The Economic Club of New York

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Program

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Chairman of the Federal Reserve System

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David Malpass
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Barbara Hackman Franklin – Presiding Officer:

Good evening everyone. Would you find your seats. Good evening. I am 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 393rd meeting in the 100th year of this esteemed club. We are delighted tonight to welcome back as our honored guest, the Honorable Ben Bernanke, Chairman of the Board of Governors of the Federal Reserve System. We were privileged to have Chairman Bernanke with us in March of 2006, very early in his tenure as Chairman and for his first major address in New York City. We had a sold out event that evening and this one is sold out tonight. It is a tribute to you, Mr. Chairman. And it is also proof that when the Federal Chairman speaks, everyone wants to listen. And you will have that opportunity in just a very few minutes. To those of you with us tonight for the first time, we extend a special welcome. The Economic Club is celebrating its centennial year as the nations premier nonpartisan speaking platform. Our members and their guests gathered here, informative and enriching exchanges from some of the most interesting people in the world. So we are pleased to have so many guests here this evening. I also want to acknowledge the clubs centennial society. To date, 75 club members have made personal tax-deductible contributions to ensure the financial stability of the club into its second century. We honor them as founders of the society. The names of this very distinguished group are in your program and will be listed in all of our programs and in our website well into the future. To those founders who are here, may I once again say thank you for your generosity. Yes you may applaud. (Applause)

Now, to the program. First we will hear from Chairman Bernanke and then we will have our

usual question period. During which, two members of the club, one on either side of the dais, take turns in asking questions of our speaker. At th conclusion of the speaking program, in about an hour, your dinner will be served. So we will go right to the main event.

It is difficult to know whether to introduce the Chairman of the Fed with reverence or with trepidation. This is going to be neither. It will just be brief. Dr. Ben Bernanke is the 14th Chairman of the Federal Reserve System. He was nominated by President Bush, and confirmed easily last year by the U.S. Senate 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 of 2006. He had first joined the Federal Board of Governors in 2002, then became Chairman of the President's Council of Economic Advisors in 2005 and then returned to the Fed the following year, this time as Chairman. Earlier he had been Professor of Economics and Public Affairs at Princeton and Chair of the Economics Department. There he had earned a reputation as one of the best monetary economists of his generation. Since becoming Chairman of the Fed, he has faced a few challenging situations. Most recently, the impact of the subprime mortgage loan problems. He has been calm, insightful and even handed under pressure. Those qualities will serve him well in whatever new challenges are fast moving interlocking global economy will bring. We all understand that he heads the most important financial institution in the world's most important economy. It is an honor to have him here, please welcome to the podium, the Honorable Ben Bernanke, Chairman of the Federal Reserve.

Dr. Ben Bernanke:

Good evening. The past several months have been an eventful period for the U.S. economy. In the financial markets, sharpened concerns about credit quality induced a retrenchment by investors. Leading in some cases to significant deterioration in market functioning. For some households and firms, credit became harder to obtain and for those who could obtain it, more costly. Tightening credit conditions, in turn, threatened to intensify the ongoing correction in the housing market and to restrain economic growth. In response to these developments, the Federal Reserve has taken a number of measures to help ensure the normal functioning of markets, and to promote sustainable economic growth and price stability.

In my remarks this evening, I will review recent events, discuss the Federal Reserves responses to those events, and conclude with some comments on the economic outlook in light of recent developments. Although financial markets around the world have come under pressure in recent months, I will focus my comments primarily on the United States. I will also have little to say this evening about the serious implications of rising rates of mortgage delinquency and foreclosure for troubled borrowers and their communities. Or about the Federal Reserve's responses to these important problems. I have discussed these issues several times in the past and I will return to them in the future.

Overall, U.S. economic performance this year has been reasonably good. The rate of economic expansion slowed somewhat in late 2006 and early 2007, but growth in the second quarter was solid. And some of that momentum appears to have carried over into the third quarter. The pace

of private sector job creation has slowed this year. But unemployment has moved up only a little from its recent lows. And although energy prices had been volatile, indicators of the underlying inflation trend, such as core inflation, have moderated since the middle of last year. Moderate growth in overall economic activity has continued despite a notable contraction in the housing sector that began in the second half of 2005. The housing correction has intensified this year, as demand has declined further. Inventories of unsold new homes have climbed relative to sales and house prices have decelerated. With some areas of the country experiencing outright declines in home values. In response to weak demand and bloated inventories, homebuilders have sharply curtained new construction. The decline in residential investment directly subtracted about three-quarters of a percentage point from the average pace of U.S. economic growth over the past year and a half. In its regular reports to Congress, most recently in July, the Federal Reserve Board has highlighted as a downside risk, the possibility that housing weakness might spill over to other parts of the economy. For example, by acting as a restraint on consumer spending. Thus far, however, direct evidence of such spillovers onto the broader economy has been limited. The housing correction has taken a more visible toll on the financial markets. In particular, since early this year, investors have become increasingly concerned about the credit quality of mortgage, especially subprime mortgages. The rate of serious delinquencies has risen notably for subprime mortgages with adjustable rates, reaching nearly 16 percent in August, roughly triple the recent low in mid 2005. Subprime mortgage originated in late 2005, and in 2006, have performed especially poorly, in part, because of a deterioration in underwriting standards. Moreover many recent vintage subprime loans will experience their first interest rate recess in coming quarters. With the softness in house prices likely to make refinancing more

difficult, delinquencies on these mortgages are expected to rise further.

At one time, most mortgages were originated by depository institutions and held on their balance sheets. Today, however, mortgages are often bundled together into mortgage backed securities or structured credit products, rated by credit rating agencies and then sold to investors. As mortgage loses have mounted, investors have questioned the reliability of the credit ratings. Especially those for structured credit products. Since many investors have not performed independent evaluations of these often complex instruments, the loss of confidence in the credit ratings has led to a sharp decline in the willingness of investors to purchase these products. Liquidity has dried up, prices fell, and spreads widened. Since July few securities backed by subprime mortgages have been issued.

Investors reluctance to buy has not been confined to securities related to subprime mortgages. Notably, the secondary market for private label securities, back by prime jumbo mortgages has also contracted. An issuance of such securities has dwindled. Even though the default rates on such mortgage remain very low, the experience with subprime mortgages has evidently made investors more sensitive to the risks of other housing related assets as well. The problems in the mortgage related sector have reverberated throughout the financial system. And particularly in the market for asset backed commercial paper or ABCP. In this market, various institutions have established special purpose vehicles to issue commercial paper to help fund a variety of assets, including some private labeled mortgage backed securities, mortgages warehoused for securitization, and other long maturity assets. Investors have typically viewed the commercial

paper backed by these assets as quite safe and liquid, because of the quality of the collateral and because the paper is often supported by bank's commitment to provide lines of credit or to assume some credit risk. But the concerns about mortgage backed securities and structured credit products, even those unrelated to mortgages, greatly reduce the willingness of investors to roll over their ABCP, particularly at maturities of more than a few days.

The problems intensified in the second week of August after the announcement by a large overseas bank that it could not value the ABCP held by some of its money funds and was, as a result, suspending redemptions from those funds. Some commercial paper issuers invoked their right to extend the maturity of their paper and a few issuers defaulted. In response to the heightening of perceived risks, investors fled to the safety and liquidity of treasury bills. Sparking a plunge in bill rates, and a sharp widening in spreads on ABCP. The retreat by investors and structured investor products, also affected business finance. In particular issuance to collateralized loan obligations, CLO's and collateralized debt obligations, CDO's, which in turn have been major buyers of leverage syndicated loans, fell off significantly during the summer. Demand for leveraged loans slowed sharply, reducing credit access for private equity firms and other borrowers seeking to finance leverage buyouts or LBO's. Concerns about liquidity and credit risk, surfaced even in markets in which securitization plays a much smaller role. For example, spreads on lower tier, unsecured commercial paper jumped and issuance was limited to very short maturities. In corporate bond markets, issuance of speculative grade bonds dropped off sharply as risk spreads widened. And although equity prices have moved up on balance since late spring, swings in prices have been large. Indeed the expected stock price

volatilities implicit in option prices, roughly doubled during the summer before falling back more recently.

As the strains in financial markets intensified, many of the largest banks became concerned about the possibility that they might face large draws on their liquidity and difficult to forecast expansions in their balance sheets. They recognized that they might have to provide backup funding to programs that were no longer able to issue ABCP. Moreover in the absence of an active syndication market for the leveraged loans that they had committed to underwrite and without a well functioning securitization market for the nonconforming mortgages that they had issued, many large banks might be forced to hold those assets on their books rather than to sell them to investors as planned.

In these circumstances of heightened volatility, and diminished market functioning, banks also became more concerned about the possible risk exposures of their counter parties and other potential contingent liabilities. These concerns prompted banks to become protective of their liquidity and balance sheet capacity and thus to become markedly less willing to provide funding to others including other banks. As a result, both overnight and term interbank funding markets came under considerable pressure. Interbank lending rates rose notably and the liquidity in those markets diminished. A number of the U.S. ABC programs that had difficulty rolling over paper, were sponsored by or had backup funding arrangements with European banks. As a result, some of these banks faced potentially large needs for dollar funding. And their efforts to manage their liquidity likely contributed to the pressures in global money and foreign exchange swap markets.

The U.S. subprime mortgage market is small, relative to the enormous scale of global financial markets. So why was the impact of subprime developments on the markets apparently so large. To some extent the outside defects of the subprime mortgage problems on financial markets, may have reflected broader concerns that problems in the U.S. housing markets might restrain overall economic growth. But the developments in the subprime market were perhaps more a trigger than a fundamental cause of the recent financial turmoil. The episode led investors to become more uncertain about valuations of a range of complex or opaque structured credit products, not just those backed by subprime mortgages. They also reacted to market developments by increasing their assessment of the risks associated with a number of assets and to some degree are reducing their willingness to take on risk more generally. To be sure, these developments may well lead to a healthier financial system, in the medium to long-term. Increased investor scrutiny of structured credit products is likely to lead to greater transparency in these products and more rigor in the credit rating process. And greater caution on the part of investors seems appropriate, given the very narrow spreads and the loosening in some underwriting standards, seen before the recent episode began. In the shorter term, however, these developments do imply a greater measure of financial restraint on economic growth, as credit becomes more expensive and more difficult to obtain. Fortunately the financial system entered the episode of the past few months with strong capital positions and a robust infrastructure. The banking system is healthy. Despite a few notable failures, hedge funds overall seemed to have held up well. And their counter parties have not sustained material losses. The clearing and settlement infrastructure generally worked well, despite trading volumes that were extremely high in some cases. Nevertheless the market strains were serious as

I have discussed and they posed risk to the broader economy. The Federal Reserve accordingly took a number of steps to help markets return to more normal functioning. The Federal Reserve's initial action was to increase liquidity in short-term money markets through larger open market operations. The standard means by which it seeks to insure that the federal fund rate stays at or near the target rate set by the Federal Open Market Committee, the FOMC.

A number of other central banks took similar steps. One source of pressure in the overnight market was the demand for dollar funding by European banks to which I alluded earlier. As Europe is in the latter part of its trading day, when U.S. markets open, this extra demand for dollars at times led the Federal Funds Rate to open well above its target. The extra provision of liquidity by the Fed helped counter the resulting pressure on the funds rate early in the day. It also eased banks concerns about the availability of credit and thus assisted the functioning of the inter-bank market.

To be clear, an open market operation can provide market participants with increased liquidity. But the intervention does not directly increase participants' capital or allow them to shed risk. In essence these operations are short-term loans collateralized by government securities. The vigorous provision of funds through open market operations succeeded in dampening pressures in overnight funding markets. Yet, markets for term funding, including commercial paper markets as well as the inter-bank markets, remained strained. And signs of broader financial stress persisted.

On August the 17th, the Fed took further action, when the Federal Reserve Board cut the discount rate. The rate at which it lends directly to banks, by 50 basis points or ½ a percentage point. The Fed also adjusted its usual practices to facilitate the provision of financing for as long as 30 days, renewable at the request of the borrower. Loans for the discount window differ from open market operations, in that they can be made directly to specific banks with strong demands for liquidity. In contrast, open market operations are arranged with a limited set of dealers of government securities. In addition, whereas open market operations typically involve lending against government securities, loans through the discount window can be made against a much wider range of collateral, including mortgages and mortgage backed securities. As with open market operations, however, Fed lending through the discount window, provides banks with liquidity, not with risk capital. In particular, the strong collateralization, accompanying discount window credit, eliminates essentially all risk for the Federal Reserve System and thus, for the U.S. taxpayer. Nonetheless, the availability of the discount window is potentially significant for banks as it gives them greater confidence that they can obtain greater liquidity as necessary. Access to a back stop source of liquidity in turn reduces the incentives of banks to limit the credit they provide to their customers and to their counter parties.

The Federal Reserve also took some other steps in response to strains in financial markets. Including reducing the fee that it charges for lending treasury securities from its portfolio. Thus helping to meet he heavy demands in the markets for those securities. The Federal Reserve's action is to ease the liquidity strains of financial markets, were similar to actions that central banks have taken many times in the past. Promoting financial stability and orderly functioning of

financial markets is a key function of central banks. Indeed, a principle motivation for the founding of the Federal Reserve, nearly a century ago, was the expectation that it would reduce the incidence of financial crises by providing liquidity as needed. In its supervisory role, the Federal Reserve, like other bank regulators, attempts to ensure that individual banks maintain adequate liquidity and make provision to raise additional funds quickly should the need arise.

We must be wary of a subtle fallacy of composition, however. Even if each market participant holds a significant reserve, of what in usual times would be considered highly liquid assets, for the system as a whole, the only truly liquid assets are cash and its equivalence. The quantity of cash assets in the system at a point in time is in turn essentially fixed. Being determined directly or indirectly by the central bank. Thus, whenever an investor sells less liquid assets to raise cash, the cash holdings of other market participants are reduced by an equal amount. Consequently I highly stressed financial conditions, when the market wide demand for liquidity rises sharply, one of two things must happen. Either the central bank provides the liquidity demanded by lending against good collateral or force sales of liquid assets will drive the prices of those assets well below their longer-term fundamental values. Raising the risk of widespread insolvency and intensifying the crisis. If the crisis becomes sufficiently severe, history suggests that damage to the broader economy is likely to follow.

In his classic 1873 treatise called Lombard Street, Walter Bagehot famously articulated the need for central banks to be prepared to lend freely against good collateral. What he called good banking security, but at a penalty rate. A panic, said Bagehot, is a species of neuralgia, and as

such, must not be starved. Of course, judgment is required to assess whether a particular set of market conditions is severe enough to warrant extraordinary injections of liquidity by the Central Bank. A too aggressive intervention could unduly reduce the incentives of market participants to ensure against more normal liquidity risks. In the steps that it took, the Federal Reserve strove to reach a middle ground. Signaling its willingness and ability to provide liquidity to markets as needed, without significantly distorting the incentives of individual banks and other participants to manage their liquidity prudently.

The Federal Reserve's efforts to provide liquidity appear to have been helpful on the whole. To be sure, the volume of loans to banks made through the discount window, though it increased for a time, has been modest. However, collateral placed by banks at the discount window, in anticipation of possible borrowing, rose sharply during August and September. Suggesting that some banks viewed the discount window as a potentially valuable option.

On the other hand, no amount of liquidity provision by the Central Bank can be expected to solve the problems regarding the valuation of complex securitized assets or to reverse the credit losses on subprime mortgages. These underlying difficulties will be resolved only over time, by the financial markets. Since mid-August, the functioning of financial markets has improved to some degree, supported, not only by liquidity provision but also by the monetary policy action taken in September to which I will return in a moment. Interest rate spreads and ABCP have fallen by more than half from their recent peaks, and overall, commercial paper outstanding has edged up this month after falling sharply in August and September. Inter-bank term funding markets have

improved modestly. Those spreads there remain unusually wide. Some progress has been made in bringing pending LBO related loans to market. Albeit at discounts and at tightened terms. Risk spreads and corporate bond markets have narrowed somewhat. The issuances of speculative-grade bonds have restarted and investment grade issuance has been strong. Volatility in many asset markets has declined toward more normal levels.

Perhaps most important, in many markets, investors are showing an increased capacity and willingness to differentiate among assets of varying quality. In contrast, despite a few encouraging signs, conditions in the mortgage markets remain difficult. The markets for securitized nonprime, that is subprime and so called Alt-A loans, are showing little activity. Securitization of prime jumbo mortgages reportedly has increased only slightly from very low levels. And the spread between the interest rates on nonconforming and conforming mortgages remains elevated. These continued problems suggest that investors will need more time to gather information and re-evaluate risks before they are willing to re-enter those markets.

The Federal Reserve's efforts to support the normal functioning of financial markets have as their ultimate objective the stability and efficiency of the broader economy. In addition, of course, the Federal Reserve can adjust the stance of monetary policy, by changing its target for the Federal Fund's rate. The FOMC monitors monetary policy to further its dual mandate to promote maximum sustainable employment and price stability. The turmoil in financial markets significantly affected the committee's outlook for the broader economy. Indeed, in a statement issued simultaneously with the Federal Reserve Board's August 17th announcement of the cut in

the discount rate, the FOMC noted that the downside risk to growth had increased appreciably. However, to allow time to gather and evaluate incoming information, possible policy action was deferred until the committee's next regularly scheduled meeting on September 18th. A key issue at that meeting was the extent to which the market disturbances had affected the outlook for the housing sector. Financial markets overall had improved somewhat, but tighter terms and standards in the mortgage market, particularly in the nonprime and jumbo segments appeared likely to intensify the correction in the housing market significantly. With adverse implications for construction activity and house prices. Indeed incoming housing data had continued to soften even before the advent of the stress in the financial markets. A further sharp contraction in residential construction seemed likely to hold down overall economic growth in the 4th quarter and early in 2008.

As they had at earlier meetings, the participants in the September meeting evaluated the potential affects of housing market developments on other parts of the economy. They agreed that significant spillovers to household and business spending were not yet evident. For example, auto sales had picked up in August from the low levels of earlier in the summer. And business investment did not appear to have been seriously affected by financial market development, as highly rates firms continued to enjoy good access to credit. Strong growth abroad was also viewed as supporting U.S. exports and domestic production.

And as I have noted, the available evidence suggested that overall economic growth in the 3rd quarter remains moderate. However, downside risks to both household and business spending

had clearly increased over the period since the committee's previous meeting. Notably the weak housing market somewhat downbeat consumer sentiment and slower growth in private sector employment increased the likelihood that consumption spending would slow in coming quarters.

Participants of the September meeting also reported somewhat greater caution in the outlooks of their business contacts. Financial market conditions were expected to improve slowly at best. And even if conditions began to normalize, credit would likely remain noticeable tighter for many borrowers, more so than had been the case during the summer. Furthermore, any weakening in the economy could itself have a negative affect on still fragile financial markets, possibly leading credit conditions to tighten further.

Regarding the other half of its mandate, to promote price stability, the committee noted some improvement over the past year in measures of the trend component of inflation. For example core inflation. Moreover, slower growth and aggregate demand would help to ease pressure on resources. But inflation risk remained including still high levels of resource utilization and elevated prices for oil and other commodities. The committee agreed that continued close attention to inflation developments was warranted. Overall, given the great difficulty of knowing how financial conditions would evolve, or the extent of their affect on the economy, the committee members judged the level of uncertainty in the outlook to be unusually high.

As you know, the committee chose to cut its target for the Federal Funds rate by 50 basis points at the September meeting. This action was intended to help offset the tightening of credit

conditions resulting from the financial turmoil. Risk management considerations also played a role in the decision. Given the possibility that the housing correction and tighter credit could presage a broader weakening in economic conditions and would be difficult to arrest. By doing more sooner, policy might be able to forestall some part of the potential adverse affects of the destructions in the financial markets.

As most of the meeting participants saw growth likely to run below trend for awhile and with the incoming inflation data on the favorable side, the risks to inflation from this action seemed acceptable. Especially as the committee was prepared to reverse the policy easing if inflation pressures proved stronger than expected.

Since the September meeting the incoming data have borne out the committee's expectations of further weakening in the housing market. As sales have fallen further and new residential construction has continued to decline rapidly. The further contraction in housing is likely to be a significant drag on growth in the current quarter and through early next year. However, it remains too early to assess the extent to which household and business spending will be affected by the weakness in housing and by the tightness in credit conditions. We will be following indicators of household and business spending closely as we update our outlook for near term growth.

The evolution of employment and labor income will also bear watching. As gains in real incomes support consumer spending even if the weakness in house prices adversely affects

homeowners' equity. The labor market has shown some signs of cooling, but these are quite tentative so far. And real income is still growing at a solid pace.

On the inflation side, prices of crude oil and other commodities have increased somewhat in recent weeks and the foreign exchange value of the dollar has weakened. However, overall, the limited data that we received since the September FOMC meeting is consistent with continued moderate increases in consumer prices. As the committee noted in its post meeting statement, we will continue to monitor inflation developments carefully.

It does seem that, together with our earlier actions to enhance liquidity, the September policy action has served to reduce some of the pressure in financial markets. Although considerable strains remain. From the perspective of the near-term economic outlook, the improved functioning of financial markets is a positive development, in that it increases the likelihood of achieving moderate growth with price stability. However, in such situations one must also take seriously the possibility that policy actions that have the affect of reducing stress in financial markets may also promote excessive risk taking and thus increase the probability of future crises.

As I have indicated in earlier remarks, it is not the responsibility of the Federal Reserve, nor would it be appropriate to protect lenders and investors from the consequences of their financial decisions. But developments in financial markets can have broad economic affects felt by many outside the markets and the Federal Reserve must take those affects into account when determining policy. In particular, as I have emphasized, the Federal Reserve has a mandate from

Congress to promote maximum sustainable employment and stable prices. And its monetary policy actions will be chosen as so best to meet that mandate.

Indeed, although the Federal Reserve can seek to provide a more stable economic background that will benefit both investors and noninvestors, the truth is, that it can hardly insulate investors from risk even if it wished to do so. Developments over the past few months reinforce this point. Those who made bad investment decisions lost money. In particular, investors in subprime mortgages have sustained significant losses. And many of the mortgage companies that made those loans have failed. Moreover, market participants are learning and adjusting. For example, by insisting on better mortgage underwriting and by performing better due diligence on structured credit products. Rather than becoming more crisis prone, the financial system is likely to emerge from this episode healthier and more stable than before.

I have sought this evening to put recent financial market developments in context and to explain the thinking behind the steps that have been taken by the Federal Reserve. This has been a challenging period. Conditions in financial markets have shown some improvement since the worst of the storm in mid-August. But a full recovery of market functioning is likely to take some time, and we may well see some setbacks. In particular, investors are continuing to reassess the risk they face and have not yet fully regained confidence in their ability to price accurately certain types of securities. The ultimate implications of financial developments for the cost and availability of credit and thus, for the broader economy, remain uncertain. In the coming months, the Federal Reserve together with other agencies, both here and abroad, will

perform comprehensive reviews of recent events to better understand the episode and to draw lessons for the future. For now, the Federal Reserve will continue to watch the situation closely, and will act as needed to support efficient market functioning and to foster sustainable economic growth and price stability. Thank you.

Barbara Hackman Franklin: Thank you very much Mr. Chairman for explaining so clearly the linkages and how a problem in one sector can ripple into others and we appreciate very much what you and your colleagues do to head off such problems. We thank you very much for your service. Now we have two astute questioners for you. On this side of the dais, Henry Kaufman, President of Henry Kaufman Inc, and treasurer of the Club too, I should add. And on this side, David Malpass, who is Chief Economist at Bear Stearns. For the first question, I will turn to Henry.

Henry Kaufman: Thank you Mr. Chairman for that very comprehensive presentation. As you noted, a major responsibility of the Federal Reserve is to pursue policies that will encourage sustainable economic growth. But the economy can be derailed, however, by financial excesses. Now what actions and policies should the Fed really pursue to present these excesses from happening, or do you feel that the Fed can do very little about a credit bubble, but to a large extent knows what to do about it, once it bursts.

Dr. Bernanke: Henry that is one of the toughest questions that central bankers face. I go back one step and I ask the question, what causes these excesses in the first place. One theory is that the Federal Reserve is doing too good a job. You know the economy is just so stable that

investors take on too much risk. I don't actually subscribe to that theory. I think that one thing that is happening is innovation—technological innovation and financial innovation. So for example the Internet is an example of technological innovation, subprime mortgages and securitized credit products are examples of financial innovation. And one of the downsides of innovation is sometimes you make mistakes and have problems. So I think that we face in some sense a broad choice and let me speak now for a moment from a supervisory and regulatory perspective. If we want to have innovation and growth and productivity and change and dynamism, we have to let the system work and we have to sometimes have problems and mistakes and errors. If we want to be tougher and try to restrain some of these excesses, we can do so I think, but we may sacrifice something in exchange. I noted that Jacob Frankel is here. He is a former governor of the Bank of Israel, one of the few people I know who was ever successful use of open mouth operation, who can talk down a bubble. And he commented at Jackson Hole one time recently, that central bankers were able to identify five of every three bubbles. The point being that from a macroeconomic policy perspective, it is very, very difficult to ascertain whether a bubble is in progress, early enough in the process to address it effectively, using macro-monetary policy type tools. This is not to say it wouldn't be desirable to do it if it were possible. I just think that it is quite difficult in practice to identify the bubble, to use your blunt interest rate tools to attack that bubble without attacking other asset prices and to figure out how much to calibrate the interest rate change to bring the asset prices down to "the appropriate level" whatever that might be. In addition, as you do that, you face the risk that your interest rate policy will be inappropriate or inconsistent for trying to achieve your macro-objectives of growth and stable prices. So having said that, I think, using monetary policies is very difficult. Again, I

do think that if you can avoid bubbles, it is a good idea. I think the better way to approach it, if you can, is by a well balanced and well thought out supervisory or regulatory approach that tries to look for situations where there incentives are misaligned or where excessive risk is not being appropriately compensated in order to try to get in the way of some of these things. And I assure you the central bankers are very sensitive to these issues and would pay very close attention to it. But as you can tell from my meandering answer, it is a very, very tough question. It is one that I think is going to be one of the central issues that central bankers look at over the next few decades.

David Malpass: Mr. Chairman, thank you very much for your clear remarks tonight. That wasn't a rambling answer. And so my question is on inflation. One theory of monetary policy is that inflation will be reasonably low, if the dollar holds its value over time and will rise if the dollar loses value. In 2004 and 2005, the dollar's value relative to gold and other commodities and many currencies weakened sharply, a cautionary symbol on inflation, which invited faster rate hikes than the fed pursued. Do you think the value of the dollar impacts inflation or should play a role in monetary policy.

Dr. Bernanke: Well David, you know I have to begin this answer by saying that these Secretary of the Treasury is the official spokesperson for U.S. dollar policy. So let me just be sure to say that first. But I will try to answer your question. The limit of your approach, if you went to the extreme would be to have a fixed exchange rate system, where the dollar's value is fixed in terms of other currency or in terms of gold or whatever. I don't believe that a fixed exchange rate

system is a good system for a large economy. The reason being that with a fixed exchange rate system you don't have independence of monetary policy to achieve domestic goals and objectives. So I wouldn't advocate a fixed rate system. In addition, we have to recognize that one of the reasons that exchange rates move is because exchange rates, besides being an indicator of general prices are also a relative price. The real exchange rate also matters. And I would call your attention to the parallels between the recent experience and the experience of the mid 1980's. During the past 10 years or so, during the whole episode of the increase and now the slight moderation of the U.S. trade deficit, there was a period of substantial increases in the real exchange value of the dollar relative to the major currencies relative to general trading partners. That peaked at around 2001, 2002. That has come back down and we are now currently in real terms about where we were in 1996 or 1997. There is a parallel here to the experience in the mid 1980s, when the dollar reacting to capital flows coming into the country appreciated in real terms, peaked in about 1984, then came back down to about where it started. Subsequently the trade deficit improved considerably. We don't yet have seen the full effects in this case. So there are some relative price effects that we have to take into account. Which is another reason why I wouldn't want to have a fixed exchange rate system or try to stabilize the dollar. Having said all of that and having gone one further step, one cannot deny that all else equal, when the dollar depreciates, that there is some inflationary impact, it comes through the cost of imports, potentially, and potentially to the prices of goods and services that compete with imports, domestically. Our experience over the recent decade has been that those affects are relatively small, but nevertheless I think it is important that we pay attention to them and that we figure them into our calculations. One way to think about it is in terms of the domestic purchasing

power of the dollar. And indeed the Federal Reserve's mandate is to preserve that purchasing power in terms of domestic prices. Price stability is our objective and I believe we can achieve that better with a flexible exchange rate system than a fixed exchange rate system. That being said, no central banker can be entirely indifferent to the exchange value of the currency of the country, and we certainly will pay attention to that issue.

Henry Kaufman: Mr. Chairman, as you suggested, marking to market is an important ingredient in our securitized marketplace. For those who want to try to maximize profits and for those who work at it through quantitative analytical techniques. But as markets have shown recently as you suggested, not all assets are readily marketable. Even marking to market is not that precise. Marking to a matrix and marking to models is questionable. As a result of that, what are your thoughts on this conundrum for market participants and also for you as an official policymaker.

Dr. Bernanke: You asked me another excellent question. We have a situation today where for example, subprime mortgages, or even prime jump mortgages are not trading actively in a secondary market. And therefore, it is very difficult to know what the appropriate price is when evaluating the assets of a special, structured investment vehicle or even a bank or investment bank. The alternative to using a market price is to try to use some kind of logic, whether it be a former model, whether it be a comparison to other assets, but the answer is, there is no fully satisfactory solution. Accountants of course have been spent a lot of time trying to figure out the best way to deal with the situation. The recent episode has brought it to the attention of other regulators, including the Federal Reserve, and something clearly we have to think about. I think

the best answer is that the firm or the vehicle in question needs to be as transparent as possible about what it has and how it values its assets. So in particular we do have methods by which the bank or the investment bank or the special purpose vehicle can describe how different buckets of its assets were valued, what the assumptions were, what the approach was. And I think that does provide some information, useful information to investors. But you put your finger right on the issue of why this current financial stress is not likely to disappear overnight. And partly it is an information problem. That it is going to take a while for investors, particularly investors who have been relying very heavily on credit ratings only and had not done independent analysis. It is going to take a while for investors to find ways to appropriately value these assets and until they are confident in their valuations, they are not going to be willing to fund these vehicles. So it is an issue that is going to be important to resolve as we try to bring the financial markets back to more normal functioning.

David Malpass: Mr. Chairman the widespread assumption is that slower growth will cause inflation to moderate. Do you agree with that and how do you see the trade off, if any, between growth and inflation.

Dr. Bernanke: Well you have to address this issue with some care. There was certainly a time in the 60's and early 70's when there was thought to be a permanent, or at least very long term trade off between inflation and growth. And therefore, those who were in favor of low inflation were against growth or against employment. And we certainly know that it as wrong as can be. Policies that weren't based on that permanent trade off had been failures. And I think we have

made progress as a profession to get beyond that very simplistic trade off perspective. I do think, though, nevertheless that over short periods of time, if you have the particular situation in which growth of spending or aggregate demand is lower than the capacity of the economy to produce, then you can develop some slack in markets and you can reduce the ability of firms to pass through price increases. And that in turn can have some affect on inflation. Indeed, part of the reason that we have some confidence in inflation remaining well controlled is that we expect to see the economy growing more slowly at the end of this year and earlier next year. Again, I want to emphasize, it is not slow growth per se, but rather slow growth in spending relative to the capacity of the economy. That can for periods of time reduce pressure on resources and pressure on prices. But again that is a short run phenomenon. We know from looking at short periods in the past. But over the longer period we have now come to understand that low inflation is really essential for solid economic growth to persist and to be sustained. And indeed, if there is one thing that a central bank can do to make sure that the economy will grow in an efficient, productive and sustainable manner, is to make sure that inflation remains well controlled and low. And indeed the Federal Reserve will be, of course very focused on doing that.

Henry Kaufman: Mr. Chairman you have been an advocate of maximum transparency as it applies to monetary policy. But, certainly the events of the last few months suggest that there has been an opaqueness about market information and what has been going on, even though we are an open credit market. So what market and economic information which you do not already have, would you like to have in order to improve your decision making process at the Fed.

Dr. Bernanke: I would like to know what those damn things are worth. (Applause and laughter) We have first of all, this episode has revealed a weakness in the structured credit products. There are many, many strengths to structured credit products. Spreading of risk, the fact that mortgage credit is no longer dependent on deposits in a savings and loan, but can be drawn from the entire world. So there are many, many benefits to it, but he recent experience has shown that there are some cost as well. And those include in particular, the cost of trying to assess accurately what the value of these assets are. And I discussed in reference to your earlier question, what some of the issues are in terms of trying to get good account evaluations of those assets. With respect to what the Federal Reserve does, I gave some remarks last January in a speech at the Annual Economics Convention, which tried to address the question of why does the central bank, why does the Federal Reserve ... why are we bank supervisors as well as central bankers. Why do we have responsibility for so-called umbrella supervision of large bank holding companies and financial holding companies. And I argued that there is a good reason for it. And the reason is that as bank supervisors we have the expertise, the experience, the contacts and the information to help us in situations just like this, that would be much more difficult for us to get if we were solely a central banking monetary policy operation. And when I gave that speech in January, it was based on my reading of history and my thinking about the issues and so on, and I thought it was quite persuasive at the time. I really believe it now. Our experience has been that by being able to talk to the banks, talking to other financial institutions, by using our supervisory information, our examination information and so on, we have been able to learn quite a bit about these evaluations and about the positions of individual banks. And frankly, as I have said, I think the strength of the banking system and the adequacy of capital has

been a real positive, which has really helped keep this episode much more limited than it would be if major institutions were facing serious issues.

David Malpass: Mr. Chairman, the U.S. household sector has a low official savings rate, but that measure doesn't count any of the capital gains taking place in the economy. The Feds flow of funds data, includes gains and clearly shows a large accumulation of household savings. Which way should we think about it. And is the U.S. household sector broke?

Dr. Bernanke: Well David you have over the years made this point very effectively on a number of occasions, which is that, the issue is this, for those of you who are not as immersed in national income accounting as some of us are. The issue is that when we talk about savings or savings rates, what we mean is the difference between the flow of income being received and the consumption going out. That is what is called saving and that is very, very low in the United States as may of you know. However, that definition of saving, that flow definition of saving, does not include capital gains. So if you are a family and your house value has gone up or your stocks have gone up or whatever, you may not have done any saving, but your asset position, your wealth position, nevertheless may well have increased. And so there are really two different concepts of saving here or wealth. And it is important I think to keep them separate and understand which ones are appropriate in which circumstances. Clearly in terms of the issue of the wealth of the household sector of the U.S., it is the determinants of its spending and saving behavior, I think the broader concept, including capital gains, including wealth, is the right concept and when we think about ... for example the Federal Reserve, as we think now about

why we think consumer spending might ... is at some risk of slowing. One of the reasons is that as house equity, homeowner equity has slowed, that reduction in capital gains or in wealth is going to cause some pullback by consumers and so that is the right concept to use in thinking about the relationship between housing wealth and spending. There are, however, some areas, some issues on which the sort of flow measure, income minus consumption is the right one. In particular the capital gains in your home or your stocks, are not available for creating new capital goods or new like housing or factories. It is only the flow saving that is available to do that. And whatever flow saving we have, if it is not enough to create the new capital goods, we have to borrow the rest from abroad, and that is what is called the current account deficit or the trade deficit. So in talking about issues of the relationship between saving defined in the narrow sense and issues like the amount of size of the current account deficit or the amount we have to borrow from foreigners, that more narrow definition is the one that is most instructive and most helpful. So it really very much depends on the kind of issue you are looking at. But again, I urge you to continue to make that distinction, because in many contexts, even when we talk about very low savings rates in the flow sense, it is still true that American household wealth has been growing over the last few years in a quite healthy way. Thank you. (Applause)

Barbara Hackman Franklin: Thank you. We are not broke, delighted to hear that. Thank you so much Mr. Chairman for such an illuminating, clear, and stimulating exposition. We really appreciate it. You are welcome back to this podium any time you want to come back here. (Applause) We wish you well in the days, months, weeks, everything, that is coming at you, ahead, and we thank you very much for your service to our country and thank you for being here

this evening. And please have a round of applause to our fine questioners, Henry and David. And that concludes our speaking program. Your dinner will be served, please enjoy that and your table companions and thanks very much for joining us this evening.