so, making the data on more than 50 million consumers vulnerable."

Now, there is a coalition of 12 consumer groups concerned about privacy who have expressed very deep concerns about this. As Chairman of the Fed, would you work with the financial institutions that you regulate to reduce the likelihood of future data breaches? And further, would you be prepared to meet with these interested groups, this coalition of consumer groups concerned about financial privacy to review with them and to discuss this important issue?

Mr. Bernanke. Senator, I believe the banking regulators have already at least issued guidance, or perhaps a regulation, about data breaches that applies to financial institutions, which is the group that they regulate. And I believe the Congress is considering similar legislation for other entities. It is a very important issue. I think the Federal Reserve and the other banking regulators have already taken some steps in this direction about providing rules about how to protect data and how to react to data breaches.

To answer the second part of your question, I hope to meet broadly with a large number of people, including the groups that you referred to. I think it is important for the Federal Reserve Chairman not to confine himself to Wall Street analysts but to speak to a wide range of people in the economy with different inter-

ests and different viewpoints, and I intend to do that.

Senator SARBANES. Warren Buffett has warned us that derivatives are time bombs, both for the parties that deal in them and the economic system. The *Financial Times* has said so far, there has been no explosion, but the risks of this fast growing market remain real. How do you respond to these concerns?

Mr. Bernanke. I am more sanguine about derivatives than the position you have just suggested. I think, generally speaking, they are very valuable. They provide methods by which risks can be shared, sliced, and diced, and given to those most willing to bear them. They add, I believe, to the flexibility of the financial system

in many different ways.

With respect to their safety, derivatives, for the most part, are traded among very sophisticated financial institutions and individuals who have considerable incentive to understand them and to use them properly. The Federal Reserve's responsibility is to make sure that the institutions it regulates have good systems and good procedures for ensuring that their derivatives portfolios are well-managed and do not create excessive risk in their institutions.

Senator Sarbanes. In a recent article in *The New York Times*, they stated, "Seven years ago, Wall Street's top bankers were caught off guard by the near collapse of the Long Term Capital hedge fund. Since then, the number and influence of hedge funds have ballooned. The hedge fund explosion has prompted concerns that if a big bet goes wrong, regulators and banks will again be caught up in a collapse." My recollection is that the Federal Reserve Bank of New York was convening all night, all weekend meetings at the time of Long Term Capital Management, putting enormous pressure on financial institutions to pick up on it in order to prevent the very collapse that is mentioned here. How do you respond to this concern? Equally sanguine?

Mr. Bernanke. I think it is important not to be complacent.

Senator Sarbanes. Not----

Mr. Bernanke. Not to be complacent. It is important for the Federal Reserve to be aware of what is going on in the market, particularly working through the banks, which are the counterparties of a lot of hedge funds, to understand their strategies and their positions.

Nevertheless, broadly speaking, my understanding is that the hedge fund industry has become more sophisticated, more diverse, less leveraged, and more flexible in the years since LTCM. So again, while it is very important to understand that industry, and particularly to make sure that the banks, are dealing in appropriate ways with hedge funds, my sense on that is that they are a positive force in the American financial system.

Senator SARBANES. Do you think these issues contain a sufficient danger in them that it would warrant the Fed undertaking a special examination of these questions if you were to become the Chairman? Because if this went bad on your watch, I mean, there

could be tremendous consequences, obviously.

Mr. Bernanke. I think it is useful to have informal contacts to try to understand what is going on in the market, and the Federal Reserve has various mechanisms for learning about this market; in particular, working through the various counterparties that deal with hedge funds.

Senator SARBANES. Well, I commend this area to you as one that should have some focus of your attention. Otherwise, it may well

come back to haunt you.

Could I ask you about HMDA and the Home Mortgage Disclosure Act? The data released in September showed that African-Americans and Hispanics pay more for home loans and face higher denial rates than similarly situated White Americans. I understand the Board has reviewed the HMDA data and flagged approximately 200 lenders for further scrutiny. And in fact, Governor Olson at the Fed says anytime a lender differentiates, the burden of proof shifts to the lender to demonstrate that the pricing differentials are based on empirical analysis.

Would you agree with that, and how important do you think this

issue is that is revealed by the HMDA data?

Mr. Bernanke. Senator, the facts you point out are correct. They were revealed because the Federal Reserve asked for disclosures of pricing information, as well as quantity and denial information. I think fair lending is extremely important. The Federal Reserve is going to follow up on these results. It is going to share the results, or has already shared the results, with other bank regulators, and the intention is to find out why these discrepancies exist.

Senator SARBANES. Mr. Chairman, I just want to close with a

couple of observations.

Chairman Shelby. Go ahead. You take your time.

Senator Sarbanes. We discussed this morning the inflation targeting, and I do not want to close out without referring back to it. And I want to commend to you for your own thinking the danger that if you had a numerical figure for inflation but not for unemployment, that there would be a shift in focus of policymaking and debate toward whether the Fed was achieving its inflation target and away from whether the Fed was achieving maximum employment through stabilizing output, whether you intended that to happen or not. I think it is easy enough to assert that it is not your intention, that you are keeping the dual mandate in mind and so forth

But I think in the real world of the dynamics and particularly in the way the media would cover such a question, the constant focus is going to be have you hit the numbers target on your inflation goal and that it would, in effect, draw attention away from the dual mandate and the emphasis we are placing on trying to balance the two.

I take some encouragement from your statement that if confirmed, you will take no precipitous steps in the direction of quantifying the definition of long-run price stability; that the matter requires further study at the Fed as well as extensive discussion and consultation. I would propose further action only if a consensus can be developed and that taking such a step would further enhance the ability of the FOMC to satisfy its dual mandate of achieving both stable prices and maximum sustainable employment.

I do not think this is fully consistent with the Fed's current policy approach, which is an assertion you make in your statement, and obviously, there have been fellow Members of the Board who have resisted inflation targeting for this very reason amongst other reasons. So, I mean, you make that assertion, but there are a number of very thoughtful people who disagree with it very strongly.

Further, I refer back to earlier. I do not think you can change the Fed's mandate except by statute from the Congress, and I know you are laying out a rationale where you interpret it in such a way that it is encompassed within the mandate, but I think you have to be extremely careful, and I particularly think, as I just said, that if you have a figure for inflation and not for unemployment, the public focus is going to be drawn to the inflation figure, and that

is going to become the overriding concern.

Finally, Mr. Chairman, I do welcome in Dr. Bernanke's statement right at the outset where he talks about this prospective new role and says, and I want to quote this, because I think it is very important to underline it and again put it on the record: "I would bear the critical responsibility of preserving the independent and nonpartisan status of the Federal Reserve, a status that in my view is essential to that institution's ability to function effectively and achieve its mandated objectives, in the plural, I might add. I assure this Committee that if confirmed, I will be strictly independent of all political influences and will be guided solely by the Federal Reserve's mandate from Congress and by the public inter-

Thank you very much, Mr. Chairman.

Chairman Shelby. Dr. Bernanke, we appreciate your appearance here today at your hearing and especially when we had a bifurcated hearing with the votes in the Senate. We appreciate your candor and your ability. I do not know of a Federal Reserve nominee, Chairman, that has as many publications under their belt as you do. And I am not going to tell you that I have read all of them, but they are interesting to go with.

But we will try to move your nomination as soon as possible. I think it is a good nomination. I have said this from the beginning. And I will be consulting with Senator Sarbanes and see what we

can do. Thank you for your time today.

Mr. Bernanke. Thank you.

Chairman Shelby. The hearing is adjourned. [Whereupon, at 4:28 p.m., the hearing was adjourned.]

[Prepared statements, biographical sketch of nominee, response to written questions, and additional material supplied for the record follow:]

#### STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name:

Bernanke

Ben

Shalom

(Last)

(First)

(Other)

Position to which nominated:

Chairman and Member, Board of Governors of the Federal Reserve

System

Date of nomination: November 1, 2005

Date of birth:

13 12 1953 Place of birth: Augusta, Georgia

(Day) (Month) (Year)

Marital Status: Married

Full name of spouse: Anna Friedmann Bernanke

Name and ages of children: Joel Asher Bernanke, age 22 Alyssa Gail Bernanke, age 19

Education:

Dates Institution attended

Degrees received B.A.

Dates of degrees

Harvard University

1971-75

1975

1979

Massachusetts Institute of Technology

1975-79

Ph.D.

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships and any other special recognitions for outstanding service or achievement.

Fellow, American Academy of Arts and Sciences, 2001-.
Guggenheim Fellowship, 1999-2000.
Fellow, Econometric Society.
Alfred P. Sloan Research Fellow, 1983-84.
Hoover Institution National Fellow, 1982-83.
National Science Foundation Graduate Fellow, 1975.
Allyn Young Prize (for best Harvard undergraduate economics thesis), 1975.
John H. Williams Prize (for outstanding senior
in the Harvard Economics Department), 1975.
Phi Beta Kappa, 1975.

#### Memberships:

List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Office held (if any)		Dates
American Economic Ass Editor	sociation l , American Econ	Member omic Review	1979-2002 2001-2004
Econometric Society	]	Fellow	1992-2002
American Academy of Arts and Sciences Fellow			2001-present
National Bureau of Economic Research			
	Research Associate		1980-2002
Director, Program in Monetary Economics			2001-2002
Coeditor, Macroeconomics Annual			2001-2002
Montgomery (NJ) Board of Education elected member 1994-2000			

Employment record: List below all positions held since college, including the title or description of job, name of employment, location of work, and inclusive dates of employment.

Chairman, Council of Economic Advisers, June 2005-present.

 $Member,\,Board\,\,of\,\,Governors,\,Federal\,\,Reserve\,\,System,\,August\,\,2002\text{-June}\,\,2005.$ 

Howard Harrison and Gabrielle Snyder Beck Professor of Economics and Public Affairs, Princeton University, 1996-2005. Department Chair, 1996-2002. Class of 1926 Professor of Economics and Public Affairs, Princeton University, 1994-1996. Professor of Economics and Public Affairs, Princeton University, 1985-1994.

Associate Professor of Economics, Graduate School of Business, Stanford University, 1983-1985.

Assistant Professor of Economics, Graduate School of Business, Stanford University, 1979-1983.

Morgenstern Visiting Professor, Department of Economics, New York University, Fall 1993.

Visiting Professor, Department of Economics, M.I.T., Fall 1983; academic year, 1989-90.

Teaching Fellow, M.I.T., 1978-79.

## Government experience:

List any experience in or direct association with Federal, State, or local governments, including any advisory, consultative, honorary or other part time service or positions.

Chairman, President's Council of Economic Advisers, June 2005-present

Member, Board of Governors of the Federal Reserve, Aug 2002-June 2005

Member, Montgomery Township (NJ) Board of Education, 1994-2000

Visiting Scholar, Federal Reserve System - Philadelphia (1987-89), Boston (1989-90), New York (1990-91, 1994-96).

Member, Academic Advisory Panel, Federal Reserve Bank of New York, 1990-2002.

Member, U.S.-Israel Joint Economic Development Group (U.S. State Department), 1997-2002.

U.S. Census Advisory Board, 1986-89.

#### Published

Writings:

List the titles, publishers and dates of books, articles, reports or other published materials you have written.

#### Publications: Articles

"Measuring the Effects of Monetary Policy: A Factor-Augmented Vector Autoregression (FAVAR) Approach." <u>Quarterly Journal of Economics</u>, February 2005, pp. 387-422. With Jean Boivin and Piotr Eliasz.

"Monetary Policy Near the Zero Bound: An Empirical Analysis." <u>Brookings Papers on Economic Activity</u>, 2004:2, pp. 1-100. With Vincent Reinhart and Brian Sack.

"Why Does Monetary Policy Affect the Stock Market?". <u>Journal of Finance</u>, June 2005, vol. 60, no. 3, pp. 1221-57. With Kenneth Kuttner.

"Monetary Policy in a Low-Interest-Rate Environment," <u>American Economic Review</u>, Papers and Proceedings, May 2004, vol. 94, no. 2, pp. 85-90. With Vincent Reinhart.

"Monetary Policy in a Data-Rich Environment", <u>Journal of Monetary Economics</u>, April 2003, vol. 50, no. 3, pp. 525-46. With Jean Boivin.

- "Is Growth Exogenous? Taking Mankiw, Romer, and Weil Seriously", NBER Macroeconomics Annual, 2001. With Refet Gurkaynak.
- "Should Central Banks Respond to Movements in Asset Prices?" American Economic Review, May 2001, vol. 91, no. 2, pp. 253-7. With Mark Gertler.
- "Monetary Policy and Asset Price Volatility", presented at Jackson Hole, Wyoming conference of Federal Reserve System. In Federal Reserve Bank of Kansas City, Economic Review, vol. 84, no. 4, Fourth Quarter 1999, pp. 17-52. Also published in Federal Reserve Bank of Kansas City, New Challenges for Monetary Policy, 2000. With Mark Gertler.
- "Japanese Monetary Policy: A Case of Self-Induced Paralysis?", in Ryoichi Mikitani and Adam S. Posen, eds., <u>Japan's Financial Crisis and its Parallels to U.S. Experience</u>, Institute for International Economics, 2000.
- "The Financial Accelerator in a Quantitative Business Cycle Framework." With Mark Gertler and Simon Gilchrist. In John Taylor and Michael Woodford, eds., <u>Handbook of Macroeconomics</u>, Amsterdam: North Holland, 2000, chapter 21.
- "The Liquidity Effect and Long-Run Neutrality", in Charles Plosser and Allan Meltzer, eds., <u>Carnegie-Rochester Conference Series on Public Policy</u>, 1999, vol. 49, no. 1, pp. 149-94. With Ilian Mihov.
- "Measuring Monetary Policy", Quarterly Journal of Economics, August 1998, vol. 113, no. 3, pp. 869-902. With Ilian Mihov.
- "Inflation Targets and Monetary Policy", <u>Journal of Money, Credit, and Banking</u>, November 1997, vol. 29, no. 4(2), pp. 653-84. With Michael Woodford.
- "Inflation Targeting: A New Framework for Monetary Policy?", <u>Journal of Economic Perspectives</u>, Spring 1997, vol. 11, no. 2, pp. 97-116. With Frederic Mishkin.
- "Systematic Monetary Policy and the Effects of Oil Price Shocks", <u>Brookings Papers on Economic Activity</u>, 1997:1, pp. 91-142. With Mark Gertler and Mark Watson.
- "What Does the Bundesbank Target?" <u>European Economic Review</u>, June 1997, vol. 41, no. 6, pp. 1025-1054. With Ilian Mihov.
- "Nominal Wage Stickiness and Aggregate Supply in the Great Depression", <u>Quarterly Journal of Economics</u>, August 1996, vol. 111, no. 3, pp. 853-883. With Kevin Carey.
- "The Financial Accelerator and the Flight to Quality", Review of Economics and Statistics, February 1996, vol. 78, no. 1, pp. 1-15. With Mark Gertler and Simon Gilchrist.
- "Inside the Black Box: The Credit Channel of Monetary Transmission", Journal of Economic Perspectives, Fall 1995, vol. 9, no. 4, pp. 27-48. With Mark Gertler.
- "The Macroeconomics of the Great Depression: A Comparative Approach", (Money, Credit, and Banking Lecture), <u>Journal of Money, Credit, and Banking</u>, February 1995, vol. 27, no. 1, pp. 1-28.
- "Credit in the Macroeconomy", <u>Quarterly Review</u>, Federal Reserve Bank of New York, Spring 1993, vol. 18, no. 1, pp. 50-70.

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- "The Credit Crunch", Brookings Papers on Economic Activity, 1991:2, pp. 205-239. With Cara Lown.
- "Procyclical Labor Productivity and Competing Theories of the Business Cycle: Some Evidence from U.S. Interwar Manufacturing Industries", <u>Journal of Political Economy</u>, June 1991, vol. 99, no. 3, pp. 438-59. With Martin Parkinson.
- "On the Predictive Power of Interest Rates and Interest Rate Spreads", New England Economic Review, Federal Reserve Bank of Boston, November-December 1990, pp. 51-68.
- "The Gold Standard, Deflation, and Financial Crisis in the Great Depression: An International Comparison", in R. Glenn Hubbard, ed., <u>Financial Markets and Financial Crises</u>, Chicago: University of Chicago Press for NBER, 1991. With Harold James.
- "U.S. Corporate Leverage: Developments in 1987 and 1988", <u>Brookings Papers on Economic Activity</u>, 1990:1, pp. 255-78. With John Y. Campbell and Toni M. Whited.
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- "Unemployment, Inflation, and Wages in the American Depression: Are There Lessons for Europe?", <u>American Economic Review</u>, Papers and Proceedings, May 1989, vol. 79, no. 2, pp. 210-214. With Martin Parkinson.
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"The Determinants of Investment: Another Look", <u>American Economic</u> <u>Review</u>, Papers and Proceedings, May 1983, Vol. 73, No. 2, pp. 71-75.

"Irreversibility, Uncertainty, and Cyclical Investment", Quarterly Journal of Economics, February 1983, Vol. 98, No. 1, pp. 85-106.

"The Real Effects of Financial Crises: Theory and Evidence", in Federal Reserve Bank of S.F., <a href="Proceedings">Proceedings</a> of Sixth Fall Academic Conference, November 1982, pp. 134-162.

"Bankruptcy, Liquidity, and Recession", American Economic Review, Papers and Proceedings, May 1981, Vol. 71, No. 2, pp. 155-159.

"Integration of Energy Policy Models", <u>Computers and Operations Research</u>, December 1975, Vol. 2, No. 3, pp. 225-249. With D. W. Jorgenson. Reprinted in D.W. Jorgenson, <u>Growth</u>, <u>Volume 1</u>: <u>Econometric General Equilibrium Modeling</u>, Cambridge MA: MIT Press, 1998.

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"International Monetary Reform and Capital Freedom." Cato Journal, forthcoming.

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- "Oil Shocks and Aggregate Macroeconomic Behavior: The Role of Monetary Policy: Reply." <u>Journal of Money, Credit, and Banking</u>, April 2004, Vol. 36, No. 2, pp. 287-91.
- "Downside Danger", Foreign Policy, November-December 2003, pp. 74-75.
- "A Perspective on Inflation Targeting", <u>Business Economics</u>, 38, July 2003, 7-15.
- "A Crash Course for Central Bankers", Foreign Policy, September-October 2000, p. 49.
- "Comment on Rosengreen, Peek, and Tootell", in Frederic Mishkin, ed., <u>Prudential Supervision: What Works and What Doesn't</u>, University of Chicago Press for NBER, 2001, pp. 293-297.
- "Comment on DeLong, 'America's Historical Experience with Low Inflation'", <u>Journal of Money Credit and Banking</u>, November 2000, Part 2, pp. 994-997.
- "Missing the Mark: The Truth About Inflation Targeting", <u>Foreign Affairs</u>, September/October 1999, 158-161. With Thomas Laubach, Frederic S. Mishkin, and Adam S. Posen.
- "Unanticipated Money Growth and the Business Cycle Reconsidered: Comment", Journal of Money, Credit, and Banking, November 1997, vol. 29, no. 4(2), pp. 649-52.
- "Symposium on the Revised St. Louis Adjusted Monetary Base: Commentary", Federal Reserve Bank of St. Louis <u>Review</u>, November/December 1996, vol.78, no. 6, pp. 70-72.
- "What Does Monetary Policy Do?: Comment", <u>Brookings Papers on Economic Activity</u>, 1996:2, pp. 69-73.
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- "The World on a Cross of Gold: A Review of Golden Fetters: The Gold Standard and the Great Depression, 1918-1939", Journal of Monetary Economics, April 1993, vol. 31, no. 2, pp. 251-267.
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"Review of: Factors in Business Investment, by Robert Eisner", Journal of Political Economy, August 1980, vol. 88, no. 3, pp. 811-813.

#### Publications: Books, Edited Volumes

NBER <u>Macroeconomics Annual</u>, Cambridge MA: MIT Press Vol. 10, 1995. Vol. 11, 1996. Vol. 12, 1997.

Vol. 14, 1999. Co-editor (with Julio J. Rotemberg).

Vol. 15, 2000. Vol. 16, 2001.

Co-editor (with Kenneth Rogoff).

<u>The Inflation-Targeting Debate</u>. Co-editor (with Michael Woodford). Chicago: University of Chicago Press for NBER, 2005.

<u>Inflation Targeting: Lessons from the International Experience.</u> 1998. Princeton: Princeton University Press. With Thomas Laubach, Frederic Mishkin, and Adam Posen. Paperback, 2000.

Essays on the Great Depression. 2000. Princeton: Princeton University Press. Paperback, 2001.

Political Affiliations and activities:

List memberships and offices held in and services rendered to all political parties or election committees during the last 10 years.

None.

Political

Contributions:

Itemize all political contributions of \$500 or more to any individual, campaign organization, political party, political action committee or similar entity during the last eight years and identify specific amounts, dates, and names of recipients.

None.

Qualifications:

State fully your qualifications to serve in the position to which you have been named. (attach sheet)

I obtained a B.A. in economics summa cum laude at Harvard in 1975 and a Ph.D. in economics at M.I.T. in 1979. I was employed as a professor of economics at the Stanford Graduate School of Business (1979-85) and at Princeton University (joint appointment in the economics department and the in the Woodrow Wilson School of Public and International Affairs, 1985-2002), where I also served as department chair (1996-2002). I was the founding Director of the Bendheim Center for Finance at Princeton University, which houses research activities in finance as well as graduate and undergraduate educational programs.

I have published extensively on a broad range of economic topics (see above), with a particular focus on monetary policy, macroeconomics, and finance. Recognitions of my research accomplishments include numerous prizes and awards (see above). My research is widely cited and has been influential in policy analysis in central banks around the world. In 2001 I was named by the American Economic Association to serve as editor of the AEA's flagship research journal, the American Economic Review. I served as the Director of Monetary Economics and Member of the Business Cycle Dating Committee at the National Bureau of Economic Research, a nonprofit/nonpartisan organization that promotes economic research. I am the founding editor of the International Journal of Central Banking, a collaborative effort of the Federal Reserve and the other G-10 central banks. I have trained many graduate students in monetary economics and macroeconomics, including many currently working as economists in the Federal Reserve System or in other policy positions, both here and abroad.

As an academic I interacted regularly with the Federal Reserve System (including both regional Reserve Banks and the Board of Governors) as a visiting scholar or outside policy adviser. I have also visited and advised foreign central banks, including the European Central Bank when it was in its founding stage.

In 2002 I was nominated by President Bush and confirmed by the Senate to a partial term as a member of the Board of Governors of the Federal Reserve. I was nominated and confirmed to a full term in 2003. At the Fed I addressed a range of policy issues including consumer protection regulation, payments system issues, international economic policy, and bank supervisory issues as well as monetary policy. I monitored the economy and financial markets closely and met frequently with outside individuals and groups to discuss the economy and the markets. As a member of the Board of Governors I spoke frequently in public on a range of economic policy topics. In 2005 I was nominated by the President and confirmed by the Senate to serve as the Chairman of the President's Council of Economic Advisers. In that capacity I have advised the President on a wide range of economic policy issues, collaborated with other agencies and departments in developing policy proposals or analyses, and managed the CEA staff, while continuing to monitor the economy closely.

### Future employment relationships:

 Indicate whether you will sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate.

I will resign from the Council of Economic Advisers upon beginning the new position. I have previously resigned from Princeton University.

As far as can be foreseen, state whether you have any plans after completing government service to resume employment, affiliation or practice with your previous employer, business firm, association or organization.

I do not.

3. Has anybody made you a commitment to a job after you leave government?

No.

4. Do you expect to serve the full term for which you have been appointed?

Yes.

## Potential conflicts of interest:

Describe any financial arrangements or deferred compensation agreements or other
continuing dealings with business associates, clients or customers who will be
affected by policies which you will influence in the position to which you have been
nominated.

None.

List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

None.

3. Describe any business relationship, dealing or financial transaction (other than tax paying) which you have had during the last 10 years with the Federal Government, whether for yourself, on behalf of a client, or acting as an agent, that might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

None.

4. List any lobbying activity during the past ten years in which you have engaged in for the purpose of directly or indirectly influencing the passage, defeat or modification of any legislation at the national level of government or affecting the administration and execution of national law or public policy.

None.

5. Explain how you will resolve any conflict of interest that may be disclosed by your responses to the items above.

Not applicable.

# Civil, criminal and investigatory actions:

 Give the full derails of any civil or criminal proceeding in which you were a defendant or any inquiry or investigation by a Federal, State, or local agency in which you were the subject of the inquiry or investigation.

None.

Give the full details of any proceeding, inquiry or investigation by any professional association including any bar association in which you were the subject of the proceeding, inquiry or investigation.

None.

#### PREPARED STATEMENT OF SENATOR JOHN E. SUNUNU

I join my colleagues in welcoming Dr. Ben Bernanke to the Committee. He is no stranger. He has been here before, both to be a Member of the Federal Reserve Board of Governors and then to be Chairman of the President's Council of Economic Advisers.

Of course, he has now been nominated to a 14-year term as a Member of the Board of Governors and also nominated to be the Chairman of the Federal Reserve

Board of Governors, a 4-year term.

The Federal Reserve Act of 1913, which established the Federal Reserve System, set the 14-year terms for the Members of the Board of Governors of the Federal Reserve. I think that clearly reflected the intention of Congress, at the time, in enacting this legislation to place the Federal Reserve Board and its individual Members beyond the reach of any given Administration and the political pressures of the moment. Actually, the 14-year term is the longest we give to any official in the Government other than the lifetime appointments for members of the Federal judiciary.

I think it is fair to say, or certainly it has come to be the case, that the credibility of the Federal Reserve rests in large part on broad confidence in its independence in the judgments it makes. And, obviously, if that confidence were to be undermined, the stature of the Board would be gravely diminished. And that, in turn, would have serious consequences, I think, not only for our National economy but

also, indeed, for the world economy.

So we are looking forward to hearing from Dr. Bernanke about this important role

of the independence of the Federal Reserve in rendering its judgments.

And my colleague, Senator Dodd, has made reference to the other major point I wanted to make. And that was that the Federal Reserve Act provides as its goals that, "The Board of Governors of the Federal Reserve system and the Federal Open Market Committee shall maintain long-run growth of the monetary and credit aggregates commensurate with the economy's long-run potential to increase production so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.

And this is conveniently referred to as the twin mandates of the Federal Reserve,

addressing both maximum employment and stable prices.

That is another issue that I look forward to exploring with Dr. Bernanke in the

course of these hearings.

Actually, we had to contend for quite a while with this non-accelerating inflationary rate of unemployment, something that Chairman Greenspan, to his credit, never accepted. That was the theory that if the unemployment rate got down to a certain level, beyond that you would have inflation. And therefore, as it approached that unemployment rate, the Fed would have to start raising interest rates to cool off the economy, even if we did not see manifested inflationary signs.

So it was a preemptive strike against inflation, but it also, of course, ended up

being a preemptive strike against employment, if it had been followed.

Fortunately, that was not the case. And we have seen in recent years that we have been able to go down-and we are now at 5 percent, but we have been able to go down below that to a 4 percent unemployment rate without an inflationary

And I am anxious to explore that with Dr. Bernanke as well, since I think jobs

is a very important purpose of economic policy.

Let me just add one other dimension, which is not often talked about when we talk about the Fed, and that is that the Board has responsibility, supervisory and regulatory authorities to assure the safety and soundness of the Nation's banking and financial systems and protecting the credit rights of consumers.

In the area of consumer protection, the board has broad jurisdiction and authority to implement regulations for a whole host of consumer laws: The Community Reinvestment Act, Truth in Lending Act, Truth in Saving Act, Home Mortgage Disclosure, the Home Owners Equity Protection Act, the Equal Credit Opportunity Act, and a number of others as well.

And while public attention is focused on the Board's monetary policy responsibilities, I think it is important to recognize its jurisdiction and authority with respect to these regulatory issues. The Board can play a very significant role in improving consumer rights and enforcing consumer protections.

Finally, Mr. Chairman, I noticed that the papers this morning are already setting

out an agenda. I just quote one paragraph to give one example of it:

If confirmed, Bernanke will take over the Fed at a moment of rising economic unease. The U.S. trade and budget deficits are soaring. The once-blistering housing market may be cooling. Rumors continue to rumble through Wall Street of dangerously overextended hedge funds ripe for collapse. The next Fed Chairman could face significant challenge, as Greenspan did, within months of taking office.

Welcome to the committee this morning, Dr. Bernanke.

#### PREPARED STATEMENT OF SENATOR ROBERT MENENDEZ

Mr. Chairman, thank you for holding this hearing. I am very pleased to again welcome my fellow New Jerseyan, Dr. Bernanke, before the Committee, and to support his nomination to be the next Chairman of the Federal Reserve.

Dr. Bernanke has a remarkable record of service and scholarship at the Council

Dr. Bernanke has a remarkable record of service and scholarship at the Council of Economic Advisers, the Federal Reserve, and before that, Princeton University. He has served in these roles with distinction as one of our Nation's preeminent economists, both in policymaking and in academia. Moreover, Dr. Bernanke has earned great respect among lawmakers and economists from all points on the political spectrum who recognize the quality of his work regardless of whether they agree with him on specific economic questions.

I have been concerned throughout the last few years that too many of this Administration's high profile economic officials seem to be salesmen for predetermined, ideologically-driven policies. Dr. Bernanke, however, has defied this stereotype during his time with the Council of Economic Advisors, and I trust he will continue this pattern of basing his decisions on sound economics, rather than ideology and partisanship.

Needless to say, Dr. Bernanke has large shoes to fill as Chairman. Alan Greenspan has been one of the most active and significant Chairmen in the history of the Federal Reserve System. While I have not always seen eye-to-eye with Chairman Greenspan on economic issues, I thank and salute him for his economic stewardship through difficult times, and for more than 18 years of distinguished service to our country.

I look forward to working with Dr. Bernanke in the future to strengthen our financial markets and to ensure economic opportunity for all Americans.

Thank you, Mr. Chairman.

## RESPONSE TO WRITTEN QUESTIONS OF SENATOR BUNNING FROM BEN S. BERNANKE

**Q.1.** As you know, I feel that Chairman Greenspan too often talked publicly about things that had nothing to do with monetary policy. Do you believe a Fed Chairman should discuss things outside the Fed's jurisdiction?

**A.1.** I believe that it is essential to maintain the independence and nonpartisan status of the Federal Reserve. As I discussed in my testimony, if confirmed, I will be strictly independent of all political influences and will be guided solely by the Federal Reserve's man-

date from Congress and the public interest.

The scope of the Federal Reserve's mandate is broad and includes matters related to the implementation of monetary policy, general financial stability, supervision of financial institutions, administration of the payments system and consumer issues, among other areas. In addressing these matters, I pledge always to give Congress my best advice from the perspective of an independent and nonpartisan Federal Reserve. I also intend to decline to address issues that are not related to the Federal Reserve's broad mandate.

Let me address specifically the area of fiscal policy. Because of the Federal Reserve's responsibilities for macroeconomic and financial stability, I believe it would be appropriate at times for me to comment on broad fiscal issues such as the sustainability of Government spending or deficits. However, as I indicated during my testimony, I will not advocate for or against specific tax or spending proposals that come before the Congress.

- **Q.2.** As I am sure you read last week, *The Wall Street Journal* asked a number of economists what questions they would like to be able to ask you. I am going to steal a few from them. What is the principal reason for the existence of the Federal Reserve?
- **A.2.** The Federal Reserve System was created by the Congress in 1913 to provide the Nation with a safer, more flexible, and more stable monetary and financial system. Today, the main duties of the Nation's central bank fall into four general areas:
- Conducting the Nation's monetary policy by influencing the monetary and credit conditions in the economy in pursuit of the statutory objectives of maximum employment, stable prices, and moderate long-term interest rates;
- Supervising and regulating banking institutions to promote the safety and soundness of the Nation's banking and financial system and helping to protect the rights of consumers in credit markets;
- Fostering the stability of the financial system and containing systemic risk that may arise in financial markets; and
- Providing financial services to depository institutions, the U.S. Government, and foreign official institutions, including playing a major role in operating the Nation's payments system.

Each of these areas of responsibility reflects specific authority granted by the Congress; and each, in my view, is essential for the economic health of the country. **Q.3.** What is currently the most significant threat to our economic expansion?

**A.3.** The U.S. economy is currently enjoying a strong and stable expansion. Over the past four quarters, real gross domestic product (GDP) has grown more than  $3\frac{1}{2}$  percent, extending the economic upturn that began in late 2001. And the current consensus among economists is that the expansion will be sustained next year.

However, this favorable outlook is ringed with a number of risks. Energy prices have risen steeply in the past 3 years, and although the economy has accommodated these rises remarkably well thus far, continuing increases in the price of energy would pose difficult challenges for households and businesses. The proximate cause of the energy price increases is a rapidly growing global demand for energy, coupled with insufficient investment in new energy supplies to meet this growth. In the long-run, high prices will curb energy demand and call forth new energy supplies. In the near-term, however, energy price increases have the potential to spill over into general inflation, sap consumer spending power, and damp overall activity. A further jump in energy prices or a more pronounced reaction to those increases in prices that have already occurred could test the strength of the expansion. With respect to inflation, the Fed, thus far, has been largely successful in limiting the effects of higher energy prices on the broader rate of price inflation. But further energy price increases would also pose upside risks to the outlook for inflation.

Developments in housing markets also bear close monitoring. Housing prices have risen rapidly in recent years, and concerns have been expressed in many quarters about whether the current high level of prices will be sustained. It is intrinsically very difficult to assess whether the value the market assigns to any asset is fundamentally justified, and housing is no exception to this rule. Certainly, some powerful fundamental forces have contributed to the run-up in housing prices, including growth in jobs and incomes, demographic trends, low mortgage rates, and limited supplies of buildable land in some areas. However, it is also true that exceptionally rapid price appreciation and what appears to be speculative buying have been observed in some local markets, suggesting that prices may exceed fundamental values in some areas. Whatever the sources, house price increases will surely moderate at some point, if they have not begun to do so already. If that moderation is not too sharp, then the slowing of consumption and residential investment that might result should be consistent with the modest cooling of growth that many forecasters expect over the next year or so. A sharper slowdown, less likely but possible, would have a larger effect on the growth of real output, particularly if it were to occur in the context of continued adverse developments in energy markets.

**Q.4.** Are you concerned that the Basel II QIS-4 study showed there would be a decline in capital standards for U.S. banks? Given the fact that Congress has recently voted (to) increase FDIC coverage, are you concerned about the safety and soundness of the banking system with coverage increasing and capital possibly decreasing?

**A.4.** The Federal Reserve and the other Federal banking agencies were certainly concerned about the large drop in minimum regulatory capital observed in the QIS-4 study for some banks. Also, the average decline in minimum regulatory capital for the participating banks collectively was larger than observed in the previous QIS. Both the decline and the wider-than-expected dispersion among the banks participating in QIS-4 caused the agencies in April to take additional time to understand the QIS-4 results. After conducting extensive additional analysis, the agencies announced on September 30 that they would be taking additional prudential measures, including an extended timeline for Basel II implementation and the addition of an extra year of capital floors

beyond those already in the framework.

I am sure that the Federal Reserve and the other agencies will not countenance declines in capital of the amount that QIS-4 found for some banks. Indeed, the motivation for conducting this and other quantitative impact studies was to assess the potential effects of the framework in advance, so problems (such as an excessive decline in regulatory capital in some banks) could be identified and mitigated. In addition, before any banks are permitted to operate under Basel II, they will go through a rigorous process of review and analysis by the supervisors to ensure that their internal processes meet high standards. Importantly, there was no supervisory validation of the methods used by the banks in the QIS-4 exercise; the banks in the study participated on a best-efforts basis without any supervisory oversight. Thus, some of the QIS-4 results likely arose from the fact that banks were not fully prepared to operate under the Basel II framework and (in good faith) may have used methods that would not be approved by regulators under a "live" application of the framework.

Besides the measures announced on September 30, supervisors have a suite of regulatory tools to prevent excessive drops in regulatory capital, including the leverage ratio, prudential measures under Pillar II of the Basel II framework, and the ongoing requirement of prompt corrective action. It is important to move to a more sophisticated system that better links regulatory capital to the actual risks of banks' lending books, trading books, and operations; that is the purpose of Basel II. However, the transition needs to be accomplished in a deliberate and careful manner, with many checks and feedback mechanisms, in order to ensure that capital is adequate and safety and soundness are ensured at all times.

The increase in FDIC deposit coverage would affect the entire banking system, of course, not just the banks included in the QIS-4 or that will ultimately adopt the Basel II framework. Most banks covered by the FDIC will be subject to the agencies' proposed amended Basel I minimum regulatory capital framework, for which an Advance Notice of Proposed Rulemaking (ANPR) has only recently been released. I assure you, as the process of rulemaking proceeds, the capital impacts of these proposed amendments will also be carefully analyzed to ensure that they are consistent with a high level of safety and soundness and the protection of the deposit insurance fund.

**Q.5.** Are you concerned about the amount of U.S. debt the People's Republic of China holds?

**A.5.** The United States is running a current account deficit, which of necessity must be financed by net capital inflows from the rest of the world. These inflows have allowed the United States to increase its capital stock at a rate faster than would have been possible had we relied solely on domestic savings, and the resulting larger capital stock has increased the competitiveness of the U.S. economy. Accordingly, the willingness of foreign investors, including China, to hold U.S. liabilities has conferred important benefits on our economy.

Concerns have been raised that the quantities of U.S. Treasury securities held by China and other foreign investors, both private and official, have become so large as to increase the vulnerability of the U.S. economy to changes in the portfolio allocations of those investors. However, many of the reasons that investors hold these securities—their unparalleled safety and liquidity, together with the dollar's traditional role as a reserve currency—are unlikely to disappear any time soon. Moreover, markets for dollar-denominated financial assets are extraordinarily deep; for example, foreign official holdings of U.S. Treasuries, of which holdings by China represent only a part, collectively account for only 3 percent of total U.S. credit market debt outstanding. Accordingly, U.S. financial markets would likely be able to absorb a significant shift in foreign official demands for U.S. debt, including by China.

**Q.6.** In November 2002, you gave a speech on deflation. After the speech, many in the pundit class started referring to you as "helicopter Ben." Would you like to elaborate on your comments on de-

A.6. My November 2002 speech ("Deflation: Making Sure 'It' Doesn't Happen Here") was a discussion of the causes and effects of deflation, as well as of some possible policy tools to address deflation. In that speech, I noted that one possible tool for combating deflation, a money-financed tax cut, was essentially equivalent to a theoretical construct used by Professor Milton Friedman, a "helicopter drop" of money. Of course, the "helicopter drop" metaphor is purely a pedagogic device to help explain money's role in the economy, not a practical policy tool. A key message of my speech was that, contrary to some views that were being expressed at the time, the central bank still has tools to address deflation even if the short-term interest rate reaches zero. I believe the speech made that point effectively and helped to relieve concerns about the potential effectiveness of monetary policy against deflation.

I would add that I believe that "stable prices" means avoiding both deflation and inflation. My November 2002 speech stressed the importance of avoiding deflation, at a time when inflation had reached an historically low level. I am equally committed to avoiding inflation; as I noted in my testimony, I believe that keeping inflation low and stable is a critical contribution that monetary policy

can make to enhancing prosperity and growth.

Q.7. It is my understanding that the Federal Reserve has decided to halt disclosure to the public of its M3 findings and report. The findings of the M3 report provide pertinent information to the public—from economists to investors and to industries which all use M3 report findings for economic forecasting, investing, and business decisions. You have advocated a "more open" Federal Reserve under your command. Will you work to reverse this policy and commit to keeping the M3 report and its findings available and open to the public? What is the rationale and reasoning by the Federal Reserve to keep the M3's information from the public?

**A.7.** My understanding is that the Federal Reserve decided to discontinue publication of the monetary aggregate M3 because the costs of collecting and processing the underlying data were judged to exceed the benefits. The Federal Reserve will not withhold the M3 data from the public; rather, it will no longer collect and assemble that information. The Federal Reserve will continue to collect data for and publish the monetary aggregates M1 and M2 and

their components.

The benefits of continuing to publish M3 appear to be minimal, because M3 has not been actively used in the formulation of U.S. monetary policy and, at least within the Federal Reserve, has not been found to have much value for economic forecasting. Discontinuing publication of M3 will allow the Federal Reserve to terminate certain reporting forms that currently must be filled out by depository institutions, lowering the costs of such institutions. Costs at the Federal Reserve Banks and the Board will similarly be reduced as these particular reports will no longer need to be processed and analyzed.

I view the periodic reappraisal of the costs and benefits of reports as a useful discipline to ensure that the reporting burden on finan-

cial institutions is kept to a minimum.

**Q.8.** The Fed has been on the record with their fears of Fannie Mae and Freddie Mac being systemic risks to our financial system. Are you worried about other large financial institutions with portfolios similar to the GSE's being systemic risks?

**A.8.** Market discipline is typically the governing mechanism that constrains leverage and ensures that firms do not undertake excessive risks. The market system generally relies on the vigilance of creditors and investors in financial transactions to assure themselves of their counterparties' current condition and the soundness

of their risk management practices.

Because of the availability of deposit insurance, market discipline is not by itself sufficient to control risk-taking in the banking system; for this reason, the Federal Reserve and the other banking agencies supervise and regulate banks. I believe that the tools available to the banking agencies, including the ability to require adequate capital and an effective bank receivership process are sufficient to allow the agencies to minimize the systemic risks associated with large banks. Moreover, the agencies have made clear that no bank is too-big-too-fail, so that bank management, shareholders, and uninsured debtholders understand that they will not escape the consequences of excessive risk-taking. In short, although vigilance is necessary, I believe the systemic risk inherent in the banking system is well-managed and well-controlled.

In the case of the GSE's, market discipline is problematic. Market participants recognize that the GSE's are closely tied to the Federal Government and such ties create a view among market participants that the GSE's are implicitly backed by the Federal

Government, thereby weakening market discipline. Consequently, strong regulatory authority and controls on GSE risk-taking are needed to ensure that they do not create systemic risks. Unfortunately, the GSE regulator's constrained capital authority, the ineffective receivership process, and other limitations weaken regulatory oversight of GSE's. Capping the size of GSE portfolios, which beyond a certain size do not contribute to the GSEs' housing mission, is also important for controlling potential systemic risk.