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How the Economy Works: Confidence, Crashes, and Self-Fulfilling Prophecies

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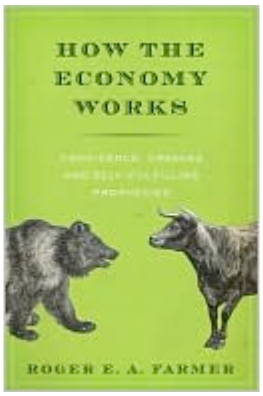

How the Economy Works: Confidence, Crashes, and Self-Fulfilling Prophecies

Introduction

JOANNE MYERS: Good morning. I am Joanne Myers, Director of Public Affairs Programs, and on behalf of the Carnegie Council I would like to thank our members and guests for joining us this morning.

Today our speaker is Roger E. A. Farmer, Distinguished Professor of Economics and Chair of the Economics Department at UCLA. He will be discussing a topic that never leaves the headlines—and yes, you guessed it, it's the economy.

His book is entitled *How the Economy Works: Confidence, Crashes and Self-Fulfilling Prophecies*, and serves two purposes: first, it provides wonderfully instructive text on the history of economic thought from 1776 to the present—and this is guaranteed to improve our economic literacy; and secondly, Professor Farmer offers suggestions for preventing future financial crises that he believes will eradicate many of the problems we have been seeing in the past few years.

For the most part, the financial crisis that began in 2007, crested in 2008, and left aftershocks which are still being felt today, has brought into question the credibility of the economic thinking that has guided policymakers for a generation. Lay people are not the only ones asking questions. Economists, too, are striving to understand precisely why it happened and how to prevent it from happening again.

In *How the Economy Works* Professor Farmer explores the current crisis by explaining, on the one hand, the theories behind classical economics, whose proponents believe that unregulated markets are inherently self-stabilizing and that government intervention often does more harm than good; and, on the other side, the Keynesians, who believe that the market system needs a little help. He gives examples on how these theories have influenced the policy debates that have developed over the past couple of years and offers a powerful argument for how economics must change to get us out the quagmire. Professor Farmer says that the question is not whether to regulate the market; it is how to regulate it.

This past century saw two revolutions in the way economists view the world. The first came after the Depression, when they built some of the first mathematical models that could be used to try to manage the economy. The second came after the inflationary period of the 1970s, when economists created a new model that took into account how people's expectations concerning prices or incomes could influence business and finance over time. Both models required a painful crisis to set them in motion, but in the end, both improved government's ability to manage the economy.

For Professor Farmer, this crisis today is just the latest in a series of events that have plagued market economies since the inception of capitalism. For this reason, he advises us to learn from it and develop new tools, which he has done. Accordingly, he offers a proposal for a third revolution, one that he believes will correct the excesses of a free market without stifling entrepreneurship and instituting central planning.

To hear his plan, please join me in giving a very warm welcome to our guest this morning, Professor Farmer.

Remarks

ROGER FARMER:

Thank you so much. That was such a wonderful summary, I feel I have nothing left to say anymore. It's a real pleasure to be here.

In writing this book, as has already been eloquently summarized, I had two ends in mind. One was to provide a lightning description of economic thought for the layperson, and the other was to provide some new ideas.

Some of the questions that I address and answer in the book: Why is there so much disagreement among journalists, politicians, and practicing economists about the qualities of recessions? What caused the 2008 crisis, and what can we do to prevent similar crises from occurring in the future? Who was Keynes and why are his ideas important today? What's the role of the Federal Reserve System in the economy and in our own lives? What is the role of the stock market and why is it important to every American? Those are some of the questions that I take a look at.

Now, one of my favorite science writers was Richard Feynman, who was a professor at Cal Tech, who wrote a wonderful book, called *Quantum Electrodynamics*, which introduces some really very difficult scientific ideas in physics and brings them to a level that a layperson like myself, with no understanding of physics, can easily understand. I hope that I have tried to do the same thing for macroeconomics that Feynman did for physics.

Now, one of the important themes of the book is that the history of economic thought is an interplay of ideas and events. Economics, for me, is very definitely a science, but it's not an experimental science. It's much more like astronomy—it's a science where we need to learn from natural experiments that are given to us.

In the book, I identify two of such large natural events that occurred in the 20th century, and I believe that the crisis of 2008 is another such event. The events that changed economic and political thought forever in the 20th century were, first of all, the Great Depression; and secondly, a period in the 1970s of high inflation and high unemployment that many of you will remember, stagflation. In a minute I'll say they changed economic thought. And the most recent event, the 2008 crisis, just as cataclysmic.

The interplay of ideas moved, in my view, between two polar extremes. One I've called classical economics, and classical economists believe very much in the market as a self-stabilizing, self-correcting mechanism, like a piece of clockwork. Left to itself, a market economy will very quickly restore full employment. Now, that idea was prevalent in the 1970s.

There was an important book published by an English economist, [Arthur Cecil] Pigou, called *Industrial Fluctuations*, which nicely summarized the classical view of business cycles at that time. Pigou identified six causes of business fluctuations. They included things like agricultural fluctuations, monetary disturbances, productivity shocks, tastes, confidence shocks. There was a rich panoply of events that would be driving business cycles.

When the stock market crashed in 1929, by 1933 the market was down 84 percent, and down to a level that it had not been to previously since 1890, and unemployment went in the United States from 6 percent to over 24 percent in the space of two years, it became very difficult to maintain that notion that the economy is a smooth, self-regulating mechanism. Many economists, and one in particular, John Maynard Keynes, introduced some new ideas and came to write a book in 1936, *The General Theory of Employment, Interest, and Money*, in which he argued that capitalism needed a little help from government to keep functioning. That really was a turning point, not just for economic thought, but for politics.

The notion that government had a responsibility to maintain full employment was something that was alien before that time. That was introduced in 1946 with the Employment Act. Since that time, the American economy has functioned much more smoothly.

The period from World War II up through the mid-1970s—and in the book I identify 1972 as an important date, because that's when an important academic paper was published by one of our Nobel Laureates here in America at Chicago, Robert Lucas—at that date the pendulum swung back to classical ideas. The reason for that is that the Keynesian policies that had been instituted in 1946 were conditioned on a theory in which the coincidence of inflation and unemployment wasn't possible. In Keynesian economics, in order to have inflation you first needed to have the economy functioning at capacity. That clearly wasn't happening in the 1970s, and that was one of the things that led economists to give up at the time, academic economists at least, on Keynesian economics.

The other was that the book itself is extremely difficult to read, internally incoherent, and led to debates among academic economists that are still going on today about what Keynes really said.

Now, Keynes was, first and foremost, a pragmatist. The purpose of writing that book was to persuade economists at the time to move in behind the policies that he thought would be successful.

I believe that Keynesian policies were successful. One of the reasons for that is that if you look at the nature of economic fluctuations after 1946, they are roughly four times less volatile than they had been before that date, and specifically during the 19th and early 20th centuries. There were two reasons for that.

The first thing that Keynes advocated was fiscal policies, which were new. The fiscal stimulus that has just been introduced by the Obama Administration, where we are spending $800 billion that we don't have—that is, borrowing—to stimulate the economy, that was a Keynesian policy.

One of the changes in terms of fiscal policy was a big increase in the size of government, something that I think was relatively successful. That led to a self-stabilizing mechanism in the economy. So government went from 10 percent at the beginning of World War II to 40 percent during World War II, then came back down to 20 percent.

One of the reasons that business cycles have been smoother in the postwar period is because government is just less volatile when it spends things. Government expenditure does not go up very much in booms; it doesn't go down very much in recessions, but taxes do. So there is a natural self-stabilizing mechanism put in by having a larger government sector.

But that for me was not the central part of what happened after World War II. The central part was the development of the institution of central banking; and in particular the Fed, which had been instituted in 1913, started operating in a new way after World War II. In particular, they started operating in a way in which they lowered interest rates at the beginning of every recession.

There have been ten recessions in the postwar period, and in nine of those, every one before the current recession, the Fed dramatically lowered the interest rate to help get out of it. Now, I want to come back to that point in a second, because for me the big change in 2008 is not a bubble—we've had bubbles throughout history. It was a financial crisis. But, in particular, what made 2008 very different from previous periods was the inability of the Fed to lower interest rates below zero, which is the same situation that we had been in in 1929. I'll get back to that in a minute.

I'm often asked if I'm a Keynesian or a classical economist. The answer I've evolved to that question is, "I'm a Farmerian." I like to think that what I have done is taken the best of Keynesian and classical ideas.

Now, I've already argued that nobody can really agree on what Keynesian ideas are, but to me there were two important ideas in the general theory. The first was that a free-market economy could end up with very high unemployment for a very long time if left to itself. The second is that confidence—Keynes called this "animal spirits"—is an independent driving force of business cycles.

He had a nice analogy when he talked about the stock market. Classical economists think that the stock market is efficient and that the value of stocks just reflects the profit stream that would come when everyone is employed in the economy and it is functioning smoothly. Keynes had a different view about the connection between labor markets and the capital markets. He argued that the stock market is much more like a beauty contest, but it's a beauty contest in which the judges are judging not how beautiful the contestants are, but how beautiful the other judges think the contestants are. That, I think, is a really important idea, because it reverses the direction of causality between the real economy and the financial markets.

Now, I think that those two important central ideas in Keynesian economics are basically correct. But I think the way that postwar Keynesians have interpreted them is wrong.

Again, another nice anecdote I like. At the Bretton Woods Conference after World War II, where the International Monetary Fund and the World Bank were set up, Keynes was present, an important contributor to that conference. In leaving it, he was famously quoted as saying, "I was the only non-Keynesian in the room." What I take from that is that we don't need to be dogmatic about Keynesian ideas. I think that if Keynes himself had seen the evidence that I have seen after World War II, that he himself would not be recommending some of the policies that have been put forward in his name.

In my work I have been working on the notion that confidence is important for a long time. Now, one thing that might surprise or shock you is that the paradigm that we have been teaching to Ph.D. students in the very best institutions in America and around the world for the last 30 years does not contain unemployment in it, and it certainly doesn't contain the idea that confidence or "animal spirits" are important.

I have been teaching macroeconomics and researching macroeconomics for 30 years now, and I'm known for my work on self-fulfilling prophecies in macroeconomics.

It has long been known, and I have long known, how to incorporate self-fulfilling prophecies or confidence into the classical paradigm, but it took an economic earthquake, in the form of the 2008 financial crisis, to help us to realize that self-fulfilling financial crises are not a thing of the past and that they have real effects for the economy.

To go back to my original statement about science and natural experiments, the ideas I put forward have long been accepted, but there are always competing schools of thought in economics, and it is only when we get large events, like the 2008 crisis, that it is possible to sort out one group of explanations from another. By 2008, many practicing economists had grown up in the post-1970 period and had forgotten the lessons from the Great Depression. I think that was a big mistake.

Now, in 2005 I began work on another project and I wrote a book, which actually is coming out simultaneously with this one, which was written for academic economists and practicing economists, called *Expectations, Employment and Prices*. That book takes the second part that I see important in

Keynesian economics, which is that unemployment can persist, and puts that back into the model.

I was sort of plodding along at a leisurely pace with that book in 2005, and then in 2007 I was at a conference at the Bank of England on something called "The Great Moderation." The Great Moderation is a name that economists had for the fact that in the period from 1980 to 2005 or 2006 the economy had been much more stable than it had been even in the postwar period up to 1980. At the conference, we met to congratulate ourselves and explain to each other why economic theory had been so successful in calming down the fluctuations of the market. In retrospect, that looks a little premature.

At the dinner that evening, which was hosted by Mervyn King, the Governor of the Bank of England, he unfortunately couldn't be present. We were a little worried about that. At my table was Rachel Lomax, who's one of the deputy governors. All evening there were men in pink coats coming over and rushing her aside for a moment.

I discovered the next day that that evening was the evening when Northern Rock had been bailed out, which was really the first large event, for me at least, in the current crisis. Northern Rock was a British financial institution, which was the first such institution to be nationalized.

That's what led me to realize that it was time to get these ideas more into the mainstream. I also decided at that time to write a popular book to try to bring them to the fore.

What's different in what I'm saying? Let me go back to this notion of the relationship between the financial markets and the real economy.

Wealth in the United States consists of roughly three-fifths factories and machines and two-fifths houses. We own the factories and the machines through our ownership of stocks, through our ownership of pension plans, which indirectly own the stock market and the bonds that are backed up by the companies that own the machines. And we all own houses, or many of us own our own houses.

We have all seen the wild swings that occurred in the housing market over the last couple of decades. We have all seen the wild swings in the stock market that have occurred in the last couple of decades.

Now, when one of those sources of wealth—houses, for example—tanks, but the stock market is still high, consumers and investors can still draw on the other source of wealth to keep spending, demand remains high, and although there may be a recession, it won't be a major one.

When the stock market crashes, but houses and real estate are still strong, people borrow against their houses and use them as ATM machines, and again spending keeps going.

But when both sources of wealth crash at the same time, as they did in 1929 and as they did in 2008, and when that crash persists for a couple of years, that's when the economy gets into real trouble.

Now, earlier I mentioned a theme about what caused the current crisis. I would like to go back there.

Again, every single recession since World War II was accompanied by a sharp drop in interest rates. That idea, that the central bank should drop interest rates and flood the markets with liquidity, was a relatively new idea at the beginning of the 20th century. There had been four significant financial crises in the 19th century. As a consequence of those crises—they occurred not just in the United States but throughout the Western world—a British economist named Walter Bagehot, who was an early editor of *The Economist* magazine, wrote a wonderful book, called *Lombard Street*, which is literally the book on central banking. In that he introduced the idea of a central bank as the lender of last resort.

Partly as a consequence of that, the Bank of England evolved into that institution in England, and the Fed was created in 1913.

After 1951, the Fed began learning how to use that tool in order to put liquidity into markets during recessions. Again, in 2008 the overnight interest rate came down to zero, and we were at that point in a very difficult situation, because the way the Fed had previously stimulated the economy was not open anymore.

So why didn't the 2008 crisis turn into the Great Depression? Well, there were two very large responses by federal government. One was the Obama stimulus plan. I may be the only self-professed Keynesian who thinks that that was not a good idea. The other response was from Ben Bernanke. For me, Ben Bernanke was the white horse here, charging in to save the day.

It wasn't only the Fed, but the Bank of England, the European Central Bank—all of these institutions entered into a new, very creative kind of monetary policy, called quantitative easing. What that involved was—traditionally, central banks have held only very safe assets. In the United States the Fed has held three-month Treasury Bills on its balance sheet. The liability side of the Fed is the money supply.

Now, it wasn't possible to lower the interest rate on overnight loans. But Bernanke, being a student of the Great Depression, recognized that there were other kinds of ways of getting money flowing in the economy. He bought the assets of Freddie Mac and Fannie Mae, mortgage-backed securities. That is largely responsible for the fact that long-term mortgage rates are now lower than they have ever been historically. Secondly, he bought long-term government debt.

That is responsible, in my view, for the 70 percent appreciation in the stock market that we have seen in the last year and a half.

As wealth has slowly started to recover, so consumption did not fall as much as it might have done, investment is now beginning to flow back into the economy, and very slowly—very slowly—employment is beginning to turn around.

So what am I advocating? I would like to see a large extension of policies much like the quantitative easing policy.

The notion that the Federal Reserve should control the interest rate when it was first floated in the early 20th century was a very radical notion, the notion that government should be controlling a price, but now it is accepted and it turns out to have been a very successful policy.

What I'd like to see is a policy in which the Federal Reserve controls not one price but two. The second price that I think is important would be an index fund from the stock market. So the proposal is to put together an index, like, say, the Russell, whatever it is—broader than the S&P—something that would have every publicly traded stock in which the weights of the companies within that index were value-weighted. So if a company became less valuable, it would fall in weight in the index. Then I would have the Fed step in to put a floor and a ceiling on the rate at which that index could grow.

Now, if you look at the markets today, there's something like $1.2 trillion in excess reserves sitting in the banking system. I think that the markets are probably fairly valued right now. But that excess liquidity is sitting there because many investors believe, and rightly so, that there is still quite a lot of downside risk. They believe that, although we are recovering, that recovery is very fragile and markets could fall again.

In order to get that money moving out and into the real economy and buying real goods, investing in factories, getting jobs back, we need to restore confidence, and one way to do that is to let people know that that kind of fall would not be permitted.

So my policy going forward would be really an extension of the quantitative easing policy, an extension in the sense that what quantitative easing represented was a decision to purchase long-term assets rather than just short-term assets. I'd like to see that done more carefully.

I think that's a good point to throw open to questions from you.

Questions and Answers

QUESTION: Just two points I'd like you to address. When interest rates are like zero, there are a lot of victims in the society—a lot of people are trying to save, afraid of the market; people who are retired, who need that income, are really desperate for it. So there is really a great shift of wealth from a lot of people who need that interest rate to plan and live off of to the financial sector. So it's not without its victims.

Just one other point when we discuss the economy. Elizabeth Warren talks about the hollowing-out of the middle class. Unless, I think, you look at our society as a business—so where are the jobs? You know, we've lost so much manufacturing—and when I say lost, I mean manufacturing done in this country, as opposed to big corporations that manufacture elsewhere. I think we need a policy to bring back an affordable living for a vast majority of people. So I think we have to look at that as well as the finance. Thank you.

They are two questions. What do you think about this?

ROGER FARMER: Let me take your first point. Absolutely, I'm on board. I'm not advocating that interest rates should always be zero. If the kind of policy that I am advocating were put in place, I think we would see much more stability in interest rates.

Now, the reason that you earn interest in the long run is because of growth. The American economy has grown over the last century at roughly 3 percent. On the other hand, if you look at the kinds of assets that people hold, the stock market has grown as something like 5 percent on top of that, and bonds, safe assets, have paid something like 2-3 percent real less than that. Now, it's not possible for the stock market to earn 5 percent more than the growth rate forever. It's just not there, because the returns are coming from growth.

The kind of policy I'm suggesting would get rid of these wild systemic swings in markets. I think that somebody who is a saver ought to be able to be guaranteed at least the growth rate, 3 percent, safe return. I would see that as being feasible either by holding bonds or by holding a broad market index.

So if the policy I'm suggesting were put in place, I think that the excess return that you see in good times and the big losses in bad times from the stock market would be evened out, and the return from government bonds would start to increase, until they both came to roughly the growth rate.

So I am not advocating that we always have zero interest rates—far from it. The key to prosperity is growth.

Your second question was manufacturing. I'm an optimist on the U.S. economy. The U.S. economy is the most resilient economy in the world, still. It's incredibly flexible.

One of the things we've seen in the last two years is that manufacturing in Detroit in American automobiles has now been completely restructured. Those companies are now competitive with the Japanese in plants in the South.

Manufacturing is taking off there again.

I don't know where the next source of growth will come from in the United States. If I did, I would be buying those stocks right now. But I'm confident there will be one. At the beginning of the 20th century it was electricity; most recently it was computing, biotechnology. There will be recovery.

QUESTION: I am fascinated by the idea of the expansion of quantitative easing. I think it's elegant in many ways. I have a lot of questions and energy which I think I can distill into two questions.

The lesser one first: If this index and Fed regime had been in place in, shall we say, 1996—I don't know if you have any fence around how much selling might have been done to contain Mr. Greenspan's one might say irrational exuberance—if there's any fence around how much, and if you envision naked shorts on the part of the Fed and any implications off of that.

ROGER FARMER: Can I answer that and then we'll have the second one?

QUESTIONER: Oh, sure.

ROGER FARMER: Keep the microphone and then—unless part two feeds on from that.

QUESTIONER: It's fairly close.

ROGER FARMER: Go ahead.

QUESTIONER: Would you envision this kind of scheme vis-à-vis nongovernment fixed-income assets or indices? Similar to an index fund or equities, would there be merit in having quantitative easing, this active Fed trading scheme, against nongovernment fixed-income assets, bonds and so forth?

ROGER FARMER: Possibly.

Let me go back to the first question: What would have happened in 1996 if this had been in place?

Let's think about how the scheme would work. The balance sheet of the Fed just before the current crisis was roughly $800 billion. That's the money supply. I would have had the Fed purchase—

The first step would be to define what's in the index fund. It might contain bonds. The most important thing is it's very, very broad. The other thing is that the weights of companies within the fund are determined by the market and not by the Fed. So I'm not having the Fed here come in and decide left and right shoes.

The second thing is I'd have the Fed purchase a block of shares in this fund, say, another $800 billion.

Now, how do you do that without increasing the money supply? I don't want to do that. I'm not advocating monetary expansion here. So I would give the Fed authority either to issue its own debt or—and it already has this authority—I would have it pay interest on reserves, and I would have it pay interest on reserves at the same rate as three-month T-bills [Treasury Bill], so they would become essentially equivalent. So now we have insulated the money supply from any intervention we have into the markets.

Now, the question was: What would have happened in 1996? It's very easy to see what would happen on the downside. If markets were falling, the Fed would potentially step in and buy the index fund. The very fact that it's plausible that the Fed could step in and buy the index fund, in itself, I believe, would mean that it would never have to do it.

If you take the worst-case scenario, the worst-case scenario—I said factories and machines were three-fifths of wealth, actually three times GDP—so the Fed would buy the entire market. Federal debt would then be three times GDP.

But the Fed would own the entire market, and the dividends flowing into the Fed from profits from American corporations would fund the payment of the interest on the debt.

So the first thing is that's a wash. In fact, the Fed would probably make a profit on that transaction.

But what about the upside? So we're now in 1996. There's a huge bubble going on. The Fed had $800 billion hypothetically in index funds that it had bought. It sells them all. Now it has run out. What is it going to do? Well, it creates synthetic index funds, just as we have had synthetic derivatives in the last ten years, and it sells them on the market. These synthetic index funds pay exactly the same return that you would get if you were buying the market, and by flooding the market with these things, they prick the bubble.

The important point here is that they do it without affecting short-term interest rates. So I am not advocating pricking bubbles by raising rates. The reason I'm not advocating that is precisely because of my view about confidence in markets. I think if Greenspan had done that in the 1990s, he's absolutely right, it would have deflated the bubble and the helium balloon would have crashed. So it's necessary to have this other instrument to prevent precisely that from occurring.

QUESTION: Setting aside for a moment the garden-variety inventory recession, let's say, over the last 50 or 60 years, but getting to the structural, systematic risk problems, isn't it an oversimplification to say that that devolves to a four-letter word called debt? What are the current levels of debt across the globe as measured by debt in relation to deficits and debt in relation to, like we have in the European Union—3 percent supposedly debt-to-deficit guardrail, which they are spilling over right now—and also in this country? Would you just comment on debt levels historically, now versus historical median levels?

ROGER FARMER: Yes. I'm going to take that question to refer to government debt. I think that's what you were asking.

Yes, we've had a huge global imbalance that has built up in the last 20 years. Americans have been consuming. If you look at consumption, which is 70 percent of our economy, after 1980 consumption began growing at an enormous rate. As we were consuming, we were borrowing from China, essentially. China was producing goods; they were sending them to us; debt levels increased.

You asked me to talk about debt levels historically. I talked about the stimulus, if you like, that occurred in World War II. That was an increase of government spending to 40 percent of the economy. It left us with debt that was approximately 1.2 GDPs. Now, debt came down all the way to about 30 percent of GDP in around 1980, and then it started building again.

Debt is a huge problem, but it is a separate and different problem in my view from stabilizing the economy. The only reason that those two things are tied together is because modern Keynesians have got the blinders on, and they are going back and reading the general theory, figuring out that what we need to do to simulate the economy is spend.

Now, again—I think I said this in the speech—I may be the only self-professed Keynesian who doesn't believe that. I've been at conferences all over the world for the last year and a half at which economists have debated the fiscal stimulus.

One of the most important questions that has been arising there is: How large is the multiplier? Now, the multiplier is a Keynesian idea that refers to the notion that if government spends $100,000, then that could create income to generate jobs worth $300,000, for example. Values of what the multiplier vary enormously. Estimates at these conferences vary from anything from zero to three.

I am reminded that it's a little bit like going to an engineer and asking him how to build a bridge. To build this bridge we need to know the elasticity of steel. One engineer says, "It's one." Another engineer says, "It's three." So we say, "Okay, let's take the average, it's two."

That really is the level at which we've been running scientific policy for the last couple of decades. The reason it's so difficult to get this number right is because we've had very little variation in government spending in the last really century since we've been measuring it, in the beginning of the Depression. The only really big experiment was the one that occurred in World War II.

Now, my reading of events is that those who are actually taking the position on the right at the moment, people like Robert Barro of Harvard, who have been arguing that the multiplier is closer to a half than it is to three—now, if the multiplier is less than one, that really means you do not want to do fiscal spending, because it means that the extra $100,000 in government expenditure will crowd out some amount of private expenditure.

If you look at what has been happening in the last couple of years, saving rates have gone up. I believe that one of the reasons that savings rates have gone up is that households are concerned that the huge increase in government debt that is being floated out there to pay for the stimulus will have to be paid back. That means tax increases in the future or it means reductions in benefits, like pensions and Medicaid benefits.

For me, the fiscal stimulus could only work if it manages somehow to restore confidence in the private markets. So again, the real key here is getting private spending back up.

The debt problem is still there. The debt problem is big in the United States. It's even bigger in Europe. We're going to have to face that. But again, I think that the debt issue is a long-term structural issue, and it should not be confounded with the short-term stimulus, in my view.

QUESTION: I have two questions about the sort of political implications of this idea of quantitative easing through intervening through indexes.

One question I had is whether this proposed index would include any allocation to foreign equities, given that most American portfolios or a significant portion of equity portfolios do include foreign stocks. If what we're talking about is confidence, and confidence in part resides on the health of the foreign stocks or the overvalued nature of foreign stocks within a portfolio, whether you would be including those or only investing, as I think you indicated, in a broad U.S. market measure.

The other one would be the concern that when a non-elected official essentially is intervening in the market, and therefore affecting the value of stocks, people are going to understand or I think the financial press and the commentators are going to be able to make much closer link than they will with interest rates. I think that will be much more understandable by the average person, and whether, therefore, that is really setting up an institution or powers for an institution that is going to be politically acceptable.

ROGER FARMER: Those are really good questions.

The notion of whether to include foreign stocks, my inclination would be to include every publicly traded company on a U.S. exchange. A scheme of this would work best if it were implemented worldwide by every central bank in every country.

The political question is a very important question. I would say that the institution that I would foresee implementing that, I would give additional authority—and I know this is not a good time to be saying this—I would give additional authority to the Fed Open Market Committee, because I think the coordination of interest rate policy and the new policy that I am suggesting would be essential. You really do not want one committee off doing one thing and another one doing something else.

Now, the Fed Open Market Committee already has immense political power. It is often stated that Bernanke is the second-most-powerful man in the world, and there is a sense in which that is true.

I don't see any alternative to developing an institution like that, which is indeed in a non-elected official. I don't see an alternative, let's put it that way.

The kind of proposal I am making would not be an easy one to get through the political system. In fact, it may well take a double-dip recession and much higher unemployment in order to get us there.

QUESTION: In your description of the aggregate assets apportioned to housing and to stocks and the market, and also your description of liquidity of $1.2 trillion, where do these collateralized debt obligations [CDOs], these synthetic products, as you described them, these derivatives, fit into that scheme, and do they have the capability, which we have not seen thus far, to generate wealth, to build actual houses and put people in them and invest in plant, machinery, and small businesses?

ROGER FARMER: No. That's why they're called derivatives. It's just like being in a casino. A lot of what has been going on has been in my view not particularly efficient at generating wealth in the real economy.

On the other hand, having said that, it is important to recognize that there appears to be an important link between finance and growth. Countries that have a well-developed financial system, like the United States—I don't know of any country that has grown rich that does not have well-developed financial institutions.

On the surface, it may well appear that the derivatives markets have been nothing other than gambling. But I would hesitate very strongly to ban them entirely. I would like to see the derivatives markets much more carefully regulated. There are proposals now in the various pieces moving through the House and the Senate to have derivatives traded on an exchange. I think that is extremely important, just because transparency is important.

Don't get me wrong here either. There has been an immense amount of fraud in the current situation, as there was in every financial crisis in the 19th century, human nature being what human nature is. I don't think we will ever get rid of that.

QUESTION: With ever-increasing debt, will the United States have more difficulties in financing that debt [inaudible] junk bonds? Secondly, can that debt lead to a dip in the economy, if not a recession?

ROGER FARMER: Yes, absolutely. I think that, first of all, the rate at which debt is increasing now is completely unsustainable, not only in the long term but also in the medium term.

You will see tax increases. I don't see any alternative in the current situation. I think it is most likely that a European style of value-added tax will be increased, merely because the promise only to tax people earning more than $250,000 is completely infeasible, given the amount of revenue that needs to be raised in order to get debt down.

So, yes, debt is a problem; yes, everybody recognizes it's a problem. Look out for VAT [Value Added Tax].

QUESTION: I'd like to get into the weeds a little bit. On the assumption that the subprime problem was a key element of the crisis, I have the sense that the institutions in California, the mortgage originators, could not have originated these mortgages that they did if they couldn't sell them. They were able to sell them because there were funds and SIPs [structured investment products] and things in New York creating instruments which then put them in the position of saying to the guys in California, "Feed me more product. I can unload it." Of course, what was happening was the incentives were skewed. Nobody ended up holding the real risk that really understood the risk or was involved in creating the original mortgages.

Now, taking that into account, do you think the actions proposed in Washington recently and at the present time address that issue; and, if they don't, what should be done to address that issue?

Second, tied into that, you addressed a little bit the CDO market—credit default swaps, for others that aren't familiar with them. The total notional amount of credit default swaps was allegedly $44 trillion. The underlying assets that they were guaranteeing were about $2 trillion. So the rest was, shall we say, speculative. I agree with you that there were big bets going on.

There is a link, I think, between those two problems: (1) the mortgages origination and (2) the credit default swaps. What should be done, in your view, and how significant is this as a source of the problem?

ROGER FARMER: The proposed legislation that is wending its way through the House and the Senate right now reminds me a little bit of throwing darts at a board and hoping that you'll hit something. A lot of what is being proposed is, I think, sensible.

You asked me what proposal I think would help. I'd like to put something else on the table.

One of the issues that has been raised recently—Simon Johnson has been pushing this—is that we need to break up large financial institutions so that they're not too big to fail. He has proposed that no institution should be larger than $100 billion, whatever the size. Whether or not we break them up, that notion that we should allow financial institutions to fail is extraordinarily important and is central to the fact that many financial corporations went out and took risks with our money that were clearly socially inefficient.

This bears on the issue that economists call moral hazard. Risk is good, it's important to take risks, but it is not important to take too much risk. The interaction between the California mortgage lenders and Wall Street was one in which companies were taking way too much risk. Now, the reason that they were taking too much risk is because they were all well aware that when the whole house of cards fell down, they would be bailed out. This goes back to the notion of the lender of last resort.

So the question then is: How do we allow individual institutions to fail without allowing the whole system to collapse?

I'll get back to your notion in a minute, but I'd like to put forward a second idea here, which is very closely related to the index fund over the whole market.

My proposal would be an index fund of the major financial stocks, the major bank stocks, and I would support the index fund but not the individual banks. So let's suppose we had 200 or 300 financial institutions worth $100 billion each. Let's suppose that some of those back in 2006 had been holding more of what we then used to call toxic assets than the other institutions. Well, those institutions holding the toxic assets would in my view have been down-valued by the market, and some of them would have been allowed to go under. But allowing every single financial institution to go under at the same time is not a good idea.

If you are supporting an index fund and it has 100 companies in it, as the companies that took the riskier bets start going under, they will drop in value, they will drop in weight in the index. If the Fed is there supporting the index, private investors will come in and buy the stronger companies because they know that the weight of those companies will go up in the index, they know that the Fed will support the value of the index fund. So just the credible announcement that the value of the fund will be supported ought to give private investors the incentive to recapitalize the better banks on their own.

So you asked me did I have a notion to how we could move forward. That's my idea. It involves allowing bad banks to fail but not allowing the banking system as a whole to fail, and the side benefit is—the initial question that you asked—that it removes the incentive for banks to engage in excessively risky behavior, because if they know they're going to go under when the whole ship sinks, they are going to be less likely to take those risky bets in the first place.

JOANNE MYERS: Unfortunately, we have run out of time. It was a stimulating discussion and I thank you so much.