Part 1

Dr. Harsha Vardhana Singh :

Thank you for coming. I have special pleasure and privilege to welcome Maurice Obstfeld who is here to share with us his perspective, very soon after the release of the October issue of the World Economic Outlook *(WEO)* of the IMF. He will share with us aspects relating to relevant economic forces which are changing the world, political shocks what might be the steps to raise growth, stability etc. We have a very eminent set of discussants as well. I have Shankar Acharya and Ajit Ranade on my left and Surjit Bhalla on my right, here, so without standing in the way of gaining knowledge from all these four persons, I now give the floor to Maurice. The floor is yours Maurice.

Dr. Maurice Obstfeld : Thank you very much Harsha; it's a great pleasure to be here at Brookings India for the first time. Thank you for inviting me. We just completed the annual meetings in Washington and released the WEO, so it's an honour to be here and present some of the results to you. I won't limit myself to the current WEO. I also want to look retrospectively at some of the results we had in the April 2016 WEO, because I think those are going to be relevant to some of what the Fund will be talking about. I've been in the job of chief economist at the Fund for about a year now and when I arrived, the concerns that were very prominent for us were China's growth slowdown and ongoing realignment, the effects of lower commodity prices in the global economy and the Fed's first interest rate increase.

Now major concerns are the ongoing effects of China's slowdown and rebalancing, commodity prices and the Fed's second interest rate increase. So things have not changed that much. And in fact, the world economy seems to be in a sideways movement at a fairly low overall level of growth, although there are spots of rapid growth of which India's probably the most prominent. Globally though we see weak productivity growth, adverse demographic trends, low demand and a low natural real rate of interest… we just put that up there. And for the world economy as a whole and particularly for the advanced economies, but I think also for many others, there's a risk of falling into a low-growth trap with deflationary pressures.

Now what is new… it was developing a year ago, but I think it's come into full flower is a nexus of political tensions in the advanced economies that does cast a cloud over the future of growth and global trade integration. And I'm sure when we get to the discussion part of this, we will want to talk about some of these issues; Brexit is a very obvious factor but the Euro Zone which went through a very serious crisis after 2010 remains in a state of extreme stress; the EU generally, and that's related to refugee problems, among another issues. These refugee problems are obviously a weight on countries like Jordan, countries in Africa, Lebanon, Turkey—it's not only a European issue.

If you look at the U.S., Europe, there's a increasing tide of anti-trade, anti-immigration rhetoric which is not leading to anything good. So, the Fund sees a policy challenge of reinvigorating growth but also of worrying more than it has in the past, about the distribution of the fruits of growth, which certainly seems to be one of the issues driving political unrest. The agenda of increasing growth relies on some aggregate demand support but also on structural reforms, tax reforms, financial sector reforms and more recently we've been calling for a comprehensive, consistent and coordinated approach to addressing problems of growth and inclusiveness.

Let me talk first about the numbers that we came out with last week. We do our updates quarterly; we've actually done them quarterly since the global financial crisis. Prior to that they were semi-annual and the expectation, when we started the quarterly updates, was that once the crisis abated we would go back to semi-annual and we haven't been able to do that yet. We haven't really gone to a situation of sufficient tranquility and growth. So, compared to our July forecasts, global growth has not been revised and we're expecting 3.1%, with purchasing power parity weights for 2016, 3.4% for 2017. What we have revised, is the more granular view of how the emerging markets are doing and how the advanced economies are doing. Advanced economies as a group disappointed in 2016, but even there there’s a lot of heterogeneity. Europe, Japan surprised on the upside slightly. The U.S. surprised strongly on the downside. So for this group as a whole there is a downgrade of 2016 expected growth. And you can see the various components here. For the U.S., the slowdown is largely a function of low investment performance but also very weak inventory performance. There’ve been five straight quarters of negative inventory contributions to growth and there's hope that this will reverse and the third quarter for the U.S. but not clear yet what will happen there. Consumption has remained strong. So much as it has been the case in India as well, we have strong consumption in the U.S. …. weak investment. As you can see in this middle chart, consumer sentiment is high, the manufacturing PMIs are lightly positive but not in strongly positive territory. And there's a very marked trend in the U.S. of lower productivity growth which is a longer-term worry. There's also an uptake in news-based measures of volatility which lately seem very correlated with the electoral polling in the U.S.

The euro area is a mixed bag. Britain had a very weak PMI in July right after the Brexit vote, then a strong one. We can discuss more later if you want about the British economy. The long-run prospect is not particularly good and within the rest of Europe, Germany is doing relatively well, other countries not so well and economic sentiment you know largely mirrors that. Uncertainty is high. Market-based measures such as the VIX are elevated compared to the height of the Euro crisis both in Euro and the U.K. News-based measures have really spiked as a result of the referendum, have fallen back somewhat, but my guess is they are spiking again as the Prime Minister May’s speech to the conservative conference sinks in.

What about emerging markets: There news has been relatively good in 2016, powered in no small part by India but also by China maintaining its growth. And for next year, we see an uptake in emerging market growth which is partially due to the fact that Russia and Brazil, two very large weights in our index, are expected to move from negative growth this year to positive growth next year.

Sub-Saharan Africa is a very mixed bag. On average negative, but dragged down by the very large commodity exporters such as Nigeria and South Africa. Smaller countries like Ethiopia, which are not resource-intensive, are doing relatively well in terms of growth rates.

As I said, India's a bright spot so there's not going to be much news in this chart. Very familiar to you what's been happening—inflation has come down; picked up lately; current account deficit down compared to the earlier part of this decade; fiscal deficit is coming down and approaching target levels; but there are still structural challenges. And major weak spot is in terms of corporate debt and the corresponding bank assets, particularly for public sector banks, where there remains a challenge despite a lot of progress, in upgrading the bankruptcy insolvency framework.

China has been slowing markedly and in the last days we got the September trade numbers which were quite weak for China. Since August 2015, roughly when I started my job at the Fund, we had a couple of bouts of market stress over Chinese fears--the last one early in 2016—are we headed for another one, one can never want to never rule that out.

China's slowdown is based in part on moving toward consumption away from investment, towards services away from manufacturing. And you can see those trends in the red and blue lines, translated into real terms because investment goods prices have been falling. The trends are less stark but are still apparent.

One noticeable fact, and I will come back to this when we discuss trade, is that your China's share of Asian trade and global trade has been falling relative to its GDP growth. And this is probably a major factor in driving regional and world events. Whatever is happening in China definitely does not stay in China and one focus of the WEO, the World Economic Outlook, this time was on China spillovers to the rest of the world. The left-hand chart, thank you, shows trade spillovers of a 1 percent rise in China's demand after one year in various regions--obviously most strong in Asia--but the other conduit that's been very important globally, really since the beginning of this decade, has been China's impact on commodity prices globally. China consumes up to 50 percent or more of some commodities, notably base metals, and so it's rebalancing and slower growth had a huge effect on the prices. This means that for some countries, there's a trade-off between the direct spillovers of China and the terms of trade effects. For commodity exporters, these reinforce each other as you can see in the right-hand bar in the last panel. For most countries in Asia these are offsetting to some degree because there's a direct trade spillover but a terms of trade improvement.

One focus of concern in markets about China has been the currency regime. What set off the turbulence in August of 2015 was an announcement of a new currency regime, a new way of setting the RMB's exchange rate against the dollar and an immediate slight devaluation. And you can see in the left-hand chart here exactly what has been happening. There's been a trend depreciation of the RMB against the dollar which then initially set off a lot of turbulence but it seems to have been carried out fairly successfully in terms of not igniting global financial stress. Nonetheless Chinese reserves have continued to bleed out gradually and that's been a concern for the authorities. In this chart you can see, looking at the top of the chart, the decoupling of the Chinese nominal effective exchange rate from that of the dollar that began in August of 2015; it's quite dramatic.

China also announced at the end of 2015 that it was moving to a basket system, away from the previous basket system, which was effectively a dollar peg. And what we did in this last chart is to try to estimate the actual weights in the basket, which you can do on daily exchange rate data by just regression analysis. And what you see is that the weight on the dollar was practically 1 in the months leading up to

August 2015, and since then attempts to estimate the weight are not terribly successful in giving any stable pattern. So it's been a fairly discretionary system and it's hard to pin down what's going on. And one of the messages we have sort of consistently tried to convey is that China needs to move to flexibility but also to better communication and transparency with markets. No, I know it's confusing and potentially confusing to markets as well.

One of the factors that has underpinned global financial markets since the turbulence really was here is the recovery of commodity prices and you can see that in this chart. I won't say a lot about that because time is short. In the early part of the year, there was really a lot of panic about commodity prices, about China's growth and its effect on commodity prices. There's been considerable affirming, and that's also a function of a number of other factors. But it's notable that it has led to some stabilization.

The commodity price decline has been a challenge for many emerging markets, especially the decline in energy starting in the fall of 2014. But there are of course those countries, of which India is a good example, which have actually benefitted from what has happened. What I find interesting about this chart is that the sort of timing of the terms of trade improvement that India sees after about 2011—it's mirrored in the opposite way for many other countries. 2011 is when China's started easing out of its post-crises stabilization phase, moving out of heavy construction and infrastructure and you do see a lot of commodities plummeting. Oil takes a little bit longer to come down sharply; it does start to get in 2014 when growth prospects were sharply downgraded by the Fund and others, and when that was basically a price war opening up *[in the OPEC];* but again these pressures have moderated a little bit. Correspondingly, capital flows have returned to some degree to emerging markets. The white line shows capitals flows including China and the bars exclude China; in the end of 2015, a large part of the reversal of capital flows was actually a very large outflow from China that played an incredibly big role in what was happening. At the moment, we seem to be seeing more of a risk-on behavior with not only traditional FDI flows but also portfolio flows up and back.

One chapter of the World Economic Outlook looks at the trade slowdown, which as you can see on the map is broad-based. And even if you look across commodities, which is what the second graph does, at a disaggregated level, the real important growth across different place is the shift to the left, the entire distribution. The World Economic Outlook quite looks at this in some detail. And you would have found that much of these slowdowns is explained by slow growth in world demand, especially with very trade incentive component. Looking at that residual, the residual is impossible to explain entirely but two factors we found were significant were a) contraction in global value chains and b) the decline in trading organization measures and the actual uptake on protectionist measures can be seen. The acceleration of tariff reductions throughout the world is well known and incredibly obvious in these graphs. But also there has been an uptake in protectionist measures, as measured by the word trade alert. Now it still don't affect the huge percentage of traded products, certainly in some strategic areas – there is excessive capacity, other areas of excessive capacity... You see a lot of temporary trade barriers, whereas Asia has much less targeted than rest of the world.

Now there's been much discussion of whether we should worry about retreat of globalisation, resurgence of protectionism, and just what is going on. In the U.S., we have seen a sort of outpouring of anti-trade sentiment…where has this come from? So I thought it will be useful to convince us this more also, to look at some data from the PEW survey on public perception of trade and try and break it down a little bit. Generally, these are data from 2014, perceptions of whether trade is good or not - good means very good or somewhat good-vary across countries. The average for emerging countries in the sample is somewhat higher than in advanced countries. But notably, the perception of trade is good. Most people think trade is very good or somewhat good. This may have to do with the consumer side- we as consumers benefit from trade, I think a lot of people recognized that they do. But there is variation across countries. I have sort of singled out India from the emerging countries and the U.S. In U.S. the perception of trade is very low as compared to other advanced countries, maybe because the US is relatively closed, it is hard to say. India, similarly, is a country where three quarter of respondents saying it's good, is lower than the average.

This sort of breaks it down by some slightly Asian countries using the time series data. What is interesting here, there are a couple of things that are interesting. Japan is very low amongst Asian countries and India seems to decline, for reasons I have no insight into. Breaking it down a little bit more, I find this chart really interesting because this focus is not on trade-good or bad- but on effects on jobs and wages. What you see in this chart is that there are a lot more countries where a lot more people think that trade is bad for jobs and wages, and most of those countries are green which means advanced countries. Emerging markets seem to, on the whole, have a more favorable view. I think with that, it gives us a hint about what is going on in the U.S., there is this perception that trade is a job-killer. *[This was in Spring of 2014. So the attempts by the Obama administration to sell the TPP was to make the case that trade actually creates high-paying jobs in export sectors, has not been terribly, terribly successful.]*

You know in terms of the U.S. political dynamics… I don't present here. Some other day we looked at, which is why it could be that you could see a certain shift in trade perception. In U.S.'s political polls… in the Republican party, which used to be a pro-trade party, most of the Republicans now say trade is bad. For example, if you look at things like the Gallup poll and ask people what is important to you, trade is at the bottom of the list, people don't really care much about it. The economy is high, guns are higher and a lot of things are higher. And so we have a dynamic in the U.S. now, where there is a group of people who feel very intensely about trade. And they are not going to abandon the party if that party switches its position on trade, and so the electoral competition for the anti-trade blockers is strong. So both major parties are now anti-trade, which is not a good sign for the economy.

I have some material on structural reforms from the April WEO… but we have other panelists we are going to ask for discussions, so I am going to skip both of these and just look at the April 2016 World Economic Outlook. That's a great chapter. And I will just turn to some sort of policy conclusions.

One important message, especially for emerging markets…*[unclear]* And, mainly to be combined with supportive macro polices. One of the things we are looking at the Fund is the sort of interplay between structural reforms and fiscal support, how that can be a very powerful combination. We are also doing a lot of soul-searching about the globalization backlash and what to do about it, what kind of policies can we basically adopt to promote globalization. And one conclusion, this is also a conclusion about promoting growth is the need to invest in education, healthcare, other social investments that are *[quite important]*. Fiscal policy can play a role with structural reforms but needs to be calibrated to where there is physical space. Financial sector in many many countries needs strengthening and it tends to gain flexibility *[…unclear…]* remains key for absorbing shocks in emerging markets. Now, the global level, we do think there is a need for a more comprehensive and coordinated policy push on structural, fiscal fronts. With monetary policy, broadly remaining accommodated for the advanced economies. We think policy makers need to speak out about trade benefits and its benefits, and about the measures they can take to support better redistributive policies without harming growth. And there is lot of *[public political problems]* that are beyond pure economic management that the international community needs to address. I am going to stop there.

13:56 – **Dr. Harsha Vardhana Singh** : Thank you Maurice for a detailed presentation. Ajit Ranade would be the first person leaving amongst the panel, so I would like to start with Ajit. There is a bit of time, so he will be here with us for some time, about 7-10 minutes.

Dr. Ajit Ranade:

Firstly, if you see by the way one trend of the IMF is, and this is just a general comment, is that the year always begins with a set of forecasts and every successive quarter there is downgrade. But this is not just this year, it's been going on for the last three, four, or five years in a row. So the January, April, July… so it's a very consistent pattern, it's never not upbeat about the future, but then it's revised consistently down. So I wonder you know, since it's adaptive expectations, so five years in a row…perhaps we need to look at why it is this, you know trend. It doesn't happen in India though.

The highest growth rate among the advanced economies or the large economies, was the U.S. *[…unclear…]* 16, the UK was slightly ahead. Now you know this is an economy which is perhaps one fourth the size of the world economy, or I don't know – maybe bigger. So that is a very significant fact - that despite the talk about global slowdown and concerns about growth, the largest economy in the world actually has the largest, highest growth rates amongst the advanced economies. It might not be enough but I think it is worth mentioning.

Secondly, the second largest economy in the world, which is now China, which of course has been slowing down, but the slowdown is from 7.5 or 7 to 6.9, I thought I saw, and maybe 6.6. And that number is not something to despair. Of course there are many other things, very big concerns about China's monetary easing, China's stock of large non-performing assets/doubtful assets in the banking system. So there are many other concerns no doubt, but I think the two largest economies in the world have average 2.2-2.4 for the US, and perhaps 6.5-6.8 for China because the numbers at least are very different *[…]*. So that's the first point.

The second point about China rebalancing. And actually there is five…I can think of five sort of dimensions of rebalancing. One is from exports towards domestic economy; second is from investment to consumption; third is from industry to services. Of course this is a bit of a caricature, these are all different dimensions. Third is from industry to services. Fourth is from, I believe, public sector being the main driver of growth to private sector, so public to private. And fifth, most importantly - very important - is from current to future. So much more stress on future generations…which means that greener growth, much more awareness about environmental concerns. China and the US together signed in Hangzhou, the… ratified the Paris treaty. So that rebalancing actually should be seen, even though it might have some impact on current growth, it's actually a rebalance between current and future generations. And you see it in terms of closing down of coal-fired plants, many other – even in textiles – many other policies which are discouraging environmentally damaging technologies and encouraging renewables and so on. I feel that, that should be taken into account when we discuss China's slowdown. And that was the second point.

Just a related point there is that, you showed a slide on how economies depend on, how the rest of the world depends on Chinese growth. And you mentioned the fact that commodity prices seem to be influenced by Chinese demand… which is true actually. The fact is China has affected the prices of a lot of metals, especially base metals. I don't know if it affected the whole phenomenon of the drop in oil prices, has to do anything with China's slowdown. I believe it was more because of the emergence of shale oil, not so much shale gas… and the fact that the U.S. is now perhaps the biggest energy producer in the world. That contributed much more to the steep fall in energy prices or oil prices unlike all other commodities perhaps *[…unclear…]* China played a role. But even then, one very prominent commodity exporter, which is Australia, they have not had a recession for the last 25 years - in a row. Even though we think that the Australian miracle, if we can call it that, it's the flipside story of the Chinese miracle. So Australia is some 30 or 40 percent export dependent on China, and it of course has its ups and downs in terms of unemployment going up and down and *micro*-economic fluctuation, but they've never had a recession in 25 years. But I must say that the Australian example is not merely the flipside of Chinese growth. I think there is something else to Australia which made it possible for them to have consistent economic expansion without a break for 25 years. Just wanted to mention that in the China context.
The third point is about trade. The observation is that the normal curve has shifted to the left and I think Arvind asked a question that whether it includes oil, then perhaps I don't know how much of the shifting to the left is simply the steep fall in oil prices. And it's in real terms so it's deflated by prices, so it's volume as well. That is something of great concern because I think all said and done, India is a net importer but if you take away oil there is a dependence on, especially for job creation, there is a strong linkage between manufacturing and industrial sector and exports. After having had a double digit increase in exports for several years until recently, this is a matter of great concern. So this puzzle, if I may call it, is not very clear why… of course it's true it is has shifted to the left but if its structural… what is the reason. If you ascribe it to the slowdown in demand, that is slowdown I guess in world GDP growth rates, but I just mentioned in my first point that I don't think the slowdown is so dramatic especially when the largest two economies in the world are still showing reasonably good numbers.

Then you mentioned that perhaps it's because of escalation or slowdown in tarriff reduction and therefore implying that emergence of trade barriers, *[may be not tariff barriers]* … But this is of great concern to Indian policies makers, in fact a very very big concern. And I suspect that India's reaction sooner or later is going to be the similar. That there will be a lot of protectionism and they're already thinking about that. And it is very heartening to note that you said actually, the world has imposed much greater trade barriers against Asia than visa-versa. It is something we must publicize in a big way, but I am not so sure whether you're taking intra-Asia, so if you're calculating all the sanctions against Asian countries, many of them could be intra-Asia. So Korea having sanctions against China if its double counted… I just want to briefly clarify that.

And final point about again in the context of trade, so I won't say anything about reforms the last bit which you said, how do you get more growth in fiscal, monetary, trade policies and structural reforms. And this is something which is an ongoing and healthy discussion in India currently--so, perhaps it will come up with the discussion--but my final point is about again trade that this tit for tat, you know the decline of TPP or the decline of enthusiasm for TTIP is further aggravated by things like the retroactive tax for apple, 13 years retroactive…which is actually seen stealing tax money from the USA… the apple is just an excuse but the Europeans are stealing US tax money and therefore the US has now snapped a 13 billion dollar penalty on Deutsche Bank. So it's been seen as stealing, so these episodes, I don't know how they are going to end up. But I think this is also a contributor to this declining enthusiasm for trade but I hope it's only temporary. So I stop here, thank you.

Dr. Harsha Vardhana Singh: Thank you very much. So we go on with Shankar Acharya and then I will be requesting Surjit Bhalla after that.

Dr. Shankar Acharya: Thank you very much, Maurice, for that wonderful… kind of… explication of WEO which we all some time or other get to read, as you say, four times a year now. I think there are two major and two updates, yeah… and it's really very very useful and interesting. I have sort of three issues of questions. The first one will take five minutes and the next two will take one minute each. So, just so that you don't worry.

The first one harks back to what Ajit just said, Maurice can tell us if the facts are right but it certainly stuck me as well, that every time there is a projection from the WEO, it is optimistic about the future but that the future never comes. And this not just for the last two-three years or even four years but I suspect that it really ever since the global financial crises and the great recession and so forth, I haven't looked at the data and I would be interested to know. Now, ok that's happening. And each time WEO gives an explanation looking back as well, looking forward as well, and we find it very plausible. I just wonder whether this could be not related to something which is a bigger thing that's going on. And it's been talked about recently by various people, which is that you know, this particular phase of globalization which we have seen since 1950, might it be just stalling or perhaps even reversing and that's why, you know, all our premises really need to be rethought through, in terms of how the future of the world economy goes, looking ahead.

So this sort of anti-globalization events, and I think this doesn't happen in one month or one year but in the last eight, nine, ten years that come to mind, if I can just reel them off, I won't go into any of them: okay, global financial crises, certainly anti-globalization; great recession, ditto; the unresolved fiscal and the banking strains in the euro countries in particular which have threatened not only the euro but perhaps notions of Europe unity; the slowdown that Maurice talked about and everybody talks about in China of course since the last five years, I guess; the crash in commodity prices in the last two, three years; the prolonged wars in West Asia, as we call it from here, and the civil wars in north Africa also; and the associated with military intervention and then blow-back in the form of massive refugee flows, as Maurice rightly pointed out, mainly to the neighbouring countries but with huge spillovers coming in the last year or two in Europe as well, which has changed perhaps the nature of European politics more than marginally; the unexpected Brexit vote and all it portends, which if one listens to Madam Theresa May, it gets frightening everytime; the unexpected rise for Trump as a Republican nominee -- I mean, I don't think we have had a candidate like that for a major party in the US, well may Barry Goldwater but I don't think he was that anti-trade, frankly; the unsuccessful Doha round, the long years of so called development round which got pretty much nowhere; and of course what has already been said about the TTIP being on the back burner and even TPP verification is not looking that easy; plus perhaps the rise of protectionism in the individual countries. All of this, I think, you know, each is a different thing and one can talk about them separately of course, but I'm just kind of, in order to be provocative, putting them all together, they've happened over almost a decade, and asking whether there's a structural break that is happening, and the causation runs both ways here, it's just a question, it worries me.

The other two questions I told you would take very short time. One, is as we look forward now, if we go back to the earlier terminology of these global documents from the multilaterals in Washington, long ago I used to associated with one of them, documents I mean… and institutions too. And we used to talk in terms of the locomotor economies and maybe that's a wrong thing to talk about, but I were to ask, going ahead, which are going to be the locomotor economies for the global economy? One, is that a sensible question? And two, if it is a sensible question, what's the answer.

And last question, and this is not covered but I suggest it as a topic perhaps for future WEOs, unless it's already been dealt with in the past. I think people in India are worrying more and more about the nature of labour-saving technical progress that seems to be sweeping industrial economies. In a way when you think about things like artificial intelligence, robotics, 3D printing and a whole host of other things - all of which could be interpreted as being elements of labour-saving technical progress - which may be in one sense very good but in another sense they could be very job-destructive, in the way that we've defined jobs in the past. And not just in the industrial countries but in terms of future possibilities in developing countries, particularly the ones where the demographic dividend is playing itself out still, like in India. So those are my three issues/questions. Thank you.

Dr. Surjit S. Bhalla *:*

[…unclear…] session. I'll take off from where all three speakers have talked. Let me first look at...basically I'll talk on inequality in the world and what the IMF if you will is saying or perhaps is saying, globalization and then move on to growth, both in the world and in India, and then finally end up with disinflation phenomenon. You know what I found very striking, which I really like that chart which is the jobs growth and which countries think that globalization is good, and is almost a perfect you know, inverse fit with per capita income, obviously there will be some outliers but it's a very very telling chart and very very useful I think of describing attitudes towards globalization.

You know the IMF has made a lot about world inequality and about world inequality deteriorating or words to that effect. May be they haven't been, if you will *[as careless]* and I'll soon say why the entire notion of world inequality worsening is just plain simply wrong. It is and indeed, even if you were to concentrate and this relates to that chart actually, if you were to concentrate in even the US and UK, it turns out that these are the two countries that have shown a deterioration in inequality, and if you will, a sharp deterioration but all of that has stabilised for the last 15 years. So, either we are talking about some other world, but if you're talking about this world, the very simple fact, here's very very intuitive, China and India together take care of about 38 percent of the world's population. Since, no matter how you measure it, whether you measure in dollar terms or PPP terms; since 1980, that's the last 35 years. Per capita income in these two countries, which were the poorest countries back in 1980, has grown at something like 6 percent per annum. And per capita income in rich, developed, western world has grown at one and a half. So, you don't need any math to really come to the conclusion that world inequality has really really improved and indeed I update my work from 2002 on if you will, on an annual basis. And as soon as the WEO data comes out, I try and update. And inequality in the world today is back to the levels of 1870. It peaked in 1970 and today inequality in the world is back to the low levels if you will or high levels but certainly much much lower.

So the first comment is that we have to be very careful about what we say about inequality and we have to be rather specific. And we have to be rather, if you will, concentrate on the time period, there's data available, the IMF has the data, everybody has the data. So therefore it's very easy to look at it and come to the conclusion that indeed this is either, completely American dominated and England dominated, if you will impression. But certainly doesn't conform to any of the facts that we see on the ground.

Now coming to world growth, it is a case that...and you know, you have pointed out that it is gone up to 3.4 percent. My impression is around 3.5 is close to, if you will, the 60th percentile of world growth in the last 40-50 years. So, it is bad it is not at 90th percentile or whatever but 3.4 and if you get to 3.8 or so, it'll be in the top 20 percent of any year of world growth. So, I'll soon come to why I think we are perhaps likely to get to 3.8 in the next few years.

Indian Growth, and since this is an Indian audience, let me just point out a little bit of a problem that I see with the IMF forecast of 7.6 percent forever. Very nice, it's a highest growing economy but you know weather is a factor. Agriculture accounts for 15 percent of GDP in India. And agriculture for the last two years has grown at 0 or may be 0.5, and because of the good weather etc is liable to grow at 7-8 percent. Area has just gone up by 4 percent and so you can add a little bit of productivity growth or whatever it is. So, it'll be a big surprise given, unless some sector in India has to decline that basically agriculture is going to add on its own ceteris paribus, all other things being equal, a full percentage point to GDP growth. So, either you have to maintain or the IMF has to maintain that agriculture grow by one percent and one full percentage point is going to be a loss in something - may be construction, may be industry or whatever. But I think it needs to be articulated as to why IMF is sticking to, if India is an important… or rising to be an important player. As to why somebody did not concentrate on just getting that thing or may be a footnote to say despite the good weather, despite the area allocation, despite the fact that we had two years of drought successive years, which is only the fifth time in Indian history since 1871 that we've had two successive years of drought. So most commonsensical interpretation would be that you know, you will add. So therefore either the world slows down or something radical goes wrong, that in India, for the next year… that it is liable to be much higher than the 7.6 percent. And if you will, that would conform to what the other discussions have said…that look you know, every time it comes out lower, it will now be counter to that. Maybe that is why it has been done that we know for certain, almost certain, that the Indian growth is going to be higher, so maybe the world's growth will be revised up. I really think that the world growth is more than a half full vision of mine.

Now I come to the last part which is on disinflation and you know the American…the global financial western crisis leads most people to belief that inflation or disinflation set in after the global crisis. Well it turns out that '96 to 2004, or let me give 1980 to 1995, the median inflation rate in developed economies was 5.4. '96 to 2004 it was 2 percent. That's your average median inflation rate in developed economies. Then in 2013, if you will, it was 1.2 and 2014-15-16 it's close to 0.5. So the fact is that we've been seen a global disinflation and if you will, for the emerging markets… basically the gap used to be about three and a half percentage points and now it's about 3 percentage points. So therefore, even for developing economies, the latest estimate for 2014-16, the median inflation CPI, the GDP deflator is a lot lower, the median inflation rate in developing economies is 3.9. So, I think the biggest phenomenon in the world and not brought on by the global financial prices but nevertheless a mega phenomenon is disinflation or lower inflation or if you will. Now this has, if you will consequences for everything that we think about, whether we are thinking about interest rates in the developed economies...this is a universal.

So India was the exception 2004-2014 and I won't go into the reasons for that, because that'll take us off on a tangent. But disinflation is related to, in my mind, completely to globalization and that is a phenomenon that I don't think has been either appreciated as far as inflation is concerned, and if you will, it is not going to go away. So if we think we can suddenly inflate our way out of trouble, if you see trouble, I think you're looking at something that is not there.

Last point on this, this is I think…again, all of us here, certainly on this table and most people in the audience have been brought up in a world of inflation. We really do not know, and I am including myself, how to think about a world of really zero inflation. And if you will, we suffer from and we were brought up in the Keynesian economics if you will, or even monetarist economics with money illusion and that drives our thinking, and in many countries that drives the policies. If you will, the U.S., and I think now they will change it, they have a target rate, if i am not mistaken, of 3 percent on the *[Fed funds]* for 2019, which means…you know… 3 percent, 1 percent and 2 percent inflation and with slowing growth, if you will is something… So all I am saying is this is a phenomenon we all need to worry about, we all need to think about, more than worry about, and this has consequences for our interpretation of growth. *[Namadi Feilstein]* has been talking about this for two years. And I am sure you aware of a lot of discussion as to you know… to what extent, are we…if we are mismeasuring inflation, by even about 50 basis points in the western world… that solves all your puzzles. And you know, productivity growth is basically, a long term… look at the productivity growth for the U.S. where data is the most accurate, the most researched etc. It's a step function and the step function, if you will, has come down and that's what we are talking about. But basically 0.5 percent is all it takes for productivity growth in the U.S. to be completely normal, for the GDP growth in the U.S. to be completely normal and everything else to be very normal. So, if the U.S. is growing at 2.1 percent and maybe we are mismeasuring inflation by 50 basis points, that's 2.6 percent, that's not so bad for the most developed economy in the world. So all I am saying is, I really think that the glass is much more than half full, there are problems with disinflation or very low inflation that all of us economists especially, and those who advise governments needs to think about and work our way through. I do not have the answer, but all I am saying is, the disinflation phenomenon is here to stay, as far as the eye can see.

Dr. Harsha Vardhana Singh: Arvind has to leave very quickly. You have two questions, you are saying.

Arvind :

[…] One is that, you know, the whole China thing with this build up of NPAs and indebtedness…this struggle between you know, short term you keep up pump-priming the economy, you build up debt. I'd like you to you know, give a sense of how this kind of the end game plays out: is it going to be capital outflows declining the exchange rate, world deflation or is it going to be you know, they chug along, they're going to keep it in check. But how does this debt problem ultimately get resolved in China. So if you could help us through that, it would be great.

The second question is related, is that, you know, several people including *[Daniel Gross]* and others have said that a big part of you know, the slow in globalization is just commodity prices. And so the corollary being that, as commodity prices decline therefore you will see globalisation *[orchestrate],* picking back again. I was in Singapore and *[Harman …]* he believes that also very strongly. So because that has implications for the outlook, how much is commodities, how much is much more structural, whatever globalization etc. So if you could you know, respond to these two, I would be delighted.

Dr. Maurice Obstfeld : You know, the commodity prices, the measures we showed…I mean it's true in…it's true in real terms, it's not just commodity prices, it's true when you look at volumes. It's particularly true in manufacturing, it's less so in services but it's like a real thing, it's not a figment of mismeasuring. You of course do see it in nominal terms as well even more sharply because of the fall in oil particularly, but it's not just a commodity phenomenon. On China, and Ajit mentioned this so I'll just bring it up now…he talked about all of the transitions that are going on. And with the exception of the energy transition you can view a lot of recent experience as government trying to slow down some of those transitions, in order to maintain the targeted growth rate that is a political imperative. And that entails a buildup of certain vulnerabilities and corporate sector and the banks; excess capacity support of sunset industries which; and misallocation of resources to low productivity sectors which have to, you know, over time take a toll on productive capacity and the ability to support the kind of consumption that the Chinese authorities would like to bring about. So, you know, we at the Fund have been recommending to them you know, give up the growth target, go for something more moderate but work on gradually reducing these imbalances so that growth is durable and sustainable. Because ultimately, there may have to be a more drastic reallocation of losses within the system which could be disruptive to growth. And so our longer run forecast for China, do take into account that, that may be a possibility that there is some slowdown. But how that would look is very murky because unlike most economies, the Chinese authorities still exercise enough direct control to reallocate losses in ways that would be hard within more decentralised settings. So, I don't have a good answer of how that looks, although it is doubtful that it wouldn't have some disruptive effect on production and employment.

[…Question/statement from audience…unclear…]

Dr. Maurice Obstfeld : Well we've seen a lot of, you know, I'm not going to give you a number because I don't know what to say about that. But, you know we've seen a couple of bouts of financial instability that's fairly broad based. We do see contagion across asset markets although it somewhat overrated compared to just the direct channels of contagion. But you know there could be a broader on set of risk version in financial markets caused by a fear that China is growing more slowly or that its trade is shrinking more rapidly. We got through that the last couple of times because the fundamentals from many economies weren't that weak. I think there are buffers in emerging markets. So I don't see a global meltdown coming from that but there could be some tremors for sure.

Dr. Harsha Vardhana Singh : Thank you. We'll take some more questions but before that I just want to say we will circulate the presentation. Please give us your email addresses to Ramandeep, if you can stand up so that they can see, or me. Either of us will make sure that you at least have the presentation. Then the colours etc will also come out clearly. Thank you.

Dr. Harsha Vardhana Singh : Questions please. Please introduce yourself…and then…you are next.

***[Krishen]* Sud**: Yeah hi, this is *[Krishen]* Sud. I'm with Civic Health Care in the U.S. I have been involved with Brookings India in some capacity. I have two questions. One, you know we've had issues on estimating global growth, whether it's the IMF or the Federal Reserve or whatever. And is it a function of estimating global growth after financial crisis is different than global growth after typical recessions. And I just sense that we've all, you know, because there is this whole deleveraging process and so on that takes time. So have we had the right framework in terms of estimating growth and then having to cut it every six months. [Insertion from Maurice: By estimating you mean projecting] Projecting yeah so is that the criteria?

And then the second point was on Surjit point on income inequality. See, I think the point that's being missed is that the U.S. is not, in the current environment today, is not thinking about global inequality, it's thinking about U.S. inequality. And in fact the points that Trump makes is, look Mexico's getting rich on us, China's getting rich on us. So, I think to look at it on a global basis is probably a mistake today. It may be a good thing strategically that you know there's more *[welds]* or less instability and so on, but from an economic standpoint, my sense is that people are more concerned about, should US policy help inequality in the US versus the rest of the world [Insertion from Surjit Bhalla: American people] and I think Europe too… and I think you know the world sort of becoming more, you know, internally focused than it was so, but that's just a comment, thank you .

Bipul Chatterjee: Thank you Doctor Singh. Bipul Chatterjee from CUTS International. I have two quick points and questions. First, we all know that there are many benefits of economic reforms, there are costs too but I'm not going into those details. But there is one particular benefit of economic reforms which our policymakers or our politicians they do not talk about often, which is about the enhancement of consumer welfare. I'm glad that Maurice has spoken about it though in passing. Dr. Bhalla has also spoken about it, though indirectly in terms of… in the context of globalization and its impact on inflation.

So my first question is why you think why our policy makers or politicians they are not forthcoming or about talking about the consumer welfare enhancement impact of economic reforms. My second question is about China. As on today, the per capita income in China, in nominal term, is about 14 percent of that in the United States. In PPP term, it is about 36 percent. As per the aspirations, which has been described by the Chinese leadership, by 2050 it is expected to be in nominal terms 60 percent of the per capita income of the United States, and maybe at par with the United States in terms of purchasing power parity. So my question is, if that happens… that huge increase in per capita income in China, both in nominal term as well as in PPP term, what would be its impact on the western or Anglo-Saxon model of democracy.

Unnamed participant: Two quick questions. One is to build on your China slide about spillover effects for Asia and to link that up with Shankar's observation about locomotives. This may be a little geeky but can you share with us the way you and the Fund have started to think about how China or India impacts on global growth. By which I mean the exposed way of thinking about it is in terms of the, of the current account… that basically global demand is affected by net exports, as it were. But you seem to be describing all kinds of other channels as well through commodity markets, through gross exports. So when we think about the implications for the global economy of Indian growth, just help us think about what mechanisms you people now focus on, rather than just net exports. And the second point is about the feel bad factor that the M.D. has been talking about too long, too mediocre. It's part of this kind of maybe Asia influenced half full perspective… I mean U.S. labor markets are pretty tight, German labor markets are pretty tight, German labor market are pretty tight. So is ultimately the issue of stagnation and wages rather than, as it were, conventional unemployment or is it just that the fact that the participation rate in the U.S. is down. So, as you guys you know, shape the messaging, what are you most worried about?

Unnamed participant 2: We've talked quite a lot about the United States and especially China, but the other two locomotives if I may use Shankar's language for the global economy used to be the Europe and Japan. Now I wonder it may not be there in WEO, but from a medium-term perspective what is the thinking in the Fund about the prospects of these two other very important, you know drivers *[of growth]*.

Dr. Ajit Ranade: This is my favorite sloganeering so Maurice please bear with me. When the US grows at 0 percent, it produces 17 million new cars. Imagine this demand for steel and other things. When India grows at 9 percent, it's three million new cars. So you know this growth number, that's why I meant the point about it's 2.2%, so even 0 percent U.S. growth is 17 million new cars.

Dr. Maurice Obstfeld: You know the projection optimism…I think we did forecast an upgrade when the oil price plummeted and the line from the Fund was that there would be a shot in the arm to the world economy, and you know we've been living that down ever since. You know part of the problem is that, you know we, I think, we and…you know again it's not just our forecast. Look at any professional forecasters… interpreted the growth from mid-90s to mid-2000s as something that was potential and there was probably an element of *[unclear]* there that was not sustainable, and so we've been learning that potential growth is much lower. So you know for the US, for example, it's true that we're projecting 2.2% for 2017 but we have downgraded the long run potential growth to 1.8%, which is lower than what we thought it was. So there is this fallen potential, fallen productivity which I think also to some degree answers the question of why when output gaps are narrowing we still worry. It is, it is because output levels are much lower, because productivity is much lower and so wage growth has been much lower.

And we do see, we are beginning to see some political ramifications of this and this is, this is related to the inequality point that I'll come back to. It is funny and Ajit made this point that, you know…this is not the 1930s, it is simply not the 1930s. Yet some of the political pressures we're seeing are… you know in the rhetoric, really is reminiscent of the 1930s. I mean a senior German official I talked to on… Monday morning said this really, you know, some of the stuff really sounds like our dark times. And it is, it is, it is scary and why you know, so what's the, what's the excuse. And I think that, that you know similarly to the nineteen-thirties there there's a feeling among a segment of the population, generally older, that the world, you know, the world they knew is slipping, slipping away and this is partially a function of globalization. You know, I…Brexiteers said we have to take our country back, Donald Trump in a speech yesterday said we have to take our country back… like from who, right? It's a, it's, it's a kind of a rhetorical question I'm asking but I think the answer tells you a lot about where, where we are. And a couple of countries, I think that, you know the French, the National Front wants to take the country back. The Poles want to take the country back. And it's not all explained by economic determinism. To some degree, I'm a little bit optimistic for the future because, you know I feel that the younger generations are less…attached to this way of thinking, but you know the current older generation can do a lot of damage between now and when they depart from the scene. So that's what we're, trying to, trying to stop.

You know, on trade…the big thing that we found is that, it's really the fallen investment that's, that's having a huge effect. The weak investment, you know, almost everywhere… it's true in India, it's true in the US, it's true in Europe, it's true in commodity exporters that have an overhang of past investment. So this is a really big, a big element of it. And… you know… it's, it's, it's, it's, it's, you know , what is the, what is the presage about globalization. Well, you know to some extent it's cyclical… but, you know, there does seem to be a backlash in some countries and I don't, we don't, we didn't find this is the major factor, but that could become worse going forward, going forward.

Labor-saving technical progress…this is a huge issue and it certainly had an effect on income distribution… to date… but I think we need to think about it through the, you know, the inequality lens and I'll come back to Surjit's point about inequality… You know this, this, this could be an even bigger driver of inequality going forward and you know there's a discussion about robots and automation…and it seems to me that the major issue is, is, is going to be like who owns, who owns those robots right. If it's, if everyone has equal endowments then it's a balance productivity change, everyone benefits but I think, I think we do need to take, take this seriously in terms of our approaches to inequality and in the advanced countries at least…certain, certainly in the United States because the future could be very, very troublesome. World inequality trends, Surjit is absolutely right that there's a lot of very loose talk about this and you really have to get pretty granular… to not fall into inaccuracy as he says. So if you, if you sort of view the world as a collection of people, then it's inarguable that world inequality has fallen a lot, and that's largely driven by…I mean China is the biggest driver… a lot of people there, India is a big driver…a lot of people there. So there's been a convergence process pretty notable for those countries.

For many other emerging market countries, there's been almost no, no convergence in per-capita incomes. It's a very, it's a very…patchy… situation. And we may, we may actually do a chapter in the next World Economic Outlook, just sort of trying to document this. What you know, and what is the, the, the importance of this, well it's not really important within any given country's political system, what's happening to world inequality. It's important to guys like, you know, us who work at the World Bank and the IMF because we like the idea that there is convergence in the world economy and that people in poor countries have rising standards of living, at least in some, some poor countries.
Within countries, the inequality trends are somewhat mixed. The U.S. is a big case…UK… you look at a country like France… not much, not much has happened…But a lot also…depends on how you measure inequality. There are different ways you can measure it. If you're looking at a Gini coefficient, that may give very different answers from looking at the income share of the top, the top 1%. And politically speaking, people do care about the income share of the top 1% and if that's… rising a lot, it may be the median wages are going nowhere. And, you know, it may be that most of the distribution of income doesn't look that different, but people are frustrated and that's I think what you see in a lot of, in a lot of countries.

On Indian growth, I will take up your points with the India desk. I suspect they, there will be further upgrades. I can't predict that. And part of it maybe agriculture, part of it is a lot of optimism about structural reforms, particularly the general sales tax.

This inflation question is really interesting and I think, I think, I think you're onto something Surjit. We don't remember that much that in the early 2000s, there was a huge panic about disinflation particularly in the US. And you know, Ben Bernanke wrote a paper called, "Can it happen here?", "it" being Japanese-style disinflation. And there was, there were really severe, severe pressures and part of it was no doubt related to globalization, to the imports surge from China. With those imbalances also helped lead to a big run-up in commodity prices, starting around 2003-2004, which may have somewhat disguised some underlying disinflationary pressures.

So the trend has been downwards since the eighties as countries progressively put into place inflation-targeting regimes. Following a debt crisis, financial crisis, such as we've had, countries have moved to the zero lower bound. And they've entered a situation where it may be, it may be much harder to return to normality, than it would be from a situation of excessive inflation - because you can always raise interest rates you can't, you can't cut them. And so there's no doubt there's an element in, in where the advanced countries are, that is, you know, makes it kind of an attractor - it makes it hard to, hard to escape from. And that's why… you know, we think, we think monetary policy has to remain accommodative but we also recognize that the, you know, the toolbox is being pushed to its extensive margin.

Consumer welfare and reforms…you know, this is, this a very important point. In the chapter I didn't go through from the WEO, we did look at some particular consumer-oriented reforms, which can be very stimulative for the economy. But there, there isn't enough, enough emphasis on that. Last spring in the U.S., President Obama directed all federal agencies to look for areas where consumer-oriented reforms could be put into action… on the grounds that these both can spur demand, spur innovation and also have favorable distributional consequences. So I agree with you that this is something that should be more, more emphasized.

You know on growth spillovers summon, you know, we tend to look at the direct trade channels. We've been looking in the context of China, particularly at the commodity channels and also at sort of asset price contagion. So these are the main things we look at but, you know, we also sort of put these things into general equilibrium models where you can also look at impacts on global interest rates and things like that. So, you know, the mechanisms can be many and pretty complicated. And you know in this spillover analysis I showed you, we tried to isolate these channels in a way that might be a little bit artificial because they all, you know, sort of work together….Yeah, Europe and Japan […unclear…]

Dr. Shankar Acharya: Yes, you didn't alert us, otherwise I would be thinking *[how]*. I, I, I [Insertion from Harsha Vardhana Singh: I can pose a few questions…], [Insertion from Maurice Obstfeld: I can keep talking] I still, I am not sure if one is allowed to repeat a question [Insertion from Maurice Obstfeld: I didn't answer what you were *[saying]*] yeah, the one that I felt kind of…my worry about… is this the end of the post-1950 globalization phase. I didn't quite get an answer to that.

Dr. Surjit S. Bhalla: One, I, I, I take your point and I think it's a telling one, where you quoted a German official saying, "is this the 1930s" and I think that is something, which we all have to be concerned about. But related to that, and this is an open question - I certainly don't have the answer - but to what extent, and this *[…unclear…]* of globalization, which has really accelerated with Brexit…and I think it has to what extent is this a phenomenal that can be expected to continue, and now I'll end with that if Clinton wins, the end of "Trump" will they be the [*visionaries*].

Dr. Maurice Obstfeld: I guess the, I mean part of the, I guess part of the answer is an issue I didn't take up, which I should have which is the point about… you know, is global growth of adequate or not, not adequate. And, you know, I guess, I guess it is true that the overall rate is not that different from what has been in the past. But the weight of supposedly fast-growing emerging economies has increased over time. And so other things being equal, you would have expected an acceleration of global growth. Now, in fact, what you see and this gets back to the locomotive point that was raised also, is that, you know, it used to be that the U.S. explained and the advanced countries explained a lot of global growth. They don't anymore. Most of it is China, now. And so their growth, their weights and GDP have come down, their growth rates have come down… this partly explains some of the disenchantment with globalization and fears that other countries are gaining on them. And it's, it's kind of misguided because you would have thought that, you know, wealthy countries in the, what is now the emerging world, will create bigger markets and more trade and all kinds of good things. And now instead we see this tremendous backlash. So what is it? Is it the end of globalization and will we instead of moving forward, have countries turn, turning in on themselves.

I think part of, part of it, part of it why I started off with growth is that I think the lower growth in the advanced countries has been driving some of this. That it's been this interacting with, you know, the shifts in the income distribution within these countries has been very negative for the political scene. And at the same time I think that, that less globalization also brings growth, growth down and so it's kind of a bad feedback loop. It's, you know, it's hard to know what to make of the, the trade slowdown to the extent it's due to investment being low, that's correlated with low growth. But some of it may simply be that global value chains cannot grow as quickly as they grew and might be contracting. If we're not going to have 3D printing, we will see more digital trade. You don't need to, you don't need to have, you don't need to hire low-wage workers in emerging markets because you can have almost no workers in advanced countries, and reshore some of your activities. Some of that is happening. Does that have negative consequences? Not at all clear. So it's very, it's very complicated but I, I would, I, you know, I think that the atmosphere in the advanced countries that view *[…unclear…]* trade is very, is very negative for the reasons, for the reasons I said. You know at some level, there has been, you know, there's, there's enough success and enough parts of the emerging world that it's, with enough repercussions, that it's actually beginning to be viewed as a, as a negative and it's affecting you know the strategic position of the advanced countries in the world. And I mean that's why TPP is such a big deal, it is, you know, really…I mean has positive trade effects but as, as a strategic move by the United States to maintain leadership in Asia, it's absolutely critical. And now you see both, both candidates turning their, their back on that due to economic arguments that don't really make any sense.

So, you know, what would the world look like after November? You know I think, I think the, the atmosphere for trade will continue to not be, not be a good one. And I think before, before the atmosphere improves we will have to see a, you know, governments in the advanced countries really owning up to the fact that they need to invest in their workforces to make them competitive in a world where, you know, you can't take it for granted anymore that… you're, you're dominant with the educational base you have. I mean we certainly see this at the Fund where, you know, it used to be that 20 years ago Fund staff would go to countries and the technical abilities of the authorities were significantly less. That is not true anymore. You know, technically authorities are trained in the best schools, they basically have the same training. And this is just a symptom of how the world has become more integrated, more competitive. And, you know, you are not going to succeed there by building walls, you are going to succeed by competing. And, I think that mindset has to sink in the advanced economies, certainly in the U.S. and it hasn't sunk in yet. Hopefully as the current older population leaves the scene, more dynamism, more investment in people will become possible. *[And the world will become more homogenous, in terms of skills and maybe not in culture but […unclear…]].*

Dr. Harsha Vardhana Singh: So many questions responded to, some left for the future to evolve. I want to thank the speakers. Please join me…in an applause to appreciate them. Thank you. I want to thank the audience also and the participation of people here. There's also refreshments outside, you are all welcome to join us there. Thank you very much.