

**The Economy and Higher Education
Forum for the Future of Higher Education**

**The Brookings Institution
Washington, DC
February 21, 2014**

Global Economy and Prospects for Financial Markets

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Key Observations

- The global economy is likely to gather steam in 2014, maybe growing 3.5 to 4 percent on average.
- China and India are no longer going to have double digit growth rates.
- Europe is doing better mainly because they couldn't be doing worse.
- Most of the downward adjustment in the emerging markets that occurred in 2013 is now over.
- Equity markets are likely to be relatively supportive of growth going forward. By contrast, the environment for fixed income will be much more challenged.

- A couple years ago people worried the Fed's policy of buying up debt would stoke inflation, but today deflation seems the greater threat.
- Household income in the U.S. has held up very well during the recession. But in terms of market income there's a sharp downward trend.
- The employment-to-population ratio is discouraging. Projections out to 2020 show it not rising.
- The economic model in higher education might be turning or changing.
- State schools are going to have to figure out how to become more like private institutions, building up planned giving and other sources of income.
- Medium sized liberal arts schools with good national reputations must appeal to their natural constituencies by conveying why there's good value for money. The value proposition is around the faculty and other students one meets there.
- Big universities need to monitor what's going on in Washington D.C. The research schools have to be deeply concerned about budget negotiations and NSF grants.
- Endowment management is important. There's an arms race around raising money.
- There are two or three ways to invest in China but none of them are very attractive. China's view of the world is worrying because it's very much a zero sum game.
- The slowing economies overseas are unlikely to reduce the number of international students because most of these students come from the very upper end; a slowing economy is not necessarily very detrimental to them.
- Financial issues are not at the heart of why so many university employees are reluctant to retire. It is much more psychological, about having a vision of what retirement looks like.

- The models of interaction between faculties and institutions are likely to change. The drive towards MOOCs, for example, will have a big impact on the economics of higher education.
- Financial literacy among faculty and employees at universities is inadequate. Many steps can be taken to improve financial literacy.

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BARRY BOSWORTH: We're going to start with Roger and let him go first to get some perspective on financial markets and so forth. Thank you.

ROGER FERGUSON: It's a pleasure to be here. And let me take a moment to thank Barry. One of the things that you may or may not know about Barry is he started his academic career as an assistant professor at Harvard when I was a freshman and a sophomore. So he taught me and then next thing I know he left. I assumed that was just a mere correlation and not causation, but nevertheless, here we are forty years later, together on the same panel. So it's really great for me to be here. We're going to talk about the global economy and markets. I know in this audience there are twenty or so people who are CFOs, and you probably have had quite an experience with markets over the last five or six years. I will try to talk to you a bit about what we might see going forward.

In your packet there is an article from The Economist that I think describes where we were. It's called the World Wide Wobble. And you can see here that it's a picture of an

individual riding a unicycle on a tightrope with an umbrella. And I think that is an apt perspective of how many people thought and still think about the global economy as we transition from 2013 to 2014. So what's happening in markets?

Well, it turns out that last year was a very, very good year for financial markets, particularly in the U.S. but more so globally. We saw the S&P here in the U.S. rose thirty percent. Japan's NIKKEI rose more than that, around fifty-seven percent. But as we turn to 2014, what we see is that there are a number of market jitters. First, there have been some disappointing economic statistics that put our markets into a smaller sort of swoon, not a correction, but down a couple of percentage points. There's a lot of anxiety about the Fed's December announcement. Monetary policy clearly has had an impact on the way markets have been unfolding. And so I think this perspective around global wobble is one that is going to be pretty important as we move forward.

So what do we see as we move forward? First, our perspective is that the global economy is likely to gather steam in 2014, maybe growing 3.5 to 4 percent on average. The U.S. economy is going to accelerate throughout the year, and the jobless rate is likely to hover around a 6.5 percent, which is not a dramatic decline, but certainly given what it was a few years ago that's movement in the right direction. We believe that Europe is going to continue to emerge from its recession and post a relatively slow growth of 0.7 percent GDP gains, but the good news is that many of the issues that afflicted the European economy, while they still remain, seem to be receding a bit.

The Chinese economy, the second largest economy in the world in total GDP, though obviously much smaller in terms of per capita GDP, seems likely to continue to grow at around seven

to seven and a half percent. Some concerns seem to have stabilized. So we think that's going to be probably pretty positive for the world overall.

Outside of those three big engines of growth, things are probably a little more mixed. Partially this is because the Fed's tapering has had an outsized impact on those markets. We have seen an unusually large increase in volatility in growth related to exchange rate uncertainties in a number of economies, including India, for example. Those markets have been all lumped together by investors and had a general down draft. With respect to Japan, Abenomics seems to be taking hold. The very aggressive policies of Governor Kurota seem to have had the desired impact and so we expect to see growth there as well. So I'd say overall, if one thinks about the wobbling world, we are cautiously optimistic.

So what are the things that could create some difficulties? One, obviously, is what the Federal Reserve is doing with the so-called tapering. The Fed came out recently with some minutes from their most recent meeting and it looked as though perhaps the Fed was setting up markets for an increase in interest rates, which led to a day or two of volatility last week. It's going to be important to watch how the Fed unfolds monetary policy for the next year or so as it pulls back this huge amount of stimulus and tries to drive towards a more normal interest rate. That's one challenge that is quite important that could have an impact on the wobble.

The second thing is how stock markets are likely to unfold. The year is off to a pretty good start in the U.S. -- some volatility, but we hit record levels last week and may again today. It seems unlikely that we'll see double digit increases, but it does seem likely that we will continue to move forward in equity, so I would say equity markets are likely to

be relatively supportive of growth as we move forward.

By contrast, I think the environment for fixed income will be much more challenged as we go forward. Valuations for core fixed income are likely to remain poor. Yields are set to rise, not only because of tightening monetary policy in the U.S., but because the economy itself seems to be getting moderately stronger. Interest rates are likely to rise, yields are likely to rise and, by definition, valuations are likely to fall.

The emerging markets clearly underperformed in 2013 because of the issues I've already alluded to. However, I think over the longer term, emerging markets will continue to offer some good opportunities.

I'm going to conclude because I really want to hear what my former professor has to say. But let me also say, in conclusion, that more than six years after the crisis we do seem to be gradually coming out of it, certainly in the U.S. While Europe is lagging behind, in part because of some policy decisions they've made, those economies do seem to be stabilizing as well. The Chinese economy seems to be stabilizing and continues to grow. Perhaps the Japanese economy is picking up pace a little bit. All of that strikes me as being generally supportive of markets going forward for the next year or so.

So what does all of that mean to you in this room? We have a number of CFOs, provosts and others who care about the finances of higher ed, and I think this story that I've told may have three implications that we might want to delve into in the Q&A. One is how one thinks about endowments. We learned during the crisis that endowments must occasionally be a source of liquidity. This creates real strains for those managing endowments because they're managed for the long term and the

thought that, in a crisis, you have to find liquidity in an endowment has proven to be difficult.

The second issue we have been discussing on and off is the economic model in higher ed might be turning or changing. Even if markets are a little stronger, the fact that unemployment is still relatively high creates some stresses in terms of the students at the margin. We've talked a bit about student loans for example. I think the strength of markets underpin all of that because they impact endowments. It also impacts planned giving, and has an impact on the need for tuition assistance in lots of different schools. So I think that's a second theme that clearly plays through markets.

The third theme is globalization. A number of institutions around this table and other places have come to rely, in part, on foreign students who can afford to pay the full tuition. And so a third theme may have to do with how the student body might evolve over time.

Those are some of the points I'd like to make and hopefully provoke some questions, comments, and challenges. Let me now turn it over to Barry.

MR. BOSWORTH: Thank you. That was a very nice start. I'm a little concerned that the two of us may agree too much, and people should worry whenever they see economists agreeing about anything. We've heard for many years, at the beginning of every year, that this year is going to be better than last year, and then it didn't turn out that way. But I think the world's economic problems are receding. Things are starting to stabilize. I would emphasize that they're stabilizing at a very low level.

One of the things we've done is beaten down our expectations. We can deal with a lot of these problems now not

because they're going away completely but because we don't anticipate that we will do so well. Last year a lot of countries seemed to suddenly wake up when Ben Bernanke gave a speech last summer saying that the United States' policy of holding interest rates around zero is not going to go on forever. This seemed to be a big shock to people and they panicked. The markets have stabilized since the summer. But it was very bad for some countries. India suffered a lot because it had gotten very reliant on cheap capital inflows. Since investors couldn't earn anything in the United States, they went searching for higher fixed rates of return around the world. A lot of capital poured into India and at the end of 2013 a lot left.

One of the things we've learned is that the emerging markets accumulated all their reserves for a very good reason. They learned that when you get in trouble, the IMF and the U.S. are not going to help you. The fact that these countries had very large reserve holdings is preventing an outbreak of a crisis for most of them. There's a couple that didn't build up reserves, like Argentina and Venezuela, where maybe the situation's a little bit more serious. But in most of Asia they'll manage quite well because they have high reserve holdings.

As we finished the year, the advanced economies were getting stronger and the emerging markets were getting weaker. But I think most of the adjustment in the emerging markets is now over with. They let their exchange rates appreciate. They basically followed pretty good policies in adjusting and now they're poised for some recovery. I think it's also evident that in the case of the United States, Japan and Europe that the worst is behind us. It's not that we solved all the problems, but the problems are not growing, and so I think there's some

hope for higher rates of growth in the advanced countries.

The other thing that's interesting is that most of the world has an excess of saving, even though we used to talk about an aging economy and everybody's going to spend their money. But in fact the dominant problem in advanced economies has turned out to be too much saving relative to investment. I would say a lot of it's because investment's so low. That threatens to keep interest rates very low -- real interest rates -- at a very low level for quite a period of time.

A couple years ago we were talking about the Fed's imprudent policies of buying up all this debt, but now it doesn't look like that's the big threat. The threat seems to be deflation. If you look at Central Banks' expectations for the last 12 months, they've been consistently running below their expectations. Inflation is going up less than what almost everybody has anticipated it would. I don't know that that's a terrible problem if it happens. But it does look like the newly emerging concern is deflation, not inflation.

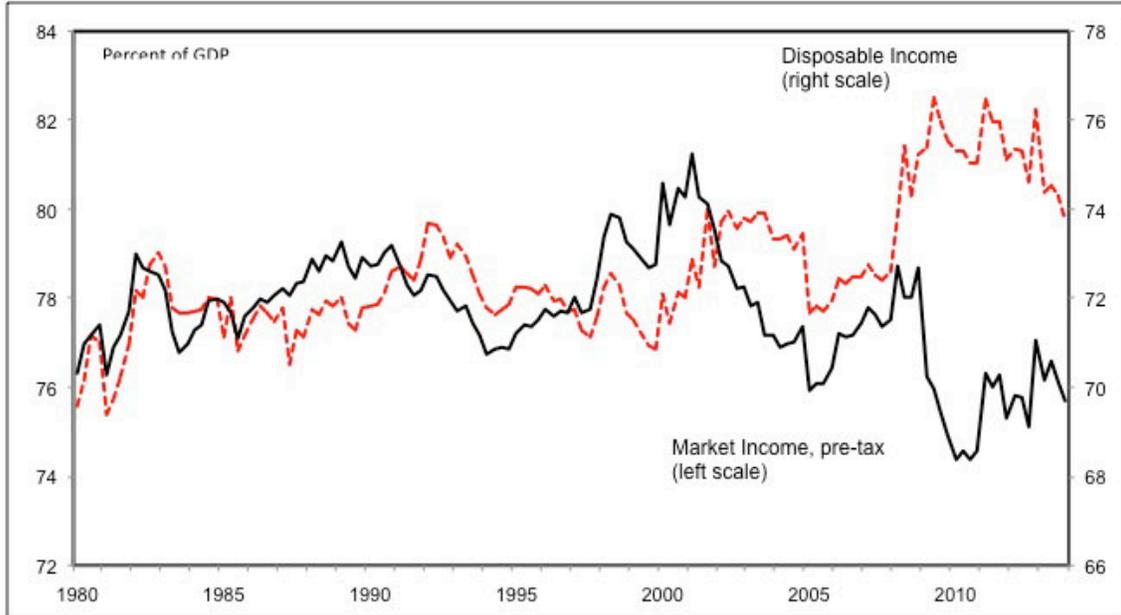
If you look at exhibit 1 you'll see that the growth rate for the world economy is pretty close to the average that we used to have before the financial crisis hit. The distribution by country is a little different, but the general pattern is now the same.

Exhibit 1: World Economic Outlook 2011-2015

	2011	2012	2013	2014	2015
World Output	4.0	3.1	3.0	3.7	3.9
Advanced Economies	1.6	1.4	1.3	2.2	2.3
United States	1.8	2.8	1.9	2.8	3.0
Euro Area	1.4	-0.7	-0.4	1.0	1.4
Japan	-0.6	1.4	1.7	1.7	1.0
Emerging Markets	6.4	4.9	4.7	5.1	5.4
Developing Asia	8.1	6.4	6.5	6.7	6.8
Latin America and the Caribbean	4.6	3.0	2.6	3.0	3.3

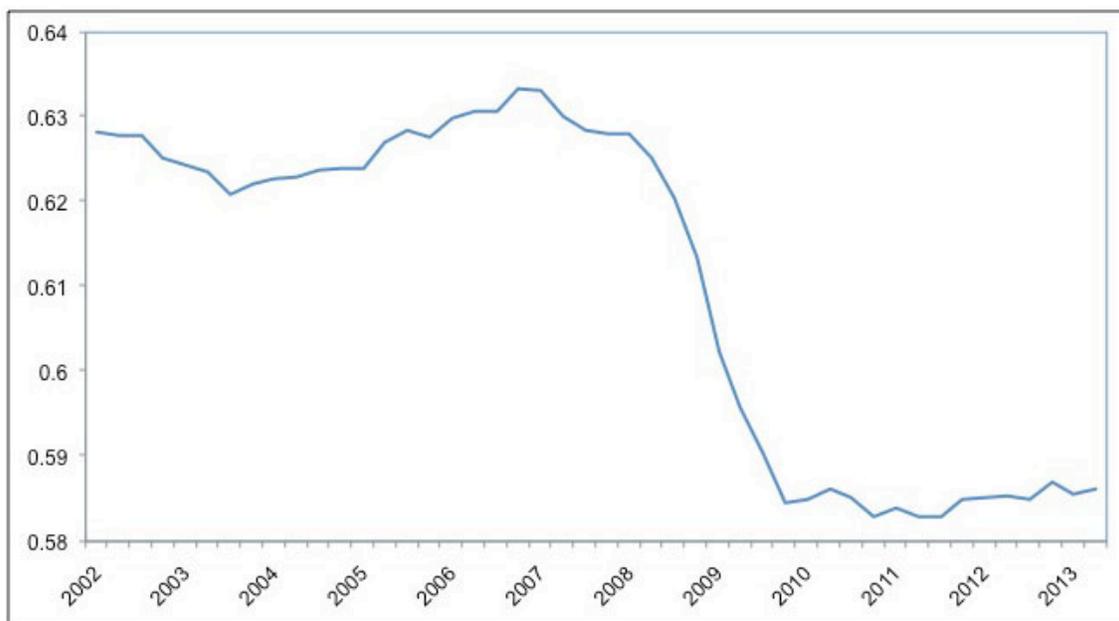
The chart for the U.S. that I wanted to mention is exhibit 2. Household income has held up very well during the recession. It's growing rapidly at the present time. On the other hand, if you look at the solid line, that's what people are getting in terms of market income. And that shows a sharp downward trend. It's been going on since 2000, but it fell particularly dramatically in the financial crisis. That reflects the fact that a far smaller number of people are employed in the United States than in the past.

Exhibit 2: Trends in Market Income and Disposable Income 1980-2013



The chart that illustrates that is exhibit 3, the employment-to-population ratio. That's a very dramatic story. And what's discouraging is that if you take that graph and the Congressional Budget Office projections of the U.S. out to 2020 the employment-to-population ratio never rises.

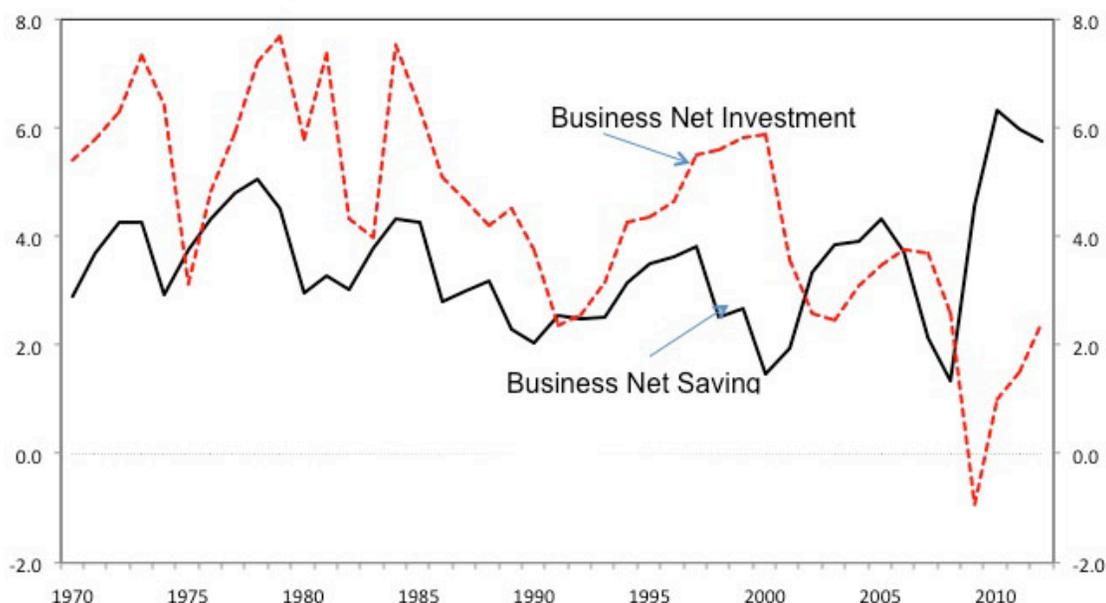
Exhibit 3: Employment to population ratio



Part of this is because of the aging population -- fewer people in the work force; but that accounts for maybe a third of the drop. Two thirds of it is just that there are an awful lot of people in the United States who don't have a job anymore. Some of them show up as unemployed. The rest of them show up as out of the labor force. It doesn't look like that situation is going to change much going forward. That's kind of the discouraging aspect of our recovery.

There are a couple of other things I wanted to mention that may be worth pointing out. We used to always think that households were net savers. They saved the money, deposited it in the banks and then the banks loaned it out to businesses, and so businesses were net lenders in the United States. That's now the opposite situation. If you look at exhibit 4, American business earns more in retained earnings than it pays out in the form of investment. It is a net supplier of funds to the rest of the economy.

Exhibit 4: Business-Saving Investment Balance (% of GDP)



In many respects, the business sector is the reason that the recovery has been so weak. Businesses were piling up record rates of profits. Profit margins were very high. They hung onto it. They didn't pay it out in the form of dividends. But they didn't do anything with it. They didn't spend it on new capital. What they have done with most of it in recent times is repurchased their equity; there are a lot of stock purchases. When a company repurchases its financial capital, we don't say it's invested. It's had an asset switch. It's get less equity outstanding, but fewer other financial assets. That gets captured in the flow of funds, but not in the national accounts. And so until recently the business sector has been a big drain, drawing more income out of the economy than injecting back into it.

One of the big sources of optimism this year is that business investment looks like it's ramping up. There seems to be more of a willingness of American corporations to spend. I

was fearful that the United States was going to turn into a Japan. They had a financial crisis. They had twenty years of economic stagnation. Was that what the United States was going to have? Japan now looks like it's trying to turn its situation around. If you think that we have had an aggressive monetary policy in the last couple of years, you ought to see what Japan has done. The intervention in financial markets is two to three times bigger than in the U.S. They have managed to drive the inflation rate positive instead of deflation, which they were suffering from for almost ten years. One reason is they had a huge decline in the exchange rate, so imported goods are costing them a lot more.

Later this year they're going to have a big increase in the value added tax, which may interrupt the whole thing. It doesn't seem too well designed in terms of trying to sustain the recovery, but they're upset about the magnitude of their budget deficit. So it will be important to watch what happens to the Japanese economy. Can they weather this big increase in the value added tax and still keep things going? I think they've done well in the last year or so. So it looks like maybe Japan is turning around.

The other interesting development is that China and India are no longer going to have these double digit growth rates that they were having for a while. China is not going to fall apart, but we're going to see its growth rate slowdown to be about eight percent a year. That's pretty damned good. If most other countries could grow in terms of eight percent, you'd think it's great. They're trying to shift away from all this focus on exports, which they've come to recognize they can't sustain, and try to promote more growth of the domestic economy. Thus far it's not going great. It's a little harder to get Chinese consumers to spend more than I think we thought it was

going to be. I always thought one answer would be to send some American households to China, to show them how to truly consume, and some Chinese to come to the United States, to show us how to save.

Because they're having trouble getting sustained growth in domestic demand, they've had to focus too much on investment, which was already at very elevated levels. I think there's some risk that all this lending to the business sector to stimulate investment and sustain the growth runs some risk of creating financial problems in China.

As for India, as I mentioned, the cheap money left the country. Also, this is an election year. In election years they do lots of terrible things trying to buy off voters with all sorts of subsidy programs, and they've moved too far away from their prior focus on economic growth. So they will not be the big stars of the next year. They're going to be going through more difficult transitions. But economic growth is not going to collapse either.

Europe is doing better mainly because they couldn't be doing worse. They've had several years that were so bad that you can't imagine the European economy declining much more, and so you're going to see some positive signs of growth. One country that stands out -- outside the Euro zone -- is the U.K. They're growing very rapidly at the present time. They're the best story, but also within Europe the European Central Bank just guaranteed the debt of every member country, which took the interest rates back down. Maybe in the long run this will turn out to be a very imprudent policy, but in the short run it relieved all the fear that these countries were going to go bankrupt. So the lower interest rates have at least temporarily normalized things in Europe. Unfortunately there's no signs that they've made any real regulatory changes or restructuring inside

the European economy. They wanted to pretend to be a United States of states but they're just a united group of countries -- and not that united. It's very difficult for them to mimic our economic behavior when they have all these border restrictions and peoples' unwillingness to move freely from one European state to another.

But I think in general Europe still turns out to be a pretty positive situation, compared to the last couple of years. We're not talking about some country going bankrupt in Europe the way we were two or three years ago. I'll stop with that. We have about half an hour for questions. Yes?

SPEAKER: As several speakers have mentioned, some institutions have liabilities for post-employment, others have deferred maintenance issues. We have a big infrastructure. How would you deploy your capital, or how would you conduct the analysis to reach that decision?

MR. FERGUSON: I think the first thing is to figure out what segment of higher ed you are in. In this room there are some great internationally known research institutions that are in some sense balanced across tuition, endowment and research funding. All of those things may be a bit under threat, but at least you start with a more balanced outlook. That's a bit of a luxury these days. If you are a small traditional, liberal arts school, where the research funding is probably lower and you're much more tuition and endowment dependent, then I think you've got a very, very different model. And then there are state schools. If I look at state schools, I think the good news is the down draft seems to have stopped. But I wouldn't expect any dramatic increase in state funding. I think state schools are going to have to figure out how, in some sense, to become more

like private institutions, building up planned giving and other sources of income.

If you're a CFO at a medium sized liberal arts school with a good national reputation, I think the story there is very much around the ability to appeal to your natural constituency and give a strong sense that there's good value for the money. Schools in that situation have to make sure that the net tuition that flows in continues to be as strong as possible, while also working to build up the endowment.

For the really big universities that have an international reputation, broad research pull, etcetera, I think there are three things they have to worry about. One is a deep understanding of what's going on in Washington because the research schools have to be deeply concerned about NSF grants and other things falling off quite dramatically. I heard some earlier discussion that maybe education's going to avoid the axe. It might, but it's important to understand that education and a few other things are the only areas where there's much discretion. True, the budget concerns have receded a little bit, but I still think there's a budget issue in the U.S. and Congress is likely to go to the smaller parts where there's discretion because they don't want to touch Social Security, Medicare, Medicaid. Defense is already down about as much as it's likely to go. That's where, if I were a research institute, I would be worried.

Also, continuing to focus on endowment management is pretty important, as well as really thinking about your giving population. I'm on a campus once a week, and most everywhere I go I find CFOs, Presidents, etcetera, very interested in conversations around how to tap into this very uneven recovery that has been very, very supportive of those who have been lucky enough to own stock. This is a great time to go out to all of

your friends or friends/funders and remind them of how well they have done in terms of the stock market. Those are some thoughts. Yes, ma'am?

SPEAKER: I'd like to hear a little bit more about India since it's facing national elections and almost certainly the end of the Congress Party.

MR. BOSWORTH: India is going to experience quite slow growth for the next couple of years. They just don't have any good options at the present time. You'd like to have more fiscal stimulus. You can't. They've got a huge budget deficit. You would like to encourage some investment, but you can't afford to with monetary policy because inflation in India is higher than any other large economy in the world. And it's high at a very unusual time, when everybody else's inflation is coming down, which is widely attributed to the loss of credibility of the Central Bank. The Central Bank doesn't have any choice except to be the tough guy for a couple of years, to restore their credibility. The good news is that they've had a big depreciation of the exchange rate. The bad news is they're not interested in exporting. It is a country that just never liked the idea of getting very dependent on exports. It was based on autarchy for a long time. They've only gradually moved towards the global economy. Manufacturing is very difficult to expand because of the labor rules; companies that hire somebody can't lay anybody off, ever. That inhibits economic growth in the good sectors. They did well for a decade in services, but it looks like that's over. So it's a country with very difficult choices going forward, and it's also constrained for the next eight months by an election.

In an election year, you can't make dramatic changes.

So I think nothing much will happen until the election is over, and after the election it's very likely to be a coalition government, and it's historically difficult for India to make tough choices with a coalition form of government. So it's a difficult time, and it's a very sudden reversal for a country that was doing spectacularly well a few years ago. They seemed to weather the financial crisis so well. If you were looking in 2010, 2011, India was one of the highest growth rate countries in the world, and then all of a sudden, in the last two to three years, all these problems caught up with them. I'm quite concerned about the outlook for India over the next few years.

SPEAKER: What I ask every economist or money manager I run into is this: how does a university access the incredible increase in wealth in China? That is, how do we invest money in China and how do we get it out of China after we've invested it? Here's the biggest wealth creation in history, and I don't understand how to take advantage of it.

MR. FERGUSON: I'll take the first crack because we are investing six hundred billion dollars of your money, so I spend a lot of time thinking about it. There are two or three ways to invest in China. None of them are very attractive. One is you can sort of own Chinese stocks, but the accounting systems there are incredibly opaque. The stocks that one can buy tend to move up and down like a penny stock, with what appears like insider trading. I'm not in a position to accuse anyone. But they move very, very quickly when they trade. So for an endowment that doesn't seem very attractive.

The second way to invest is -- and this is not what you would do--is foreign direct investment. Any business leader I know who's done that through a joint venture or whatever says

it's very hard to get money out. So that investment option seems pretty problematic as well.

The third is opening campuses in China, which is what many universities are doing. What I've found interesting as I traveled in higher ed circles is the divergence of views around whether or not that's a good or a bad thing. Some campuses have done it and then run into issues around civil liberties, which spills back onto your local campus here. The economics of opening campuses in China seems like it may be neutral to slightly positive. But the ability to integrate the Chinese campus with one's U.S. campus also is a bit of a challenge.

I'm just reciting all the frustrations that we all seem to have, which is that China looks like an incredibly lucrative and attractive market, except it's hard to find anyone who's actually made money there consistently and managed to bring it home. To be quite honest with you, I'm not one hundred percent certain that it actually is as attractive as it appears on paper, simply because the model is not consistently accretive to the economics of any institution in the service sector, as far as I can tell.

SPEAKER: A number of universities in the U.S. are benefitting from bringing students over from China and India. Could you comment on what you expect the impact to be from the change in those two economies?

MR. FERGUSON: I think it's going to be net beneficial. America still has the most enviable higher education system in the world -- a great diversity of schools represented here, some of the best researcher training, some of the best young thinkers. The fact that we can build human capital has got to be a net positive. You've heard other people talk about the difference

between those who have college educations and those who don't, and so I think it's got to be net beneficial. The question for us is much more about what we do with these folks that we're educating as opposed to whether or not they're beneficial to their home economies. The question is how beneficial can we make them to our own economy?

SPEAKER: Do you think the slowing of their economies will slow the number of students coming here?

MR. FERGUSON: I am not sure that would be the case. The folks that come to the U.S. from these economies have two or three things in common. One is they come from the very upper end and even a slowing economy is not necessarily very detrimental to the very upper end. Two, they get through these very, very rigorous testing systems and are some of the best students and the governments want to support them, so even slowing economies can still afford to send a certain number of their best students overseas. And then there's sort of a third group of what I would describe as very scrappy, pulling themselves up by their bootstraps folks, and I still imagine those folks will still want to come. Two of those three groups will have plenty of support -- those who can support themselves and those who are getting supported by the government. The third group might be much more challenged, but I suspect that third group is a relatively small percentage on your campuses. So I think the ups and downs of the economies in China, India and etcetera aren't likely to have a dramatic impact on the desirability or the availability of foreign students to come onto U.S. campuses.

SPEAKER: Is our faculty retirement savings getting to the point that -- maybe I shouldn't say this in this group -- we can

encourage some moving on? Also, I'd like to hear both of your advice on the business model.

MR. FERGUSON: I'm going to do it but I've spoken too much and I want Barry to talk.

MR. BOSWORTH: I don't know how many of you have seen the latest data on the growth of student lending, or student loans. They have just exploded, which to me is evidence that there's been this big cut back by the states and their funding of education. It also looks like parents have cut back on their funding, and they're encouraging the students to borrow the money. I don't see that as a sustainable long term path, given the growth rate in student lending.

I'm just amazed at all the economic studies that come out saying there's never been a higher return to higher education, compared to a high school education, than now. Yet, again and again, even in this institution, I'm struck by how many people tell me that too many students are going to university. I don't know where that's coming from. What the hell else are they going to do? But I think you have a lot of growing political opposition to funding this and the schools are going to have to find some way to get the costs under control and develop some new sources of funding. You've got to start thinking of new sources of funds, compared to the old model.

MR. FERGUSON: My son graduated from Brown last year and my daughter is now a freshman at Harvard, so you two represent two of my fifteen thousand favorite institutions. Let me try to respond to a range of the issues that you've raised. First, you started delicately talking about the retirement issue that many of you confront, which we have spent some time on a number of

campuses talking about. What we know, at least among our participant base, is that financial issues are not at the heart of why so many folks on your campuses are reluctant to retire. It is much more about retiring to something and having a vision of what it looks like to be on the other side of that thing that looks like this incredible wall. And that's where your HR departments come into play, because you have to be able to explain to people what it's like to be an Emeritus. That you can still go to seminars, etcetera. So the retirement story is not a financial story, it's a psychological story. And many of our institutions have to deal with that.

On the broader question of the economic model, I agree and disagree with the general sense that we've got to change everything. First we've got to do the things that we do so well, which is why I go back to endowment, endowment management, planned giving, etcetera. Harvard has just announced a \$6.5 billion fundraising campaign. Columbia just finished theirs at \$6.1 billion. There's an arms race around raising money. And that's an important part of what we have to do.

Secondly, if I were running a university, thinking about this from a business standpoint, I would ask the Warren Buffet question, which is what are the underused assets and resources that we have here and how can we use them more fully? In addition to the physical assets are the faculty members. And they are a funny breed because, as you well know, you pay them. They're full time. But, in fact, you have very little control over what they do with their most valuable asset, which is their time and intellectual capacity. I think over time the models of interaction between faculty and institution are probably going to change. This drive towards MOOCs, for example, is going to have a really big impact on the economics of higher ed and the ability to monetize that to some degree. I can't even speculate

or know exactly what that's going to look like, but that is certainly a place that would differentiate.

And the final point is how the value proposition for the students has evolved or might evolve, and it's up to you to define that. The value proposition at Brown and Harvard -- I know this as a father with students in each one of those schools -- has very little to do with getting a job, sadly. I wish my son had gone to school to get a job. No, no -- he has a great job, believe me. But the value proposition at Brown and Harvard has everything to do with the other students and the faculty that you're going to meet there. So you should try to define the value proposition that way. Those are some of my thoughts. Start with the basics, which is to manage the money that you have now superbly well. If you don't do that, nothing else works. So, yes sir?

SPEAKER: I want to go back to the student loan comment that Barry made. People say they are borrowing a lot of money because all these expensive schools cost a lot and they're getting more expensive. But I think a more accurate analysis would be to say that people are borrowing a lot of money because state government has stopped funding public education and public education institutions had to raise their price. They don't have big financial aid programs and so students are borrowing a lot of money. If you are a very bright capable person, of low income, the cheapest education from the standpoint of price is Harvard. It's less expensive because you get full, need-based aid with minimal loans, in some cases zero. That's just not understood. There are quite a few institutions in this country that are not overpriced.

MR. BOSWORTH: It looks like Linda wanted to say something.

MS. HILL: Not too many years ago the Dean at Harvard sat us down and said -- you people are really bad at managing your finances. You are now going to have a mandatory meeting that this school's going to pay for and we're going to help you make sure that you're ready to retire. So we actually now have required financial planning. Maybe that would be something that all schools should think about.

MR. FERGUSON: We do planned outcome assessments that will tell, on average, across a faculty or staff at a university, what percentage of their pre-retirement income they can achieve in retirement years. It's a combination of what they may have saved with us and, for lower income people, social security. Across the board our institutions are well within the range a retirement economist suggests, but with lower income people that has to include social security as well. That is not inconsistent with your other point, which is the woeful lack of financial literacy even among Harvard Business School professors. We have a huge number of Nobel Prize winners, the vast majority of whom probably have exactly the same challenges. There's no question that financial literacy, even among the institutions represented here, is probably inadequate.

Part of the reason is that young people are not at all focused on these kinds of questions. What we discover is that some of them get very interested in a retirement income when they're 58. I'm being moderately facetious, but the first thing they're interested in is tenure, and then obviously they're interested in family and then they're interested in getting from tenure to the chair, etcetera, and so we find that huge numbers of people are not very interested in these financial matters. It's one of the reasons why this question of getting objective

advice is incredibly important. So the two things are not inconsistent. The great luxury in higher ed for folks who are represented around this room is the plans tend to be well funded, many do have matches of one sort or another, and so things are structured pretty much the right way. The other thing that really works for higher ed that's different for the rest of the world of retirement is almost everyone on any of your campuses is enrolled in some sort of a retirement plan. One of the nice bits of magic around higher ed is people sign all those papers when they first join. One of them is to be enrolled. And that sort of gets the clock running. But, having said that, there are still lots of things that one could do on campus to improve financial literacy.