

**Conversation with the Chairman: A Teacher Town Hall Meeting
August 7, 2012, 2:30 p.m.**

ROSE PIANALTO, ASSISTANT TO THE BOARD: Hello, everyone, and thank you for joining us here in Washington, D.C., today for a conversation with Federal Reserve Chairman Ben Bernanke as he takes questions from teachers about personal finance, the Federal Reserve, and the economy.

My name is Rose Pianalto, and I work here at the Board of Governors, and I look forward to moderating today's session. Here in the Board room of the Federal Reserve, we are pleased to host a group of 60 educators who teach economics and personal finance to young people. We are also joined via video conference by educators from all over the country, who are participating in local events at their regional Reserve banks and branch offices, as well as many who are viewing this exchange via webcast.

Through this session, the Federal Reserve System seeks to advance the conversation about the importance of financial education for young people. We also hope to provide insights into the Federal Reserve's goals and activities so we can support the work you do with students as you strive to teach them how the decisions made by the Central Bank affect them, their families, and the economy. Throughout our event today, Twitter users can follow the Federal Reserve Board's feed, @FederalReserve, and join the discussion about the event by using the hashtag, #fedtownhall.

Today, we are honored to bring you Federal Reserve Chairman Ben Bernanke. Before coming to the Board of Governors in 2002, Chairman Bernanke was a professor of economics and public affairs at Princeton University. He also chaired the Department of Economics from 1996 to 2002. Chairman Bernanke served as a Governor of the Federal Reserve System from 2002 to 2005. In 2005, he became the Chair of the President's Council of Economic Advisers. He returned to the Federal Reserve as the Chairman of the Board of Governors in 2006. Chairman Bernanke grew up in Dillon, South Carolina, and received the BA in economics from Harvard University and a Ph.D. in economics from the Massachusetts Institute of Technology. He and his wife Anna, also an educator, have two children.

Thank you for joining us today, Mr. Chairman.

[Applause.]

CHAIRMAN BEN S. BERNANKE: Hi and welcome. Welcome to the Federal Reserve. I am delighted to have the opportunity to speak today with educators throughout the country on the topic of financial education. Thank you for your participation and for the important work you do. As an educator myself, I understand the profound effect that good teachers and a quality education have on the lives of our young people. Today I hope you will learn from each other and share ways to best promote learning and, in particular, to help students achieve greater financial literacy.

Financial education supports not only individual well-being, but also the economic health of our nation. As the recent financial crisis illustrates, consumers who can make informed decisions about financial products and services not only serve their own best interests, but, collectively, they also help promote broader economic stability. Smart financial planning--such as budgeting, saving for emergencies, and preparing for retirement--can help households enjoy better lives while weathering financial shocks.

Financial education can play a key role in getting to these outcomes. Research by Federal Reserve Board staff members on the effectiveness of financial education for young military personnel, for instance, found that those who had taken a high school financial education course were more likely to save regularly.

Effective financial education is not just about teaching students about financial products or performing financial calculations. It also involves teaching them the essential skills and concepts they will need to make major financial choices. High school students might not recall specific information from a lesson about loans a year later when they go to get their first car loan or student loan. However, if they understand and remember some basic ideas--for instance, that it's important to shop around for a loan to get the lowest interest rate, to review the fees charged, and to know how to contact financial counselors and advisers--they will be more likely to make a good decision.

A particularly valuable lesson we can teach students is how to apply an economic way of thinking to their decisions. For instance, the topic of student loan debt and whether students are prepared to service that debt upon graduation has received increased attention lately. Students with some exposure to economic thinking will be more likely to conceptualize their spending on postsecondary education as an investment in their own human capital and choose their school, course of study, means of paying for their education, and profession with that thought in mind. Likewise, the economic tool of cost-benefit analysis should help students make sounder personal and financial decisions.

Financial education also provides a context for students to develop important skills that can be applied more broadly. Making good financial decisions requires that consumers seek out relevant information from trustworthy sources, and that they use critical thinking, quantitative reasoning, and decision-making skills. These competencies are also some of the fundamental abilities our schools seek to inculcate in our children.

As with other types of education, the format and quality of the content matters a great deal. Providing financial education that is realistic, interesting, and relevant can help students retain information and remain engaged. Games and simulations can be particularly effective at keeping students interested. For example, in 2010, I spoke at the opening of the Junior Achievement Finance Park in Fairfax, Virginia. This organization, as well as similar facilities throughout the country, allows students to play the role of a family head with financial challenges and opportunities, giving them a chance to practice financial decision-making in a realistic setting.

Students and their parents can become financially literate together through exercises such as intergenerational homework assignments, which reinforce the concepts taught in class. Such strategies allow educators to help adults who until then may not have been exposed to financial concepts.

To provide the most effective education, curriculums should also have clear standards and goals. To that end, the federal government's Financial Literacy and Education Commission, of which the Federal Reserve is a member, has identified five core competencies that should be covered by financial education: earning and income, spending, saving and investing, borrowing, and protecting. Behind each of these competencies is a set of related knowledge and skills, and corresponding behaviors. For

example, in the category of earning and income, students are expected to know the difference between gross pay and net pay, and information about benefits and taxes. With this knowledge, they can understand their pay stubs and take full advantage of their workplace benefits. The five core competencies are reflected in the National Standards for Personal Finance being developed by the Council for Economic Education; several of our Federal Reserve System colleagues are working with the council on this project.

While it is important to begin teaching financial skills to children and teenagers, achieving and maintaining financial know-how is a lifelong undertaking. The types of financial decisions that people have to make--from paying for school to buying a home to planning for retirement--vary through the course of their lives, and thus we need to ensure that access to financial education is readily available at all stages of life. Moreover, relevant, accurate, and reliable financial information must be readily available to consumers at the time they are making their decisions. Given the ubiquity of smartphones, applications for mobile devices may be one effective method of delivering this just-in-time information at a relatively low cost. For example, our colleagues at the Department of the Treasury are currently running an "app" contest to design mobile tools to help Americans make better financial choices.

Because financially capable consumers ultimately contribute to a stable economic and financial system as well as improve their own financial situations, it's clear that the Federal Reserve has a significant stake in financial education. We demonstrate our commitment through numerous programs and resources offered by the Federal Reserve System staff and through partnerships our Reserve Banks have formed with local educators and institutions. For instance, the Federal Reserve Bank of Chicago, during its annual Money Smart Week, conducts free classes and activities to help consumers better manage their personal finances. And the Federal Reserve Bank of St. Louis offers a broad selection of online personal finance courses that teachers can use along with their students. To find out more about what is happening in your area, I encourage you to visit the Federal Reserve System's education website, www.federalreserveeducation.org.

I would like to thank you again--all of you --for your participation today. And it's a great pleasure to be talking to other teachers, and people who are working so effectively and importantly with our young people. I look forward to your questions. Thank you.

[Applause.]

PIANALTO: Thank you, Mr. Chairman. And now, we'll begin taking questions. The first one is from the Miami branch.

TOM GLAZER: Good afternoon Mr. Chairman. My name is Tom Glazer. I teach history, government, and economics at Mater Academy Charter High School in Hialeah Gardens, Florida. Thank you for this opportunity. Here is my question: What is your view with the current state of government budgets—local, state, and federal? And what are the implications for students in education?

CHAIRMAN BERNANKE: Well, you've identified a key example of a tradeoff, which is what economics is all about. State and local governments have been facing some fiscal challenges for some time, as you know.

It's not just something that's happened since the crisis. Maybe some of you are aware of a study that just came out under the auspices of former Fed Chairman Paul Volcker that looked at state and local government finances and found that many governments are finding very difficult to meet their long-term commitments for pensions and other benefits for their workforce. During the recession and the crisis, of course, as the economy contracted, tax revenues still quite a bit and states and localities with balanced-budget amendments or requirement cut back on their spending. And indeed, if you look at employment over the last few years, even as the private sector has been adding jobs, the state and local sector has been subtracting jobs and reducing the overall pace of gains in our labor market. So, it's been very tight and a difficult period for state and local governments.

Now on the other side you have education, which is the most basic kind of investment. It is investment in human capital; it's investment in our future. There's lots and lots of evidence that every extra year of education provides extra earning power, extra job satisfaction, and adds to the overall social welfare of the entire economy. So there's a great deal to be gained from extra education.

Now, an additional complication is of course that the quality of education and the amount spent on education are not always exactly correlated. Many other factors as well, such as parental involvement, community support, quality features, types of curriculum and so on. So it's a very complicated relationship.

All that being said, and understanding very well that state and local governments, while things have been little better lately, are still under a great deal of budgetary pressure, I hope that in making those decisions and thinking about where to put their limited dollars, that state and local governments will keep in mind that we don't want to be eating our seed corn. We want to be making investments in the future, and education is one of the most fundamental investments, because it's in our young people who will be of course the workers, consumers, and citizens in decades ahead.

PIANALTO: Thank you. Next we'll go to Cleveland.

[Pause.]

RICHARD PETERSON: Peterson from Mentor and I teach economics to students at Mentor High School. And my question Mr. Chairman, how does the Fed maintain the delicate balance between not having political party leanings or pressures, and yet at the same time offer the best objective financial leadership for our country?

CHAIRMAN BERNANKE: It's a good question. One of the basic findings of research about central banks is that it really helps an economy to have a strong and independent central bank. And what I mean by that is a central bank that can make monetary policy and other decisions without being influenced by short-

term political pressures. The research shows that countries with independent central bank have lower inflation. They have more stable economies and overall more confidence in their currency and so on.

So it's very important to have that degree of independence. The reason for this is because monetary policy tends to work with a lag. It takes time for the full effects of monetary policy to be felt. And therefore you want decisions about monetary policy to be made by people who are not looking at the short-run, not looking at the election a few months down the road, but are looking at the longer-term and saying what's right for the economy. So, independent central banks are very important.

Now there's a quid pro quo for that, though we are a democracy. And obviously the central bank, the Federal Reserve of the United States, has to be accountable, has to be transparent, has to be following a framework given to it by the Congress. And that's of course what we do. We are indeed nonpartisan. We do try to make all of our decisions based on technical analysis, based on what's good for the economy, not based on any political considerations. This is the table by the way, you're sitting here, where we have the Federal Open Market Committee meetings and make decisions about monetary policy. And there is never any discussion around this table about political issues. It's always about: Where is the economy? Where is it going?

But given that we are independent and there are a lot of provisions, such as the fact that Governors are appointed for 14 years, for example, and that the term of the chairman goes across presidential terms. So there are many provisions that give the Federal Reserve a good bit of independence and decision making. But the quid pro quo for that is that we have to be accountable. And we are very accountable by law. I testify twice a year in front of the House and the Senate to explain what monetary policy is doing. I actually testified many more times than that. Our Federal Open Market Committee meetings are followed by a statement, three weeks later by detailed minutes. We provide quarterly projections. I give a quarterly press conference. I meet regularly with people both from the Congress and from the administration, so I'm very responsive personally to people in the government.

And so, for all those reasons, we try very hard to make sure that we explain what we're doing and that the elected folks who are in the Congress or administration can appreciate what we're trying to do. So that's the balance that we try to achieve: independence in order to make good decisions, but accountability and transparency to make that independence consistent with our democratic framework.

PIANALTO: Thank you. No, we go to Houston.

ALICE PURCELL: I'm Alice Purcell with First Baptist Christian Academy in Pasadena. Chairman Bernanke, what effect is the Euro crisis having on the U.S. economy? And what would a centralized European fiscal policy--what effect would that have on the global economy?

CHAIRMAN BERNANKE: That's a--you have about an hour? [Laughter] Well, the European situation is very difficult. I mean the basic problem there is that like the states of the United States, they have a single monetary policy. There is one central bank, the European Central Bank, that makes monetary policy for all 17 nations in Euro zone. But unlike the states of the United States, they don't have one fiscal policy. Each country has its own parliament, its own prime minister and its own fiscal policy. So it is

as if in the United States, during a downturn, individual states know that the federal government is there to pay social security, to pay Medicare, to provide defense, all those broad government functions. And each state and locality only has to deal with its more local services that it provides. In Europe, each country is basically responsible for its own fiscal situation.

Now since there are some countries that are weaker fiscally, and they're involved in tightening their belts very--in a very strong way, the results of that are weaker economies in those countries. And indeed, most of Europe is now suffering a much weaker economy. On top of that, their banking system is been stressed by the fact that banks hold a lot of sovereign government debt, which in turn is hurting the financial positions of the banks and reducing the amount of lending they're willing to do.

So, the European continent and particularly the euro zone, those 17 countries that share the euro, are under a lot of economic and financial stress. There's been a lot of steps taken to try to address that by European leaders. They have a very strong incentive to address these problems. They want to maintain the political integrity, the European collaboration that's been going on now since--almost since World War II, but it is very difficult that involves many, many tough political choices.

The effects on the United States are pretty significant. There are two basic types of channels by which the Euro crisis is affecting us. First, Europe is a major export destination for U.S. firms. So a weaker European economy means that both U.S. exporters and exporters from other countries are finding weaker markets, and that is reducing demand for our products and slowing our economy. Probably even more important is the fact that concerns about the European situation have created lots of stress and volatility in financial markets, in the stock markets, in the credit markets, and those problems are affecting us here in the United States as well. So, between the financial effects and the trade effects, the European crisis is slowing our economy.

Of course the many other factors affecting the U.S. economy as well, including fiscal issues, credit tightness, the housing market, and so on. But this is one of the--the European situation--it's one of the factors that's slowing the economic recovery.

You asked about what would happen if Europe had a single fiscal authority. That would put them in a much closer situation relative to the United States. That would probably address many of the concerns, many of the problems that they have. But getting to that point is very difficult because, again, you have 17 different countries, and each set of taxpayers wants to make sure that their own country is being fairly treated. And so, it's a very difficult, complex, political negotiation that's been going to on now for a couple of years.

PIANALTO: Ok, so let's go to D.C. for the next question.

JENNIFER WALKER: Good afternoon, Mr. Chairman. My name is Jennifer Walker and I teach comparative politics and economics at Sherwood High School in Sandy Spring, Maryland. My question for you is: How can we as educators emphasize the importance of understanding how the invisible hand led to our current crisis, while at the same time encourage students to believe that the market can work?

CHAIRMAN BERNANKE: So I think one of the most exciting moments in teaching economics is when kids understand the invisible hand idea, the idea that markets can achieve such complex economic outcomes without any kind of central planning. Milton Friedman, I think, had the example of saying: Think how complicated it is to deliver a pencil. You think of all the components, you know, the wood and the rubber and the metal and the graphite and paint and everything else and delivery and assembly, and you get a pencil for a dollar or whatever it is it costs. And markets can do that, because the invisible hand says that even though each participant is working for their own interest only and there's no central planner involved, that markets still work somehow to deliver that result. And indeed, there's a lot of evidence--I think it's pretty clear to everybody that looking around the world that markets have played a tremendous role in creating the wealth that we see in rich countries and in emerging markets that are becoming rich. So, markets are an amazing thing and getting students to appreciate what markets can do is a very important part of teaching economics.

Now that being said, the next level up is to understand that markets also have problems: that there are market failures. There is monopoly. There are externalities. There's many other things that can go wrong in markets and understanding what--how to fix those problems is really an important key to thinking about economic policy in general.

Now in the financial crisis, there were a number of places where markets or the combination of markets and government failed. For example, basic invisible hand economics assumes that information is perfect that everybody understands basically what they're buying and what they're selling. That wasn't always true obviously in the crisis when people were buying complicated credit instruments that contained a variety of substandard credit products, like subprime mortgages. And the people who bought that didn't necessarily understand everything that was in those credit products. Likewise, during the crisis, there was huge uncertainty about, you know, which banks and which financial institutions were in danger, because it was very hard to know what the exposures were and what each institution held and what the risks were.

Another issue related to financial markets is that unlike most industries, financial markets are prone to runs. That is, if people lose confidence in a particular institution or even in a broad set of institutions, and they are providing short-term deposits or short-term funding to those institutions, they have an incentive to run and pullout their money as quickly as possible. And if everybody does that, it's like everybody running to the exit in crowded theater. Then, you know, nobody's better off. What happens is that you create huge stress in the financial system. And trying to address the problem of runs and instability is in fact why the Federal Reserve was created in almost 100 years ago to provide support for the financial system during periods of crisis.

And finally I mentioned the too-big-to-fail problem, which is a sort of combination of governments and market failure. Institutions, which are so big and complex and interconnected that their failure would possibly bring down the financial system--there is a strong presumption in the markets that the government will protect those institutions. And that means that the market is not allowed to work in a sense, because people who lend money to those institutions are saying, "Well, I don't have to worry about whether they're making good investments or taking too much risk 'cause I believe that if they get

into trouble, the government will protect them." That obviously leads to very bad allocations. It leads to increased risk in a system.

So they're--so to answer your question, I've already lost a chance to answer your question quickly, so let [laughter] me close by just saying that markets are a wonderful thing and it's important to understand that. But as the financial crisis showed, there are some ways in which markets don't always work well. And, you know, it's just as important to understand that markets can fail as it is to understand that markets are powerful and can give good results a lot of the time.

PIANALTO: Ok, now let's see if we can go back to Omaha and pick up from there. Omaha? Great.

CAROL MATHIAS: Good afternoon sir. I'm Carol Mathias from Lincoln Northeast High School. Economics and current events go together. So what current events would you consider essential that we cover in the classroom? And as a follow up to that, after--with everything that's going on in the world, do you see any events on the horizon that teachers should be aware of and ready to talk with students about?

CHAIRMAN BERNANKE: Well, we certainly have had a lot of things happening in the economy in recent years. And I think students want to understand, you know, what they see around them, what they read in the paper or what they hear--I guess they don't read papers, sorry--what they [laughter] hear in their iPhone. So, you know, what we've seen recently includes, of course, the financial crisis, a very complex event, but certain parts of it can be explained. You can explain what a bank run is. You can explain the problems with subprime mortgages for example, which ties in the financial literacy type issues that we talked about. So, financial crisis is clearly something that kids would probably want and understand and the recession that followed that as well.

Surely, they want to understand about monitoring fiscal policy. What is the Federal Reserve? What does it do? How is monetary policy being used in the current situation? Fiscal policy is something that affects their lives in a quite concrete ways. Decisions are being made about the long-term future of social security, for example, who's going to pay and who's going to benefit. That has a big effect on kids' futures.

So those are the kinds of things that can interest them. You raised--someone raised the question just a few moments ago about Europe. That's also something that's in the news, and I know that people are interested in understanding what's going on there. Now, these are all complex issues and probably a complete analysis is going to be tough to put into a class. But there are many elements and aspects that you can use to try to give a better sense of what's happening in these situations.

I think going to forward, there are many things you can look at from, you know, I suppose, microeconomics and macroeconomics. At the microeconomics level, issues of pollution control and perhaps global--I mean, global warming interests students, you know. What are the economics of that? What are the economics of the demographics of society? It's getting older. And what are the implications of that for our economy and for our young people's futures? I think an interesting question you might think about right now is: Why do countries compete to have the Olympics in their country? Is that an economically sensible thing to do? Or is just for national pride, basically?

So there are lots and lots of issues, just, you know, look out the window, you'll find things to talk about, and see what the students themselves raise because they've heard things on the--in the media and they'll raise questions themselves.

PIANALTO: Thank you. And now, we'll go to Philadelphia.

[Pause.]

DAVID HILLINCK: Mr. Chairman, my name is David Hillinck. I teach at Germantown Academy in Fort Washington, Pennsylvania. My question for you is about Federal Reserve System itself. I'm wondering what you think young people most need to know about the Federal Reserve and how it operates.

CHAIRMAN BERNANKE: Well the first thing they should know is what it is. [Laughter] The Federal Reserve is, of course, a very important economic institution. And I think every informed citizen should know at least the basics of what the Fed is, and how it's structured, and what it does.

A good economics class is going to take students a little further. It's going to explain: What is monetary policy, and how does it work? I think a very basic thing that often gets lost is the difference between monetary policy and fiscal policy. Monetary policy is responsibility of the Fed. Fiscal policy is the responsibility of the Congress and the administration. Those are very different. They work in different ways. And there are sets of responsibilities there. So, understanding the distinction between those things, I think, is very important.

The Fed is also a regulator, and the fact that along with other banking regulators, we oversee banks try to help control the risks that they take and try to help maintain your stability. Why is that? And, you know, what economic role does that play?

Now, all of that would probably been sufficient a few years ago but, you know, recently--and now I'm getting to the AP class [laughter]--a lot of other things have happened. The Fed has done things that it hadn't done for a long time. For example, over the last few years, we had been trying to use monetary policy to support the economy, but it was already almost four years or three and a half years since the interest rate--the federal funds rate went almost to zero. And we'd been using other kinds of monetary policy involving the purchases of longer term treasury securities, for example. So instead of buying short-term securities, which is the traditional way of doing monetary policy, we're now doing longer-term asset purchases. So kids will want to, you know, in an advanced class, they would want to understand how monetary policy can be conducted even when short-term interest rates are close to zero.

The other thing which is very important and I think there will be a lot of broad interest in this. The Federal Reserve was founded, as I mentioned before, in large part to deal with financial crisis, to be available to support the financial system during periods of panic and to try to stabilize the financial system. This function got a lot less attention during most of the post-war period, and most people began to think about the Fed as primarily a monetary policy institution. But obviously with the crisis that we've had recently and crises in other parts of the world, central banks have become much more engaged in

supporting financial system, creating financial stability, and explaining that basic function, I think, is also very important.

So, to summarize basic structure in governance, monetary policy, distinction between monetary and fiscal policy. Those are the basics. Those, I think, are what every citizen needs to know. And then the most recent few years, the Fed has done new things including buying longer term securities in order to provide more monetary policy support and working to stabilize our financial system. Those are more complex subjects but also of, I think, great interest.

PIANALTO: Ok, now we're going to go to Los Angeles.

[Pause.]

DIANE LARSEN: Mr. Bernanke, I'm Diane Larsen and I teach economics, business economics and business law in Mater Dei High School, Santa Ana, California. And I have this question for you: What do you believe is the best way to anticipate and prevent another financial crisis similar to the one that started in 2008? Thank you.

CHAIRMAN BERNANKE: How to anticipate and prevent a financial crisis.

[Laughter.]

CHAIRMAN BERNANKE: Another easy question. Well, obviously given the cost of the last financial crisis, we like to do all we can to anticipate and prevent another financial crisis, and if one happens, to mitigate its effects as much as possible.

I would say broadly speaking that the new regulatory structures both the Dodd-Frank Act, the Basel Accord and other parts had--is this really a two-part strategy, if I might. The first is that we are now taking--when I say we, I mean, the financial regulators, the government in general--are now taking a sort of a more system or systemic approach. That is, before the crisis every regulator had its own particular institution, particular market that it was responsible for. And nobody was there watching the system as a whole.

The idea that in fact that regulators ought to work together to identify risks in the broader system, which is called macro prudential regulation, was discussed even before the crisis, but it is now I think part of what the new regulatory structure is trying to accomplish. So, we have for example something called the Financial Stability Oversight Council, known lovingly around here as FSOC, which consists of 10 major regulators, including the Federal Reserve, as well as some other regulators, who don't have votes, including state and local state regulators. The FSOC's job is to look at the system as a whole, to try to identify problems, to see if there are risks that may threaten the system. Are there weaknesses in the structure of the system? Are there gaps in regulation that need to be addressed? The Federal Reserve has its own Office of Financial Stability, which we created since the crisis, which has a similar function again to try to monitor the whole system, to try to identify problems that might be arising. And we worked closely with the FSOC to look for new problems, to try to see where there might be--the next

crisis might be coming from and to take steps to at least to provide a warning so that we can collectively address those problems.

So that's the first part which is to have a macro prudential approach, which is looking at the system as a whole and is trying to identify gaps and weaknesses and fix those if possible. Now, we know perfectly well that we won't be able to identify every problem that comes along. The issues are very complex and historically it just happens that, you know, very often that neither the private sector nor the public sector identifies a problem until it's already upon us. So, the second part of the strategy is to make the system itself as resilient as possible. So, whatever happens, even if we don't identify it or prevent it, the system will be stronger and able to survive and continue to provide credit even in the face of a shock. So, there are many aspects of that. One example would be the new capital standards that have been agreed upon by not just the United States but essentially all the major countries in the world, so-called Basel III capital standards. What they would do is increase the amount of reserves capital that banks have very substantially. And that means is that when banks, whenever, whatever may happen, if banks takes significant losses relative to where they were before the last crisis, they will have lots of capital which can absorb those losses and prevent those losses from turning into a failure or to a broader banking panic. So, greater capital, stronger rules on derivatives trading, more liquidity for banks, so they have enough cash on hand to meet withdrawals, all of those things are intended to make the system stronger, so no matter what may happen--and it's certainly going to be something we don't anticipate--the system will be better prepared to absorb the shock without going into crisis as we saw in 2008.

PIANALTO: Thank you, and now a question from St. Louis.

[Pause.]

JENNIFER: MACALADY: Hi, my name is Jennifer Macalady, and I work for special school district of St. Louis County, and I work with Normandy High School math students. My question, Mr. Chairman: Should the public school system add more courses such as economics and finance to the curriculum?

CHAIRMAN BERNANKE: Well we're all in favor of that.

[Laughter.]

CHAIRMAN BERNANKE: So, there are lots of ways to do that. I mean I think it's clearly good to have say--so the beginning it's really good to have students be able to understand the basics of economics and finance and financial literacy. But there are lots of ways to do it. I mean, one way to do it is if your high school has AP courses. There are AP courses in microeconomics and macroeconomics. And students who want to do that can do college preparatory work in economics. And so you can do pretty significant, pretty serious economics courses if you want.

But I say that because there are lots of other ways to incorporate economics. When I took history in high school, I said, "Well, this is all about kings and queens and wars. And there must be other things to life than that." And of course there is. Economics tells how people actually live, how they make a living, how societies function, how markets function, trade--all those aspects of history which are so important. So,

integrating economics into your history, integrating economics into civics so that students understand the importance of institutions like the Federal Reserve and regulators, and fiscal policy, and so on.

Then of course beyond that is financial literacy, which is so very important for all students, I don't think there are any students who should not be exposed to at least basic financial literacy concepts. That can be done as an individual course, as a part of a course, maybe combined with something like the junior achievement program that I mentioned, which is a very a good way to get kids interested. Or it can be integrated into consumer math, or to a math class. There are other kinds of context.

So, there are many ways to do it. It depends on your resources and the kinds of interest that students have. But, if you think about what people do every day, what adults are required to do in terms of their managing their finances and preparing for retirement and all those things, that economics and financial literacy are just critical parts of education. And there are lots of ways to incorporate it, and I hope that everyone here will do that. I assume that you're here because you're interested in doing that, and I congratulate you for that. I encourage you to keep making that effort.

PIANALTO: And now we'll take a question from Boston. [Pause]

DAVID HENNESSEY: [Inaudible] Could you share your thoughts on the current crisis regarding the current level of student loan debt? And how might the burden of current student loan debts for our young people impact the economy in the future if these same borrowers and not in the position to borrow for good such as housing, and automobiles, or for starting up new businesses?

CHAIRMAN BERNANKE: Well, student loan debt, which is now one of the largest categories of debt of any type at this point, is kind of a two-edged sword. On the one hand, education is an investment. It's an investment of human capital and it's, as I mentioned before, a very important way of increasing your earning power. And we don't want to have a world in which talented students are unable to get additional education because they can't afford it. So having a student debt market or a student debt program allows people who don't have the money still to get the education and to benefit from that, and it helps everybody if students go on and get additional preparation. So, it's very important to have this kind of institution.

Now as I said, it's a two-edged sword. On the other hand, if people make bad choices, they can end up being burdened with student debt, large amounts of it, which is not even--you may know--you can't even discharge student debt with bankruptcy. I mean, basically, you've got it. So, if you acquire a lot of debt, but you find that, you know, the schooling and you got doesn't really prepare you for a good job, you know, then you're really in trouble because you have--you don't have the income but you have the debt.

So, what I think I--well, my first advice on that is that just like any other investment, if you are investing in your own human capital, you got be smart. You got to make smart investments. You got to know what it is you're buying. Those of you who do guidance counseling and type work, think of it as being an investment adviser. You're trying to explain to the students, you know: What kind of job or career are you expecting to get out of your additional education? What are the graduation rates? What are the job-

finding rates for this particular institution? What kinds of income can you expect to earn? And does all of this make sense given how much debt you have to take?

Now, of course that's not the only reason people take out debt and go get additional education. There's lots of reasons, personal and other reasons to get more schooling. But if you're thinking about it truly as an economic proposition, it's important to understand what it is you're buying. Are you making a good investment. So, counseling I think should be important part of the decision making process for kids taking out student debt because it does stick around for a long time.

So, in terms of the economy, you know, I think the main issues there are really fiscal issues. Most government--sorry, most student debt is now provided by the federal government, and so whatever losses or problems there may be on that side will be fiscal problems. Losses will be borne by the taxpayer ultimately. And they're also the issues, again, of students being burdened by debt if they don't use it in a smart way to get themselves kind of income they need to pay it off. So burden on the future consumers and fiscal burdens for future taxpayers, those are some of the reasons to try to use debt wisely. I don't think that student debt is a--again, you never know, but I don't think it's a financial stability issue to the same extent that say mortgage debt was in the last crisis, because most of it is held not by financial institutions but by the federal government.

PIANALTO: All right. Ok, now we'll take a question from Chicago.

[Noise]

HELEN ROBERTS: Hello, this is Helen Roberts from the University of Illinois at Chicago Center for Economic Education. So I teach all ages. There's widespread misunderstanding about how the Federal Reserve supports the economy and the short-run and long-run effects of monetary policy. Students sometimes think that the Fed is being in a position to solve all economic problems. And then some also believe that the Federal Reserve is not doing enough to fix the economy, and they blame it for addressing problems that really at the responsibility of fiscal policy. What do you think that Federal Reserve needs to do to educate the public--along with us--about the limits of monetary policy so the people have more realistic expectations?

CHAIRMAN BERNANKE: Well, your basic point is absolutely right. The Federal Reserve is an important economic policy institution. Monetary policy, as well as financial regulation, has very important roles to play in providing a stable economy--stability involving both stability in terms of growth and employment and stability in terms of prices.

But as I've often said, monetary policy is not a panacea. It doesn't solve all problems. There are many, many issues that are more appropriately dealt with by the fiscal authorities, through tax policy or through spending decisions. And beyond that, there are decisions made by trade policymakers, education policy makers--all the different areas of economic policy. I think it should be a basic part of civics or government or whatever, you know, heading you put that under that students understand that the government is not just the Congress and the administration. There are many other institutions, including the Federal Reserve, but including regulators as well, and they have a sense of what these

institutions do and how they divide their responsibilities. I think it's a very basic, very basic bit of economic education.

We've been sort of putting together in this discussion, two kinds of financial and economic education. Sort of the personal type of education where understanding better how the stock market works may help you make better investments and better financial decisions. But there's also the kinds of education that involves understanding how our society works to make you a better citizen and a better--better able to understand what's happening in world events. And this is certainly in that latter category.

A basic understanding of modern government involves understanding the principle economic policy institutions and their division of labor. Monetary policy, again, as you say is very important. It's--the Federal Reserve is the primary institution involved in that. It has the important role of providing long-term ability in crisis, that is low inflation. It can be very helpful in helping to restore full employment in--by providing support for a recovery. But in particular, the long-term types of things like providing a strong educational system, providing a good tax code, creating free trade, helping unemployed workers gain skills that they need, and so on and so on. There's so many of these things which are really responsibilities of a wide variety of economic policymakers together with, in many cases, together with the private sector, working with the private sector. So, I basically agree with your point that it's important for students to understand who does what and what the different types of policy can achieve.

PIANALTO: Thank you for that question, and we'll go to Minneapolis.

[Pause]

PIANALTO: Ok, Minneapolis, we can't hear you, so--

ALAN: How you doing, Mr. Chairman?

PIANALTO: Ok, good. We can hear you now.

ALAN AMDAHL: How you doing, Mr. Chairman? My name is Al Amdahl. I teach economics and government in Albany, and many of us work hard to teach the importance of saving and investing, yet interest rates return are in historic lows. How can we teach students that they will be rewarded for saving, given that returns at investments are currently so low?

CHAIRMAN BERNANKE: Good question. So obviously, interest rates are very low. They are low for a good reason, I want to say, [laughter] which is that our economy is still in a fragile recovery and low interest rates are intended to help the economy recover and to restore more normal levels of employment and growth in our economy.

For savers, for investors, it is essential that the economy be strong overall. If you think about what investors invest in, some of it is of course and fixed--so-called fixed income instruments, like certificates of deposit or government bonds. But a lot of what people invest in are stocks and in corporate debt and small businesses and a variety of other kinds of assets. And those assets are not going to perform well unless the economy is strong. So the kind of return that you can get as an investor and as a saver

depends on having a strong economy, and there's really no shortcut to that. And that's the reason why we have low interest rates now as a way of trying to restore that vitality that will make--that give investors high returns in the future.

So that's the reason that rates are low, but of course they are low. That being said, I think that there's an awful lot that can be taught. Even with rates being low, there's still many incentives to save if you want to buy a house. Now, since the financial crisis, down payment requirements are much higher than they were. You can't get by with no down payment in most cases. If you want to go to college and increase your earning power, if you want to retire, all the many things that people want to plan for over their lives still require saving. So, in fact, you probably have to save more and with rates low in order to get to a certain point. And there's a lot to be learned about it because, for example, if you're going to be saving, you don't--again, don't want to save in just one form, you want to diversify. You want to save in different types of assets. You need to understand the tradeoff between risk and return. You need to understand how taxes affect the returns of different types of assets. So, there's a great deal to be learned about how to save and how to invest even in a low interest rate environment. And I think students find it pretty interesting to have for example a make-believe portfolio, make their investments, and they can check the paper every morning and see how they did. And they may learn that putting all their eggs in one basket may not be the best idea. And so, there are many basic ideas like diversification and risk reduction that students can learn and would enjoy learning.

PIANALTO: Ok, we have one final question. And once again we'll go to a teacher from the Richmond District, who is here in the room with us. So, Mary?

MARY LARSON: Good afternoon Mr. Chairman. My name is Mary Larson. I'm from Oak Knoll Middle School in Hanover County, Virginia, and we hear this upcoming generation is going to be the first generation of Americans who are going to be worse off than their parents. I'm a middle school teacher, and my kids hear this, but middle schoolers think they're invincible. Everything is far away. They think we're ancient. So two questions: Number one, do you agree? Do you think that this generation will not be better off than their parents? And the second one is: If your own kids were middle schoolers today, what would you ask their teachers to do to help, to impart this important information to them?

CHAIRMAN BERNANKE: Yet, another very good question. [Laughter] So, nobody can predict the future obviously. All kinds of things can happen in the world. But my best guess is that our kids will be better off than we are, and there are number of reasons for that. The first is that living standards depend--most fundamentally of all the various things that determine living standards, the most fundamental is gains in productivity. And we--we're living in the world of technological change, and the United States is at the forefront of that. We have some of the greatest universities in the world here. And we are doing pretty well at finding ways to commercialize the inventions and discoveries that are coming out of those universities in places like Silicone Valley and Research Triangle and in Washington, D.C., area as well.

So technology will continue and provide them opportunities. And the U.S. economy is well-placed to take advantage of that. We have a very entrepreneurial culture. We have a lot of market-oriented--our ethos is very market-oriented. We have flexible capital and labor markets. There are--again, I guess I

would come back to one issue, which cuts both ways, which is our demographics. So, one of the challenges that we face collectively is the fact that we're--our society is getting older and the fraction of people who are retired and receiving social security or Medicare is increasing, and that creates fiscal burdens and burdens on future taxpayers.

So the good news is that relative to most other industrial countries, and indeed compared even to some of emerging marketing economies, the demographics of the United States are actually not that bad. We have a very healthy immigration rate. We have a healthy fertility rate. And so our demographics are actually relatively favorable compared to a number of other industrial countries, and that's another positive.

So there are a lot of reasons to think that our society will be transformed by new technologies, new products, new markets, if United States will play in important role on that and that will give opportunities for our children to have higher standards of living than we did.

Now, there's certainly some very important challenges. I already mentioned the fiscal challenges. Our educational system, we need to keep improving it, because now it's not even a question of--our educational system is both failing--it's failing many of our students to some degree, but it's creating a lot of inequality also, because you have some very good schools in United States, and some that are very poor. And that creates a very different starting line for kids who are coming out of those different backgrounds. So education, health care, fiscal, there are a lot of issues that we have. And in the near term, of course, kids coming out of high school or college right now are not facing a particularly good job market, and that's going to make it harder for them to get into the work force and to gain experience, and so on. So there are lots of challenges. I don't want to deny that. But again, I think that over the medium term, maybe even the longer term, the intrinsic features of the U.S. economy, which have made it the richest economy in the world, together with the ongoing improvements in technology and the strengths we have in terms of our markets and our demography, all those things are going to be positive.

Now, in terms of advice, I think that the way the world is going towards a more globalized system where trade and services can flow very easily across borders to a highly technological society, the benefits of education are going to get greater and greater. This is not going to be a kind of world in which an unskilled worker is going to do well. You need to have enough knowledge, enough--typically of technology but just broadly--that you can adapt and accommodate the many changes that are happening and will happen in the coming years. So, the good news for you is that your product is becoming more and more valuable [laughter], and people who are smart will take every possible advantage of it.

LARSON: Thank you.

PIANALTO: Well, thank you for all your great questions. That concludes our session for the today. We hope you have gained insights from this conversation that will help you in your work in the field of economic and personal finance education. And on behalf of the Federal Reserve System, thank you especially to the participating teachers. We are really pleased you could join us today. And once again,

we would just like to thank Chairman Bernanke for taking the time to speak with us today. Thank you, Mr. Chairman.

[Applause]