Unedited Event Transcript

Global Economic Prospects: Spring 2016

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Paolo Mauro: Welcome back to the Peterson Institute for International Economics. My name is Paolo Mauro. I'm one of the senior fellows here at the Institute and it's my honor and pleasure to welcome you to this session on global economic prospects. This is one of our favorite regular events. We do this every six months. We've been doing this for a number of years.

The structure of the proceedings today is going to be a little bit different. Our good friend and colleague, Dave Stockton, who had done the last eight consecutive events of this kind, is deservedly taking a break.

So the way we will structure the proceedings is I will provide the global context, I will review the key risks and shocks facing the world economy, and then I will turn over to our president, Dr. Adam Posen, who will cover the case of the United States and will focus on monetary policy. And of course Adam is well placed to do that having served in central banks.

We'll then turn to Nick Lardy who is the Anthony Solomon Senior Fellow here at the institute and is of course well known to many of you as one of the leading experts on China. Nick will focus on the prospects for the Chinese economy with a special focus on the exchange rate and on capital flows. After that presentation we'll turn to the usual lively question and answer section.

So, let me begin by giving you a sense of the global economic prospects at the big picture level. And what I'm providing here is a forecast for which I'm happy to take the blame when a year from now it turns out that some of these numbers are not accurate. But I did consult very widely with my colleagues here at the Peterson Institute who follow these countries.

And as you can see, the world economy is growing. It is growing at a pace of about 3% per year in real terms. That's slower than we were used to prior to the global economic and financial crisis that began in 2008/2009. It is slower, but it's a not bad growth rate. If you think about it, in 20 or 25 years this kind of growth rate doubles world output. Looking at the advanced economies, in most areas we see a slow but steady growth rate, so things look like they're on the mend. For the United Sates, we see the US a bit in a Goldilocks position. The growth rate at 2% is neither too hot, nor too cold. It's about right. It's pretty much in line with potential output growth. The unemployment rate is at 5%. We'll hear more from Adam. The inflationary pressures are beginning to rise a little bit but they're certainly still subdued.

Turning to the Euro area, on average, we have a slow recovery. It's a steady pace of recovery. Things are getting better. There's availability of credit. There isn't a whole lot of investment. In fact one of the reasons globally why we have relatively low growth is exactly that investment is much lower than would be predicted by any kind of model. Within the Euro area we have a lot of variation, of course, ranging from Greece, which is still pretty stagnating, all the way to Ireland, which is booming at 8%. And even within the larger economies in the Euro area there are substantial differences. But on the whole things are looking better.

Turning to Japan, the growth rate is slower, particularly if we look at total GDP growth. That said, a lot of the differences between the United States, the Euro area and Japan are simply driven by demographics at this point. If you were to do the same table, here I used total GDP growth, but if one were to use a table in terms of GDP per person of working age, then the differences between the US, the Euro area and Japan would be much smaller. In the specific case of Japan we are projecting a small decline in the growth rate this year on account of the recent appreciation of the yen and a little bit of a decline in expectations, particularly expectations reflected in forecasted inflation.

When we look at next year, we are projecting a small rebound in that growth rate, again, to a low level. But that's predicated on the assumption that the VAT hike is postponed further. Looking at the UK, things would be fine, it would be a healthy growth rate. However, for this year we are already seeing a decline in investment associated with the uncertainty that comes from the referendum on Brexit. And for next year, for the UK, we are projecting a return to healthy growth of 2.2%, on the baseline assumption that the British population will choose to remain in the European Union. In the event that we don't think is particularly likely, but in the event of Brexit we would forecast the growth rate that is in significantly negative territory for the UK.

Turning to the so-called emerging economies, I'm somewhat reluctant to talk about emerging economies because they're very diverse. There are huge differences driven by whether they're oil importers or oil exporters and perhaps even more importantly by domestic political developments or by geopolitical developments. So, beginning with the case of Brazil we have a decline in output projected for this year by four percentage points, and really we only see the situation of the economy getting resolved when the political situation gets resolved.

For Russia, we see the continued adverse impact of the decline in oil prices that began in mid-2014 all the way through 2015. That's still having an impact and of course the sanctions are also having an impact. It's possible that next year we'll see a little bit of a recovery. China, of course we'll hear in a lot more detail from Nick, but just to summarize, we see a gradual slowdown and we consider this gradual slowdown to be entirely appropriate. We think that a gradual slowdown is actually compatible with the reduction in the likelihood of a crisis.

When it comes to India, finally, here is the bright spot in the world economy. There are some questions being asked already about the investment base, about what's going on in manufacturing, but on the whole India still looks like the bright spot in the world economy.

Let me make on final general point on these forecasts, which is that if you notice, they are pretty flat. If I had shown this table maybe two or three years ago, normally we would tend to say that the outer year projections are for much faster growth than the current year. And instead, now we seem to have come to a realization that the potential growth rate has declined. We are in a new normal. And that's perhaps unfortunate, but the good news is that there's no over-optimism. I think economists in general have come to realize that we have to be realistic about what can be expected for the growth rate.

Demand, of course, is still an issue, particularly for the Eurozone, particularly for Japan. If we look at prospects for the inflation rate and what's actually already happening to the inflation rate in the United States; if one looks at core PCE, which is the inflation rate argued by the Fed, we're already at about 1.7%. So, we're not so far form the target in the case of the US. We are much further from the target in the Eurozone and Japan.

Now, key shocks affecting the world economy. I still think that the oil price decline between 2014 and 2015, that's still a big part of the story. And I want to reiterate the perhaps old-fashioned view that lower oil prices are good for the advanced economies. There's a puzzling view out there, particularly with reference to the United States, according to which oil prices would hurt the US economy. And that is reflected actually in very strong correlations between oil prices and stock market prices. It's reflected in very strong and excessive correlations between changes in oil prices and inflation expectations. We think that's unwarranted. And what seems to have happened is that there was a very abrupt collapse in investment in the energy sector, particularly in the US, given the new technologies is being used. Those were technologies where investment could be reversed very quickly.

But if one looks carefully, we have already seen a positive impact of low oil prices including in the United States on consumer demand. And we think that over time that effect will continue and will more than offset the adverse impact on investment. Of course the decline in oil prices has affected massively and will continue to affect countries such as Venezuela, Russia, Nigeria and so on, all the commodity producers. But on balance this is a good thing for the advanced economies.

There is an interesting question whether globally lower oil prices are still a net positive for world demand. In the 1970s we used to think that a decline in oil prices was good for world demand because the marginal propensity to consume of the advanced economies, of the oil importers rather, was higher than the marginal propensity for consumer of the oil exporters.

Now, the way that the production is much more geographically diversified today makes it a weaker case and perhaps it's not such a big net positive as in the past. But that's a question that one can think about. In any event the oil price seems to have stabilized in recent weeks between $35 and $40 per barrel and of course we know there's a cap of about 70% with is imposed by the ability of the US producers to come into the market. So, this is one theme,

The other theme that is very much discussed and we'll hear from Nick is what are the implications of a slowdown or a potential slowdown of China's economy on the rest of the world? And here, I want to argue that the impact is negative and it's already being felt and that's kind of regardless of the exact extent of what's happening to total GDP growth in China. Hypothetically, even if the total GDP growth rate in China were to remain at 7% for several years, will still have a massive impact on the rest of the world form the structural transformation that is happening away from manufacturing and towards services. We know that services are already more than half of the Chinese economy and the decline in the manufacturing output is becoming offset by the improvement in the service sector.

That rebalancing is imparting a negative shock to the rest of the world because the share of imports of services in total imports of goods and services for China, like for many other countries, is only 18%. So, we already see a large decline in the growth of imports of goods by China and this is hurting the emerging economy exporters, certainly the commodity exporters, but it's also hurting the advanced economy neighbors of China. So, just to give you a sense of the numbers, this is a chart from Chinese customs. Its goods import volumes. And you will see that the growth of those volumes is pretty much zero already in 2015. So, this is having an impact.

And who is hurt the most? Well, if one looks at the share of exports to China as a share of total exports country by country, you will see that of course the commodity exporters are hurt but also the neighbors. So, if you look at South Korea or Japan, they have somewhere in the neighborhood of 20% or 25% of their total exports going to China. So, it's having a big effect there. It's having a smaller impact on the US, the UK, the Eurozone and so on.

Last but not least, I argued that things are on the mend in Europe, but I still feel that we need to discuss potential risks emanating from Europe to the rest of the world. And I took a bit of a poll among the senior fellows here and what they saw as the important risks. And I rank them by degree of importance. Starting from the bottom as being the least important for the rest of the world, there's a lot of discussion of non-performing loans in the banking system, in Italy, in other Eurozone countries. And that's certainly a problem for those economies, but I don't see that as being something that will affect the rest of the world.

Brexit, I don't think that's likely to happen. We've sort of played that movie once. I don't think it's going to playing again in the near future. And even in the unlikely event that it were to happen I believe this is something that at this point would be manageable from an economic point of view. I think the issue of Brexit is more serious. The betting markets I believe are giving something like a 30% or 40% probability. It's certainly difficult to predict a referenda. But at any rate, even if it were to happen I think the immediate impact would be serious for maybe a couple of years. It would be also something that can be managed. It would take time to renegotiate the various trade agreements and so on, but it's something that you would be able you handle over time.

The one I'm most concerned about is the refugee crisis and I'm not concerned about the economics of it. As a matter of fact, the economic impact of the refugees might paradoxically be actually beneficial. Certainly, given the demographics in Europe, more of an influx of people would be welcome and certainly greater spending to integrate the refugees into European society, something that would be beneficial even from an economic point of view. I am concerned however about the politics and the way in which some countries are becoming a little bit more protectionist. So, I do see that as being the one that we need to watch the most closely.

Before I turn over to Adam, let me just make one final point related to the investment worldwide. And there's a perception that the world has become more uncertain and perhaps this is one of the reasons why investment is so weak. There is a perception, we can't measure it precisely, but there is a perception that geopolitics has become more uncertain. That may be part of the story. There's also a perception that policymakers have run out of ammunition. And there's a whole event dedicated to this theme tomorrow which I highly recommend. But very briefly let me give you my five cents worth.

I think there is still plenty of scope for quantitative easing if necessary. We can argue whether quantitative easing going forward is going to be more or less effective than in the past episodes, but certainly that will still be used. I think on the fiscal side, for individual countries, if one looks around the world, the government debt to GDP ratios are so much higher than before the crisis that I'm not sure that countries have a whole lot of ability to use fiscal policy. Maybe Germany, maybe Australia, Canada, but the scope is quite limited.

There is a possibility in a really severe global recession scenario, which I don't think is very likely, but in that sort of extreme scenario I think markets would tolerate another round of coordinated global fiscal stimulus. So, on balance I do think that there is still quite a bit of ammunition. In particular in the event of another global recession. With that, let me turn over to Adam to discuss the United States.

Adam Posen: Thank you very much, Paolo. I am in the odd position, as I was when I and our team of fellows came out with the Reality Check document about four to six weeks ago that many of you have seen, of sort of going back to the radical center of the forecast. After years of being seen as someone who always was pushing for more stimulus, I'm not doing so at the moment. And I have some friends sat the left who are quite disappoint in me. Of course also have, I won't say friends, but contacts on the far right, who are convinced that this is all just a stealth program to inflate away the debt, so we will leave that for another time.

Joking aside I think it is important – I'm speaking for myself, but like Paolo, I've drawn on the work of our colleagues including Dave Stockton who is, as Paolo said, getting a well justified leave today – I think there is a sense that everybody wants to hear drama. And there just isn't that much drama. I think the US is a very good example of what Paolo was saying about a new normal of a downshift to a sustainable lower rate of growth and therefore one that can continue for quite some time.

Now, I'm not happy that we're at a lower rate of growth. I believe that perhaps had we been a little more aggressive with monetary and particularly fiscal policy back in 2009, '10, '11, we might have had at least a better labor market, and we might have possibly had slightly better potential growth than we now have.

Our colleagues, Olivier Blanchard and Larry Summers, have done extensive work on hysteresis which indicates that dynamic is what took place. And that is something I was warning about when I was at the Bank of England in those days. But that ship has sailed. And given where we are now, I'm just going to try to make the case that slow and steady wins the least ugly contest, to mix my metaphors. That the US will continue to turn out to be the least ugly of the major economies, that it will do so not through anything spectacular, but by continuing to grow at a slower yet sustainable rate.

This is the standard chart we put up at the start of every US outlook. Basically very little change from six months ago. The unemployment rate continues to come down. It's plateauing. I'll come back to that. There's a little hope that perhaps it will pick up a bit if we get some more increase in participation, but I wouldn't put too much weight on that. Inflation continues to be sub-target by a small amount as Paolo indicated. I think the key points, which are the numbers in red that I've highlighted there are that we are seeing this flattening of growth in the US, and unfortunately should expect that, and that with that we are seeing a continued soft inflation outlook.

I think the best good news in the US that people tend to overlook is just how far we have come with household balance sheets. These are two measures one can use. Consumer loan delinquency rate is the red lined scale on the right. Household financial obligation ratio, it's basically service debt to income, that's on the left. You can use any number of readily publicly available assessments of the household situation in the US. And we are at solidity of household balance sheets that we have not seen in decades.

Now, this is not universal. There remain people underwater in Nevada and Florida with their homes, there remain poor people without access to credit, but that was, to some degree, true even in 1980 and in the early '80s in the aftermath of the savings and loan crisis. This is an economy where the household sector is fundamentally less leveraged than it was. And we are seeing, to some degree, a lot more conservative behavior from younger generations. Many of you are seeing the stories in the press about the millennials who worry about their jobs, who are reluctant to take on debt.

I do not pretend that this is like our grandparents or parents coming out of the Great Depression, but I do think we should start entertaining at least the possibility that this will be a sustained change in household behavior in the US and that means a much less leveraged consumer than in the past.

Housing is of course the flipside of this. And as Dave Stockton and I and others have pointed out over the last few years, housing was due to come back because of course the housing slump started in 2006. And due to population movement, growth in population, as well as weather in the US, you always need to build a number of other houses. And of course we had a long period without.

But the key problem in many ways after the recovery started was household formation. How many young people and how many people wanted to go out and build their own house, buy their own place, make their own family living separately from grandma and grandpa. And what we saw, we were just waiting whether or not that would happen – no light okay.

And what I've done is you see that there is that Empire State-like looking tower at the right edge of the left graph. Household formation did come back for about 18 months. But we've suddenly seen a sharp downturn in the last few months. And I will be honest, I have no idea why we saw that type of downturn. It's not clear that there's anything, perhaps financial conditions contribute to it. But that bears watching. That would be a serious risk to the forecast through the housing channel is the housing formation stays down.

But it is important to remember that we are still crawling our way back up in terms of housing starts from the setback that we had during the crisis. And so barring demographic change or some clever person coming up with why we've seen this downturn in household formation, I would expect and I forecast a continued rise in housing starts.

So, again consumption growth remains solid and it's not leveraged like it was 10 years ago. The real PC continues to grow at about 2%. We have friends from the auto industry in the audience and they can tell you in better detail than I can, but motor vehicle sales are going pretty well in the US and continue, we hope, to do so. Slight downturn but nothing sharp.

Business investment, as Paolo mentioned, is a generic problem throughout the advanced world, but remains one in the US. Again whether it was Dave or Paolo or I giving forecasts in the last couple years, we kept saying our forecast may seem as good or even more positive in consensus. It's not based on assuming a strong uptick in business investment. We don't pretend, at least I don't pretend to know exactly why business investment has been so week. I think there is an accelerator story. I think there's an uncertain story. I think it's more probably a combination of a lack of competition and a lack of productivity story. We will come back to that.

But the fact is we have not been assuming a major uptick in business investment and every time we've said it's an upside risk. But in this case, we now start looking – this is non-defense capital goods which is one way of looking at it – I think that we are running out of upside risk. I do expect a sharp falloff in business investment, but it can't be that sharp because it isn't that high. And what we are seeing is dollar strength is starting to feed through particularly to manufacturing and that will continue to weigh on investment over the next couple of years.

So, manufacturing is under dollar pressure. As Dave said in our last one of these meetings roughly six months ago, we were using sort of back of the envelope based on the Fed model. We would assume that the dollar strength so far is going to take a half of percent of growth off the US GDP in both '16 and '17. That's not trivial. However, as Paolo indicated, if potential growth is only about 2%, keeping growth at 2% is not a calamity either. And there remains room and worry and concern of course of the dollar going up further.

We had a very good discussion last week in light of *Thirty Years after The Plaza*, a new book edited by Fred Bergsten, a colleague. And a very nice discussion by Larry Summers and we can get into this in the discussion, but just to recap, I think there is a floor under the dollar. We are winning the least ugly contest, but there is no reason to assume massive upward movement in the dollar either. Again, slow and steady wins the race.

Now, the labor market remains in a sense the US's big [inaudible 00:26:20] test or ideology test or simply source of uncertainty. The facts are clear. We have had an incredible run, a very solid non-farm payroll growth, real job growth. We have had an incredible decline in initial jobs claims, which is the usual measure on a flow basis of who's getting out of work. That red line I threw in there is benchmarked to be the low – see the point in the middle – the low of jobless claims during the big boom of the early 2000s. We are now own below that on a monthly basis. So, as far as the labor market goes, whether you look at, U3, U6, these various narrow measures in labor market, things are doing very well.

But one of course can also put up charts – In the interest of time I didn't bother, but you can all know them – up charts that indicate the matching of people with jobs is not as good as it was before the crisis. That underemployment, which is mention here, is a problem in two senses. First, that there are a lot of people out there who want to work full time or want to work in a new job who are not able to do so. We have that from survey data.

And second, that there are people who are not fully placed to maximize use of their skills. Again, that will always be true in a market economy. At an average run rates, we're worse off on those scores than we've been during recoveries in the last few decades, but we are not in European historicist territory. We are not in disastrous territory. So, it's a question, frankly, of judgment. How much further can the labor market improve?

Now, a year and a half ago I co-authored a paper with Danny Blanchflower arguing that there was a lot of room for the long term unemployed to get back into the work force. Michael Kiley, an economist on the Federal Reserve Board, did a similar exercise of local data, as we did, but using a different dataset came to the same conclusion. Yon Hua, I believe it was, at Goldman Sachs said something similar.

Meanwhile the people running the labor group at the Fed, William Washer and his team said, "No, most of the downturn in participation is driven by demographics." We predicted this back in '06. You were going to have a batch of women who were going to drop out of the workforce because of age bracket, because of children. There isn't that much room to add, female labor force participation. So, we predicted," said – not me, Bill Washer and people at the Fed predicted – we are going see this decline.

And I said, "You've done a nice job of predicting but it seems awfully coincidental that the decline in participation happens to coincide with the Great Recession." Well, it turns out its all more than coincidence. So, to be fair to the Federal Reserve Board's team – and again this is their staff reports, not the board itself – but they got it broadly right. And so now people are getting excited. You see that little red circle. We're getting a tiny uptick in participation.

And either you believe that the ability of people to come back in the workforce is largely unimpeded, in which case you have to wonder why it took until now to get only that much. Or you believe there are structural problems in the US labor market, in which case you can't believe we're going to get that much more. So, I regret to say that I was wrong, not because I was wrong. I'm always wrong. I regret to say I was wrong because it means the ability of us to pull more people into the workforce in my judgment has changed and I do think we're not going to get that much more increase in participation. And therefore the unemployment rate is starting to bind.

Now, I would suggest, however, that doesn't mean we're going to get immediately to high inflation. It's worth pointing out that it's not just the US, but Germany, Japan, the UK, all have very low unemployment rates and all have been accompanied by very low wage growth rates. There is something going at a global level that is restraining wages. And I think it's important we think about that. We can come up with candidates, but it's also important to see that there's many cases around the world, both now and in recent years, where you've gotten close to full employment and not seen much in the way of wage growth. So, even though I've turned into more of a pessimist, frankly, on the cyclical aspect of unemployment, I don't think we should all get too worked up about inflation.

The real problem of course is productivity growth. And Paolo has mentioned this and Dave had said this in his last presentation, which I endorse. Again I've sort of highlighted key numbers there in the right most column. Productivity growth is the one thing where Dave and I and others kept assuming it was going to really mean revert. That we wouldn't get all the way back up to 2.5-plus, but that we would somehow get back up. And of course there's a secular stagnation argument and the weak form as argued by Larry Summers and the strong form as argued by Bob Gordon.

My point when I say what we see is maybe what we get is that it doesn't matter what you believe is the source of productivity growth slowdown. Even if you believe, as I would like to, a lot of it has to do with having had a missed investment cycle for several years that we have to catch up. That will still take several years more to resolve given the poor accumulation of business investment. So, it makes sense to assume that productivity growth will be slow for the outer years of this forecast. How slow? If I have to pick a number I would suggest that labor productivity growth is well below 1.5 and may stay below 1.25 and over time that's a pretty negative number. That means potential growth is around 1.75. That underscores the idea that we're in Goldilocks economy, but a Goldilocks economy of pretty un-tasty porridge.

So, let's move on finally to inflation expectations and the Fed. So, as all central banks do, the Fed looks at multiple measures of inflation expectations. Their key concern coming out of the 1970s is do inflation, not just now, but do as expectations become unanchored and potentially spiral upwards? And if you look at the various surveys of forecasters or average people, you get flat numbers. You get a little bit of decline during the crisis, you don't really get much.

If you look at financial surveys or financial indicators, and the standard one people is the so-called call Five Year Five Year Forwards on the treasury market, you also see a pretty marked decline in inflation expectations. And one of it is actually picked up pace in the last couple years as opposed to during the crisis when five years out the expectation was inflation would come back.

Now, I honestly am now sure whether this means expectations are anchored or whether we're drowning in deflation. My guess is that the Five Year, Five Year Forward, as I argued a little bit in our Reality Check briefing, is largely distorted at the moment. There's a great deal of excessive risk evasion. There's a great deal of regulatory and supervisory pressure for people to move money into the Five Year Five Year. There are problems abroad that are moving money into the treasury market.

And so I think that that decline is probably overstated. That measure is not as good a measure as it once was of inflation. That said, I also think that there is an inertia, that we've seen repeated disappoints on the inflation front and slow pickup and therefore no reason to expect that this has to remain so. I don't view this is an un-anchoring, as the anchor sort of being dragged along. But this again is worth monitoring.

So, let me conclude with a note about the Fed. All the back and forth about the Fed, there is too much drama. I think people have missed, however, a very important debate that is going on. Canonical inflation targeting – and since I coauthored the book with Bernanke and Mishkin and Laubach, I can say this – canonical inflation targeting was not just forward looking at, and look at the forecast. It was explicitly meant to be preemptive. At a two or three year horizon you were to act now to forestall inflation developments later. And if you look at the speeches of Stanley Fisher, the Vice Chairman in recent months, going all the way back to Jackson Holt last summer, he very much takes that tack, as do some others on the Committee.

But instead we're seeing increasing commentary – mostly outside the Fed but some indications inside the Fed – of waiting to see inflation first; what's called the whites of their eyes strategy. I've been in the midst of the arguments between Krugman and Summers who coined it first. Anyway, I think it was the Battle of Bunker Hill who coined it first. But, the point is this would be if members of the Federal Reserve Board, if the FMC moves to waiting for inflation to appear rather than trying to preempt it, that has nothing to do with the forecast. That has nothing to do with the welfare function. That's a significant shift in strategy.

Now, there are some solid reasons why you might consider this. So I am to some degree recanting canonical inflation targeting. First is, we've seen enormous stickiness of inflation expectations, not just in the US but throughout the world. It's not explosive. Small errors, small deviations in inflation have not led to upward spikes and spirals. Second, as I mentioned, we've seen throughout the world, at least the advanced economies, what seems to be a structural ongoing decline in wage bargaining power, which makes it harder for wages to push on inflation rather than just take it.

Third, as Robert Solo argued maybe 20 years ago now, there probably isn't this trigger point on the Nehru; that we just picked this one number on unemployment and if you cross that line suddenly you're in trouble. There's probably room to experiment to figure out how low the number can go, especially in the context that mentioned. I don't think you can go that much lower than 4.6, but I also don't think there's that much risk to be had by trying to see if you could go over or could bring in more participation.

And finally, the US has a relative upside versus the rest of the world. I think this is getting again, exaggerative with a taste for drama, but the fact is this will put some cap on how much inflation can get out of hand if the rest of the world continues to operate in the low inflation environment that Paolo mentioned.

So just to say, the slow growth of the US economy is sustainable and recession risk is almost probably mildly elevated. Recessions occur, particularly in the US, because the Fed tightens a lot or because you have a financial crisis. Neither of those are in the offing. There is a floor under the dollar. If you have to do like a river of blood fan chart, like I used to do at the Bank of England, I would say that the risk to the economy and the risk to inflation remains skewed to the downside but the degree skew is much less and the fatness of the tale is much less. We're really still pretty bunched around the central distribution.

Fed policy therefore is really not that critical at this point. Dave has built into his forecast – I'm almost there – that we'll only have one, two more hikes this year; one before eth election, one after. I'm not even sure it matters that much, to be perfectly honest. This is not a knife edge economy and the Fed moves would probably be offset by the dollar and other things.

I think what we do need to focus on, which brings us back to the productivity discussion and sector stagnation discussion that we and others of course have had is when we have this economy that's been growing pretty well for a while, we have an absence of wage pressures and absence of investment, we have to ask what the structural problems holding back the US economy. Thank you very much.

Nick Lardy: Well, happy to be in this program again, as I was six month ago. I am going to talk a bit about exchange rates and capital flow since they've gotten so much attention recently in China. But I can't resist beginning by kind of reviewing and kind of reinforcing the message that I tried to give in the fall meeting, which is very simple. And that is the rebalancing is underway. It may be a little bit slow but it's definitely there.

This is growth of value added in real terms. You can see that starting in the third quarter of 2012 services began to grow more rapidly than industry. They've now become the main driver of China's economic growth. The outperformance of the service sector has been particularly marked since our starting in the fourth quarter of 2014 and you can see its widened quite a bit as we went through 2015.

One way of looking at this, you can see industrial growth has decelerated dramatically over the last years and the service sector has held up much better. If the service sector had slowed down in proportion to the slowdown that we’ve seen in the industrial sector, GDP growth would have been 4% last year rather than 6.9%. We also are beginning to see a pickup in household consumption as a share of GDP seems to have bottomed out in 2010. Remember we had this decade long period where consumption share declined. Now it is moving back up.

What I want to expand on in this session compared to the fall is to talk about, more specifically, what are the structural drivers of these changes? Are they structural, are they cyclical? My basic argument is that they’re mostly structural and that the growth of the service sector and consumption are likely to be even more important going forward.

So, let me run through them very, very quickly. This is my list. I start with demographics because we’re now in an environment where the working age population is shrinking. Disposable income has been growing more rapidly than GDP now for a number of years. With the shrinkage of the labor force you’d expect even more rapid growth of wages, which of course is the main contributor to disposable income. So, I think income growth will remain reasonably strong.

Secondly, the Engle’s law, people spend more on services once their income gets to a certain level. Certainly the share of expenditures on services in Chinese households has gone up significantly over the last decade. It’s now about 50% of household consumption is on services. So we have a rise in consumption, a growing share of it on services.

And the third factor is that the social safety net has now been built out quite a bit and the household savings rate peaked in 2010 and has begun to come down. So, you have all three of these things working together; rising wages, declining savings, which translates into more consumption, and a larger share of it going towards services.

The fourth factor is that the currency is no longer undervalued. The undervaluation of the currency of course was a subsidy for Chinese exports which are 95% manufactured goods, an implicit tax on the service sector that has faded away. And in the last couple of years we think, based on Bill Cline and the IMF and a number of other sources, the evidence seems to be that the exchange rate is much closer to an equilibrium level, so implicit subsidy for the industrial sector has largely eroded or faded away.

And you can see the result in the share of investment. The share of investment going to services in the decade of the 2000s declined almost every year. The share of investment now going into services has been rising for several years and last year it was almost 60% of total investment. So, I think many people still have this idea that this is still the smoke stack economy and they’re building more steel mills even though they already have too many. But almost 60% of investment is going into the service sector.

And finally, the service sector is more labor intensive, so that just reinforces the growth of wages, which kind of completes this virtuous cycle. So, the main conclusion is that I think the service sector will continue to be the driver of economic growth going forward.

Now, as I said, at the outset I want to spend a little bit of time on the outlook on the exchange rate and capital flows since it's gotten a lot of attention, particularly in January and February. And what I'm going to do is sketch out what I see as, what I'm calling, a large step devaluation or a market driven large depreciation is inevitable. This is the narrative that I want to address. Is this well founded or not so well founded. And I think it's quite important because of the spillover effects of the large change in China's exchange rate for the global economy could be quite large.

So, the narrative is, okay, growth has been slowing down, we know that. Growth has been slowing down. And the authorities are very anxious to prevent a further slide in the growth rate sooner or later will engage in big step devaluation of the currency to boost the growth of export, which you can see basically have been declining fairly significantly with the exception of the bounce back in 2010 from the negative number in 2009. But the growth rate has gone from the 30%, 20% range of the first part of the 2000s to actually flat, negative 2% last year.

Another part of the narrative is the currency's appreciated so much. It's appreciated about 55% in real trade weighted terms since 2005, as you can see in the diagram. Most of the appreciation has come since 2010 and slowing exports, this argument means that China has lost competitiveness and that reinforces the need for a big change in the exchange rate. Another part of the narrative is that these are the official numbers on China's reserves, but the argument goes the reserves are overstated. In any case, they're falling fairly rapidly and even if the authorities reject a big one off devaluation as a growth strategy, the market eventually if going to force a large depreciation of the currency. So, that's the narrative that I want to address.

I begin with the exchange rate. If you go back a few years earlier you will see that there was a significant appreciation of the currency from February 2002. Remember at this period that the RMB was tied very strictly to the dollar. February 2002 onward, the dollar began to depreciate so the RMB on a trade weighted basis also depreciated quite substantially. So, by the time you get to 2005 the currency is very significantly undervalued. So we shouldn't be looking at this 55% appreciation as taking us into overvalued territory.

These are Bill Cline's estimates of the extent of appreciation the RMB needed to get the exchange rate back to a reasonable level, which he defines quite carefully. And you can see in the middle of 2002 when the appreciation began, his estimate was that the currency was about 20% undervalued. So, we should not accept the view that it's overvalued today because it's appreciated significantly since 2005.

Why was a 55% appreciation needed to get rid of what was thought to be a 20% undervaluation to begin with? Well, the argument which Morris Goldstein and I made more than 10 years ago was that China has very high productivity growth in the export sector and that you need to appreciate 2% to 3% per year just to kind of stay even. So, that's why it took a 55% appreciation to get us something close to equilibrium.

So, I don't accept this argument that the currency is significantly overvalued. I don't accept the argument that China's lost competitiveness. This is China's share of global experts. You can see going from about 4% just before they joined the World Trade Organization up to something like 14% last year. Yes, they have lost competitiveness in some low-end textiles and footwear, but they're gaining competeviness in a range of other products. It's very hard to turn this story into one in which China has lost competeviness. They're simply moving up the value chain.

The other piece of evidence, of course, I would point out the fact that had a current account surplus of more than $300 billion last year, which was the largest in the world in absolute terms. So, I think the argument that they're losing competitiveness and they desperately need to devalue the exchange rate to boost economic growth isn't very compelling.

Now, the next argument in the devaluation depreciation story is that China's reserves are vastly overstated. This was a famous claim made by Kyle Bass, a hedge fund guy, who said, "Well, they don't really have the $3 trillion. It's only about $2.1 trillion or $2.2 trillion once you make some adjustments." He argued that about $700 billion were the assets of CIC or had been injected into CIC, but were still be carried on the Central Bank balance sheet.

The reality is very different. The assets of CIC are about $700 billion US dollars, but the vast majority of that is actually in RMB. CIC, the Sovereign Wealth Fund, got an injection of about $200 billion in foreign exchange about a decade ago. But this was subtracted from official reserves. All the other recapitalizations of special policy banks have also been subtracted from reserves. So the $3.2 trillion – I don't know why that number disappeared – $3.23 trillion I believe is an accurate number.

Another claim that Kyle Bass made was that China had about $200 billion to $300 billion in open short forwards in the exchange market. The actual amount has now been disclosed and it's less than $30 billion, which means it's about 1% of China's reserves. So, this argument that the reserves are overstated, that they're highly illiquid because they've been allocated for other purposes, I don't think carries much weight.

Now, what how about the argument, maybe they're not overstated, but they're falling fairly rapidly – maybe I can't get back to that slide – but they're failing fairly rapidly over the last year or so. I think the reality is actually quite different. If you take 2015 as a whole, reserves declined by more than $500 billion US, about $513 billion US.

The first adjustment we have to make is this was of course a period when the dollar was appreciating and the value of reserves that are held in the form of the euro or yen or sterling denominated financial assets increased in value. UBS estimates that about a $170 billion of the change in reserves was due to this valuation effect. In other words, when you convert them back into US dollars, they're worth less because the dollar has gone up. So, that's about a third of the $513 billion.

A second thing that needs to be taken into account is that a large part of the decline, this capital outflow or decline in reserves, was because Chinese corporates began to repay foreign currency loans. According to the BIS, the amount of foreign currency borrowing offshore roughly more than doubled between the end of 2012 and the third quarter of 2014. This was a function of the fact, remember, the RMB had been appreciating steadily for five or six years. Offshore interest rates were lower, so many people thought, many corporates felt it was more advantageous to borrow abroad.

Bur that expectation began to change. Remember QE ended, the rate hike was in the cards, the expectation for continuous RMB appreciation was weakening. So Chinese corporates began to repay their foreign currency loans. And as you can see in the diagram, by the end of the third quarter of last year cross-border claims held by foreign banks on Chinese counterparties in China had declined by about $235 billion US.

Now, this is part of capital outflow, but I don't think it should be regarded as capital flight. And certainly there's no change in China's net international investment position as a result of this. Yes, foreign currency assets of the central bank go down, but foreign currency liabilities in the corporate sector go down by an identical amount. And, I think, unless you're down to your last few hundred billion that change in the composition is not anything to worry about.

Another chunk is foreign investors reversing carry trades for the same reasons. And a third chunk is Chinese policy banks that are actually lending dollars offshore. So, what do these three things amount to? These are the three big factors that I've just gone over. So, I don't think the decline in reserves is panicked Chinese retail investors or households moving their money offshore. It's been a perfectly rational response to changes and exchange rate expectations and interest rate differentials.

And the most important thing is these changes are inherently self-limiting because the total amount of Chinese foreign currency borrowing, as you saw from the BIS data is relatively small. It's been paid down to a considerable degree. And the amount of foreign currency assets held by foreign investors in China is actually fairly small. So that kind of move is also self-limiting. The third, basically, I think of as Chinese foreign policy objectives, so if reserves start going too low, maybe they'll have to be a little bit less generous in their loans to foreign governments. So, the China Development Bank will have to scale back its activity.

So, in conclusion, I'm arguing services and consumption are likely to continue to be the drivers of economic growth. That, I think, the assertion that the authorities are going to engineer a large step devaluation to prop up economic growth or prevent it from falling significantly further from where it is now I don't think it's well founded. And I think the argument that the decline in reserves is because of panicked mainlanders trying to get their money offshore is somewhat misleading. I think it largely reflects actions of investors and corporates in response to changes in exchange rate expectations and interest rate differentials. So, I don't think we'll see either a big step devaluation or a market driven large depreciation. Thank you.

Paolo Mauro: So, thank you, Nick. Thank you, Adam. I guess both of you take a very benign view of prospects for the United States and China respectively. But I get the sense that many in the audience would disagree with you. And so let's move to Q&A. Usual rules of the game, we have a roving mic here in front and then if you're in the back, there's is a mic up there. Maybe starting from this end.

Steve Butler: Hi, my name is Steve Butler. This question is for Nick Lardy. I'm wondering, as you look at China's growth prospects, how you figure in the possibility or prospects for a state enterprise reform and whether that's an important aspect of changing the investment mix going forward and actually having a more rational of allocation of capital?

Nick Lardy: Well, this is an area where I've been fairly critical of the pace of movement by the Chinese government. I think they outlined a very good reform program in the fall of 2013, but the parts of that program that dealt with state owned enterprises have not been implemented as of yet in a very aggressive fashion. So, I think they're moving too slowly and I think the state sector is a big drag on China's economic growth because the return on assets in that sector is about third of what it is in private firms.

So, if they want to sustain growth at the 6% to 7% range I think they will have to adopt a much more aggressive program.

Now we're seeing are the beginnings. Remember, they were saying they were going to lay off 1.8 million people in the coal and steel industries, which would be a good start and I think it's readily doable. I cannot remember how many newspaper articles that I've read that mention this 1.8 million figure and they make it sound like it's some big terrifying number. Not a single article has pointed out that the non-agricultural labor force in China is in excess of 400 million. So, laying off 1.8 million is one half of one percent of the workforce. So I think it's doable.

Remember, in the Ju Won Ji reforms 30 million people lost their jobs and non-agricultural labor force at that time was half of what it is today. So, it should be doing and can be done. Whether it will be done we'll have to wait and see.

Paolo Mauro: The next question goes to this gentleman here.

Carter Doley: Hello, my name is Carter Doley. As promised I wanted to ask Adam Posen about the umpteenth iteration of Abenomics that we're experiencing or are about to experience, since I know that was a research interest of your going back to the '90s. And then for Nick Lardy, just if you could talk a little bit about the capital account liberalization, the Chinese bond market in particular. There have been some baby steps on that over the past few years an, additional something early this year, but frankly I find these as usual very murky and hard to evaluate.

Adam Posen: Thank you, Carter. So just to be clear about the Japan forecast that Paolo presented up front. I have to take responsibility for that as the Japan person here. I am pretty negative because essentially what's happening is I assumed the consumption tax hike is postponed. If you think it's not going to be I will take the other side of that bet very happily. As a result you don't get much in the way of growth shifting forward ahead of the consumption tax hike or the cut next year. You get, again, a smoother ride. The deflationary downturn and arguably the rise in real interest rates in Japan are meaningful enough to put at least a few tense drag.

And what about Abenomics? I think I remain a big backer. I think the likely beneficial effects for Japan if the US hold up its end on TPP – that's not why the US should do it – but if the US did hold up its end on TPP, I think the beneficial effects for Japan are quite large, as my colleague have argued. And as Paolo indicated, the poor performance in Japan tends to be exaggerated because of you look at a per capital basis or productivity basis, they do much better. So, I don't think it's time to run the town on Abenomics. I do think they're not going to do the consumption tax hike. I think therefore we get slow low growth in Japan ‘16 and ‘17. And I wish they would do more.

The big question is, why has Abenomics’ counterpart at the bank of Japan not worked well or as well as we hoped? Blanchard and I have been writing about that a bit and we think that – or I will say – I think that they let deflation go on too long before they tried. They were making progress and then got set back by global energy and other factors. I think the perverse move in the end says more about the mistake of doing negative interest rates and how they handled it than anything fundamental about Japan or monetary policy. Sorry, crammed a lot in there.

Nick Lardy: Well, on the capital account, I think the situations very complicated. They’re moving in opposite directions. I think they’re tightening up a bit on capital outflows, which has been widely reported. And they’ve liberalized on inflows, particularly giving foreign institutional investors access to the inner bank market and the bond market has grown very dramatically over the last couple of years, so I think eventually we will see significant inflows into that market.

But at least in the short run, I think the response is fairly limited. In part because I think there’s a widespread perception in the market that there’s still a very significant chance of a large devaluation of the currency. So people obviously are waiting to see how that plays out before they start committing substantial sums to inbound investments in portfolio capital.

Paolo Mauro: There’s a question here. Sorry.

Frank Lubisky: Frank Lubisky from Aegon Asset Management. With regards to the balance of risk, Adam, you had spoken about the US having a pretty tight distribution around your base forecast. I was hoping you could broaden that out to all the other regions that you talked about, specifically, China. What do you see? Is there a larger skew when it comes to risks, downside, but also on some of the EM complex, where we’ve have contractions currently, do you see a potential upside there?

Paolo Mauro: Let me come back to something that Nick was saying earlier. It seems to me that – I agree with Nick – that we’re not going to see any deliberate depreciation from the Chinese authorities. I think that would be counterproductive, not only from an economic point of view, but also from a political point of view, certainly in the context of US elections. They know they would be playing in the hands of those who favor protectionism.

So, I don’t see that as being a likely scenario. But the idea that market forces could bring about market determined depreciation in the exchange rate, given the corporate debt where it is in China, I think that’s a possibility that couldn't be discarded. Maybe we can think about what the implications of that would be.

Looking around the world, I think that I certainly see an upside in emerging markets in the medium run. I'm not sure that I would make any guesses about sudden dispersed growth immediately, but I certainly remain bullish in emerging markets generally given that that's where the population growth is going to come, that's where the enthusiasm and energy is going to come from. So, I would say no immediate upside, but certainly in a medium run sense, that's certainly an area that I would invest in myself.

Nick Lardy: Well, on China, you saw that diagram showing this long five-year moderation in the growth of the industrial sector. That's primarily because of a slowdown in housing investment. In 2010, it grew 33%. It went down, down, down. Last year it was -2%. It's picked up in the last few months. There's been a little bit of a turn around.

So, the big question for China is whether or not that is sustained. It's kind of like the housing chart that Adam had. Are they going to bottom out or is there going to be another year or two of decline. If there's another year or two of decline, for example in 2014 it was 10%, -2% last year. If they go to -10% that will take another half a percentage point off the growth rate. If they bottom out it shouldn't be so hard for them to hit the 6.5% announced target.

Adam Posen: Can I just add something more on EM. Frank, I think you've heard me say this before but I tend to think of the EM at this point as fitting into three categories. So, you've got the major EMs that have integration with large parts of the advanced economies. So, think of the Mexico, think of the Poland, arguably Turkey, which has managed to do okay despite many things going against it. Arguably Indonesia and Taiwan because of what's around them. Taiwan's no longer an EM, but anyway.

You then have another category of countries that just are rocked by the commodity cycle. And they're not necessarily doing anything wrong. Just that's life. You're a commodity exporter. Chile is of course the prime example. They're not necessarily badly governed. They don't necessarily have a major productivity problem. They just have never converted away from being a commodity cycle. So, that's life. There's nothing particularly cosmic to think about there.

And then you have the third category, which Paolo emphasized, which is the places that have idiosyncratic political risk and policy risk. And obviously Brazil, Russia, head that list, with South Africa and a few others. Monica Debolle has done an excellent work for us here talking about the Brazilian risk over time. Simeon Jonkhoff similarly has done excellent work for us on Russia. We have people who are covering these and I encourage you to read them.

The broad take away is, it's important to understand that these things are not happening just because of the commodity slowdown. The commodity slowdown just simple helps reveal the underlying problems of these economies. Remember, these governments are not falling. They're either not falling, in the case of South Africa or Russia, or they're not falling because of the commodity slowdown in the case of Brazil. They're falling for something else and they're managing to hold on actually surprisingly well.

So, it really is about bad governance, bad policies and not just some commodity play. And so then you get into interesting questions. You have to as an investor think about country by country, region by region. Got to do a little work, folks. I know you don't fear doing a little work, but buying the EM class except in the long term's a problem.

That said – and this is the last thing I'll say – Paolo and Thomas Hillenbrand have a manuscript for us that we're planning on releasing before the end of the year, which some of you have seen or heard bits of, projecting the long-term consumption growth in Africa, in Latin America, throughout the emerging world. And it's a pretty good picture, and so again it also a question of your time arising.

Paolo Mauro: We have time for a couple more questions. Here in the front, please.

Speaker: Adam, I just wanted to follow up on the question on Japan and push a little further about your expectations for the BOJ. I mean, you seemed have some negative feelings about the negative interest rates. What do they do next then?

Adam Posen: It's an interesting question. So, there's both sort of a Japan specific aspect and there's a general tactical question. So, I think we talked about this a bit at the table before the session started. There are legitimate disagreements over how useful or potent negative interest rates are as a tool. My working assessment is that if you're Switzerland or Singapore or some small, open, very financialized economy, negative interest rates can be quite powerful because it's the capital flows that matter.

If you're Japan, Italy, large economy with a very bank-bound saving sector, negative interest rates are probably not your best move because the capital flows are relatively small compared to what goes on in your economy and you have – to pick on Italy and Japan in particular – for demographic and cultural reasons, you have people who really bottle up their savings in the banks, which means you either hurt the savers in a way that it actually is overt to them. Or like Japan, you so bracket what you're doing, what the BOJ did, that it can't have any effect because you basically said anybody who could be affected by negative interest rates, we're going to shielded them from it.

So, the BOJ then compounded this by trying to surprise everyone. And as much as I admire what Governor Kuroda has done over the last three years, two-plus years, the idea that there's any advantage for central banks surprising people is just wrong. That was a nice thing to do when you were intervening in foreign exchange markets in 1988, but when you're dealing in today's world, running a central bank instead of a four X account, it's a bad idea.

So, what does the BOJ do next? I mean there's two options essentially. Well three. First best option would be to listen to what Blanchard and I were arguing and try to get a wage spiral going in Japan, but that's going to take a lot of action outside of the BOJ.

Second best option – and this is stuff we'll be talking about again tomorrow with our colleague Joe Gagnon – is do you resort to more QE? The BOJ, unlike the Federal Reserve, has both the operational capability and the legal capability to buy essentially anything they want. They can buy commercial paper, they can buy bonds, they can buy stocks. So, the next thing that I would expect them to do, and probably they should do, would be to forgo further negative interest rates and buy further.

And then the third thing they can do is try to job own. I mean I think it is very interesting, going back to the exchange rate issue – which again we'll talk about a bit tomorrow and we spoke about at our Plaza event last week – is very interesting to Prime Minster Ave come out as strongly as he did roughly a week ago and say he's not looking for unilateral intervention.

I mean, people want to put this out as some sort of coordinated conspiracy thing. I think that's wrong. I think what we do have is a genuine, let's call it happy deterrents. That the Chinese and the Japanese and the US all together don't really want to see major moves in exchange rates. Threats are credible that if you try to beggar thy neighbor it will be largely offset. And they're smart enough not to do it. So, I think bottom line, BOJ will have to resort back to quantitative easing if they want to contribute to getting out of this.

Paolo Mauro: Thank you for waiting patiently. Please identify yourself. Go ahead. Thanks.

Anjali Kumar: Hi. Thanks. Anjali Kumar, World Bank. And my question is for Adam Posen. It's to do with the US economic data which you had and particularly on the household balance sheet. There you showed that there's a positive aspect to this because of the net decline and the debt on the US household balance sheet. But then you countered this by saying that maybe this mirrors a little bit some of the slow housing starts.

So my question is, what about the rest of US household debt? What does it consist of and do we see anything there which can have a more sustained positive effect? And particularly I'd like to ask you here about, there's this big concern with the household college and educational debt, which people like Hillary Clinton and so on are making a big agenda item. So, how big is this relative to the sort of negative debt component which is the mortgages? And then also how much of this is part of short-term, essentially credit card kind of debt, which has a very different long-term implication from…?

Paolo Mauro: Adam?

Adam Posen: Thank you very much. Let me just start off by apologizing. I should have those numbers in my head and for some reason at the moment I'm not able to pull them up. There are several people I can look at in the audience who would know them, so I apologize. But broadly speaking, mortgage debt is in excess of two thirds of household debt. And auto debt, which is of course secured by an asset and generally, generally – again there are people in the audience who know better than I do – generally is well vetted is another big percentage. I think it's around 15%. So, the vast majority of household debt is some combination of either mortgages or auto debt, both of which are longer term, fixed, reasonably well secured or collateralized assets.

Credit card debt is down a lot from what it was 10, 15 years ago, but the big swing is really house equity lines of credit. That was the big thing that really expanded, along with mortgages, during the bubble years. And that's been tightened up enormously. Again, I apologize. If you want to leave me your email I'll get you the exact numbers. I don't remember. I should. I apologize.

The final thing is student loan debt. Our colleagues across the street at Brookings had done some really good work on this. This is not something we've worked on internally. But the basic thing, without going into any candidates' comments, is the issue with the college loan debt is more about the distribution of it and perceptions of fairness and less about it as a macro risk. Almost anybody who goes to college gets a real college degree. I don't mean to be insulting. I mean, a two-year college degree that has a real skill behind it is fine. Anybody who gets, but gets actual education for their money, over time will come out ahead with the vast bulk of loans we have.

The two concerns that I think people have, why has this become such an issue, is because (A) we had this boomlet in private sector for profit education like – I don't know – Trump University, that took money from people and didn't give them skills. We also had cutbacks in the community college sector, which had been a very high functioning sector on average, again with variation, but on average, when state local governments got into trouble during the crisis. And so there was this push into the fore profit stuff that tended to be more expensive, tended to rack up a lot of debt and tended to not lead to good human capital result. So, that's part of the issue.

The other part of the issue is the strong perception which the data largely backs, that the expansion of college load debt hasn't really been helping poor people get in to college. It's still been the mostly lower and upper middle class program. So, anyway, long story short, there are some subtleties. You're right to raise what's going on there with non-mortgage debt. It is an issue, but the overwhelming majority of US household debt, particularly post-crisis, remains either mortgage or auto loans. There is a segment of the economy that is of people, particularly on the border between a working class and a lower middle class, for whom credit card debt or student loan debt is a very big issue. But as a macro forecasting issue, it's not.

Paolo Mauro: Thank you. And again, tomorrow there's an event that we'll look at the policy side stemming from this outlook. So, thank you very much.