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The Honorable Ben Bernanke
Chairman, Federal Reserve Board

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Questioners: John Lipsky
Vice Chairman of JP Morgan Investment Bank

Glenn Hubbard
Dean of the Columbia Business School and former
Chairman of the Presidents Council of Economic Advisors

Introduction

Barbara Hackman Franklin

Good evening. Good evening everyone. I'm Barbara Hackman Franklin, Chairman of the Economic Club of New York and it is my great pleasure to welcome each and every one of you, our members and guests, to this the 386th meeting in the ninety-ninth year of this esteemed club. We are delighted tonight to welcome as our honored guest the Honorable Ben Bernanke, Chairman and a member of the Board of Governors of the Federal Reserve System. It's a real privilege to have him here so early in his tenure as chairman and for his first major address in New York City. It's a tribute to you Mr. Chairman that your appearance here has been sold out for a month. It's also proof that when the Fed Chairman speaks, people do want to listen. And we'll all have our chance to listen in just a few minutes.

To those of you with us tonight for the first time we extend a special welcome and we want to introduce you to the Economic Club. This club will be one hundred years old next year, and it's the nation's premier non-partisan speaking platform. Our members and their guests come to hear informative and enriching exchanges with some of the most interesting people around the world, so we're pleased to have so many guests here tonight. Our program will begin momentarily. First we will hear from Chairman Bernanke, then we will have our usual question period during which two members of the club, experts in their own right, one on either side of the dais, take turns in

asking questions of our speaker. At the conclusion of the speaking program, in about an hour, your main course will be served. So, we'll begin with the program.

Dr. Ben Bernanke was an early favorite to become the 14th Chairman of the Federal Reserve. He was nominated last fall by President Bush, won easy confirmation by the United States Senate in January to a 14 year term as a member of the Board of Governors, and a four year term as Chairman. He was sworn in on February 1st. He also serves as Chairman of the Feds principal monetary policy making body, the Federal Open Market Committee.

Before this Dr. Bernanke was chairman of the Presidents Council of Economic Advisors. At the time of his confirmation hearing a reporter for the Washington Post wrote that Dr Bernanke is quote "a supple thinker and a deceptively shrewd politician with a dead-pan wit, a deeply calming bedside manner and no strident political or economic ideology" close quote.

Colleagues describe him as brilliant. He scored 1590 of a possible 1600 on his SAT. Graduated summa cum laude from Harvard, and earned his PhD in economics at MIT. After MIT he headed to Stanford University and its graduate school of business where he quickly emerged as a top teacher. Then in 1985 he came to Princeton as Professor of Economics and Public Affairs, and subsequently also became Chair of the Economics Department. There he earned a reputation as one the best monetary economists of his generation. He has held several prestigious fellowships, has been a prolific author and a leader in his profession. And in what some people consider his

most challenging assignment he served two terms during turbulent times on the Montgomery Township New Jersey Board of Education.

But Dr. Bernanke is no stranger to the Fed. He was a visiting scholar at the Federal Reserve Banks of Philadelphia, Boston and New York, and was a member of the academic advisory panel at the New York Fed for 12 years. He joined the Board of Governors of the Federal Reserve in 2002 where he served until his 2005 appointment as Chairman of the Council of Economic Advisors.

We all understand the global importance of the position he holds. So it's an honor to introduce the Chairman of the Federal Reserve, the Honorable Ben Bernanke. (Applause)

The Honorable Ben Bernanke

Chairman, Federal Reserve Board

Thank you. My daddy back in South Carolina used to tell me "son if you ever have an opportunity to keep your mouth shut, be sure to take advantage of it." Unfortunately tonight I can't take advantage of that, I'd like to share some comments with you. I should say that it's exciting to be here in the financial capital of the world and see so many of you leaders in that area.

I'm going to talk about a financial phenomenon, an intriguing one, the fact that over the last seven quarters or so, even as monetary policy has been tightening, long term yields, long term interest rates, have moved very little. Why haven't long term interest rates moved more as they have done typically over previous tightening cycles? And what implications does this pattern of long term interest rates have for monetary policy and for the economic outlook?

As you'll see in my remarks, I'll do a better job of raising these questions than of answering them. In particular I'm going to conclude that the implications for monetary policy, of the recent behavior of long term interest rates are not at all clear-cut. I hope you'll agree that these questions are never-the-less worth posing, as they are intertwined with a number of important economic and financial issues. And I should say at the outset that the views I'm going to express tonight are my own and not those necessarily of the Federal Market Committee.

The tightening cycle that began at the end of June 2004 is notable in at least four respects. First, its onset was delayed for longer than many observers expected. The FOMC kept policy unusually accommodative for an extended, or should I say, for a considerable period. The goal as you know was to help ensure that the economic expansion would be self sustaining and to protect against a remote risk that the fall in inflation observed during 2003, might culminate in outright deflation, an outcome that could have had potentially serious consequences for he economy and for the efficacy of monetary policy.

Indeed with those concerns in mind, in 2003 the Federal Reserve made explicit for the first time, that price stability is a symmetric objective. It is important to avoid inflation that is too low as well as inflation that is too high.

A second way in which the most recent experience has been unusual is the extent to which policy actions have been signaled in advance. Both in the months leading up to the initiation of the tightening cycle and during the cycle itself, the statements issued after each meeting of the FOMC provided qualitative guidance about the likely future path of policy and its dependence on economic events.

Providing information about the expected path of policy helped to insure that the long term interest rates and other asset prices did not build-in a projected pace of tightening that was more rapid than the committee itself anticipated. And the statements focus on the conditionality of future policy actions emphasized the ongoing need for both policy makers and financial market participants to respond to economic news.

In retrospect, the clear communication of policy provided notable benefits, in my view, by increasing the effectiveness of monetary policy while minimizing unnecessary volatility in financial markets.

Third, policy moved gradually, tightening in one-quarter point increments over fourteen successive meetings. Together with expanded communication, this gradual approach served to stabilize policy expectations and to dampen market volatility. In addition the measured pace of rate increases gave the committee time to observe the progress of the economy and to adjust its plans and communications strategy accordingly. To be sure gradualism was possible only because inflation expectations remained contained, testimony to the importance of a central banks retaining credibility in financial markets and among businesses and households.

A forth interesting aspect of the latest tightening cycle, which is my principal focus this evening, is the behavior of long term interest rates. Since June 30, 2004 the overnight interest rate has moved up 3 ½ percentage points, but the 10 year nominal treasury yield has only edged higher. At less than 4 ¾%, that yield is not much above the target Federal funds rate of 4 ½% and indeed is about even with yields for maturities of one to three years.

In the remainder of remarks, I will speculate on the reasons for and consequences of, this historically unusual behavior of long term interest rates.

Some discussion of the arithmetic of longer term yields provides a useful perspective on recent developments in bond markets. The 10 year treasury yield for example can be viewed as a weighted average of the current one-year rate, and nine one-year forward rates, with the weights depending on the coupon yield of the security. As I will discuss, each of these forward rates can

be split further into (1), a portion equal to the one-year spot rate that markets participants currently expect to prevail at that date in the future, and (2) a portion that reflects additional compensation to the bond holder for the risk of holding longer dated instruments.

Current and near term forward rates are particularly sensitive to monetary policy, because they directly affect spot short term interest rates and they strongly influence market expectations of where spot rates are going to be in the next year or two. Indeed as we would expect, the recent tightening of policy has been accompanied by increases in both the current one-year rate and in the next few years' forward rates. For example, for June 2004 the one-year forward rate for the period two to three years in the future has risen almost 1 ½ percentage points. As the 10 year yield is about unchanged even as the near term components have risen appreciably, it follows as a matter of arithmetic that the components representing terms that are more distant in time, must have fallen. In fact the one-year forward rate, nine years ahead has declined a remarkable 1 ½ percentage points over this tightening cycle. Incidentally by comparing forward rates implied by yields in nominal treasuries with those implied by treasury securities that are indexed for inflation, we can infer that about 2/3 of the overall decline in the far distant nominal forward rates over this tightening cycle, has been associated with a drop in real yields with the remainder reflecting a drop in inflation compensation.

It’s very important to note that the marked decline in far forward interest rates has not been confined to US Treasury securities. The spread in yields between treasuries and longer term

private securities such as corporate bonds is little changed or is down on net since June 2004 implying that essentially all of the fall in forward rates seen in the treasury markets have occurred in private yields as well. These patterns have also appeared in securities not denominated in dollars. For example, over the same period, long term government and swap yields in the United Kingdom and the Euro area have moved appreciably lower. Indeed long term nominal yields have dropped in a number of countries often by more than in the United States. And yield curves in many of these countries are also rather flat or even slightly inverted.

Why have the far forward rates implied by the term structure of interest rates declined in recent years? Observers have offered two broad but not mutually exclusive classes of explanations. One set of explanations holds that bond yields are reacting to current or prospective macro-economic conditions. Another set of explanations focuses on special factors that may have influenced market demands for long term securities per-se, independent of the economic outlook.

I will first consider explanations that emphasize possible changes in the net demand for long term securities, and later return to explanations that focus on the link between bond yields and the economic outlook.

As I've already noted, each of the forward interest rates implicit in the term structure can be usefully decomposed into two parts. One, the spot interest rate that market participants currently expect to prevail at the corresponding date in the future, and two, the additional compensation

that investors require for the risk of holding longer term instruments known as the term premium. With the economic outlook held constant, changes in the net demand for long term securities have the largest effect on the term premium. In particular, if the demand for long dated securities rises relative to the supply, then investors will generally accept less compensation to hold longer term instruments, that is, the term premium will decline. To quantify the importance of the shift in the balance of demand and supply and the consequent change in the term premium, we can appeal to the research literature on the term structure of interest rates.

In modern models of the term structure yields at each horizon are explained by a small number of factors. In some models these factors can be explicitly tied to observable economic variables such as inflation. In other models the factors represent statistical summaries of the data and have no explicit economic interpretation. These factors in turn can be used to estimate term premiums at each point in time although one should clearly acknowledge that these results can be sensitive to various statistical and modeling assumptions.

According to several of the most popular models, a substantial portion of the decline in distant-horizon forward rates over recent quarters can be attributed to a drop in term premiums. Using some of these models we can further divide the term premium into two parts; a premium for bearing real interest rate risk and premium for bearing inflation risk. Both of these components have trended lower over time as well, according to the standard models, but the decline in the

premium since last June 2004 appears to have been associated mainly with the drop in the compensation for a real interest rate risk rather than inflation risk.

A number of explanations have been put forth for why the net demand for long term issues may have increased thereby lowering the term premium.

First, longer maturity obligations may be more attractive because of more stable inflation, better anchored inflation expectations and a reduction in economic volatility more generally. With the benefit of hindsight, we now recognize that an important change occurred in the US economy, and indeed in the other major industrial economies as well, sometime in the mid-1980's. Since that time the volatilities of both real GDP and inflation have declined significantly, a phenomenon that economists have dubbed the 'Great Moderation'. I have argued elsewhere that improved monetary policies which stabilized inflation and better anchored inflation expectations are an important reason for this positive development. No doubt structural changes in the economy such as deregulation, improved inventory control methods and better risk sharing in financial markets have also contributed.

Whatever the reason for the fall in macro-economic volatility, if investors have come to expect this past performance to continue they might believe that less compensation for risk, and thus a lower term premium, is required to justify holding long term bonds. In this regard, it's interesting to observe that long term forward rates were also low in the 1950's and the 1960's. With long

term inflation expectations apparently anchored at low levels and with the prospect of continued economic stability, market participants may believe that it is appropriate to price bonds for an environment like that which prevailed four or five decades ago.

A second possible explanation of the evident decline in the term premium is linked to the increased intervention in the currency markets by a number of governments, particularly in Asia. According to this explanation, foreign official institutions, primarily central banks have invested the bulk of their greatly expanded dollar holdings in US Treasuries and closely substitutable securities, and these demands by the official sector have put downward pressure on yields.

This interpretation has some support including research that I did with two co-authors that found that longer term yields came under significant downward pressure during episodes of heavy official purchases of dollars in 2004 and financial market participants appeared to be especially sensitive to any suggestion that the foreign official entities may alter their portfolio preferences.

However these observations speak more to the existence of a short term impact of large purchases in sales the result of limits to liquidity in the very short run, more so than to perhaps the more important question of whether those transactions have a lasting or more permanent effect on yields.

On the latter issue, clear evidence is hard to come by. Several pieces of indirect evidence suggest that the long term effect of foreign purchases on yields may be moderate. Notably the global market for dollar denominated bonds is enormous. Perhaps around 25 trillion dollars, including dollar denominated debt issued by other countries as well as debt issued abroad by US residents. In the long run therefore, the market should be able to absorb purchases and sales of large absolute magnitude with relatively modest changes in yields. Indeed, long term yields continue to fall over recent quarters even as foreign official holdings of Treasury Securities increased at a slower pace than previously.

The performance of Treasuries relative to that of other fixed income instruments also agues against the dominant influence of official foreign portfolio holdings on long term rates. If foreign official holdings of Treasuries were the source of the decline in their yields, then we would expect to observe increased spreads between yields on Treasury securities and the returns to other types of debt less favored by foreign official holders. But we have not seen any such significant widening of private yield spreads. Quite the contrary, and as I noted earlier, yields in other industrial economies have fallen as well indeed sometimes more than US yields.

A reasonable conclusion is that the accumulation of dollar reserves abroad has influenced US yields, but reserved accumulation abroad is not the only or even the dominant explanation for their recent behavior.

Changes in the management of and accounting for pension funds are a third possible source of a declining term premium. Reforms proposed in the United States, Europe and elsewhere are widely expected to encourage pension funds to be more fully funded and to take steps to better match the duration of their assets and liabilities. Together with the increased need of an aging population in the industrial countries to prepare for retirement these changes may have increased the demand for longer maturity securities. We have seen little direct evidence to date of sizeable pension fund portfolio shifts towards long duration bonds, at lease in the United States. But judging from anecdotal reports, bond investors might be attaching significant odds to scenarios in which pension funds tilt the composition of their portfolios towards such assets substantially over time.

Forth and finally, as investors demand for long-duration securities may have increased over the past few years, the supply of such securities seems not to have kept pace. The average maturity of outstanding Treasury debt for example has dropped by 1 ½ years since its peak in 2001, a trend just now beginning to turn with the Treasuries re-issuance of the 30 year bond.

Corporations and households however, have taken advantage of low long term rates to lengthen the duration of their debt in recent years, which has compensated to some extent for the reduced duration of available Treasury debt.

What does the historically unusual behavior of long term yields imply for the conduct of monetary policy? The answer it turns out depends critically on the source of that behavior. To the extent that the decline in forward rates can be traced to a decline in the term premium perhaps for one or more of the reasons that I have just suggested, the effect is financially stimulative and argues for greater monetary policy restraint, all else being equal. Specifically, if spending depends on long term interest rates, special factors that lower the spread between short term and long term rates will stimulate aggregate demand. Thus when the term period declines a higher short term rate is required to obtain the long term rate and the overall mix of financial conditions consistent with maximum sustainable employment and stable prices.

However, if the behavior of long term yields reflects current or prospective economic conditions the implications for policy may be quite different. Indeed quite the opposite. The simplest case in point is when low or falling long term yields reflect investor expectations of future economic weakness. Suppose for example that investors expect economic activity to slow at some point in the future. If investors expect that weakness to require policy easing in the medium term they will mark down their projected path of spot future interest rates lowering far-forward rates and causing the yield curve to flatten or even to invert.

Indeed historically the slope of the yield curve has tended to decline significantly in advance of recessions. What is the relevance of that scenario for today? Although macro-economic

forecasting is obviously fraught with hazards, I would not interpret the currently very flat yield curve as indicating a significant economic slowdown to come for several reasons.

First, in previous episodes when an inverted yield curve was followed by a recession, the level of interest rates was quite high consistent with considerable financial restraint. This time both short- and long-term interest rates, in both nominal and real terms are relatively low by historical standards.

Second, as I've already discussed, to the extent that the flattening or inversion of the yield curve is the result of a smaller term premium, the implications for future economic activity are positive rather than negative.

And finally the yield curve is only one of the financial indicators that researchers have found useful in predicting swings in economic activity. Other indicators that have had empirical success in the past including corporate risk spreads for example would seem to be consistent for continuing solid economic growth. In that regard the fact that actual and applied volatilities by most financial prices remain subdued suggests that market participants do not harbor significant reservations about the economic outlook.

An alternative perspective holds that the recent behavior of interest rates does not presage an economic slowdown but suggests instead that the level of real interest rates consistent with full

employment in the long run, the natural interest rate if you will, has declined. For example some observers have pointed to factors that may create a longer term drag on the growth in household spending including high energy costs, the likelihood of slower growth in housing prices and a possible reversal of recent declines in saving rates. If these drags on the growth of spending do materialize then a lower real interest rate will be needed to sustain aggregate demand and to keep the economy near full employment. To be consistent with a lower long term real interest rate, the short term policy rate might have to be lower than it otherwise would be as well.

Given the global nature of the declining yields an explanation less centered of the United States might also be useful. About a year ago, I offered the thesis that a global saving glut, an excess at historically normal interest rates of desired global saving over desired global investment was contributing to a decline in interest rates. In brief, I argued that the shift reflects the confluence of several forces. On the savings side the factors include rapid growth in high saving countries in the Pacific Rim, export focused economic strategies that directly or indirectly hold back the growth of domestic demand, and the surge of revenues enjoyed by oil producers.

On the investment side notable factors restraining the global demand for capitol include the legacy of the Asian financial crises of the 1990's, which led to continuing sluggishness in investment in some of those countries and the slower growth of the work force in many industrial countries. So long as these factors persist, global equilibrium interest rates and consequently the neutral policy rate will be lower than they otherwise would be.

Well what conclusion should we draw? Clearly bond prices like other asset prices incorporate a great deal of information that is potentially very relevant to policy makers. However the information is not always easy to extract and as in the current situation the bottom line for policy appears unfortunately to be ambiguous. In particular to the extent that the recent behavior of long term rates reflects that the declining term premium the policy rate associated with a given degree of financial stimulus will be higher than usual but to the extent that long term rates have been influenced by macro-economic conditions, including such factors as trends in global saving and investment, the required policy rate will be lower. Given this reality, policy makers are well advised to follow two principles familiar to navigators throughout the ages. First, determine your position frequently and second use as many guides or landmarks as are available.

In the context of monetary policy, these principles suggest that policy makers should monitor bond yields carefully in judging the state of the current economy, but only in tandem with the signals from other important financial variables, as well as direct readings on spending, production and prices and a goodly helping of qualitative information.

Ultimately a robust approach to policy making requires the use of multiple sources of information and multiple methods of analysis combined with frequent reality checks. By not tying policy to a small set of forecast indicators, we may sacrifice some degree of simplicity but we are less likely to be misled when a favorite variable behaves in an unusual manner.

Thank you very much. (Applause)

QUESTION AND ANSWER PERIOD

BARBARA HACKMAN FRANKLIN: Mr. Chairman that was a dazzling treatise. Thank you very much. We have two very distinguished questioners for you tonight. On this side of the dais John Lipsky who's Vice Chairman of JP Morgan Investment Bank and on the other side Glenn Hubbard who is Dean of the Columbia Business School and former Chairman of the Presidents Council of Economic Advisors.

First question, John I'll turn to you.

JOHN LIPSKY: Thank you. And first I'd like to say on behalf of fellow club members and our guests, I want to offer congratulations and best wishes on your new responsibility to Ben Bernanke. Thanks for coming here tonight and we hope to welcome you back many times in a long and successful tenure as Fed Chairman.

THE HONORABLE BEN BERNANKE: Thank you John.

JOHN LIPSKY: Thank you very much for that very interesting and stimulating discussion of the meaning of the behavior of long term interest rates. Today we find for example the yield on six-month Treasury Bills is about 4 ¾% while the yield on 10 year notes is about 10 basis points lower. You've discussed many of the issues that may have influenced the behavior of long-term interest rates. But it's also important to note that in the current moment core inflation is within the Feds own central tendency forecast of 1 ¾ to 2% annual increase through the end of 2007. In these circumstances it's of course important not just to look at the implication of long term rates for the economy but also to ask, what kind of guide does the yield curve provide to the stance of Fed policy itself. In particular, does the current modest yield curve inversion imply that Fed policy already has become restrictive and more broadly what are the key indicators for gauging the impact of the Feds monetary policy on the economic outlook?

THE HONORABLE BEN BERNANKE: As I tried to indicate the term structure is right now a pretty confusing and uncertain guide to the state of policy. To the extent that, in particular to the extent that the decline in longer-term rates reflects declines in term premiums related to perhaps past success in maintaining low and stable inflation then it doesn't have the implication it would have had perhaps, in past decades that policies passed the neutral rate. So, the same issues apply to gauging the state of policy as apply to understanding why long-term rates are low in the first place. In particular as I also indicated in my speech I think there's no substitute for looking at a wide variety of indicators. In particular what does it mean when the Fed says that policy actions are going to be dependent on data? What that means to my mind is that as new data come in we

need to think about not just the number itself in some sense, but what is the implication for the long-term forecast, or the medium-term forecast?

When we see numbers from the labor market or from inflation, how does that revise our views of where the economy's likely to be in the next six, twelve and eighteen months? After all, monetary policy works with a lag and so the only reasonable way to make policy is to think about the actions that have been taken so far, look at the state of the economy and try to make an assessment as to where the economy's going to be a year down the road.

So the key statistic in some sense is the forecast. And many, many variables go into making the forecast. As I've tried to indicate, the term structure alone is not going to be, at this stage by itself, a useful benchmark for policy making. We're going to have to combine it with a variety of other indicators to assess where we are and how we plan to go forward.

GLENN HUBBARD: I'd also like to join John, Ben in offering you congratulations and thanks and as a trustee of the club I guess I'd like to give you special thanks. If we could just have you once or twice a year we would balance our books, just looking at the crowd tonight. But I want to take you back to the saving glut and your observations about it. Associating it both with low levels of the world real interest rate and with global imbalances in the US current account deficit, whether we have a saving glut or a change in the mix of global savers or decline in global investment opportunities, it's clear that the operative word is global. We have to look at factors

beyond those in the United States. In your recent testimony, you noted that the G-7's three-part plan identified the need to increase saving here in the United States, strengthen domestic demand growth in Japan and the Euro zone and increase flexibility in Asia. Two questions for you. How do you assess progress in achieving the plan's approach to resolution of global imbalances and do you tonight have specific additional suggestions for the United States in that regard?

THE HONORABLE BEN BERNANKE: So to repeat the premise, we have of course a large US current account deficit about 6 ½ % of GDP and apparently still rising and I have expressed concern about that because I think while it's possible over a number of years to bring the current account down it does pose certain financial risks particularly risks in changes in interest rates and the dollar. The conventional G-7 type prescription for dealing with the current account deficit has one very important virtue which recognizes that even though current account deficit has the word US if front, it's not a strictly US phenomenon, it is a global phenomenon and requires action not only by the United States but also by our trading partners in order to rebalance in some sense the distribution of final demand around the world. The three part G-7 prescription is higher savings in the US, more flexibility in exchange rates in Asia and greater growth in Europe and Japan to generate more demand. I would add, to part of your question Glenn, I would add that besides greater growth in Europe and Japan, it's also particularly important for there to be greater domestic demand, 'absorption' in the economic lingo, in the economies of east Asia. We have a lot of economies that are essentially running an export led development strategy which I guess is fine except that everybody can't run an export led development strategy, it's necessary for there

over time to be an increased reliance on domestic demand in Asia to help move towards this balance.

Now, is any progress being made? Well evidently not a great deal so far, but we can be hopeful. First, what I would point to is perhaps moderately encouraging is that we are beginning to see of course cyclical recoveries in Europe and Japan which will provide more strength to the global economy and should bring a greater share of demand outside of the US. The reason I am only giving that one share is that these recoveries seem to be primarily cyclical, they don't yet seem to reflect the fundamental structural changes that we're looking for to see higher sustainable growth in Europe.

Another slightly positive direction I think, is that China and perhaps to some extent other Asian countries have begun to speak about increasing their own domestic demand as part of their own development process and implicitly as part of the global rebalancing process. So for example, in China there's been discussion of increasing infrastructure spending, of providing more education to rural areas, to reforming the banking system and increasing the social safety net which ought to encourage domestic consumption so all those actions, if they are taken, would be important because they would begin to increase demand in China and make China more reliant on its own spending rather than on exports.

The other areas, Foreign Exchange flexibility, you know as much as I do that we have seen some steps from last summer. We saw a modest appreciation, and China is working towards a more flexible system, but so far of course those steps are relatively modest. One might say also the same about US national savings which has not turned around very significantly. I do think there is some chance that we'll see increased private sector savings in the US in the next year or two if for example housing prices were to moderate. We could still see a weaker wealth affect perhaps, more saving on the part of households, that would be in my view not only desirable in terms of raising the national saving rate but it would be entirely consistent with continued growth at or near potential, so I don't think it's necessarily a problem for the sustained expansion.

So to summarize there are, the current account deficit is a global, it's a system problem. It has to be addressed by all of us collectively in different ways. So far the actual actions taken have been relatively modest, but there is some hope I think, that going forward these actions will become more important to advance further and we'll see more progress in the current account.

JOHN LIPSKY: Thank you. Let's turn to a little bit more detail on some aspects of the domestic US economy that you've already mentioned. In particular, household spending sustained the US economy through the 2001 recession and powered the expansion until joined more recently by strong growth in business capital spending. Nonetheless, worries have been expressed by many observers and you've alluded to them that future consumption growth is vulnerable to a rise in interest rates or a fall in house prices. Typically this view is justified by reference to the low

household savings rate and high household leverage, boosted in part by home equity extraction through mortgage refinancing. A more optimistic reading of current circumstances would emphasize record household net worth, and solid income gains as providing a resilient underpinning to household spending, especially if inflation remains low. How do you assess the outlook for consumers, and what do you consider to be the principal risks?

THE HONORABLE BEN BERNANKE: Well John you are correct that there are some forces acting that would tend to retard to some extent consumption spending those include the likelihood of some slowing in house prices, possible higher interest rates that would encourage saving. There are also factors in the other side of course which include growing incomes, strengthening job market and the lagged effects of wealth accumulation from previous years. So the overall consumer situation as I talked about in my Humphrey Hawkins testimony, there are some risks there. We don't know for sure whether the housing market will be in a moderate slowdown, as we currently expect, and it seems to be supported by the evidence thus far but very early, or whether it will be more significant. We also don't know for sure how strong the response of consumers will be to any such slowdown so that it's a risk factor. Something we're going to have to watch and think about carefully as we, make policy going forward. I guess I would like to comment a bit on the buildup of household debt and the question of whether or not that is itself a factor that would slow the economy going forward. I think from a macro perspective clearly we have to recognize that mortgage debt in particular has grown rapidly in recent years and has risen relative to income quite significantly. I think though that again from a

macro perspective that this increase in mortgage debt may not be a particularly serious problem. First, there has been on the other side of the balance sheet of course significant increases in assets so that balance sheets in general are looking stronger, indeed the ratio of assets to income for the typical family or for the average family is well above long-term averages at the moment. So wealth has grown. Also, families made a lot of progress in restructuring their liabilities, one of the reasons that mortgage debt has grown is because people have substituted mortgage debt which is fixed rate, lower interest because it's collateralized and tax favored for other kinds of consumer credit like credit card debt which in fact is smart financial behavior on their part and helps to explain part of what we've seen. And the Federal Reserve calculates various kinds of interest coverage ratios, the so called 'Financial Obligations Ratio' for example which is a measure of the fraction of family income which is devoted to fixed payments like interest and rent and those kinds of numbers don't show any significant movement, they've been slightly elevated but not very high. One fact I think which is interesting in this regard is that while there's been greater and greater use of adjustable rate instruments, adjustable rate mortgages, many of these or most of them come with fixed rate lock in periods of three, five or seven years before the adjustable rate component kicks in and our estimates at the Federal Reserve are that the re-pricing of these instruments is actually going to take place relatively slowly. Our best estimate is that in 2006, only about 10% of mortgages are going to re-price, so even as interest rates policy rate has gone up, the impact on interest costs for the households are not that high.

Now there are issues in certain sectors perhaps in the sub-prime sector, we've issued guidance as you may know on non-traditional mortgages, option ARM's and the like. There may, they have not yet been but there may be in the future some stress in some areas, but broadly speaking I think that consumer finances are consistent with continued reasonable growth and consumption and enough to keep the economy at or close to its potential outward growth rate.

BARBARA HACKMAN FRANKLIN: Last question.

JOHN LIPSKY: I want to take you to the budget deficit. Your recent comments about US budget deficits got a substantial amount of attention and of course the term deficit is accounting and it's the difference between two economically meaningful and politically relevant words which are spending and taxes. Is the problem in your view the path of future budget deficits or the path of future government spending? And is there a difference in the prospects for future US economic growth according to whether deficit reduction as you discussed, is accomplished through tax increases or spending restraint?

THE HONORABLE BEN BERNANKE: There are, let me address that from 30,000 feet. There are really, the focus of the congress the media and economists, I must concede, on the deficit is useful but incomplete. There are really two key variables that one must think about when thinking about Federal budget activity. One is the deficit but the other is the share of GDP that's devoted to Federal spending.

The share of GDP devoted to Federal spending is the fundamental measure of the amount of resources that is being taken out of the economy by the government as Milton Freidman taught us many years ago. The deficit by contrast, what it basically does is tell us who is going to pay for that spending, is it going to be us or is it going to be our children. There's a big difference obviously just to say something very straightforward, there's a big difference between having a balanced budget where spending and taxes are 15% of GDP and having a balanced budget where spending and taxes are 25% of GDP. So to think about the Federal budget, you really need to think about both sides of that equation, both elements in the calculation. The way to think about this is, Congress needs to look very hard at the size of the government, because the resources extracted to fund government spending really have more than one for one cost. Let me explain what I mean. If you spend a dollar on government spending that costs a dollar in terms of the resources being drawn from the economy but in addition there's what economists call a dead weight loss or an excess burden. There are, because higher taxes do create inefficiencies in the economy and do have effects on growth, there's an extra cost that goes beyond the simple direct cost of the government spending. Now in the long run and perhaps even in the intermediate run, taxes and spending have to be commensurate. That doesn't mean exactly equal but they have to be at roughly comparable levels otherwise you run into exploding debt problems and the bond market will let you know about that. So really there are two coherent positions that one can take and the only law here I'm defending is the law of arithmetic and I think that's perhaps, I hope that's not too controversial. There are two possibilities. One is to say I think government spending has a very high value, I think that an extra dollar of government spending justifies not

only the dollar I'm taking out of the pocket of someone but the additional costs associated with the inefficiencies of higher tax rates on the economy. And I make that judgment, I say I think the worth, the value of that spending is worth it and I'm willing to do that. That's one possibility.

The other possibility is to say, 'Well I value low taxes because low taxes maintain higher levels of efficiency, they promote growth'. But if you take that view, which is a respectable view of course, you also have to say that then I agree that the consequence of that is at least somewhere down the road government spending has to be commensurate with that level of taxes. And so there are different positions, ultimately of course and this is why I stuttered at the beginning of the question, ultimately you can't make that choice without a liberal dose of values of your own personal judgments about the relative value of different spending programs for example and different tax cuts. And that I am happy to say is not my responsibility, that is the responsibility of our elected representatives in Congress and I will urge them, not necessarily to choose high or low spending or high or low taxes, but only to make sure that the choices they make are internally consistent and consistent with long term responsibility in our fiscal finances.

Thank you very much.

BARBARA HACKMAN FRANKLIN: Mr. Chairman we thank you for your thoughtful insights and your clarity. We really appreciate very much your public service, your service to our

country. We wish you much success and we invite you to come back to this podium anytime you have something that you want to say to us.

Thank you very much.

Please give a round of applause to our fine questioners, John and Glenn.

This concludes our program and now your dinner will be served so please enjoy your dinner and your table companions and thanks very much for coming.

END OF MEETING