

THE ECONOMIC OUTLOOK

HEARING

BEFORE THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

NOVEMBER 3, 2005

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PRINTING OFFICE

28-071 PDF

WASHINGTON : 2006

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

JOINT ECONOMIC COMMITTEE

[Created pursuant to Sec. 5(a) of Public Law 304, 79th Congress]

HOUSE OF REPRESENTATIVES

JIM SAXTON, New Jersey, *Chairman*
PAUL RYAN, Wisconsin
PHIL ENGLISH, Pennsylvania
RON PAUL, Texas
KEVIN BRADY, Texas
THADDEUS G. McCOTTER, Michigan
CAROLYN B. MALONEY, New York
MAURICE D. HINCHEY, New York
LORETTA SANCHEZ, California
ELIJAH E. CUMMINGS, Maryland

SENATE

ROBERT F. BENNETT, Utah, *Vice Chairman*
SAM BROWNBACK, Kansas
JOHN E. SUNUNU, New Hampshire
JIM DEMINT, South Carolina
JEFF SESSIONS, Alabama
JOHN CORNYN, Texas
JACK REED, Rhode Island
EDWARD M. KENNEDY, Massachusetts
PAUL S. SARBANES, Maryland
JEFF BINGAMAN, New Mexico

CHRISTOPHER J. FRENZE, *Executive Director*
CHAD STONE, *Minority Staff Director*

CONTENTS

OPENING STATEMENT OF MEMBERS

Hon. Jim Saxton, Chairman, a U.S. Representative from the State of New Jersey	1
Hon. Carolyn B. Maloney, a U.S. Representative from the State of New York	2

WITNESSES

Statement of Hon. Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System	3
--	---

SUBMISSIONS FOR THE RECORD

Prepared statement of Representative Jim Saxton, Chairman	27
To Hon. Alan Greenspan from Representative Saxton	28
To Representative Saxton from Hon. Alan Greenspan	31
Prepared statement of Senator Jack Reed, Ranking Minority	36
Prepared statement of Representative Carolyn B. Maloney	36
Prepared statement of Hon. Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System	37
Letters:	
To Hon. Alan Greenspan from Senator Bennett	43
To Senator Bennett from Hon. Alan Greenspan	44
To Representative Saxton from Senator Bennett	46
Responses by Hon. Alan Greenspan to questions submitted by the Joint Economic Committee	32
Core PCE Inflation Chart	41
Yield Spread Chart	42

THE ECONOMIC OUTLOOK

THURSDAY, NOVEMBER 3, 2005

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The Committee met, pursuant to notice, at 10 a.m., in room 2175, Rayburn House Office Building, the Honorable Jim Saxton (Chairman of the Committee) presiding.

Present: Representatives Saxton, English, Brady, Paul, Maloney, Hinchey, Sanchez and Cummings.

Staff Present: Chris Frenze, Robert Keleher, Colleen Healy, John Kachtik, Emily Gigena, Brian Higginbotham, Chad Stone, Matt Salomon, and Nan Gibson.

OPENING STATEMENT OF HON. JIM SAXTON, CHAIRMAN, A U.S. REPRESENTATIVE FROM THE STATE OF NEW JERSEY

Representative Saxton. Good morning, I am pleased to welcome Chairman Greenspan before the Committee once again to testify on the economic outlook. We appreciate the many times that you have testified before this Committee, Mr. Chairman, and recognize your outstanding stewardship of monetary policy during your tenure as Fed Chairman.

You have guided monetary policy through stock market crashes, wars, terrorist attacks and natural disasters with a steady hand. Under your tenure, price stability has been the norm, with inflation low and stable. You have made a great contribution to the prosperity of the United States, and the Nation is in your debt.

A broad array of standard economic data reflect the health of the U.S. economy. Figures released last week indicate that the economy grew at a 3.8 percent rate last quarter despite the massive regional destruction wrought by the hurricanes.

So far during 2005, the economy has expanded at a 3.6 percent rate, roughly in line with Federal Reserve expectations as well as the Blue Chip indicators.

Equipment and software investment has bolstered the economy since 2003 and continues at a healthy pace. This component of investment responded especially sharply to the incentives contained in the 2003 tax package. Employment has also gained over the period with 4.2 million jobs added to the business payrolls since May 2003, and the unemployment rate is at 5.1 percent.

Consumer spending continues to grow. Home ownership has reached record highs. Household net worth is also at a record level. Productivity continues at a healthy pace, and although higher en-

ergy prices have raised business costs and imposed hardships on many consumers, these prices have not derailed the expansion.

As the Fed recently suggested, long-term inflation pressures are contained. As a result, long-term interest rates, such as mortgage rates, are still relatively low.

By its actions, the Fed has made clear its determination to keep inflation in check.

In summary, the economy has displayed impressive flexibility and resilience in absorbing many shocks. Monetary policy and tax incentives for investment have made important contributions in accelerating the expansion in recent years.

The most recent release of Fed minutes indicates that the central bank expects this economic growth to continue through 2006.

The Blue Chip Consensus of private economic forecasters also suggests that the economy will grow in excess of 3 percent next year.

Current economic conditions are positive, and the outlook for 2006 is favorable.

Mrs. Maloney, we are ready for your opening statement.

[The prepared statement of Representative Jim Saxton appears in the Submissions for the Record on page 27.]

**OPENING STATEMENT OF HON. CAROLYN B. MALONEY,
A U.S. REPRESENTATIVE FROM THE STATE OF NEW YORK**

Representative Maloney. Well, thank you very much, Mr. Chairman, and on that note I would like to place inside the record Senator Reed's opening statement and hope that everyone about will get a chance to see it. It is over on the desk.

[The prepared statement of Senator Jack Reed, Ranking Minority Member, appears in the Submissions for the Record on Page 36.]

Representative Maloney. First of all, I want to welcome Chairman Greenspan for his appearance before the Joint Economic Committee as Fed Chairman.

This will probably be your last appearance before us, and first of all, I want to say that New York is so proud of you. And we take tremendous pride in the fact that you are a born, tried and true New Yorker. And many of my constituents have expressed their gratitude for your service and their hope that in retirement you will be able to spend more time back in New York City.

You have really done a great service for this Nation. You have pulled us through some difficult times that were outlined by the Chairman. I would like to add to that list, 9/11. That was a very difficult economic time. And your leadership is greatly appreciated by New York and the entire Nation.

Over the past 18 years, Chairman Greenspan has achieved a really remarkable record of success as the country's central banker. He has steadfastly maintained the Fed's credibility for keeping inflation under control while dealing flexibly with a variety of economic challenges. The 10-year economic expansion of the 1990's was the longest on record. One contributing factor was Chairman Greenspan's strong sense in the middle of that expansion that there was room for monetary policy to accommodate further reductions in the unemployment rate, even though the conventional wisdom at the time said otherwise.

Of course, another contributing factor was the Clinton administration's strong commitment to deficit reduction, which created a fiscal policy environment conducive to strong, sustainable, non-inflationary growth.

Unfortunately, that discipline is now a distant memory and Chairman Greenspan's successor will face a host of problems managing monetary policy in the face of historically large budget deficits, largest in history, a record current account deficit, a negative household savings rate, rising inflation and a labor market recovery that remains very weak in many respects.

As always, I look very much forward to hearing Chairman Greenspan's testimony. I hope that, in addition to his views on the economic outlook, he will share with us some reflections on what has made his tenure at the Fed so successful and what are the key lessons he would like to pass on to his successor. We thank you for your many years of public service.

[The prepared statement of Representative Carolyn B. Maloney appears in the Submissions for the Record on page 36.]

Chairman Greenspan. Thank you.

Representative Saxton. Mr. Chairman, let me just add my personal thanks for you being here today and just say that, in my office, there is a great picture of you with me, and as my constituents come in and tell me whatever it is that is on their minds, on the way out the door, I often point to that picture and say, "and there we are planning for this great economy." And so it has been a pleasure working with you, sir, and Mr. Chairman, we are ready for your statement.

STATEMENT OF HON. ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Chairman Greenspan. First, let me thank you both for your thoughtful and kind comments. I will be excerpting my prepared remarks and request the full transcript be included in the record.

Representative Saxton. Without objection. Thank you.

Chairman Greenspan. Prior to the hurricanes that severely damaged the Gulf Coast, the economy appeared to have considerable momentum. But pressures on inflation remained elevated. Then Hurricane Katrina hit at the end of August, causing widespread disruptions to oil and natural gas production and driving the price of light sweet crude oil above \$70 per barrel. With the recovery from the first storm barely under way, Hurricane Rita hit, causing additional destruction, especially to the energy production and distribution systems in the Gulf.

These events are likely to exert a drag on employment and production in the near term and to add to the upward pressure on the general price level. But the prices of crude oil and refined petroleum products have now fallen significantly from their peaks, and repair and rebuilding activities are underway in many parts of the affected region.

Outside the areas affected by the storms, economic fundamentals remain firm, and the U.S. economy appears to have retained considerable forward momentum.

If allowance is taken for the effects of Katrina and Rita and for the now-settled machinists strike at Boeing, industrial production

rose at an annual rate of $5\frac{1}{4}$ percent in the third quarter. That is up from an annual rate of $1\frac{1}{4}$ percent in the second quarter when a marked slowing of inventory accumulation was a restraining influence on growth.

The September employment report showed a loss of 35,000 jobs. However, an upward revision to payroll gains over the summer indicated a stronger underlying pace of hiring than before the storms that had been previously estimated.

The Bureau of Labor Statistics estimates that employment growth in areas not affected by the storms was in line with the average pace over the 12 months ending in August.

Retail spending eased off in September, likely reflecting the effects of the hurricanes and higher gasoline prices.

Major chain stores report a gradual recovery over October in the pace of spending, though light motor vehicle sales declined sharply last month when some major incentives to purchase expired.

The longer-term prospects for the United States' economy remain favorable. Structural productivity continues to grow at a firm pace, and rebuilding activity following the hurricanes should boost real GDP growth for a while.

More uncertainty, however, surrounds the outlook for inflation. The past decade of low inflation and solid economic growth in the United States and in many other countries around the world has been without precedent in recent decades.

Much of that favorable performance is attributable to the remarkable confluence of innovations that spawned new computer, telecommunication and networking technologies, which especially in the United States, have elevated the growth of productive capacity, suppressed unit labor costs and helped to contain inflationary pressures. The result has been a virtuous cycle of low prices and solid growth.

Contributing to the disinflationary pressures that had been evident in the global economy of the past decade or more has been the integration of in excess of 100 million educated workers from the former Soviet bloc into the world's open trading system. More recently, and of even greater significance, has been the freeing from central planning of large segments of China's 750-million workforce. The gradual addition of these workers, plus workers from India, a country which is currently undergoing a notable increase in its participation in the world trading system, will approximately double the overall supply of labor once all these workers become fully engaged in competitive world markets.

Of course, at current rates of production, the half of the world's labor force that has been newly added to the world competitive marketplace is producing no more than one quarter of world output. With increased education and increased absorption of significant cutting-edge technologies, that share will surely rise.

Over the past decade or more, the gradual assimilation of these new entrants into the world's free market trading system has restrained the rise of unit labor costs in much of the world and hence has helped to contain inflation.

As this process has unfolded, inflation expectations have decreased, and accordingly, the inflation premiums embodied in long-term interest rates around the world have come down.

The effective augmentation of world supply and the accompanied disinflationary pressures have made it easier for the Federal Reserve and other central banks to achieve price stability in an environment of genuinely solid economic growth. But this seminal shift in the world's workforce is producing, in effect, a level adjustment in unit labor costs.

To be sure, economic systems evolve from centrally planned to market-based only gradually and at times in fits and starts. Thus, this level adjustment is being spread over an extended period. Nevertheless, the suppression of cost growth and world inflation at some point will begin to abate and, with the completion of this level adjustment, gradually end.

These global forces pressing inflation and interest rates lower may well persist for some time. Nonetheless, it is the rate at which countries are integrated into the global economic system, not the extent of their integration, that governs the degree to which the rise in world unit labor costs will continue to be subdued.

Where the global economy is currently in this dynamic process remains open to question. But going forward, these trends will need to be monitored carefully by the world's central banks.

Mr. Chairman, I want to conclude with a few remarks about the Federal budget situation which, at least until Hurricanes Katrina and Rita struck the Gulf Coast, were showing signs of modest improvement. Indeed, tax receipts have exhibited considerable strength of late, posting an increase of nearly 15 percent in fiscal year 2005 as a result of sizable gains in individual and, even more, corporate income taxes.

Thus, although spending continued to rise gradually last year, the deficit in the unified budget dropped to \$319 billion, nearly \$100 billion less than the figure for fiscal year 2004 and a much smaller figure than many had anticipated earlier in the year.

Lowering the deficit further in the near term, however, will be difficult in light of the need to pay for post-hurricane reconstruction and relief.

But even apart from the hurricanes, our budget position is unlikely to improve substantially further until we restore constraints similar to the Budget Enforcement Act of 1990, which were allowed to lapse in 2002. Even so, the restoration of PAYGO and discretionary caps will not address the far more difficult choices that confront the Congress as the baby boom generation edges toward retirement.

As I have testified on numerous occasions, current entitlement law may have already promised to this next generation of retirees more in real resources than our economy, with its predictably slowing rate of labor force growth, will be able to supply.

So long as health care costs continue to grow faster than the economy as a whole, as seems likely, Federal spending on health and retirement programs would rise at a rate that risks placing the budget on an unsustainable trajectory. Specifically, large deficits will result in rising interest rates and an ever-growing ratio of debt service to GDP. Unless the situation is reversed, at some point, these budget trends will cause serious economic disruptions.

We owe it to those who will retire over the next couple of decades to promise only what the government can deliver. The present pol-

icy path makes current promises, at least in real terms, highly conjectural. If fewer resources will be available per retiree than promised under current law, those in their later working years need sufficient time to adjust their work and retirement decisions. Crafting a core strategy that meets the Nation's longer-run needs will become ever more difficult and costly the more we delay.

The one certainty is that the resolution of the Nation's demographic challenge will require hard choices and that the future performance of the economy will depend on those choices. No changes will be easy, as they all will involve setting priorities and making tradeoffs among valid alternatives.

The Congress must determine how best to address the competing claims on our limited resources. In doing so, you will need to consider not only the distributional effects of policy changes, but also the broader economic effects on labor supply, retirement behavior and private savings. The benefits of taking sound, timely action could extend many decades into the future.

Thank you very much.

I look forward to your questions, Mr. Chairman.

[The prepared statement of Hon. Alan Greenspan appears in the Submissions for the Record on page 37.]

Representative Saxton. Thank you, very much, Mr. Chairman.

Mr. Chairman, let me refer first in a question to something that you mentioned in your testimony, and that is, expectations related to inflation. I would like to put up a chart, if I may, that shows changes in core personal consumption expenditures, which is a measure of inflation that the Fed likes to use. The Fed has successfully kept this measure of inflation between 1 and 2 percent, which some refer to as the Fed's comfort zone. By keeping inflation low and in this narrow range, it seems to me that the Fed has reduced and helped keep long-term interest rates lower than they would otherwise be.

We know that we have had 12 short-term increases in interest rates brought about by monetary policy. And at the same time, long-term rates, which often in the past have tracked along with short-term rates, have remained relatively low.

[The chart entitled "Core PCE Inflation" appears in the Submissions for the Record on page 41.]

By lowering uncertainty, by keeping inflation controlled and reducing the inflation premium embedded in interest rates, it seems to me that price stability has helped promote long-term economic growth and, in doing so, kept long-term interest rates relatively low. Is this a policy result that was planned by the Fed, and, if so, what is your perception of how well it has worked?

Chairman Greenspan. Well, I go back to the earlier years when I first joined the Federal Reserve, and our general policy that emerged from that particular period going forward was a recognition of our dual mandate to maintain maximum, sustainable growth and price stability.

What we began to learn—which came as a conceptual shock to most economists in the 1970s—is that you could get both rising unemployment and rising inflation concurrently. We began to recognize that, indeed, rising inflation causes unemployment or, the reverse, that a necessary condition for maximum sustainable growth

is price stability. So what has occurred over the years is a recognition that rather than having a dual set of goals which are independent of one another, which indeed was the general policy prescription in earlier decades, it is price stability which creates economic growth, employment and higher standards of living.

We have chosen the core PCE inflation measure as our standard gauge largely because, as I have argued many times in the past, there are structural problems in the consumer price index which don't capture the inflation rate per se.

We are also aware that even though this is a superior measure to the CPI, it nonetheless does have upward measurement bias. And it ranges, depending on how you look at some of the numbers, from a half a percent, to as much as a percentage point.

Second, as you may recall, we ran into what looked to be the beginnings of at least possible disinflationary pressures in the summer of 2003, another surprise to economists who did not believe that would be feasible in a world of fiat money, but Japan proved otherwise.

We have gained from that experience a recognition that we don't want to get close to that particular area, either. So we have chosen effectively to perceive price stability largely as the range which you are seeing, after making adjustment for the statistical and economic adjustments which we learned over the last couple of decades.

I don't want to communicate to you that somehow we had this chart up there, and every time the inflation rate got close to the top, we tightened it, and every time it got down to the bottom, we eased. That is not the way policy is run because there are long leads in various different things. But essentially, as I indicated, fairly early on in this particular period, I thought that we had, in fact, achieved price stability. While it has moved up and down since then, it has broadly stayed in that range.

And judging from the data which you have cited, Mr. Chairman, it appears to be a range which is really quite conducive to economic growth and prosperity that are associated with that.

Representative Saxton. Thank you very much. Let me ask a question that is related to inflation, as it also relates to energy. Oil prices in particular have shot up, as every American consumer knows, boosting increases in the major broad price indices. Arguably, however, the additional expense of oil might not be inflationary if it were offset by cutting back on other expenses.

In the absence of an accommodative monetary policy, should oil prices necessarily be expected to lead to increases in inflation? Would you give us your response to that?

Chairman Greenspan. Yes, Mr. Chairman. I think there are two aspects to this. One is a technical issue which relates to the degree to which American businesses, confronted with increasing energy costs, institute various different actions, either by capital equipment or changing of the structure by which goods are produced. The extent to which they do that can increase the efficiency of oil use. Indeed, we have been seeing that for several decades.

The ratio of British thermal units per constant dollar of GDP has effectively been falling progressively decade after decade since the 1970s in this country, so that the intensity of energy use—and in-

deed oil use as well—is about half of what it was relative to the level of GDP, say, 30 years ago.

The increasing, if I may put it in these terms, productivity of energy, gains in productivity associated with more efficient use of energy, continues to this day. Indeed, as best we can judge, the very sharp increases in prices, and therefore costs to the non-financial, non-energy corporations of this country, actually induced a fairly significant rise in efficiency, so it all didn't pass through as cost increases. But more important is the perception that inflation overall will be contained.

Indeed, as you point out, inflation expectation is a crucial variable in any market system, largely because it tends to be a key factor in wage rates and labor costs generally.

As long as the Federal Reserve is perceived to be holding inflation expectations in check, which means holding core inflation in check, the pass-through of energy costs into the underlying inflation rate will be subdued.

And indeed, the data indicate that while, prior to the early 1980's, a goodly part of energy costs were indeed passed through into the general price level, subsequent to then, there is very little indication that has been the case, and we associate it with the significant decline in inflation expectations. One of the reasons why we are very firm in the notion that this country should not visit the 1970s again, in the way of inflation, is that we have managed to keep expectations contained. As difficult as energy problems are—there is no doubt there has been a very significant amount of hardship, and I think people are going to be quite surprised at their heating bills this winter—we have not had the pass-throughs into other products in a manner which existed in the 1970s.

Representative Saxton. Let me ask you just one final question. According to a FOMC statement of last Tuesday, "core inflation has been relatively low in recent months and longer-term inflation expectations remain contained."

Given the need for the Fed to preempt inflation, to what extent is the Fed now addressing inflationary expectations or fears that may not be fully evident in the current available data?

Chairman Greenspan. Inflationary expectations are reasonably well measured concurrently and in real time in the sense that we pick them up from a variety of different sources, but mostly from the structure of interest rates: very specifically, the differences between interest rates, which are defined in real terms, such as Treasury TIPS, and what we call additional compensation required for inflation. That pretty much picks up what we are looking at.

Although we measure the same phenomena in a number of different ways—in other words, we have a whole series of measures which relate to inflation expectation, essentially picking up the same general attitude that is embodied in the marketplace—they all very much show the same sort of pattern, which is that inflation expectations are contained.

Representative Saxton. Thank you, Mr. Chairman.

We are going to move now to Mrs. Maloney for her questions.

Representative Maloney. Thank you, Chairman Greenspan. The question that my constituents ask me, I am going to ask you: If the economy is so good and inflation is so well behaved and there

is price stability, then why does everything cost so much more when you go to buy something? They are feeling pressured in their lives.

The question that I hear from my neighbors and friends and constituents is, when we have so many economic indicators that are unhealthy, how are we having a healthy economy? We have a costly war, the largest deficit in history, the largest trade deficit in history, high energy costs, a weak dollar, huge investment from foreign countries. All of these patterns are very troubling to people, yet the economy appears, according to your testimony, strong and moving forward.

They question, how can it be strong when there are so many concrete problems out there that are unhealthy for the economy? And I would like to frame the question in terms of your career at the Fed. When you first came in the 1970s, your first job was with President Ford as the head of his Council of Economic Advisors. And when you took that job, the country was going through a great deal of what we are going through now, possibly less shocked than we are now, you had the high energy price shock, but not the huge deficits in history, and you didn't have a war. But inflation in 1974 shot up to double-digit territory, and by 1975, the economy was in a serious recession with the unemployment rate rising from under 6 percent in 1974 to 8.5 percent in 1975.

Now we are experiencing yet another energy price shock. But your testimony is very optimistic. And you are saying that we will not see any inflation, that we will not see any recession. You are very optimistic.

I want to know how are you confident that we will not—that we will be able to avoid the same type of economic outcomes now that we had in the 1970s? Has the economy fundamentally changed? Are we more competitive? Is it the world economy? Is it Fed policy? What has changed so that the economy has not experienced the really dramatic problems that we had in the 1970s?

I guess a part of it is, what are the key changes over the past 30 years in our economy and in the way that we are conducting monetary policy that have put us in a better position to withstand energy supply shocks or price shocks?

Chairman Greenspan. Well, Congresswoman, that is a very important question, because it is the experience that we had in the 1970's that gave us a far better understanding of how the post-World War II American economy functions.

First, let me say that we have a very complex, huge economy which is churning. There are winners, and there are losers, and there are pockets in the economy where things are exceptionally weak, areas where they are strong.

The best way of summarizing why I say things are doing well is that I would suspect that, on average, I worry about 20 different problems which seem insurmountable out there. Today, there are only 12 or thereabouts. So, they are still out there. And you know, I have mentioned on innumerable occasions, despite the fact that the economy overall is growing, there is a definite bimodal labor market in the sense that for the 80 percent of the labor force which are production workers, wages are growing far less quickly than the skilled workers. This is, as I have mentioned before you on nu-

merous occasions, essentially an educational problem which we need to adjust because it is creating a skewing of economic distribution in this country, which I think is a very unsettling trend for a democracy.

That, to me, is where I think the major problems are.

But what I should also point out the reason people are seeing prices rising is that they are. They are seeing them, however, for a lot of petroleum-related products. The one statistic that I think almost everybody is able to audit clearly every day, every week, is the price of gasoline. It is a homogeneous product, and it is listed on the signs in the service stations all the time, and needless to say, the price has been fluctuating all over the place.

But the Bureau of Labor Statistics does an excellent job in trying to truly get what is the structure of price change in this country. Those data, which essentially come from the BLS and in detail, are the best we can do. So I think that it is mainly a selective view, when you look at the total, which people often see in a period like this. But when you look at all the data, it doesn't show the concern of acceleration that I often hear, as you do.

What has changed since the 1970s with respect to oil is, as I mentioned before, we are using only half as much as we used to relative to the GDP in the 1970s. As a consequence of that—and also because of the fact that the underlying inflation rate is now much lower—we are able to absorb a remarkable amount of that increase because we have an extraordinarily more flexible economy than we had in the mid-70s.

Indeed, that very flexibility itself is one of the reasons we have gotten through a whole series of shocks that the Chairman mentioned early on. It is the development of that flexibility, coupled with the fact that the use of energy is much less than it was, that has enabled us to absorb the energy shock with nowhere near the consequences that we confronted in the earlier period.

Representative Maloney. Thank you.

In your testimony today, Chairman Greenspan, you stress the long-term core pressures that we face with the retiring baby boomers. And we have very little flexibility in our core. Most of it is entitlements. We have very little discretionary spending now in our Federal core. So this is a huge challenge. But weren't those pressures also there in 2001? And wouldn't it have been better if we had focused on that challenge in 2001, instead of enacting tax cuts that lost revenue and reduced our national savings? And I want to read the following quote from a story that was in the *New York Times* on Monday:

“Mr. Greenspan is widely perceived as having given an agreement to President Bush's plans for a big tax cut in 2001 and thus to have helped set the stage for the huge deficits that followed.”

And do you have any regrets about the way you expressed yourself in 2001? And were you surprised that your testimony was interpreted as having given a green light of support for these policies that have added to this extremely large core deficit?

Chairman Greenspan. Let me review what was going on then and what I actually testified to with respect to the budget at that particular point.

We, as you know, then had very large surpluses, which all of the technical experts projected further, and indeed, the Congressional Budget Office projected them further. The Office of Management and Budget projected them further. The staff at the Federal Reserve projected them further. We were all trying to get as full detailed an analysis as we could on something which we found very surprising, namely, chronic surpluses, which we never believed we would ever see, and we could not find any technical reasons to say that those data were incorrect.

Indeed, the Federal Reserve embarked upon a study of what we would do when the actual supplies of U.S. Treasury issues would become inadequate for purposes of open market operations, meaning that the level of debt outstanding would approach *de minimis* levels.

The problem, if you get to that point and still have surpluses, is that you have to accumulate technically private assets plus State and local assets.

I have always argued that that is potentially very destabilizing where large claims on American businesses would be held by the U.S. Government.

As a consequence, I argued at that time that we ought to cut taxes before the debt would get to such levels that we couldn't reduce it any more and would therefore have to accumulate assets. Were I confronted with the same data today as I was then, I would have given exactly the same testimony.

I must tell you, however, that in that whole evaluation I did recognize, in the testimony, that even though we couldn't find anything wrong with the forecasts of surpluses should they, in fact, dissipate, we ought to have procedures which would follow up any changes in budgetary policies, whether for tax cuts or expenditure increases, and essentially have triggers or other means of review that would reverse the actions that would be taken at that particular point in time.

So, I have gone back and I have reviewed that testimony. And I must tell you that, aside from the fact that the probability that we all perceived of the deficit reemerging was small and that was clearly a forecast gone wrong—not that the probability was small, but that we would maintain the surpluses. Aside from that, I must say, I would reproduce the testimony word for word.

Representative Maloney. Well, former Treasury Secretary O'Neill reports that when he expressed concern about the possible impact of the proposed tax cuts on the deficit and he said that Vice President Cheney said, "Reagan proved that deficits don't matter." And did you have any idea when you gave that testimony in 2001 that the Administration was not serious about containing deficits, was not serious about enforcement rules to help turn record deficits into surpluses and to control the core?

Chairman Greenspan. I think the "deficits don't matter" was a reference that they don't have an impact on interest rates. And I disagree with that. I disagreed with it then; I disagree with it now. And I disagree with it because the facts prove otherwise.

Representative Maloney. My time is up, and as always, it is a great pleasure to listen and learn from you. Thank you.

Chairman Greenspan. Thank you.

Representative Saxton. Thank you, Mrs. Maloney.
Mr. Paul.

Representative Paul. Thank you, Mr. Chairman.
And welcome, Mr. Greenspan.

Looking at your last three paragraphs, I certainly would agree with your concern about the concerns for the future, the future financing of the medical care system as well as the retirement programs, as well as financing the debt. And to me, I read that as a rather dire warning of what we should be dealing with in the Congress. And you make a suggestion that the entitlement laws should be looked at because we cannot much sustain this.

And yet I think that is only part of the problem, because the entitlement system is certainly one reason why we spend a lot of money. I don't think we can do this without addressing the subject of what we do with our foreign policy as we spend hundreds of billions of dollars overseas destroying countries and then rebuilding countries.

I cannot see how we can adjust our ways here unless we talk about that as well. But I also think that we should tie in this deficit spending and this commitment to the future to overall monetary policy because I think the system of money that we have had helped create the problems that we have. And we can't separate the two because it certainly makes it a lot easier for Congress to spend if there is some way of creating new money to accommodate these deficits.

Just in the time that you have been at the Fed, we have had a lot of monetary inflation. We have had a lot of new money pumped into the system. As a matter of fact—over \$600 trillion as measured by M3—it is all new money. It is three times as much money as we had in 1987. But interestingly enough, the total debt, government debt, corporate debt and personal debt, has done the same thing. It has tripled. It was approximately \$8 trillion in 1987, and now it is like \$25 trillion. So a lot of new money was created. And we have a lot of new debt in the system. But we also suffered a consequence, our dollar now is worth 55 cents. So that to me seems unfair because if I had saved money in 1987, I am only going to get 55 cents back on my dollar.

I think there is a moral element to this, too, as well as an economic argument. Why save? And we don't save. And if we need more money to take care of our entitlements or fight a war or accommodate the debt, we just literally are able to go and depend on the Federal Reserve to make sure interest rates don't go up.

And then I think another problem we have is we look at the wrong things when we are looking at our problems. It has been said that the government tells us there is really no inflation. But you know we could use what we strike out. We could look at medical care costs. We could look at food. We could look at energy. We could look at the cost of government, taxes. And who knows, the inflation rate might be 12 percent or 14 percent. So sometimes I think we deceive ourselves with the system of money that we have today by looking at the wrong things.

Because of globalization and productivity, prices have in some respect been held in check. But I cannot see how we can continuously reassure ourselves that that is good, because it doesn't deal with

the problem of the malinvestment, the overinvestment, the bubbles that develop, as well as the debt that builds up.

And this could not be done other than with someone being able to create credit out of thin air.

I think it should be held in check.

So, in order to get this into a question, isn't there—isn't there something unfair about the system? How can we justify stealing value from people who save, cheat the people who are on retirement and then they get so little on their interest earned as well? Is this a wise thing to do economically? Because you have expressed the concerns that I have. But I cannot see how you can separate that from the overall monetary system that we have been dealing with a lot longer than you have been in charge of the Fed.

Chairman Greenspan. Well, Congressman, the first thing that we have to recognize is that the inflation rate, properly measured, at this particular stage has been very close to zero for a very long period of time.

In other words, as I said earlier, those numbers are biased upwards because of the way we calculate it. So while that is true about a number of the statistics you quote, those statistics go back well before the inflation rate stabilized and are reflecting very substantial inflation pressures which existed, especially during the 1970s when the inflation rate was double-digit.

But the level of nominal GDP has gone up basically roughly the same after certain types of adjustments, with what the real underlying GDP properly measured would have done. That tells me that we are not unduly inflating the system.

Representative Paul. Well, I don't think that reconciles the facts that I can get from the Federal Reserve that show that our dollar is worth 55 cents compared to 1987. If that is not the reverse of what you see in rising price and inflation, my dollar just doesn't buy as much any more. And the trend is continuous since 1914. It is worth 5 cents. So I don't see how you can say there is no inflation.

Chairman Greenspan. Well, you and I have discussed this issue at length many times over the years. And I agree with you in part, and I disagree with you on the other part.

Representative Paul. Can you say anything favorable about gold today?

Representative Saxton. The gentleman's time has expired. We are going to go now to Mr. Hinchey.

Representative Hinchey. Thank you very much, Mr. Chairman.

Mr. Greenspan, I just want to say that we are going to miss you, really miss you.

I think that you have probably been one of the most effective chairmen of the board in the history of the Federal Reserve.

Chairman Greenspan. Thank you.

Representative Hinchey. And also I think one of the most interesting and instructive. And I think that that instruction has come on a variety of levels, so you have done one heck of a job. I won't say, Brownie, but you have done one heck of a job. And I think we are going to miss you a great deal, and I want to thank you, take this opportunity to thank you very much for your service

and to share the things that were said by my friend and colleague, Mrs. Maloney, a few moments ago. As a New Yorker, I am very proud of you, too.

The economic circumstances that we are experiencing today, growth in the economy, is a result of a variety of things, not the least of which, the most of which, frankly, I think is the conflux of some extraordinary circumstances of economic stimulation. We have had record low interest rates, extraordinary amount of Federal spending and record tax cuts, all coming at the same time. And if you don't have economic stimulation and a growing, creating-new-money economy when you are pouring all that money in, both in terms of monetary and fiscal policy, then you are in deep, deep trouble.

So I am frankly very concerned about what is going to happen when the conflux of circumstances wears out. And it certainly will in the not-too-distant future.

So that would be my first question to you. What is going to happen when all of this stimulation starts to decline?

Chairman Greenspan. Congressman, it depends on what is going on in the world generally, because you can remove all of that stimulation, but if the underlying incentives in the private system are increasing—and I think they are, at the moment, especially coming out of the hurricanes—you can more than offset the stimulation, if you want to put it that way, from the private sector.

Representative Hinchey. That is true. And if that happens, that may be the case—

Chairman Greenspan. Well, the history of stimulating a market economy is mixed. There are innumerable occasions in the past when we have engaged in very significant stimulation—in other words, large deficits, large expansions of the monetary base—and we found that real GDP barely grew, and often fell into recession because of the inflation which was engendered by the excess stimulant. I think we have to be careful about defining what type of stimulus, what part of the economy it is imposed on or injected into and what is going on mainly in the private sector, because that is where most of the job generation occurs.

Representative Hinchey. Well, the job generation in the private sector—

Chairman Greenspan. Let me just follow up. I recognize that and agree with you. I think that there is going to be significant pulling back in the overall degree of stimulus. At least I hope there is, because if we engage in fiscal policy that I was concerned about, that was in the latter part of my testimony, then we are going to get exceptionally large amounts of fiscal stimulus which we are not going to want.

Representative Hinchey. Well, Mr. Chairman, I know that is a very vague and ambiguous answer. And it is probably the best you can do in the context. But the fact of the matter is that I think we are going to be facing some very serious problems when we begin to pull back. And we will have to pull back. In terms of the job production in the private sector, this economy has lost substantially more than a million manufacturing jobs in the last 5 years. And those are the best paying jobs.

One of the scholars at the American Enterprise Institute very recently made the observation that the benefits in the economy—and these are his words—the benefits of the economy are not filtering down, that the creating-new-money benefits are going to capital and not to workers.

And we see that very, very clearly. The median pre-tax income is now \$44,389. That is the lowest it has been since 1997.

We have a situation here in our country where the average, the median income of the average American family has been flat for 5 years. The biggest problem that we are going to face, in addition to maintaining the growth of the economy, assuming that we can do that, even as we have to withdraw all of this stimulation that we have been pouring into it because growing core deficits and a national debt now that exceeds \$8 trillion—the biggest problem that we are going to face, is how to engage in some more equitable distribution of the benefits of the creating-new-money growth in the context of a democratic society.

How are we going to do that?

Chairman Greenspan. Well, first of all, let me just say that there is a question about what the real median income level has been, and it gets to different types of price deflation and which types of data are employed.

Representative Hinchey. That number takes into consideration inflation.

Chairman Greenspan. I don't disagree with the conclusion that you raised as a consequence of that.

The issue is most vividly reflected in the fact that, in the last period, 20 percent of the workforce, which is largely supervisory by definition, has had hourly wage increases approaching 10 percent, whereas the increase for those in the 80 percent, who are perceived to be production workers, is under 4 percent.

That is essentially creating a type of bimodal distribution.

The argument that seems most convincing to me as to the cause of this problem, indeed it is almost necessary, is that we have clearly observed a major increase in the need for skilled workers to basically staff our ever-increasingly complex technological capital stock.

On the other hand, we have seen a relative decrease in those who are required to do less skilled work. Our educational system, however, has, as best we can judge, been falling short in pushing our students, from fourth grade to high school and from high school into the universities relative to the rest of the world. As a consequence, we are left with a shortage of skilled workers who go through this whole educational process, and with a lot of more lesser-skilled people than are needed to staff our capital structure. The result is that wages are rising rapidly among the skilled and at a very subdued level for the lesser skilled, creating a very marked change in the distribution of income. And it is showing up in the capital as well.

Representative Saxton. Thank you very much, Mr. Hinchey.

Representative Hinchey. Wish we had more opportunity to follow up, Mr. Chairman.

Chairman Greenspan. I agree with you. I think this is a very important question for the United States.

Representative Saxton. Thank you, Mr. Chairman, and Mr. Hinchey.

We are going to go to the gentleman from northwestern Pennsylvania, a Member of the Ways and Means Committee, Mr. English.

Representative English. Thank you, Mr. Chairman.

Chairman Greenspan, let me first say I would also like to thank you for your long years of testimony before this and other committees up here on the Hill and your willingness to speak truth to power and present some powerful economic realities to us whether they are politically comfortable at the moment or not.

I am particularly grateful in this testimony that you have focused on the nuances of the problems that you see in our fiscal policy, and particularly the fact that we have an ongoing challenge in dealing with the deficit. I was particularly grateful for how your testimony also focused on the fact that prior to Katrina, we had, in effect, seen a lowering of the deficit by a little under \$100 billion for the previous year, the result at least in large part of economic growth interacting with the Tax Code to produce additional revenues. To me, that points the way for at least partially digging out from under this problem even though we now have huge additional obligations, as some of the other Members have noted.

To me, through all of this you have made the case for strong policies to continue to encourage economic growth, and I am concerned that we have, in effect, in the Tax Code scheduled under current law a tax increase in a couple of the provisions that directly impact on our growth rate, and here I am noting for the record that in 2008 under current law, the capital gains tax rate will go back up, and the reforms in dividends will be phased out. And I wonder if you would comment on whether you think that that is sound policy, or whether Congress should move now while we have the opportunity to make the current rates permanent before the market begins to anticipate that we might allow those tax increases to go into law. Do you share my concern, Mr. Chairman?

Chairman Greenspan. I think there are two issues here, Congressman, and I thank you, incidentally, for your kind remarks. The first is, I have testified previously that the partial elimination of the double taxation of dividends has been a major contribution to the structure of our tax system, and I should very much like to see it continued.

Secondly, however, I would like to see it continued in the context of PAYGO, in the sense that we should not be cutting taxes by borrowing, we should be cutting taxes by reducing the level of spending, and that is an issue which I think is critical.

We do not have the capability of having both productive tax cuts and large expenditure increases and presume that the deficit doesn't matter, because it will create very serious backlashes in the system. So I would like to see the extension of that provision in the tax law, but I would insist that it be done in the context of a PAYGO, which is not currently on the books. As I indicated in my testimony, one of the very first things that we ought to recognize is that if we are going to come to grips with the long, very difficult budget problems that exist as the baby boomers start to retire, we have to put in place a structure which will enable the Congress to make rational choices. I don't believe this is realistically possible

unless something like the Budget Enforcement Act of 1990 is on the books, and if that is the case, then I would say let's confront the question of the tradeoffs, of what the advantages are of keeping or even increasing the reduction of the double taxation on dividends with the context of what other priorities there are.

There are no easy choices. The easy choices are long gone. These choices are between things which a majority of the Congress has previously said are good and another one which the majority of Congress has said are good, but both can't exist at the same time.

Representative English. Thank you, Mr. Chairman, and thank you, Mr. Chairman.

Representative Saxton. Thank you, Mr. English.

Ms. Sanchez.

Representative Sanchez. Thank you, Mr. Chairman, and thank you, Chairman Greenspan, for your service to our country. I think most of my colleagues have already spoken about your service, and I would associate myself with their words.

I have a couple of questions. One has to do with the capital markets and our budget situation here in Washington, D.C., and the other has to do with something in your testimony on page 5 with respect to the result of 100 million educated workers from the former Soviet bloc entering into the world's trading system, China's 750 million people workforce, and India are also engaging in it.

Let me go first with this one, because basically what you have said in here is the economy, the world's economy, has been able to absorb much of this workforce. You have also said in there, or you alluded to the fact, that they are educated workers, and my biggest fear for this country's future, competitively speaking, is that we are doing such a poor job in education. When I go to the universities, the teachers in the graduate departments of science and math tend to be foreigners, and probably three-quarters of the classes are.

So I guess my question to you is with this disparity that we continue to see growing between no growth or actually a decrease in the real income of unskilled workers in the United States versus the high-skilled workers, what do you think we do as a Nation to address that?

Chairman Greenspan. Let me address the issue, because I think this is a critical question that we will be confronted with as the years go on. The global world is changing in a way which is that an ever-higher proportion of value added in the world, goods and services produced—meaning value which the world consumers view as value—is becoming increasingly conceptual and less physical, more services and less physical goods.

We have recently done an analysis of 136 countries in the world which indicates that there is a very high correlation between the proportion of services to GDP and the relative real per capita income in that country, reflecting that those countries with an above-average amount of services relative to goods being produced tend to have the higher standard of living.

What we in the United States are going through is a very difficult transition. Our standard of living continues to increase, our per capita real GDP continues to be increasing amongst the major countries; we are obviously well ahead even considering the problem I was discussing with Congressman Hinchey previously. On

the average we are well ahead, which essentially says that we are going through a period which is extremely stressful for those people who are producing goods. Indeed we have had an extraordinary decline—not in industrial production, which has held up—but in employment involved in industrial production. The job loss has been horrendous, and in certain areas of the country it has really been a very serious and stressful problem.

It does say to us, however, that our standard of living is dependent on our ability to create services, conceptual services, ever more as an increasing ratio to goods, and this is where our educational system is going to be critical. While we will find that both China and India have a huge number of educated people, they still are missing one thing which we have, which in addition to our fairly wide but, as I said previously, less than numerous skilled workers, we have a really very imaginative workforce and a very productive workforce.

We also have what the others don't have, namely the Constitution of the United States. What that has done, in my judgment, is to create a rule of law which enables individuals both in this country and those investing from abroad—in other words, those who invest in the United States—to know and trust the course of this country to protect their rights. That is true both of citizens of the United States and foreigners, and I believe that has been a very major factor in why we do as well as we do, and indeed a lot of the so-called development research which endeavors to determine why certain economies prosper and others don't would subscribe to that.

But unless we get our educational system in check, even our Constitution is not likely to protect us over the very long run. But we do have an awful lot going for us, and if we can resolve our educational problems, we will maintain the very extraordinary position the United States holds in the world at large.

Representative Sanchez. I see my time has expired, Mr. Chairman.

Representative Saxton. Thank you very much, Ms. Sanchez.
Mr. Brady.

Representative Brady. Thank you, Mr. Chairman, for this hearing and, Mr. Chairman, like others, I want to thank you for your service. It has been famously said you make a living by what you get; you make a life by what you give. You have given back so much through your guidance of our economy and the Fed to the prosperity of this Nation. I just want to join others in thanking you for your leadership.

I want to ask two questions, one related to foreign holdings of U.S. debt and the other to the account deficit the United States is running. In your view, what do you see as the real world risk to the large amount of foreign holdings of our U.S. debt? In the account deficit, while we mostly look at that as a function of what we purchase and what we export, there is a savings component in that trade deficit that I think is often ignored. Can you give your views to us on what impact we can have, what role that plays long term for us?

Chairman Greenspan. I think it is part of the globalization process which has been accelerating over recent years, especially

since 1995. In other words, the last decade has been a remarkable period of expanding trade, movement of capital, and all the various measures which we use to say that globalization has increased. You can compare, for example, the U.S. economy 150 years ago—where we had a lot of interstate movement of goods and services and trade deficits between the States, but very little outside of our borders—as we expanded into a national market, all of that activity that is going on between peoples in different geographical areas—which creates deficits and creates debts and all the variety of other elements—spills over our sovereign borders, and now we look at it in somewhat a different way, but it really is not.

I grant you that there is exchange-rate risk and legal risk with respect to whose jurisdiction you are in, but a lot of what we are observing is economic process, which is adjusted. The markets are gradually adjusting.

The big puzzle to everybody is how is it possible for the United States to have a current account deficit of more than 6 percent of the GDP. It is one of the major puzzles, and the reason why I believe it exists is that it is a market phenomenon which is reflecting globalization. It can't go on indefinitely, as I indicated previously, but a lot of these variables—that is, the big increase in debt holdings or U.S. Treasury holdings by foreign central banks or the even larger holdings of American debt by foreign citizens—all of this is a buildup which is characteristic of the global markets.

At some point globalization will slow down, but we are in a period where it has been undergoing extraordinary expansion and has had effects we have yet to fully understand. Indeed, one of the problems that we have run into, which was a great surprise to us, is how apparently globalization forces have affected the long-term interest rates when we started tightening our monetary policy in June 2004. Long-term interest rates did not rise because of these extraordinary forces, which we are just now beginning to understand.

So, yes, we ought to be looking at these various different increases. A very significant part of our Federal debt is held outside of this country. It is close to half, depending on what the denominator is. But that is part and parcel of the globalization process, and I think the presumption that when it stops, the whole world is going to collapse is not correct, unless we fall back on a degree of protectionism which has not existed in the world in the post-World War II period.

Representative Brady. Thank you.

Would your advice to Congress be to not overreact to those elements until we see further how it is working out? And what the impact is in this?

Chairman Greenspan. Yes. Most certainly, Congressman, and indeed I have argued in other recent testimony that the best way we can address this type of problem is to make certain that our economy overall is sufficiently flexible so that adverse events—the unforecastable events that occur as a part of this globalization—will not have a significant negative impact on production or employment in this country. As far as policy is concerned, that is a policy issue, and I think we ought to move as best we can to create as much flexibility as we can in our system.

Representative Brady. Thank you, Mr. Chairman.

Representative Saxton. Mr. Chairman, let me just ask a quick question here. We have talked about various stimuli that have occurred in recent years, and one of the by-products of the easing of monetary policy which began in 2001 was to give homeowners whose properties had increased in value the opportunity to refinance at lower rates of interest. And as people did that, we found them not only refinancing to the balance of their higher rate mortgage, but also taking out more of their equity, which supported consumer spending.

I am just curious to know whether the Fed anticipated that this would happen and your thoughts on—just generally on this matter.

Chairman Greenspan. Well, in the early stages we didn't, largely because the proportion of cash-outs that were associated with refinancing were relatively small. But as refinancing became ever easier, as the costs of refinancing declined, and as the home equity loans became a major instrument for household debt accumulation—or, more exactly, an ability to extract equity from homes, plus the automatic extraction of equity that occurs when homes are sold and the realized capital gains for all practical purposes come out as cash—these have turned out to be extraordinarily large amounts relative to disposable income. Ten years ago we would not have been able to forecast them because we would not have been able to foresee the extraordinary changes that would emerge in the mortgage markets, in the secondary mortgage market, in the whole structure of asset-based securities generally, and the willingness on the part of households and their ability to extract very substantial amounts of equity as the capital gains built up.

We have been observing that phenomenon very closely. Indeed, my colleagues at the Fed and I have put together a fairly detailed series trying to trace the issue of cash-outs and the effects of equity extraction from home turnover and home equity loans, and trying to determine to what extent that has been a factor in the decline in the savings rate in this country. We are still examining it. There are conflicts in the data, and it is very clear a good part of the decline in the savings rate is directly attributable to the extraction of equity.

Representative Saxton. Mr. Chairman, one of my great staffers and I have had ongoing conversations about the so-called flattening of the yield curve, which essentially means that short-term rates have gone up, while long-term rates have stabilized, creating a very small gap between short-term and long-term rates. What, in your opinion, is the effect of this on the economy in the future?

Chairman Greenspan. Mr. Chairman, that used to be one of the most accurate measures we had to indicate when a recession was about to occur and when a recovery was about to occur. It has lost its capability of doing so in recent years. The markets have become far more complex, and the simple relationships that that yield curve slope indicated no longer work. For example, remember we used to have Reg Q a number of years ago, which essentially limited the extent to which you could increase interest rates, short-term deposit rates, and that created all sorts of imbalances in the system and was an indicator which induced the change in the

structure of the yield curves, which did anticipate fairly accurately what was going to happen to financial markets and to the economy.

The effectiveness of that relationship to where the economy is going has virtually disappeared, and while it has significant financial impacts, it's no longer useful as a leading indicator to the extent that it was.

Representative Saxton. I thank you for that.

I just want to refer to the chart that we put up. The red line, of course, refers to short-term rates, which have gone up 12 times. The darker gray line indicates the level of long-term rates. My question is: If banks are forced to pay interest at relatively high rates on short-term loans, what is the encouragement to loan with long-term rates when there is such a small difference in the spread?

[The chart entitled "Yield Spread" appears in the Submissions for the Record on page 42.]

Chairman Greenspan. Well, what is happening is that, for example, in the mortgage market where we used to find that rates were low, say, back closer to June 2004, adjustable-rate mortgages became an extraordinarily important instrument. They are obviously undergoing significant contraction now, as rates go up, even though a very substantial number of those loans are so-called hybrids, they are half short-term, half long-term mortgages. But consumers are changing their behavior, and we would have clearly expected that to happen, and we don't think that's bad. We think that is good.

Representative Saxton. Thank you.

Mrs. Maloney.

Representative Maloney. Thank you, Mr. Greenspan.

When you say that inflation causes recession, are you saying that the private economy on its own collapses, or are you saying that inflation leads to a monetary policy response of higher interest rates that slows the economic activity?

Chairman Greenspan. I think the problem is that it is the inflation process itself that creates the difficulty, and to the extent that monetary policy is inappropriate, the central bank can contribute to that, or it can actually reduce the probability. But there are broader inflationary processes in the private economy as well, so it is a combination of a number of forces.

Representative Maloney. What caused the 1981 recession?

Chairman Greenspan. Essentially a recognition on the part of government generally that the acceleration of inflation that was building for the latter part of the 1970s was creating such huge distortions that unless and until we confronted it, this country could get into very serious trouble. As a consequence, my predecessor in October 1979 withdrew a huge amount of liquidity from the system in order to bring down the inflation rate. That process, while it ultimately was clearly successful and importantly successful to the economy longer term, had short-term consequences, which was a very severe recession.

I would in a sense debit the recession to the earlier policies that created the inflationary pressures which necessitated the reaction that we had rather than to the Federal Reserve's action in 1979. We had no choice, and indeed had that action not been done, had

that action not been implemented, I fear for the stability of our system, therefore, going forward.

Representative Maloney. You have spoken very eloquently today about the growing—and expressed concern about the growing gap between the haves and the have-nots, the inequality that is growing in our country, which is a very bad trend, and the solutions that you have talked about are all long term.

I want to pick up on one of the points that you made about the effects of integrating China and India into the world economy, and you described that as helping to keep labor costs contained and helpful in restraining inflation, but doesn't it also contribute to inequality by putting a downward pressure on the wages of U.S. workers and the competition that they feel internationally?

Chairman Greenspan. It hasn't put downward pressure overall. What it has done is tended to put downward pressure mainly in the goods area of the American economy, because that is where their capabilities at this particular stage of the development are most evident, and the impact has been fairly pronounced in a number of areas of this country, especially in the manufacturing area.

Representative Maloney. I would like to bring up a point that Dr. Alan Blinder brought up at a Democratic forum we had on the economy, and he argued that continuing advances in telecommunications technology are going to make global outsourcing of jobs a much larger problem in the future. He says we have a challenge now, but in the future it is going to be absolutely huge, and that in the coming years the highly-skilled educated workers could be just as vulnerable as the less-skilled workers. And doesn't that imply that education and training are at the least a very incomplete answer to the challenge that we confront with the outsourcing of jobs and the growing middle-class job insecurity that I hear every day in my office?

Chairman Greenspan. As globalization proceeds and very clearly creates an average higher level of standard of living in this country, it also, because it rests upon what we call creative destruction, induces a greater degree of insecurity in the system. This is manifested by the fact that today half a million people lose their jobs every week, and another half a million quit, and we hire a million people, plus or minus, every week. The churning is extraordinary. It basically means that the old view of job security which we tended to have, or the way we viewed what it was in earlier generations, is disappearing.

We are now finding that education is not wholly constrained to our earlier years; it is basically becoming a lifelong proposition. Community colleges, for example, are becoming a major part of our education system, and the average age of the people in community colleges is quite high. So people are recognizing that they are going to have more than one job—indeed, they may have more than one profession—in their lifetime.

This is the choice that we must make. In other words, if we want the benefits of the huge amount of interaction, division of labor and specialization that is implicit in an ever-growing world economy, that implies a huge amount of both insourcing and outsourcing of all goods. We at the moment, of course, are the recipient of more insourcing than we send out. We have a net surplus of services.

I don't know whether that will continue to exist or not, but I do agree that the amount of exchange of services across national borders is almost surely going to increase, and as a consequence, standards of living will increase. But in the process there are winners and losers, and if you have creative destruction—which essentially means you move the obsolescent capital, less productive capital, to cutting-edge technologies—it necessarily means that the workforce which is involved in the growingly obsolescent technology has to move to another part of the economy.

That is happening. It is happening in the vast, vast majority of cases. But there is a small and very pronounced segment of the world economy which is creating problems which are difficult to reverse.

Representative Maloney. My time is up. Thank you very much.

Representative Saxton. Mr. Paul.

Representative Paul. Thank you, Mr. Chairman.

You mentioned earlier that we have been debating the monetary issue for a long time, and I guess that will go on. I am quite confident that what I say here or whatever we say together probably won't determine whether paper wins over gold or vice versa, because I think the market will determine that.

I think the only thing that I have on my side is history, because paper currencies don't have a very good history. They usually end up in the waste can, and gold survives the many thousands of years it has been used. So time will tell.

But a question I have relating to gold is currently, especially since the early 1980s, 25 years, the last time there was ever any serious talk about gold, today it is inappropriate to talk about it, but since that time, of course, the dollar has lost a lot of value. But during that time essentially paper has won out, intellectually speaking. Nobody speaks of gold, but the question I have is why does our Government—why does policy still mean that we should hold the gold?

And I don't have any problems with this. I would think that if we trust paper, we ought to just get rid of the gold and spend the money. We are in big deficits; we could get a lot of money for it. So if gold is so out of place, and we will never have to use it again, why couldn't we make the case for just getting rid of it, as well as the IMF?

Representative Saxton. Mr. Chairman, before you answer, if I may just ask my colleagues, Mr. Hinchey and, I think, Ms. Sanchez also have a question. We are in the beginning of a series of votes, so if we could get through this question rather expeditiously and go to Mr. Hinchey and then Ms. Sanchez, and then we will vote, and we won't have to ask you to wait for us to come back from this series.

Go ahead and respond to this question, if you would.

Chairman Greenspan. The question is what do we do with the gold supply?

Representative Paul. If we don't believe in gold, why don't we just get rid of it?

Chairman Greenspan. It is a very interesting question and a question debated at length on rare occasions within government.

The bottom line is that in periods of extreme chaos, it has turned out that gold has been the ultimate means by which transactions have been consummated. It occurred, for example, during World War II when you could only negotiate transactions with gold.

I must say, however, there was a vigorous debate in the Ford administration as to whether it made any sense to hold gold stock at all, and the debate ended up with leaving it as it is. I would suspect the same psychology exists around the world, and that is the reason why the IMF basically holds the gold that it does and is also the reason that other central banks are holding the gold that they do. You might be aware, for example, that the Europeans have sold off significant amounts of their gold, but they still hold quite a good deal.

Representative Paul. Thank you.

Representative Saxton. Thank you, Mr. Paul.

Mr. Hinchey.

Representative Hinchey. Thank you, Mr. Chairman.

Mr. Chairman, in response to one of the questions that I was asking earlier with regard to this growing inequality in income, you were drawing attention to the inequality between supervisory personnel and nonsupervisory personnel. I understand that, and that is fine, but that isn't the real issue. The real issue is the huge growing inequality between people at the top of the income ladder and those down at the middle.

As I pointed out, even a very conservative scholar at the very conservative American Enterprise Institute pointed out the benefits of the tax cuts are going to capital and not to workers. That is a problem that we face.

Now, you, of course, looking at these growing surpluses back in the beginning of this decade, were very supportive of the ideological tax cuts that came out of this Administration which were designed to benefit people at the upper income of the ladder.

Now, at the same time, this country for several decades now has been facing some very serious infrastructure deterioration, everything from energy to transportation, to environmental protection, health care, general quality of life. All of that has been declining for decades in the public sector. Wouldn't it have been wiser to take some of that money in those surpluses, rather than just give almost all of it to the wealthiest people in the country, to use some of it to build up the basic infrastructure of the country rather than continuing to witness this serious deterioration?

The final aspect of my question is we have another tax cut coming up next year, 2006. That tax cut comes about at a time when the median income is just over \$44,000, meaning half of the people in the country make less than that. This tax cut is going to benefit people making over \$182,000 and couples making more than \$326,000. Aren't we on the wrong track here, Mr. Chairman?

Chairman Greenspan. Congressman, I think that a large number of economists, perhaps most, view the issue of tax policy in two ways: one, how does it impact on the growth of the economy and the increase in the tax base that is associated with the growth. My argument in favor of a number of the tax cuts which have been offered in recent years, especially the one which I thought was the most structurally desirable—namely the elimination of the double

taxation of dividends for lots of reasons—is essentially because I believed they would enhance economic growth. Similarly, I was a strong supporter of the 1986 Tax Reform Act, which, as you know, eliminated many of the loopholes, expanded the tax base and improved the system materially.

As I said there are two schools with respect to taxation. One is what does it do to the economy and to the tax base; and two, what does it do to the distribution of income. In considering the issue you have to look at both, and I think that there is a tendency for one side of this aisle to look one way, the other side to look at the other. Perhaps we ought to be aware that there is double-entry bookkeeping involved here, as in many other things.

Representative Saxton. Thank you, Mr. Chairman.

Representative Hinchey. That is not an answer, Mr. Chairman, but I thank you very much for it, and I wish you the very best in the future.

Chairman Greenspan. Thank you very much, Congressman.

Representative Sanchez. Thank you, Mr. Chairman.

Mr. Chairman, before I came to the Congress, I was involved in the capital markets, and so I have a question for you, just an overall question that has been bothering me for a while. And I asked my friends on Wall Street, and most of the time they just shrug their shoulders and don't have a good answer for this. Maybe I thought as a parting—since this will be the last time you are before our Committee, maybe you could give me some advice on this.

I am worried that we have an \$8 trillion debt, and from my calculation, even though you brought up today that you thought the unified budget was at a deficit of \$319 billion right now, I sometimes, when I look at it, truly look at it, I look at us spending between \$400 and \$800 billion more every year, at least in the last 5 years of this Congress, because I think—and I believe there is a lot of things that don't get taken into account; supplementals that we do here, supplemental appropriation bills, the two Louisiana Senators asking for \$250 billion just for Louisiana; a Medicare Part D package that was supposed to be \$400 billion spending over 10 years, now it is calculated at at least \$1.3 trillion, probably will get to \$2 trillion by the time we finish with that. We spend \$1.55 billion a week in Iraq, with no end in sight in that place, and that doesn't include the reinvestment we are going to need to do in our vehicles and everything that is wasting away in that desert right now. I have in Congress a lot of colleagues who want to increase our Army by 100,000 new troops and don't really know what the cost is to that or the capacity that we currently have and how that is going to affect our troops. So we have all these big spending plans out there.

My question is why haven't the capital markets told Congress and Washington, D.C., to get their act together? Why are they ignoring what is happening here?

Chairman Greenspan. That is an excellent question, Congresswoman, and let me explain to you what I think the answer is, but I don't know for certain. As part of this globalization trend, not only have we had the major disinflationary forces that are occurring because of the educated workers of the former Soviet Union, China and India coming in, but we also have had the issue of, as

I think I testified before the House Banking Committee, an excess of saving over investment and a general set of forces suppressing long-term interest rates.

So the question really is why is it that with what has to be rising expectations of very heavy borrowing as we move out, say, into the early part of the next decade, why isn't that beginning to reflect itself in, say, 10-year notes, because it has to be out there for 10 years.

I think the answer—I don't really fully feel comfortable with it, it is one of the issues that I think is on the table and has to be understood—is that the disinflationary pressures, the excess savings pressures, have more than offset the expectational concerns that rising supplies of U.S. Treasury debt have out there. I think that is going to change. I think, as I tried to indicate in my prepared remarks, that is a gradually changing process, but I find it utterly inconceivable, frankly, that we can have the type of potential fiscal outlook which now confronts us over the next 15, 20 years without having a significant impact on long-term interest rates.

So I guess the answer to your question is there are other forces involved offsetting it, or, to put it another way, that the impact has been delayed.

Representative Saxton. Mr. Chairman, just let me add to the chorus of appreciation for the many appearances that you have made here before the Joint Economic Committee over the years. We have benefited greatly from your wisdom, and we thank you. And in conclusion I would just like to offer my wishes for the best of everything in the future. Thanks for being with us.

Chairman Greenspan. Thank you very much, Mr. Chairman, and I thank the Committee. I have always enjoyed being here, and I must say I get questions at this Committee which I don't hear elsewhere, and they are most interesting. Thank you.

Representative Saxton. Thank you, sir.

[Whereupon, at 11:48 a.m., the Committee was adjourned.]

Submissions for the Record

PREPARED STATEMENT OF REPRESENTATIVE JIM SAXTON, CHAIRMAN

I am pleased to welcome Chairman Greenspan before the Committee once again to testify on the economic outlook. We appreciate the many times you have testified before this Committee, and recognize your outstanding stewardship of monetary policy during your tenure as Fed chairman.

You have guided monetary policy through stock market crashes, wars, terrorist attacks and natural disasters with a steady hand. Under your tenure price stability has been the norm, with inflation low and stable. You have made a great contribution to the prosperity of the U.S., and the Nation is in your debt.

A broad array of standard economic data reflects the health of the U.S. economy. Figures released last week indicate that the economy grew at a 3.8 percent rate last quarter, despite the massive regional destruction wrought by the hurricanes. So far during 2005, the economy has expanded at a 3.6 percent rate, roughly in line with Federal Reserve expectations as well as the Blue Chip Consensus.

Equipment and software investment, which has bolstered the economy since 2003, continues at a healthy pace. This component of investment responded especially sharply to the incentives contained in the 2003 tax legislation. Employment has also gained over this period, with 4.2 million jobs added to business payrolls since May of 2003. The unemployment rate is 5.1 percent.

Consumer spending continues to grow. Homeownership has reached record highs. Household net worth is also at a record level. Productivity growth continues at a healthy pace.

Although higher energy prices have raised business costs and imposed hardship on many consumers, these prices have not derailed the expansion.

As the Fed recently suggested, long-term inflation pressures are contained. As a result, long-term interest rates, such as mortgage rates, are still relatively low. By its actions the Fed has made clear its determination to keep inflation in check.

In summary, the economy has displayed impressive flexibility and resilience in absorbing many shocks. Monetary policy and tax incentives for investment have made important contributions in accelerating the expansion in recent years. The most recent release of Fed minutes indicates that the central bank expects this economic growth to continue through 2006. The Blue Chip Consensus of private economic forecasters also suggests that the economy will grow in excess of 3 percent next year.

Current economic conditions are positive, and the outlook for 2006 is favorable.

HOUSE OF REPRESENTATIVES
JIM SAXTON, NEW JERSEY,
CHAIRMAN
PAUL RYAN, WISCONSIN
PHIL ENGLISH, PENNSYLVANIA
RON PAUL, TEXAS
KEVIN BRADY, TEXAS
THADDEUS G. MACOTTER, MICHIGAN
CAROLYN B. MALONEY, NEW YORK
MALURICE D. HINCHAY, NEW YORK
LORETTA SANCHEZ, CALIFORNIA
ELIJAH E. CLUMMINGS, MARYLAND
CHRISTOPHER FRENZE,
EXECUTIVE DIRECTOR

Congress of the United States
JOINT ECONOMIC COMMITTEE
(CREATED PURSUANT TO SEC. 8(a) OF PUBLIC LAW 304, 79TH CONGRESS)
Washington, DC 20510-6602

SENATE
ROBERT F. BENNETT, UTAH,
VICE CHAIRMAN
SAM BROWNBACK, KANSAS
JOHN E. STUNNIGLI, NEW HAMPSHIRE
JIM DEMINT, SOUTH CAROLINA
JEFF SESSIONS, ALABAMA
JOHN CORNYN, TEXAS
JACK REED, RHODE ISLAND
EDWARD M. KENNEDY, MASSACHUSETTS
PAUL S. SARABANES, MARYLAND
JEFF BINGAMAN, NEW MEXICO

November 14, 2005

The Honorable Alan Greenspan
Chairman
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, NW
Washington, DC 20551

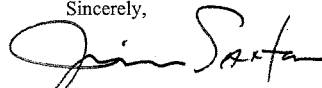
Dear Chairman Greenspan:

Chairman Greenspan, on behalf of the Members of the Joint Economic Committee, I would once again like to express our appreciation and gratitude for so many years of outstanding and productive service to our country. Many millions of Americans have greatly benefited from the positive economic consequences your legacy of price stability has established. You have our best wishes for great happiness in your future retirement from the Federal Reserve.

Most recently, we appreciate your testimony earlier this month before the JEC, and have attached several additional questions for the record. A copy of the November 3, 2005, transcript also is attached. Please have a member of your staff return your corrected transcript, together with your answers to the submitted questions, to my Executive Director, Christopher Frenze, Joint Economic Committee, 433 Cannon House Office Building, Washington, DC 20510. Should your staff have any questions, please call Chris on (202) 225-3923.

Thank you and I look forward to your response.

Sincerely,



Jim Saxton
Chairman
Joint Economic Committee

**Questions Submitted for the Record by Joint Economic Committee
Chairman Saxton for Chairman Greenspan**

- Since the “neutral” rate is not observable, how do you know when you’ve reached the “neutral” rate? What variables do you monitor to make judgments as to how close to neutral the fed funds rate is? As the fed funds rate is ratcheted up, and given the lags that exist, does the possibility of raising it above a neutral level increase?
- Over the last year and a half, the Federal Reserve has raised the Federal Funds rate by 3.0 percentage points and indicated that further increases are likely in order to check inflation. Yet long-term interest rates, including mortgages, are lower now than when the FOMC began tightening. In past comments you have termed this situation a “conundrum” without recent precedent. What explains the low level of long-term rates?
- I was intrigued by your response to my question relating to the yield curve and associated yield spread between the fed funds rate and the 10-year bond yield. In particular, your response to the spread question was as follows:

“...that used to be one of the ...most accurate measures we used to have to indicate when a recession was about to occur and when a recovery was about to occur. It has lost its capability of doing so in recent years...it has significant financial impacts, it’s no longer useful as a leading indicator to the extent that it was.”

In pondering this comment, **three considerations appear to be especially relevant:** (1) **First**, the importance of a yield spread for monetary policy has been long recognized by classical economists. Both Henry Thornton and Knut Wicksell recognized that when the central-bank- controlled short-rate moves **relative to a long-term market rate**, relative prices, incentives, and behaviors change. (2) **Second**, the recent (2005) extensive review and summary of the literature pertaining to research on the yield spread (published by the Federal Reserve Bank of New York) concludes that the weight of the evidence supports the potency of the yield spread. (See Estrella; October 2005) (3) **Third**, the Conference Board includes a yield spread variable in its index of leading economic indicators. The Conference Board conducts an ongoing evaluation of

these indicators and an especially thorough, major reevaluation of the composite was made last July. The bottom line is that the yield spread remains a key component of this composite.

- In light of these considerations, what available evidence or other factors support the view that the yield spread is no longer especially useful? Has the Board staff assessed this relationship recently?
- One of the strategies or institutional changes that you have supported in recent years relates to the increased transparency of the Federal Reserve. This increased Federal Reserve transparency has, for the most part, been associated with more benefits than costs. Doesn't this increased transparency work to the benefit of both the Federal Reserve and the public?



BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

ALAN GREENSPAN
CHAIRMAN

November 28, 2005

The Honorable Jim Saxton
Chairman
Joint Economic Committee
Washington, D.C. 20510

Dear Mr. Chairman:

I am pleased to enclose my responses to the additional questions you forwarded in connection with the November 3 hearing.

I also wanted to thank you, and the other members of the committee, for your kind and generous comments at the hearing and in your letter. It has been a pleasure appearing before the Joint Economic Committee over the years.

Sincerely,

A handwritten signature in black ink, appearing to be "Alan Greenspan", written over a horizontal line.

Enclosure

Chairman Greenspan subsequently submitted the following to written questions received from Chairman Saxton in connection with the Joint Economic Committee hearing on November 3, 2005:

Q.1. Since the “neutral” rate is not observable, how do you know when you’ve reached the “neutral” rate? What variables do you monitor to make judgments as to how close to neutral the fed funds rate is? As the fed funds rate is ratcheted up, and given the lags that exist, does the possibility of raising it above a neutral level increase?

A. 1. Although the concept of a “neutral interest rate” is a useful theoretical construct, difficulties in implementing it in practice limit its usefulness as a framework for monetary policymaking. For one thing, a variety of definitions of a neutral real interest rate are possible. For another, quantitative estimates of the level of such a rate are subject to considerable uncertainty. Also, such estimates can vary widely depending on the type of measure and the prevailing and projected economic conditions. In particular, all variables that contribute to making a macroeconomic forecast are relevant for estimates of neutral interest rates, greatly complicating such assessments. Thus, it is impossible to know with any certainty when the neutral rate has been reached. Moreover, the use of neutral real rates in the formulation of monetary policy is not necessarily straightforward. For instance, in some circumstances, attaining a “neutral” federal funds rate would in principle be an appropriate objective for monetary policy, but in others--particularly when inflation is too high or too low--aiming for a neutral funds rate in the near term would not be appropriate. These uncertainties and complications suggest that reliance on a single summary measure such as a neutral real interest rate would be unwise as a strategy for formulating monetary policy. Rather, a full consideration of current and prospective economic developments, and of the risks to the outlook, is essential for the conduct of monetary policy.

Q.2. Over the last year and a half, the Federal Reserve has raised the federal funds rate by 3.0 percentage points and indicated that further increases are likely in order to check inflation. Yet long-term interest rates, including mortgages, are lower now than when the FOMC began tightening. In past comments, you have termed this situation a “conundrum” without recent precedent. What explains the low level of long-term interest rates?

A.2. As I noted in my monetary policy testimony before the Congress in July, two distinct but overlapping developments appear to be at work in explaining the low level of long-term interest rates: a longer-term trend decline in bond yields and an acceleration of that trend over the period since mid-2004. Both developments are particularly evident in the nominal interest rate applying to the one-year period ending ten years from today that can be inferred from the U.S. Treasury yield curve. In 1994, that so-called forward rate

exceeded 8 percent. By mid-2004, it had declined to about 6-1/2 percent--an easing of about 15 basis points per year on average. Over the past year, that drop steepened, and the forward rate fell 130 basis points to less than 5 percent.

Some, but not all, of the decade-long trend decline in that forward yield can be ascribed to expectations of lower inflation, a reduced risk premium resulting from less inflation volatility, and a smaller real term premium that seems due to a moderation of the business cycle over the past few decades. As I noted in my testimony before the Joint Economic Committee in February, the effective productive capacity of the global economy has substantially increased, in part because of the breakup of the Soviet Union and the integration of China and India into the global marketplace. And this increase in capacity, in turn, has doubtless contributed to expectations of lower inflation and lower inflation-risk premiums.

In addition to these factors, the trend reduction worldwide in long-term yields surely reflects an excess of intended saving over intended investment. This configuration is equivalent to an excess of the supply of funds relative to the demand for investment. Because intended capital investment is to some extent driven by forces independent of those governing intended saving, the gap between intended saving and investment can be quite wide and variable. It is real interest rates that bring actual capital investment worldwide and its means of financing, global saving, into equality. We can directly observe only the actual flows, not the saving and investment tendencies. As best we can judge, *both* high levels of intended saving and low levels of intended investment have combined to lower real long-term interest rates over the past decade.

Q.3. I was intrigued by your response to my question relating to the yield curve and associated yield spread between the fed funds rate and the 10-year bond yield. In particular, your response to the spread question was as follows:

“...that used to be one of the...most accurate measures we used to have to indicate when a recession was about to occur and when a recovery was about to occur. It has lost its capability of doing so in recent years...it has significant financial impacts, it’s no longer useful as a leading indicator to the extent that it was.”

In pondering this comment, three considerations appear to be especially relevant: (1) First, the importance of a yield spread for monetary policy has been long recognized by classical economists. Both Henry Thornton and Knut Wicksell recognized that when the central-bank-controlled short-rate moves relative to a long-term market rate, relative prices, incentives, and behaviors change. (2) Second, the recent (2005) extensive review and summary of the literature pertaining to research on the yield spread (published by the Federal Reserve Bank of New York) concludes that the weight of the evidence supports the potency of the yield spread. (See Estrella, October 2005). (3) Third, the Conference Board includes a yield curve spread

variable in its index of leading economic indicators. The Conference Board conducts an ongoing evaluation of these indicators and an especially thorough, major reevaluation of the composite was made last July. The bottom line is that the yield spread remains a key component of this composite.

In light of these considerations, what available evidence or other factors support the view that the yield spread is no longer especially useful? Has the Board staff assessed this relationship recently?

A.3. Although the slope of the yield curve remains an important financial indicator, it needs to be interpreted carefully. In particular, a flattening of the yield curve is not a foolproof indicator of future economic weakness. For example, the yield curve narrowed sharply over the period 1992-1994 even as the economy was entering the longest sustained expansion of the postwar period.

Three basic factors affect the slope of the yield curve--the current level of the real federal funds rate relative to the long-run level, the level of near-term inflation expectations relative to expected inflation at longer horizons, and the level of near-term risk premiums relative to risk premiums at longer horizons.

Statistical analysis indicates that the first factor--the gap between the current and long-run levels of the real federal funds rate--is the key component from which the yield curve slope derives much of its predictive power for future GDP growth. When the level of the real federal funds rate is pushed well below its long-run level, economic stimulus is imparted and the yield curve steepens. The economic stimulus influences output growth with a lag; as a result, the steepening of the yield curve in this scenario is a predictor, albeit not the cause of, stronger economic activity ahead. Conversely, when the level of the real federal funds rate is pushed above its long-run level, economic restraint is imparted and the yield curve flattens. Once again, the economic restraint influences output growth with a lag, so the flattening (inversion) of the yield curve in this scenario would signal weaker economic growth ahead, but would not itself be the cause of the weakening.

The connection between future output growth and the other two factors affecting the slope of the yield curve--the gap between near-term and long-term inflation expectations and the difference between near-term and long-term risk premiums--is far less certain and likely to depend on economic circumstances. For example, a rise in near-term inflation expectations above long-term inflation expectations would tend to flatten the yield curve and might also signal a prospective weakening in aggregate demand. This configuration in inflation expectations might reflect adverse supply factors that have pushed up inflation expectations in the near term but that are expected to dissipate over time. In this case, the flattening of the yield curve might well be a signal of an improving inflation picture that could also be accompanied by a favorable outlook for economic growth.

The connection between output growth and risk premiums is also quite uncertain. A fall in distant horizon risk premiums would flatten the yield curve and might signal a weakening in economic activity if, for example, the drop in risk premiums in fixed-income markets was associated with a “flight to safety” on the part of global investors seeking a safe haven from turbulence in equity markets and other risky assets. But it is also possible that a decline in distant horizon risk premiums could be a sign that investors are generally more willing to bear risk. In this case, a flattening of the yield curve stemming from this factor could be an indicator of an easing in financial conditions that would stimulate future economic activity.

In summary, many factors can affect the slope of the yield curve, and these factors do not all have the same implications for future output growth. In judging the indicator value of any particular change in the slope of the yield curve, it is critical to understand the underlying forces that may be affecting the yield curve at that moment. As the 1992-1994 episode attests, simply relying upon an average statistical relationship estimated over a very long sample can be quite misleading.

Q.4. One of the strategies or institutional changes that you have supported in recent years relates to the increased transparency of the Federal Reserve. This increased Federal Reserve transparency has, for the most part, been associated with more benefits than costs. Doesn't this increased transparency work to the benefit of both the Federal Reserve and the public?

A.4. Greater transparency with regard to Federal Reserve actions encourages public discussion and informed scrutiny, important aspects of accountability in a democratic society. Transparency also enables financial markets to better predict monetary policy decisions, which can contribute to improved policy outcomes. However, providing more complete information about policy decisions is not without cost. Transparency requires careful attention by policymakers, and so constrains the time they have for actually making decisions. More importantly, excessive transparency could inhibit policymakers, making them less spontaneous in their remarks and less willing to explore new ideas. Such an outcome would have adverse effects on policy decisions. The Federal Reserve's current practices strike a reasonable balance between transparency and the degree of confidentiality appropriate to support the policy process.

PREPARED STATEMENT OF SENATOR JACK REED, RANKING MINORITY

Thank you, Chairman Saxton. I want to welcome Chairman Greenspan for his last appearance before the Joint Economic Committee as Fed Chairman. As always, I look forward to his perspectives on the economic outlook, but I'm also interested in any reflections he may have on his tenure as Fed chairman.

Some have called Chairman Greenspan the most successful central banker in history. On his watch, inflation was kept under tight control and we enjoyed the longest economic expansion on record from March 1991 to March 2001.

While the Chairman's track record managing monetary policy is very impressive, his role in justifying the 2001 tax cuts is more problematic. I know that Chairman Greenspan will point to his caveats about the need for triggers and other cautions, but in the real world of politics, he was seen as giving the green light to President Bush's tax cuts, and now we are living with the consequences.

President Bush's tax cuts were poorly designed to stimulate broadly shared prosperity and have produced a legacy of large budget deficits that leave us increasingly hampered in our ability to deal with the host of challenges we face. Large and persistent budget deficits are undermining national saving, and they have contributed to an ever-widening trade deficit. Our vast borrowing from abroad puts us at risk of a major financial collapse if foreign lenders suddenly stop accepting our IOU's.

Raising national saving is the key to our economic growth, a good way to reduce our record trade deficit, and, as the Chairman's past testimony reflects, the best way to meet the fiscal challenges posed by the retirement of the baby boom generation. But what has the President offered us? A plan to replace part of Social Security with private accounts that would increase the deficit without raising national saving and a proposal to make his tax cuts permanent that is simply incompatible with reducing the deficit.

Sound policies for the long run are clearly very important, but I am also deeply concerned about what continues to be a disappointing economic recovery for the typical American worker. Strong productivity gains have shown up in the bottom lines of shareholders but not in the paychecks of workers. The typical worker's earnings are not keeping up with their rising living expenses, including soaring energy prices. And both earnings and income inequality are increasing.

Chairman Greenspan has regularly expressed concern about the widening inequality of income and earnings in the American economy, but his solutions are always focused on the long term. While I too acknowledge the importance of education and training, we face an immediate problem.

The flooding of New Orleans forced America to confront the existence of poverty. A new report shows that hunger in America has risen dramatically over the last 5 years, with more than 38 million people living in households that suffer directly from hunger and food insecurity, including nearly 14 million children. The minimum wage has been losing purchasing power steadily, and low- and moderate-income households face crushing energy bills this winter.

Of course, many of these problems in the American economy lie outside the purview of the Federal Reserve, where Chairman Greenspan has carried out his official monetary policy responsibilities well. He has shown flexibility rather than a rigid adherence to any predetermined policy rule in responding to changing economic circumstances, in order to pursue the multiple policy goals of price stability, high employment, and sustainable growth.

I hope the next Fed chairman observes that precedent when he takes up his duties in the face of historically large budget deficits, a record current account deficit, a negative household saving rate, rising inflation, and a labor market recovery that remains tepid in many respects.

Chairman Greenspan will be a hard act to follow. The impending "Greenspan deficit" is but the latest addition to our concerns about the economic outlook. Chairman Greenspan, I want to thank you for your public service and I look forward to your testimony today.

PREPARED STATEMENT OF REPRESENTATIVE CAROLYN B. MALONEY

Thank you, Chairman Saxton. Senator Reed will not be able to be here because of votes in the Senate, so I request that his opening statement be entered into the record, and I would like to make a few brief remarks.

I want to welcome Chairman Greenspan for his last appearance before the Joint Economic Committee as Fed Chairman. Over the past 18 years, Chairman Greenspan has achieved a remarkable record of success as the country's central banker. He has steadfastly maintained the Fed's credibility for keeping inflation under control while dealing flexibly with a variety of economic challenges.

The 10-year economic expansion of the 1990s was the longest on record. One contributing factor was Chairman Greenspan's strong sense in the middle of that expansion that there was room for monetary policy to accommodate further reductions in the unemployment rate, even though the conventional wisdom at the time said otherwise. Of course, another contributing factor was the Clinton administration's strong commitment to deficit reduction, which created a fiscal policy environment conducive to strong, sustainable, non-inflationary growth.

Unfortunately, that fiscal discipline is now a distant memory, and Chairman Greenspan's successor will face a host of problems managing monetary policy in the face of historically large budget deficits, a record current account deficit, a negative household saving rate, rising inflation, and a labor market recovery that remains tepid in many respects.

I look forward to Chairman Greenspan's testimony. I hope that, in addition to his views on the economic outlook, he will share with us some reflections on what made his tenure at the Fed so successful and what are the key lessons he would want to pass on to his successor.

PREPARED STATEMENT OF HON. ALAN GREENSPAN, CHAIRMAN,
BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Mr. Chairman, when I last appeared before the Joint Economic Committee in early June, economic activity appeared to be reaccelerating after a slowdown in the spring. The economy had weathered a further run-up in energy prices over the winter, and aggregate demand was again strengthening. Real gross domestic product (GDP) growth averaged 3½ percent at an annual rate over the first half of the year, and subsequent readings on activity over the summer were positive. By early August, the economy appeared to have considerable momentum, despite a further ratcheting up of crude oil prices; pressures on inflation remained elevated.

As you know, the economy suffered significant shocks in late summer and early autumn. Crude oil prices moved sharply higher in August, bid up by growth in world demand that continued to outpace the growth of supply. Then Hurricane Katrina hit the Gulf Coast at the end of August, causing widespread disruptions to oil and natural gas production and driving the price of West Texas Intermediate crude oil above \$70 per barrel. Because of a lack of ready access to foreign supplies, natural gas prices rose even more sharply. At the end of September, with the recovery from the first storm barely under way, Hurricane Rita hit, causing additional damage and destruction—especially to the energy production and distribution systems in the Gulf. Most recently, Hurricane Wilma caused widespread power outages and property damage across the State of Florida. These events are likely to exert a drag on employment and production in the near term and to add to the upward pressures on the general price level. But the economic fundamentals remain firm, and the U.S. economy appears to retain important forward momentum.

Of course, the higher energy prices caused by the hurricanes are being felt well beyond the Gulf Coast region. Those higher prices resulted from the substantial damage that occurred to our nation's energy production and distribution systems. Of the more than 3,000 oil and gas production platforms in the paths of Katrina and Rita, more than 100 were destroyed, and an additional 50 suffered extensive damage. Of the 134 manned drilling rigs operating in the Gulf, 8 were lost, and an additional 38 were either set adrift by the storms or were badly damaged. At present, both oil and natural gas production in the Gulf are operating at less than 50 percent of pre-Katrina levels. Since the first evacuations of oil and gas facilities were ordered before Katrina, cumulative shortfalls represented almost 4 percent of the nation's annual production of crude oil and 2 percent of our output of natural gas.

The combination of flooding, wind damage, and a lack of electric power also forced many crude oil refineries and natural gas processing plants to shut down. The restoration of production at the affected natural gas processing facilities has proceeded particularly slowly, in part because of the lack of natural gas feedstocks and infrastructure problems. Most refineries, however, will be back on line within the next month or so, though a few may take longer.

In the interim, a greater output of refined petroleum products in other areas of the country and much higher imports, especially of gasoline, are making up for the production shortfalls in Gulf refining. The temporary lifting of some environmental regulations and the suspension of the Jones Act facilitated those adjustments. In addition, refiners have shifted the mix of production toward more gasoline and less heating oil and jet fuel. That shift has had benefits in the short run, though the

longer it continues, the greater the possibility of upward pressure on distillate fuel oil prices during the winter heating season.

Releases from the nation's Strategic Petroleum Reserve relieved much of the upward pressure on crude oil prices, and imports of refined products responded rapidly to ease the price pressures stemming from the loss of refinery production in the Gulf. As a consequence, the nationwide retail price of gasoline for all grades has declined 60 cents per gallon from its peak of \$3.12 per gallon in the week of September 5. Motorists appear to have economized on their driving, and gasoline demand appears to be off a bit. However, it will take time and an appreciable increase in the fuel economy of our stock of motor vehicles to fundamentally change the amount of motor fuel used on our nation's highways.

The far more severe reaction of natural gas prices to the production setbacks that have occurred in the Gulf highlights again the need to expand our nation's ability to import natural gas. In contrast to the fall in crude oil prices and the sharp narrowing of refinery margins during the past 2 months, natural gas prices have remained high. Moreover, judging from elevated distant futures prices, traders expect natural gas prices to edge lower but to stay high for the foreseeable future. This expectation largely reflects a natural gas industry in North America that is already operating at close to capacity and our inability to import large quantities of far cheaper, liquefied natural gas (LNG) from other parts of the world. At present, natural gas supplies appear to be sufficient to meet the near-term demands—even with some ongoing shortfall in Gulf production. However, a colder-than-average winter would stress this market, and prices will likely remain vulnerable to spikes until the spring.

U.S. imports of LNG have been constrained by inadequate global capacity for liquefaction, as well as by environmental and safety concerns that have restricted the construction of new LNG import terminals in the United States. In 2002, such imports accounted for only 1 percent of U.S. gas consumption. Despite the major effort to expand imports, the Department of Energy forecasts LNG imports this year at only 3 percent of gas consumption. Canada, which has recently supplied one-sixth of our consumption, cannot expand its pipeline exports significantly in the near term, in part because of the role that Canadian natural gas plays in supporting increasing oil production from tar sands.

The disruptions to energy production have noticeably affected economic activity. We estimate that the storms held down the increase in industrial production 0.4 percentage point in August and an additional 1.7 percentage point in September.

Except for the hurricane effects, readings on the economy indicate a continued solid expansion of aggregate demand and production. If allowance is taken for the effects of Katrina and Rita and for the now-settled machinist strike at Boeing, industrial production rose at an annual rate of $5\frac{1}{4}$ percent in the third quarter. That's up from an annual pace of $1\frac{1}{4}$ percent in the second quarter, when a marked slowing of inventory accumulation was a restraining influence on growth.

The September employment report showed a loss of 35,000 jobs. However, an upward revision to payroll gains over the summer indicated a stronger underlying pace of hiring before the storms than had been previously estimated. The Bureau of Labor Statistics estimates that employment growth in areas not affected by the storms was in line with the average pace over the twelve months ending in August.

Retail spending eased off in September, likely reflecting the effects of the hurricanes and higher gasoline prices. Major chain stores report a gradual recovery over October in the pace of spending, though light motor vehicle sales declined sharply last month, when some major incentives to purchase expired.

The longer-term prospects for the U.S. economy remain favorable. Structural productivity continues to grow at a firm pace, and rebuilding activity following the hurricanes should boost real GDP growth for a while. More uncertainty, however, surrounds the outlook for inflation.

The past decade of low inflation and solid economic growth in the United States and in many other countries around the world has been without precedent in recent decades. Much of that favorable performance is attributable to the remarkable confluence of innovations that spawned new computer, telecommunication, and networking technologies, which, especially in the United States, have elevated the growth of productivity, suppressed unit labor costs, and helped to contain inflationary pressures. The result has been a virtuous cycle of low prices and solid growth.

Contributing to the disinflationary pressures that have been evident in the global economy over the past decade or more has been the integration of in excess of 100 million educated workers from the former Soviet bloc into the world's open trading system. More recently, and of even greater significance, has been the freeing from central planning of large segments of China's 750 million workforce. The gradual

addition of these workers plus workers from India—a country which is also currently undergoing a notable increase in its participation in the world trading system—would approximately double the overall supply of labor once all these workers become fully engaged in competitive world markets. Of course, at current rates of productivity, the half of the world's labor force that has been newly added to the world competitive marketplace is producing no more than one quarter of world output. With increased education and increased absorption of significant cutting-edge technologies, that share will surely rise.

Over the past decade or more, the gradual assimilation of these new entrants into the world's free-market trading system has restrained the rise of unit labor costs in much of the world and hence has helped to contain inflation.

As this process has unfolded, inflation expectations have decreased, and accordingly, the inflation premiums embodied in long-term interest rates around the world have come down. The effective augmentation of world supply and the accompanying disinflationary pressures have made it easier for the Federal Reserve and other central banks to achieve price stability in an environment of generally solid economic growth.

But this seminal shift in the world's workforce is producing, in effect, a level adjustment in unit labor costs. To be sure, economic systems evolve from centrally planned to market-based only gradually and, at times, in fits and starts. Thus, this level adjustment is being spread over an extended period. Nevertheless, the suppression of cost growth and world inflation, at some point, will begin to abate and, with the completion of this level adjustment, gradually end.

These global forces pressing inflation and interest rates lower may well persist for some time. Nonetheless, it is the rate at which countries are integrated into the global economic system, not the extent of their integration, that governs the degree to which the rise in world unit labor costs will continue to be subdued. Where the global economy is currently in this dynamic process remains open to question. But going forward, these trends will need to be monitored carefully by the world's central banks.

I want to conclude with a few remarks about the Federal budget situation, which—at least until Hurricanes Katrina and Rita struck the Gulf Coast—was showing signs of modest improvement. Indeed, tax receipts have exhibited considerable strength of late, posting an increase of nearly 15 percent in fiscal 2005 as a result of sizable gains in individual and, even more, corporate income taxes. Thus, although spending continued to rise rapidly last year, the deficit in the unified budget dropped to \$319 billion, nearly \$100 billion less than the figure for fiscal year 2004 and a much smaller figure than many had anticipated earlier in the year. Lowering the deficit further in the near term, however, will be difficult in light of the need to pay for post-hurricane reconstruction and relief.

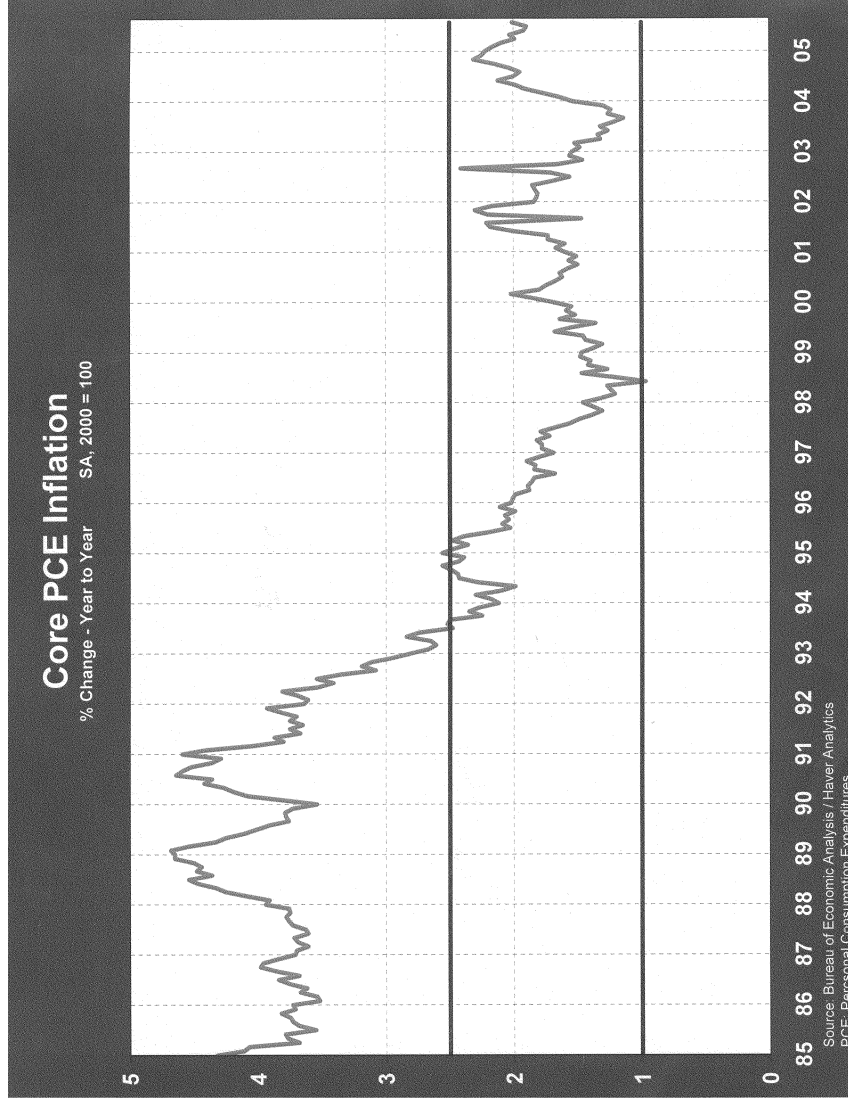
But even apart from the hurricanes, our budget position is unlikely to improve substantially further until we restore constraints similar to the Budget Enforcement Act of 1990, which were allowed to lapse in 2002. Even so, the restoration of PAYGO and discretionary caps will not address the far more difficult choices that confront the Congress as the baby-boom generation edges toward retirement. As I have testified on numerous occasions, current entitlement law may have already promised to this next generation of retirees more in real resources than our economy, with its predictably slowing rate of labor force growth, will be able to supply.

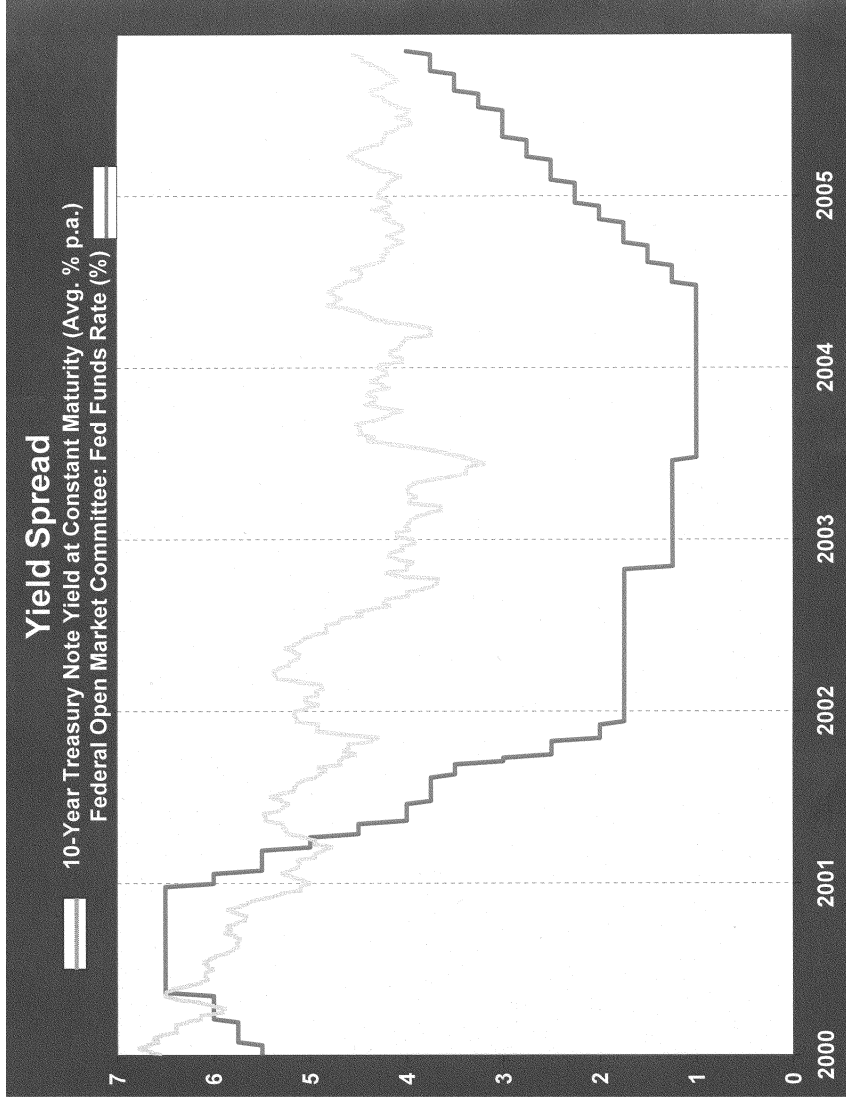
So long as health-care costs continue to grow faster than the economy as a whole, as seems likely, Federal spending on health and retirement programs would rise at a rate that risks placing the budget on an unsustainable trajectory. Specifically, large deficits will result in rising interest rates and an ever-growing ratio of debt service to GDP. Unless the situation is reversed, at some point these budget trends will cause serious economic disruptions.

We owe it to those who will retire over the next couple of decades to promise only what the government can deliver. The present policy path makes current promises, at least in real terms, highly conjectural. If fewer resources will be available per retiree than promised under current law, those in their later working years need sufficient time to adjust their work and retirement decisions.

Crafting a budget strategy that meets the nation's longer-run needs will become ever more difficult and costly the more we delay. The one certainty is that the resolution of the nation's demographic challenge will require hard choices and that the future performance of the economy will depend on those choices. No changes will be easy, as they all will involve setting priorities and making tradeoffs among valued alternatives. The Congress must determine how best to address the competing claims on our limited resources. In doing so, you will need to consider not only the distributional effects of policy changes but also the broader economic effects on labor

supply, retirement behavior, and private saving. The benefits of taking sound, timely action could extend many decades into the future.





Congress of the United States

JOINT ECONOMIC COMMITTEE
(CREATED PURSUANT TO SEC. 5(a) OF PUBLIC LAW 304, 79TH CONGRESS)

Washington, DC 20510-6602

November 2, 2005

The Honorable Alan Greenspan
Chairman
Board of Governors of the
Federal Reserve System
20th & Constitution Avenue, NW
Washington, DC 20551

Dear Mr. Chairman:


Tomorrow you will be testifying before the Joint Economic Committee on the Economic Outlook. I am looking forward to discussing the current state of the economy and its future outlook with you at tomorrow's hearing.

As you know, one of the major issues facing Congress is how best to facilitate recovery and rebuilding in the areas affected by recent hurricanes, most notably Katrina and Rita. The debate over how to meet the challenge before us has been wide ranging as has been the scope of suggested policy responses. I will be quite interested to hear what views and suggestions you might have for the Congress.

There is one proposal being considered in a number of forums that I am particularly interested in discussing with you. Some have suggested that to aid in the recovery and rebuilding efforts the Congress should authorize the creation and issuance of federally guaranteed municipal securities. I would be most interested in hearing your views on whether such an approach represents a wise course of action and what impacts, direct and indirect, such a policy approach would have on the economy, the federal budget, bond markets in general, and the market for Treasury securities.

Once again, I look forward to your testimony tomorrow and hope you will provide us with some wise counsel on the specific issue of creating federally guaranteed municipal securities.

Sincerely,



Robert F. Bennett
Vice Chairman



BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

ALAN GREENSPAN
CHAIRMAN

November 4, 2005

The Honorable Robert F. Bennett
Vice Chairman
Joint Economic Committee
Washington, D.C. 20510

Dear Mr. Vice Chairman:

Thank you for your letter enquiring as to my views regarding whether--as you put it--"the Congress should authorize the creation and issuance of federally guaranteed municipal securities" as a means of aiding the recovery effort in the Gulf Coast area.

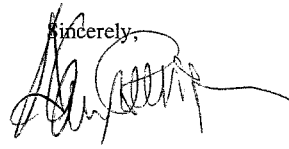
For a variety of reasons, I believe such a step would be quite inadvisable. First and foremost, authorization of federally guaranteed municipal securities would set an unfortunate precedent. To date, the federal government has not been in the business of guaranteeing municipal debt, and I am concerned that if it were to get into that business for the governments directly affected by the recent hurricanes, many other municipal governments would appeal for similar treatment. Moreover, if federally guaranteed municipal securities were issued, financial-market participants might perceive an implicit federal guarantee of the whole of the nearly \$2 trillion outstanding in municipal debt, resulting in an enormous new contingent liability for the federal government.

Second, provision of a federal guarantee would come at a cost. Under current federal credit rules, provision of a guaranteed loan should--appropriately--be scored as entailing a subsidy. (These scoring rules capture the essential idea that issuance of a guarantee increases the exposure of the federal government to risk.) If the scope of the guarantee could be tightly limited, the explicit cost would be small in the context of the overall resources being committed to the Gulf Coast area. However, if--as I fear might be realistic--the guarantee was seen as extending to a much wider base of municipal debt, the implicit cost could be quite significant and would likely not be reflected in budget costs.

At present, municipal governments are able to purchase bond insurance from private insurers; about half of all municipal bonds are insured. If the Congress determined that it wanted to support the affected state and municipal governments in their efforts to borrow at low cost, it could appropriate to those governments the amounts required to

The Honorable Robert F. Bennett
Page Two

purchase insurance from private providers. Alternatively, the Congress could simply augment the overall financial assistance being provided to the affected governments, and let those governments determine whether the funds would best be used to purchase bond insurance or for some other purpose. Either approach, it seems to me, would underscore the special nature of the action and thus run less risk of opening the door to a much wider federal commitment.

Sincerely,


Congress of the United States

JOINT ECONOMIC COMMITTEE
(CREATED PURSUANT TO SEC. 6(a) OF PUBLIC LAW 304, 78TH CONGRESS)

Washington, DC 20510-6602

November 7, 2005

The Honorable James Saxton
Chairman
Joint Economic Committee
Washington, DC 20510-6602

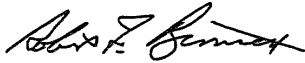
Dear Mr. Chairman:

I regret that business on the Senate floor prevented me from participating in last Thursday's hearing on the "Economic Outlook" with Federal Reserve Board of Governors Chairman Alan Greenspan.

I intended to ask Chairman Greenspan for his views on various proposals to allow for the creation and issuance of federally guaranteed municipal securities in connection with the recovery and rebuilding efforts following recent hurricanes along the Gulf Coast.

I wrote to Chairman Greenspan prior to the hearing and indicated that I intended to pursue that line of questioning. Chairman Greenspan was kind enough to provide me with his views on the subject by letter. I would respectfully ask that my letter and Chairman Greenspan's response be made a part of the permanent record of the hearing.

Sincerely,



Robert F. Bennett
Vice Chairman