

Four Questions about the Financial Crisis

Ben S. Bernanke

Morehouse College, Atlanta, Georgia

April 14, 2009

I am pleased to have the privilege of speaking today to the students and faculty of Morehouse College, the only all-male historically black institution of higher learning in the United States. It is sufficient to note that Martin Luther King, Jr., was a graduate of Morehouse. Yet a roster of distinguished alumni that also includes former Atlanta Mayor Maynard Jackson, former U.S. Surgeon General David Satcher, and filmmaker Spike Lee testifies to the success of your stated mission of "producing academically superior, morally conscious leaders for the conditions and issues of today."

My remarks today will focus on the ongoing turmoil in financial markets and its consequence, the global economic recession. The financial crisis, the worst since the Great Depression, has severely affected the cost and availability of credit to both households and businesses. Credit is the lifeblood of market economies, and the damage to our economy resulting from the constraints on the flow of credit has already been extensive. With recent job losses exceeding half a million per month, this year's college graduates are facing the toughest labor market in 25 years. In the communities in which you and I grew up, many families are trying to cope with lost employment and depleted savings or are facing foreclosure on their homes. Firms have shut factories and cancelled construction projects. States and municipalities are scrambling to find the funding to provide critical services. And although we naturally tend to be most aware of conditions in the United States, we should not overlook the impact that the crisis is having virtually everywhere in the world, particularly on many citizens of countries that struggle economically even when the global economy is doing well.

In the midst of all of these concerns, many Americans have recently celebrated Easter or Passover. As you may know, a highlight of the traditional Passover meal occurs when the youngest child asks four questions, the answers to which tell the history of the Jews when they were slaves in Egypt and during their exodus to the Promised Land. In the spirit of the holiday, today I will pose and answer four important questions about the financial crisis. Of course, my answers will have to be brief, but we will have more time for additional questions at the conclusion of my prepared remarks.

How Did We Get Here?

The first question I would like to address is: How did we get here? What caused our financial and economic system to break down to the extent it has? Not surprisingly, the answer to this question is complex, and experts disagree on how much weight to give various explanations. In my view, however, to tell the story fully--and, in particular, to understand its international scope--we need to consider how global patterns of saving and investment have evolved over the past decade or more, and how those changes affected credit markets in the United States and some other countries.

At the most basic level, the role of banks and other financial institutions is to take the savings generated by households and businesses and put them to use by making loans and investments. For example, financial institutions use the funds they receive from savers to provide loans that help families buy homes or allow businesses to finance inventories and payrolls. Financial markets, such as the stock and bond markets, perform a similar function, as when a firm raises funds for a new factory by selling a bond directly to investors. When the financial system is working as it should, it allocates funds both prudently (that is, with proper attention to risk) and efficiently (to the most productive uses).

Importantly, in our global financial system, saving need not be generated in the country in which it is put to work but can come from foreign as well as domestic sources. In the past 10 to 15 years, the United States and some other industrial countries have been the recipients of a great deal of foreign saving. Much of this foreign saving came from fast-growing emerging market countries in Asia and other places where consumption has lagged behind rising incomes, as well as from oil-exporting nations that could not profitably invest all their revenue at home and thus looked abroad for investment opportunities. Indeed, the net inflow of foreign saving to the United States, which was about 1-1/2 percent of our national output in 1995, reached about 6 percent of national output in 2006, an amount equal to about \$825 billion in today's dollars.

Saving inflows from abroad can be beneficial if the country that receives those inflows invests them well. Unfortunately, that was not always the case in the United States and some other countries. Financial institutions reacted to the surplus of available funds by competing aggressively for borrowers, and, in the years leading up to the crisis, credit to both households and businesses became relatively cheap and easy to obtain. One important consequence was a housing boom in the United States, a boom that was fueled in large part by a rapid expansion of mortgage lending. Unfortunately, much of this lending was poorly done, involving, for example, little or no down payment by the borrower or insufficient consideration by the lender of the borrower's ability to make the monthly payments. Lenders may have become careless because they, like many people at the time, expected that house prices would continue to rise--thereby allowing borrowers to build up equity in their homes--and that credit would remain easily available, so that borrowers would be able to refinance if necessary. Regulators did not do enough to prevent poor lending, in part because many of the worst loans were made by firms subject to little or no federal regulation.

Mortgage markets were not the only ones caught up in the credit boom. The large flows of global saving into the United States drove down the returns available on many traditional long-term investments, such as Treasury bonds, leading investors to search for alternatives. To satisfy the enormous demand for investments both perceived as safe and promising higher returns, the financial industry designed securities that combined many individual loans in complex, hard-to-understand ways. These new securities later proved to involve substantial risks--risks that neither the investors nor the firms that designed the securities adequately understood at the outset.

The credit boom began to unravel in early 2007 when problems surfaced with subprime mortgages--mortgages offered to less-creditworthy borrowers--and house prices in parts of the country began to fall. Mortgage delinquencies and defaults rose, and the downturn in house prices intensified, trends that continue today. Investors, stunned by losses on assets they had believed to be safe, began to pull back from a wide range of credit markets, and financial institutions--reeling from severe losses

on mortgages and other loans--cut back their lending. The crisis deepened last September, when the failure or near-failure of several major financial firms caused many financial and credit markets to freeze up. Stock prices fell sharply as investors lost confidence in the financial sector and became gloomy about economic prospects. Declining stock values, a teetering financial system, and difficulties in obtaining credit triggered a remarkably rapid and deep contraction in global economic activity and employment, a contraction that has persisted through the first months of 2009. Both the ongoing financial crisis and economic contraction have posed major challenges to economic policymakers.

What Is the Fed Doing to Address the Situation?

Those challenges bring me to my second question: What has the Federal Reserve been doing to address the economic and financial crisis?

The Fed's mandate from the Congress is to promote maximum sustainable employment and stable prices. In addition, the Fed is expected to contribute to financial stability by acting to contain financial disruptions and prevent their spread outside of the financial sector. Thus, we have been serving as a first responder to the crisis.

The Fed's basic policy tool for influencing economic activity and inflation is its ability to control very short-term interest rates--specifically, the federal funds rate, which is the rate that banks pay each other for overnight loans. Lower interest rates can be used to stimulate private-sector borrowing and spending at times like the present when the economy is suffering from a lack of demand. In September 2007, shortly after the turbulence in financial markets began and signs of economic weakness started to appear, the Federal Open Market Committee (FOMC), the body that determines the Federal Reserve's monetary policy, began to aggressively reduce the federal funds rate. By the spring of 2008, we had cut that interest rate from 5-1/4 percent to 2 percent, a highly proactive policy that helped to cushion the economy from some of the effects of the financial turmoil. But, as I mentioned a moment ago, the intensification of the financial crisis in the fall of 2008 led to a further significant deterioration in the economic outlook. The FOMC responded with additional interest rate cuts, and since December, our policy interest rate has been essentially zero. In addition, the FOMC has made clear that it expects economic conditions to warrant holding the federal funds rate low for an extended period.

However, given the ongoing problems in credit markets, conventional monetary policy alone is not adequate to provide all the support that the economy needs. The Fed has therefore taken a number of steps to help the economy by unclogging the flow of credit to households and businesses. In doing so, we have demonstrated that the Fed's toolkit remains potent, even though the federal funds rate is close to zero and thus cannot be reduced further.

We have taken a wide range of actions to help restore the flow of credit, of which I will only mention a few of the most important. One set of actions involves making short-term loans to banks and other financial institutions. Banks and other financial intermediaries normally make longer-term commitments--such as residential mortgages and business loans--yet rely on funding that may be relatively short-term, such as customer deposits that can be withdrawn at any time. To have the

confidence to commit to longer-term loans and investments, banks must be sure that they will have ample access to funding when necessary. To give this assurance to banks, the Federal Reserve has made clear that it will provide short-term credit to sound financial institutions as needed. Indeed, serving as a lender of last resort to financial institutions is a method that central banks have used for centuries to try to calm financial crises.

To underscore our commitment to providing short-term funding to banks when they need it, we have lowered the interest rate we charge for short-term loans and extended the term of the loans to up to three months. We have also begun to auction funds to financial institutions, thereby allowing the interest rate paid to depend on the level of demand. Importantly, this lending is extremely safe from the point of view of both the Fed and the taxpayer. Not only is our lending short-term and restricted to healthy institutions, but we require that the borrowers pledge, as security, collateral whose value exceeds the amount we are lending. The Fed's lending to financial institutions has helped to ease conditions in a number of key financial markets, reduced important benchmark interest rates (such as the London interbank offered rate, or Libor, to which payments on some mortgages and other types of loans are tied), and increased the willingness of banks to make credit available.

A second strategy the Fed has employed is to use targeted lending to help free up critical credit markets outside of the banking system. A good example of targeted lending is our efforts in the commercial paper market. Commercial paper is a form of short-term debt issued by a variety of businesses to finance their operations; paychecks and payments to suppliers can depend on it. Among the largest investors in commercial paper are money market mutual funds. At the peak of the crisis last fall, many people who had invested in money market mutual funds lost confidence in those funds and withdrew their money; this loss of funding forced money market mutual funds to reduce their own investments, which in turn caused serious problems in the commercial paper market. Through a series of lending programs, and in coordination with steps taken by the Treasury, the Federal Reserve helped restore confidence in both money market mutual funds and the commercial paper market. Over time, withdrawals from money market mutual funds have been replaced by modest net inflows, and borrowers in the commercial paper market have seen significant improvements in the cost and availability of funding.

More recently, the Federal Reserve has also initiated a lending program, with the cooperation of the Treasury, designed to free up the flow of credit to households and small businesses. Among the forms of credit on which the program is currently focused are auto loans, credit card loans, student loans, and loans guaranteed by the Small Business Administration. We are currently reviewing other types of credit for possible inclusion in this program. In all cases, we will be taking the appropriate measures to minimize the risk of loss to the Federal Reserve.

Restoring stability to the market for housing and home mortgages has been a particular area of concern. To address this problem, the Fed has employed a third type of policy tool--namely, buying securities in the open market. The FOMC has approved purchases of well over \$1 trillion this year of mortgage-related securities guaranteed by the government-sponsored mortgage companies, Fannie Mae and Freddie Mac. Buying mortgage-related securities helps to drive down the interest rates that consumers pay on mortgages, and, indeed, the rate on a traditional 30-year fixed-rate mortgage has recently fallen to less than 5 percent, the lowest level since the 1940s. Certainly, the

housing market remains depressed, but lower interest rates and house prices are making houses more affordable. For example, two years ago, when mortgage rates were higher than 6 percent, payments on a mortgage covering 80 percent of the cost of a \$215,000 home would have been more than \$1,000 per month; today, the price of that same house may have fallen to \$170,000, and, at today's mortgage interest rates, the monthly payment would be about \$700. Lower mortgage rates are also helping some homeowners refinance their mortgages to reduce their monthly payments.

The Federal Reserve will continue to take the necessary steps to unclog the credit markets and strengthen the economy. We will also continue to work closely with other agencies, such as the Treasury and the Federal Deposit Insurance Corporation (FDIC), each of which has also taken a variety of actions to help stabilize financial markets, as well as with other central banks around the world.

Does the Fed's Aggressive Response Risk Inflation Down the Road?

The multifaceted policy response that I've described has been aggressive. I am confident that such a proactive policy response is well justified by the serious ongoing problems in financial markets and the economy. However, some have raised the third question I will address: Could the Fed's aggressive actions to stabilize the economy today lead to an inflation problem down the road?

I mentioned earlier that the Fed's mandate from the Congress is to foster price stability as well as maximum sustainable employment. The FOMC treats its obligation to ensure price stability extremely seriously. Price stability supports healthy economic growth, for example, by making it easier for households and businesses to plan for the future. In practice, price stability does not require that inflation be literally zero; indeed, although inflation can certainly be too high, it can also be too low. Experience suggests that inflation rates that are close to zero or even negative (corresponding to deflation, or falling prices) can at times be associated with poor economic performance. Cases in point include the United States in the 1930s and the more recent experience of Japan. In their latest quarterly projections of the economy, most members of the FOMC indicated that they would like to see an annual inflation rate of about 2 percent in the longer term. Right now, because of the weakness in economic conditions here and around the world, inflation has been running less than that, and our best forecast is that inflation will remain quite low for some time. Thus, the Fed's proactive policy approach is not at all inconsistent with the goal of price stability in the medium term.

Although inflation seems set to be low for a while, the time will come when the economy has begun to strengthen, financial markets are healing, and the demand for goods and services, which is currently very weak, begins to increase again. At that point, the liquidity that the Fed has put into the system could begin to pose an inflationary threat unless the FOMC acts to remove some of that liquidity and raise the federal funds rate. We have a number of effective tools that will allow us to drain excess liquidity and begin to raise rates at the appropriate time; that said, unwinding or scaling down some of our special lending programs will almost certainly have to be part of our strategy for reducing policy stimulus once the recovery is under way.

We are thinking carefully about these issues; indeed, they have occupied a significant portion of recent FOMC meetings. I can assure you that monetary policy makers are fully committed to acting as needed to withdraw on a timely basis the extraordinary support now being provided to the economy, and we are confident in our ability to do so. To be sure, decisions about when and how quickly to proceed will require a careful balancing of the risk of withdrawing support before the recovery is firmly established versus the risk of allowing inflation to rise above its preferred level in the medium term. However, this delicate balancing of risks is a challenge that central banks face in the early stages of every economic recovery. I believe that we are well equipped to make those judgments appropriately. In addition, when the time comes, our ability to clearly communicate our policy goals and our assessment of the outlook will be crucial to minimizing public uncertainty about our policy decisions.

Why Did the Fed and the Treasury Act to Prevent the Bankruptcy of Some Major Financial Firms?

The final question is as difficult as it is important: Why did the Fed and the Treasury act to prevent the bankruptcy of some major financial firms, such as the investment bank Bear Stearns and the insurance company American International Group, or AIG? We must answer that question not only because the decisions have been controversial, but also because it bears on the steps we need to take as a country if we are to avert a repetition of the crisis.

As a general rule, my strong preference is that any firm that cannot meet its obligations should bear the consequences of the marketplace. But recent circumstances have been truly extraordinary. Consider the situation on September 16 of last year, when the insurance conglomerate AIG faced pressures that threatened to force it imminently into bankruptcy. At that time, the strains in the global financial system were unprecedented and extreme, and the confidence of financial market participants in the system was rapidly eroding. The investment bank Lehman Brothers had filed for bankruptcy the day before, and the mortgage giants Fannie Mae and Freddie Mac, after suffering losses that threatened their solvency, had effectively been taken over by the government just two weeks earlier. As waves of panic and fear washed over the markets, the Fed and the Treasury became very concerned about the stability of a number of other major financial firms.

Large, complex financial institutions tend to be highly interconnected with other firms and markets, and AIG was more interconnected than most. For example, AIG had insured many billions of dollars of loans and securities held by banks around the world, and its failure would have rendered those insurance contracts worthless, imposing large losses on the global banking system. In addition, banks had extended more than \$50 billion in credit to the company, much of which would have been lost. Many other serious consequences would have followed from a default by AIG: Insurance policyholders would have faced considerable uncertainty about the status of their policies; state and local governments, which had lent more than \$10 billion to AIG, would have suffered losses; workers whose 401(k) plans had purchased \$40 billion of insurance from AIG against the risk of loss would have seen that insurance disappear; and holders of AIG's substantial quantities of commercial paper would have also borne serious losses.

But much more important, the disorderly failure of AIG would have put at risk not only the company's own customers and creditors but the entire global financial system. Historical experience shows that, once begun, a financial panic can spread rapidly and unpredictably; indeed, the failure of Lehman Brothers a day earlier, which the Fed and the Treasury unsuccessfully tried to prevent, resulted in the freezing up of a wide range of credit markets, with extremely serious consequences for the world economy. The financial and economic risks posed by a collapse of AIG would have been at least as great as those created by the demise of Lehman. In the case of AIG, financial market participants were keenly aware that many major financial institutions around the world were insured by or had lent funds to the company. The company's failure would thus likely have led to a further sharp decline in confidence in the global banking system and possibly to the collapse of other major financial institutions. At best, the consequences of AIG's failure would have been a significant intensification of an already severe financial crisis and a further worsening of economic conditions. Conceivably, its failure could have triggered a 1930s-style global financial and economic meltdown, with catastrophic implications for production, incomes, and jobs.

The Federal Reserve and the Treasury agreed that in the environment then prevailing, AIG's failure would have posed unacceptable risks for the global financial system and for our economy. Accordingly, the Federal Reserve, with the full support of the Treasury, made a loan to AIG to prevent its failure. The loan imposed tough terms; in addition, senior management was replaced, and shareholders lost almost all of their investments. However, because the firm avoided a declaration of bankruptcy, creditors of AIG were protected.

In my view, preventing the failure of AIG was the best of the very bad options available, but it nevertheless involved major costs, including financial risks to the taxpayer. The American people also quite correctly see as unfair that AIG was saved from bankruptcy because of the dangers to the system that its failure would have posed, even as many other companies, including nonfinancial and smaller financial firms, have not received the same treatment. Allowing AIG to at least partly avoid the discipline of the marketplace also sets a bad precedent.

For these reasons, it is essential that we make changes to the financial rules of the game to prevent a similar episode from occurring in the future. First, we must ensure that all types of financial institutions, especially large and interconnected ones like AIG, receive strong and effective government oversight. AIG's regulatory oversight was limited, which allowed it to take dangerous risks largely out of sight of federal regulators.

Second, the AIG experience demonstrates that federal regulators urgently need a new set of procedures for dealing with a complex, systemically important financial institution on the brink of failure. Such rules already exist for banks: If a bank approaches insolvency, the FDIC is empowered to intervene as needed to protect depositors, sell the bank's assets, and take any necessary steps to prevent broader consequences to the financial system. However, for an insurance conglomerate like AIG, or for a large financial holding company that owns many subsidiary companies, these rules do not apply. Among other things, a good system for resolving nonbank financial institutions would allow federal regulators to unwind a failing company in ways that minimize disruptions in financial markets. An effective regime would also provide the authorities greater latitude to negotiate with creditors and to modify contracts entered into by the company, including contracts that set bonuses and other compensation for management. More generally, we

need significant reforms to financial regulation and financial practices that will reduce the risk of future financial crises like the one we are currently experiencing. The Federal Reserve strongly supports such reform efforts.

Conclusion

The current crisis has been one of the most difficult financial and economic episodes in modern history. Recently we have seen tentative signs that the sharp decline in economic activity may be slowing, for example, in data on home sales, homebuilding, and consumer spending, including sales of new motor vehicles. A leveling out of economic activity is the first step toward recovery. To be sure, we will not have a sustainable recovery without a stabilization of our financial system and credit markets. We are making progress on that front as well, and the Federal Reserve is committed to working to restore financial stability as a necessary step toward full economic recovery.

I am fundamentally optimistic about our economy. Among its many intrinsic strengths are universities and colleges like Morehouse, which help talented students gain not only a command of a body of knowledge but also the capacity to think creatively and independently. Institutions like this one train the professionals, entrepreneurs, and leaders who will shape our economy in the future. Today's economic conditions are difficult, but the foundations of our economy are strong, and we face no problems that cannot be overcome with insight, patience, and persistence. The Federal Reserve will certainly do its part to help restore prosperity and opportunity to our economy.