Implications of the Global Financial Crisis for Developing Countries*

Danny Leipziger

Thank you very much for the kind and warm introduction. Basically, I don't have to describe too much about what the crisis entails but what makes it interesting this time around is that it originated in the advanced countries, that it had a deep aspect of confidence that has yet to be restored, that it is a synchronized recession so that even countries like Korea that have diversified their exports in a strategic way are facing difficulties. We think that for developing countries the worst is yet to come, by the way we do not consider Korea a developing country despite the current crisis. And we are clear that solutions require a coordinated response between all those concerned.

The facts are pretty clear. Starting in 2008 there was a large drop off in world output, in 2009 we expect the high income countries to register about –2% growth and the developing countries not including Korea but including China and others will see their growth drop from what was about 8% to 3%. So the overall picture is for 0% or 0.5% growth but is being driven by the emerging economies and not the advanced.

This is not surprising in some sense when you look at this decade compared to 1990s, the incremental growth in output was much more driven by low and middle income countries. If you look and compare the high income and low and middle income (Figure 1) that by a factor of 3 to 1, it was the low and middle income that were driving additional world trade and additional growth. This means that they are now keeping the system somewhat afloat.

There was some period where people spoke of "decoupling", we don't believe that is true. It is true that the emerging market economies had a different trajectory but when you get into the non-trend cycles there is a synchronization between developing and developed countries, no one is immune. That is why, in this chart (figure2), world output is estimated to be 0.5%, but the estimates are being done every few weeks and much of these re-dos are in the negative direction. What is also remarkable about this chart is

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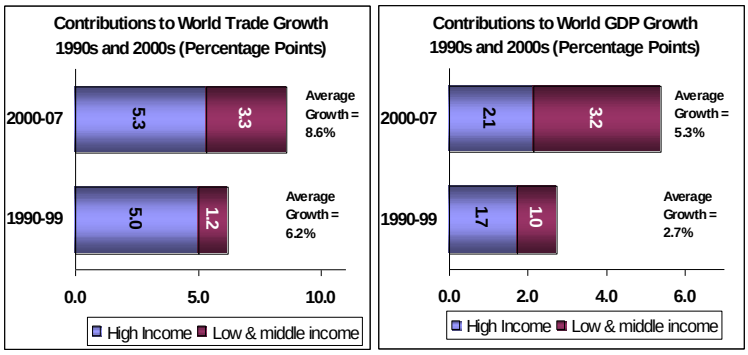
* Transcription of a speech given at the IGE/Prudential Lecture on International Finance on Tuesday, February 24, 2009

that the world trade volume line on the bottom shows a negative figure for 2009. The first time since 1982 that world trade volumes have fallen.

Figure 1

Developing Economies' Contributed Virtually All the Increase in World Growth in the 2000s.



Source: World Bank Development Indicators.

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Figure 2

Advanced economy output and world trade volumes to contract in 2009

World Growth Projections

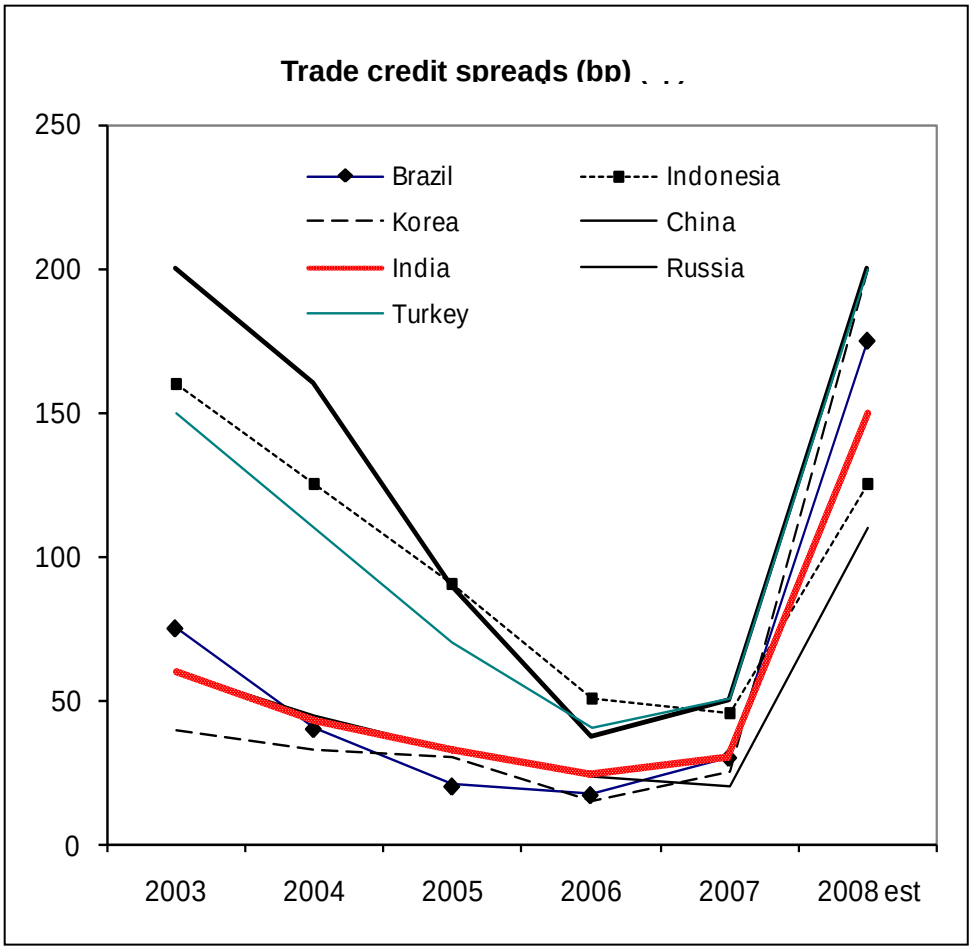
	2007	2008	2009	2010
World Output	5.2	3.4	0.5	3.0
Advanced economies	2.7	1.0	-2.0	1.1
Developing	8.3	6.3	3.3	5.0
Sub-Saharan Africa	6.9	5.4	3.5	5.0
Cent.& E. Europe	5.4	3.2	-0.4	2.5
CIS	8.6	6.0	-0.4	2.2
Developing Asia	10.6	7.8	5.5	6.9
Middle East	6.4	6.1	3.9	4.7
W. Hemisphere	5.7	4.6	1.1	3.0
World trade volume	7.2	4.1	-2.8	3.2

Source: IMF World Economic Outlook Update 01/28/09

Real import growth from the OECD countries has fallen. It is clear that it has fallen dramatically in the United States; it is very clear that the drop in real import growth in

the US in 2008 has been between -3 and –5%, so a tremendous drop-off in imports. At the same time, the two crises, the financial sector crisis and the real economy crisis are interacting in a very unhealthy way in part because people are worried about the financial sector so they are not spending and the real economy is having difficulty in finding finance. And if you look at what the spreads have been for trade finance, which should be the safest kind of credit because it is 90 days or 180 days, it rolls over, it's got real goods behind it.

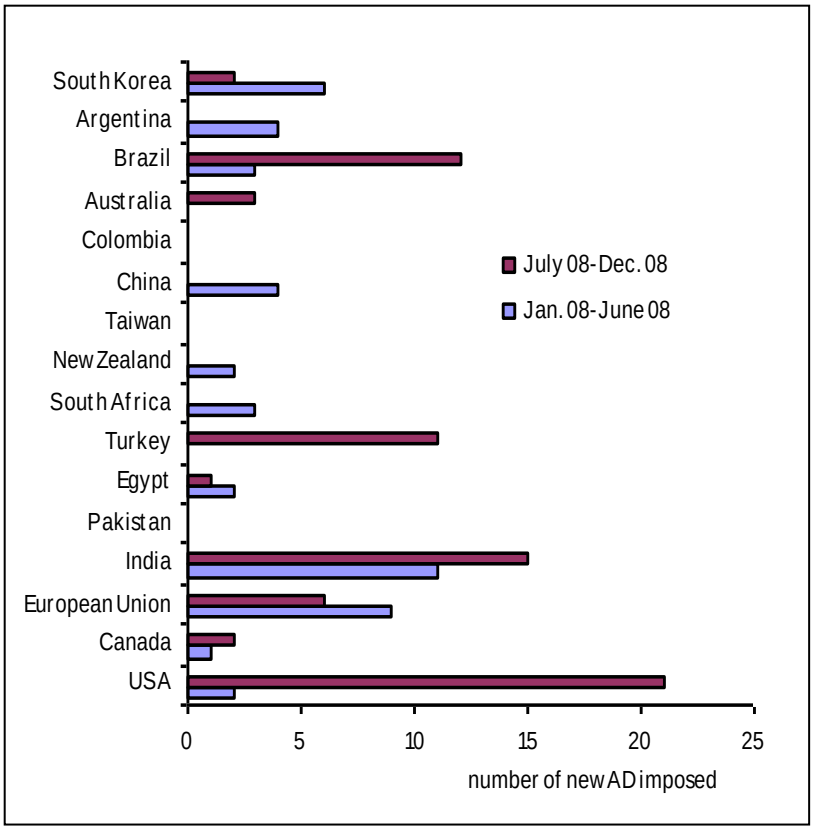
Figure 3



If you look at 2006/7 for this basket of countries, you see that the normal spreads in that period 2006/7 were 50 basis points and they are now up to 150 or 200 basis points which some countries have experienced in the past but not the major trading countries and certainly not Korea, which was through the period mapped here from 2003 to 2007 able to do trade finance at less than 50 basis points over benchmark rates (Figure 3). So this is one of the problems that we are seeing in terms of world trade. It's probably

true that the majority of the downturn in trade volumes is due to lack of demand, but a certain part of it is also due to lack of trade or finance. As financiers have trouble refinancing, they cannot sell in the secondary market, people are worried about their leverage ratios, and, in general, everyone is hunkering down. This has been combined as others including Chairman Dr. Ahn have mentioned this morning, that protectionist measures have increased. I don't think that they have reached the alarm stage yet. This is data that was collected by the WTO and others. (Figure 4)

Figure 4



It shows the number of new anti-dumping actions that have been announced. We know tariffs have increased in a number of countries, and we know that we can anticipate new anti-dumping actions. In a paper that I did about 15 or 20 years ago, I tried to econometrically show what determines the number of anti-dumping suits that were brought in the US, and the two variables that were most significant were increase in market share and difficulty in that sector. Now, we are not in the situation where firms are worried about increase market share being taken over, but they are in a defensive posture. So I think that we can expect more of this. Pascal Lamy, yesterday in his lunch

talk at the Global Korea 2009 Conference, said that the Doha Round, now, is the best insurance policy; it's the best inoculation to see that protectionism doesn't resurge. Nevertheless, protectionism can come in a variety of forms. We have seen support for strategic industries, we've heard of bi-national plans, and we've heard in the UK about reserving certain jobs for UK workers. The President of France indicated that he preferred to see plants closed outside of France rather than inside of France. So I think there is going to be a lot of pressure in many areas to protect domestic employment and I think a lot of these will have protectionist sounds to them. Another concern is what is going to happen to flows, in general, to developing countries. Again, this does not consider Korea to be a developing country, but for the emerging market economies flows in 2007 were close to a trillion dollars (figure 5).

Figure 5

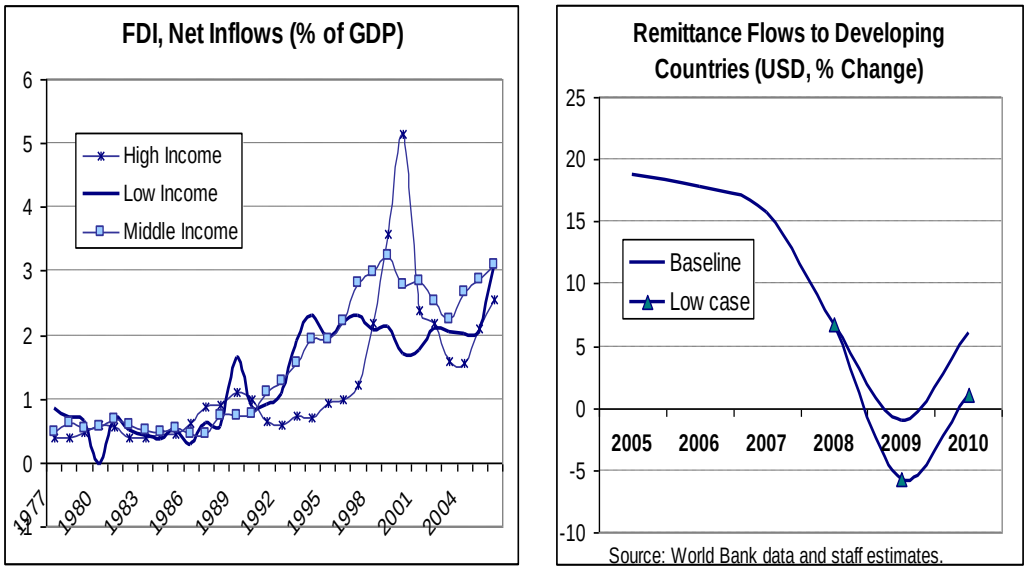
Capital flows to emerging economies

(US dollars, billions, net)	**2006**	**2007**	**2008**	**2009**
Private flows	565	929	466	165
Equity investment	222	296	174	195
Direct	171	304	263	198
Portfolio	52	-8	-89	-3
Private Creditors	343	632	292	-30
Commercial banks	212	410	167	-61
Nonbanks	131	222	125	31
Official flows, net	-58	11	41	29
IFIs	-30	3	17	31
Bilateral	-27	9	24	-2

Source: Institute for International Finance: "Capital Flows to Emerging Market Economies." 01/27/09.

Some at yesterday's conference said that this was too high and that it was an indication that the system was somehow out of control. In 2008 it was about half and the estimate from the IIF is for 2009 that it will be 165 billion which is a huge drop off and most worrying are the negative numbers which are in the corporate sector. So I think the concern about corporate rollovers will become more and more prominent as will the method of development finance. If you look at developing countries in the 80s they relied on banks and there were some problems as a result and in the 90s they relied on bonds, there were some problems there. Now, it is a more diversified set of flows, but that flow is beginning to be choked off. So particularly for low-income countries, net inflows of capital, as you can see on the left-hand side, account for at least 3 percent of GDP (figure 6).

Figure 6



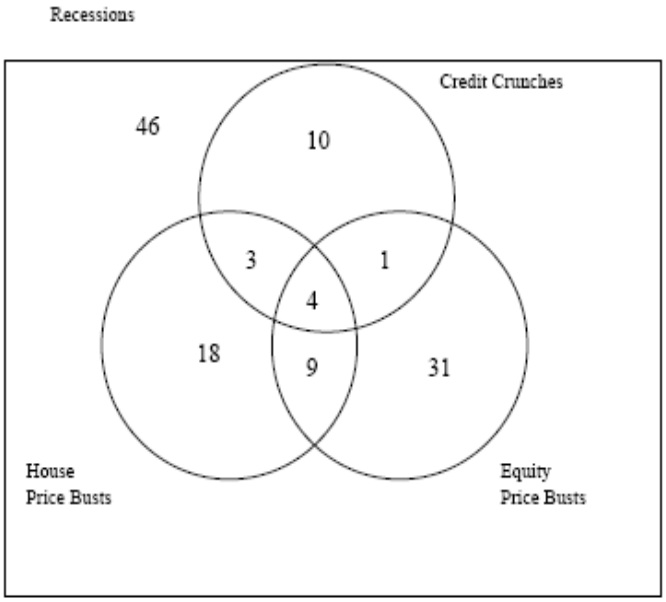
We can expect this to drop off and at the same time remittances will drop off. And so we have some estimates on the right hand side to show the fall of remittances to developing countries (figure 6). As you know, a number of developing countries rely heavily on remittances in Eastern Europe, the "Stans," Honduras, the Philippines, and other countries. It's a major source of capital inflows. When jobs are lost in the OECD countries, remittances will drop. At the same time, were it not for this crisis, we would not be so concerned about the reversal of commodity prices because, actually, commodity prices a year ago, first in energy and then in food, were way too high and above trend and actually causing difficulties. They have reversed which is good news, but it's not good news if you're a commodity exporter particularly if you are in Africa or if you are in Latin America producing basic commodities.

Let me refer to the three circles (figure 7). This comes from a paper by Klaus and others, he's now at the IMF and was at the World Bank before, which examines recessions in the post-war period. They examine 122 recessions and they fall into three groups: those that are credit crunches, those that are equity busts or stock market collapses, and those that are housing collapses. And there is a variety of combination of these. What is interesting is that we, at the moment, are experiencing all three. So the innermost overlapping area indicates that there are only 4 of 122 episodes that have involved the collapse of credit, stock markets, and housing. In general, they find

that the recessions tend to last, if it is caused by one factor, an average of 3 to 4 quarters. If the recession is caused by two or more factors, they could last 5 to 6 quarters. However, actually given the small sample of 4 out of 122, they don't really make an estimate of how long this recession will last. Nevertheless, on the right hand side, we have plotted a few recent recessions (figure 8).

Figure 7

Figure 1. Associations between Recessions, Crunches and Busts
(number of events in each event category)



Notes: The rectangle shows the distribution of 122 recession episodes in the sample into those associated with crunches and busts (76) and those associated with none (46). Out of 122 recessions, 18 are associated with credit crunches, 34 are with house price busts, and 45 are with equity price busts. 46 recessions are not associated with either a crunch or bust episode.

The one that was the most severe in the last 25 years was 1981. The dotted line is the average. The bold line, this comes from J.P. Morgan, is their assessment of how long the recession will last. They are talking essentially about 5 quarters, but the question is when do you start, when did the recession begin. The other is pretty clear, at least from their projection, that the recovery will be slower and less sharp than the average or than the major recessions that we have seen in the post-Cold War period. So, nobody knows when we will hit bottom. I think the sort of consensus at the moment is that if the stimulus package goes through we would see some minimal recovery towards the end of 2009 and regular recovery in 2010. This is sort of a provocative chart because it shows the US savings rate, which many people have pointed to as a culprit, I would say, in terms of structural imbalances (figure 9).

Figure 8

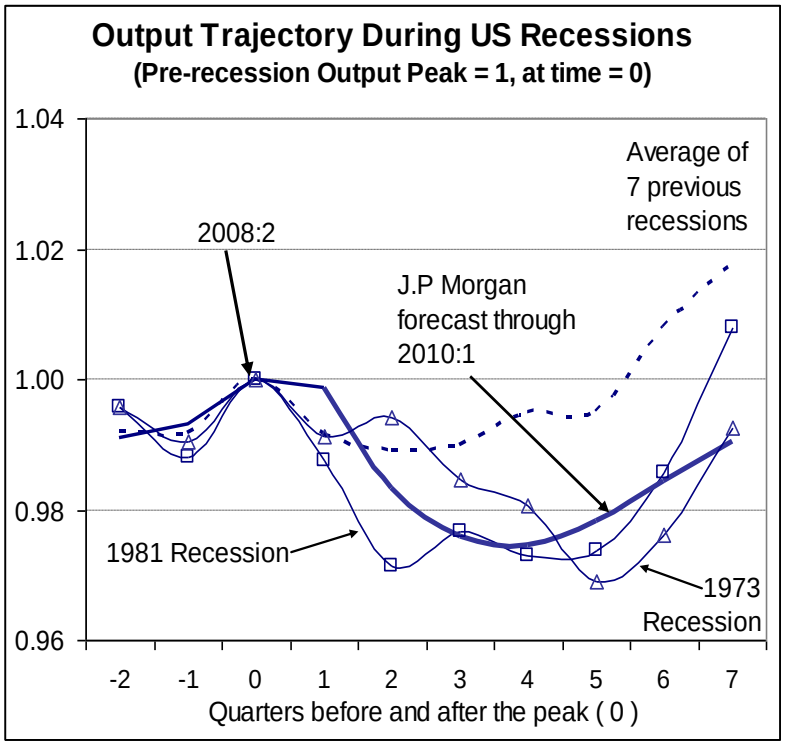
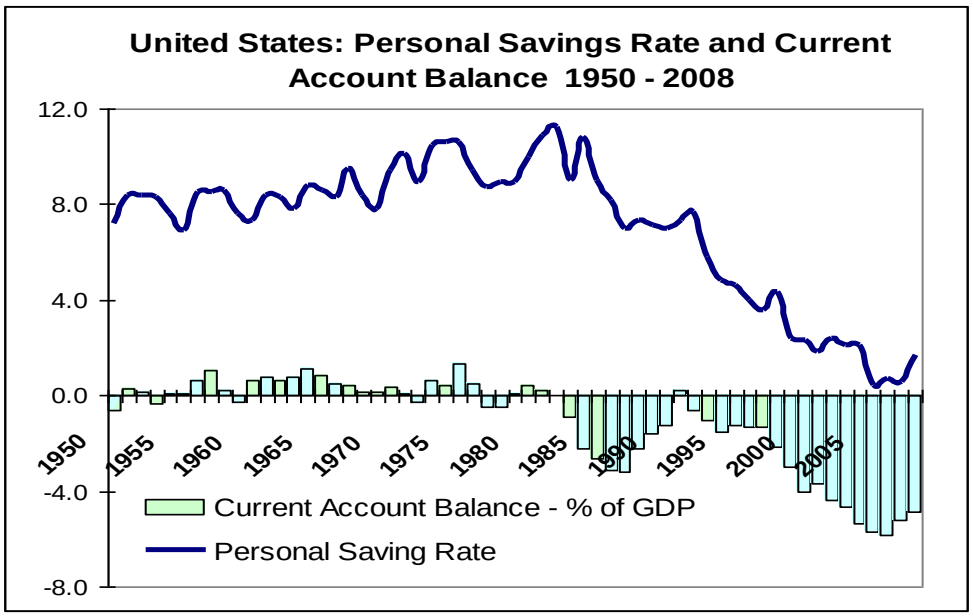


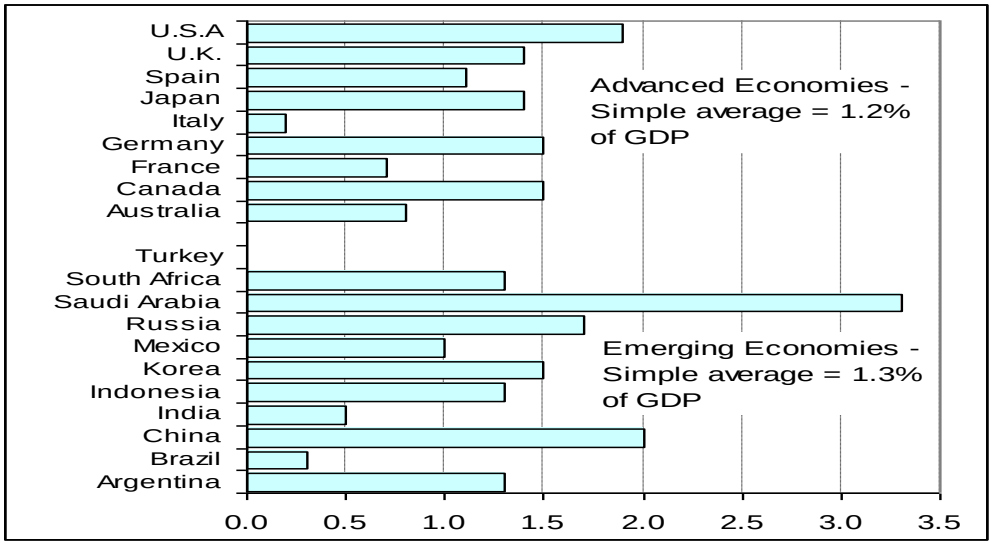
Figure 9



Particularly, since, as you see, starting in about 1985 when the saving rate begins to

drop from an average of 8 percent of GDP to considerably less. It is mirrored by current account deficits in the US and that was well known but not addressed. But, here's the problem: if you look at the end of that series you see that the savings rate is beginning to come back up from about zero in the US to 2 or 3 percent. People expect to see it to rise to perhaps 5, 6, or 7 percent as households rebuild their household balance sheets. Because housing pricing has dropped, stocks have dropped, there is a lot of uncertainty so savings will go up. That's okay for the US, that's probably long over due, but the question is, as I put on top of the slide, who will provide the next locomotive for global growth because this lack of savings or excessive consumption in the US was one of the main drivers over the last 5 or 10 years. And the question is what will replace it. Will it be the Chinese middle-class or will it be countries that have a very high savings? We don't know, but in order to resume the growth path that we were previously on or to get close to it there will have to be some locomotive for that growth and the question is where will that come from.

Figure 10



Now coming back to the current situation, everyone is focused on the G20. It's a group, as you know, that is more representative than the G7 or G8. It does include Korea and, in fact, Korea will be the chair of the G20 next year, the UK has it this year. If you look at what's going in the G20 (figure 10), you see in terms of simple averages that countries are tending to have stimulus packages in the 1 to 1.5 percent range. If you weighted them by the importance of the economies, the ones that matter the most, obviously, are China and the US where you are seeing substantial stimulus packages. I

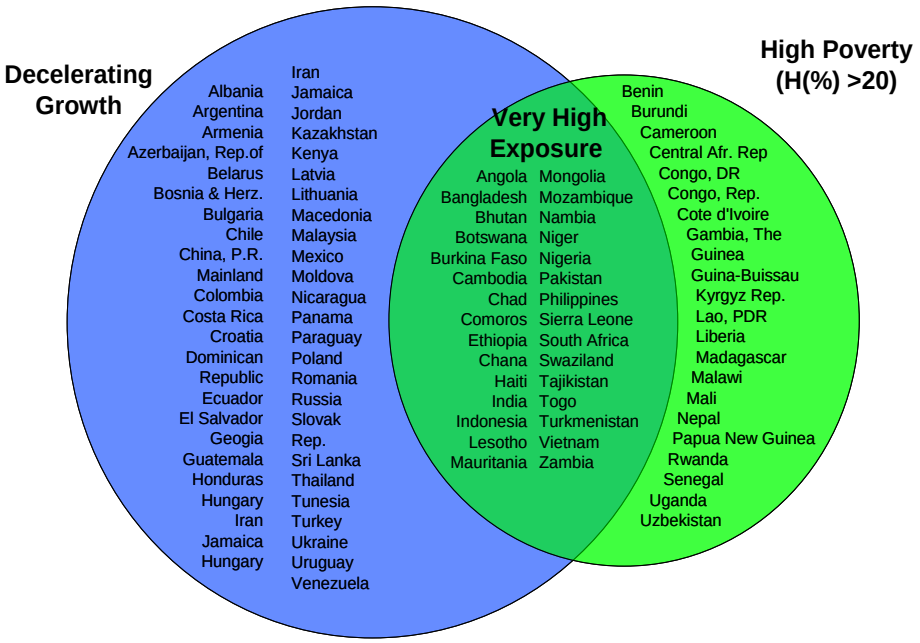
just found out about Korea, and I think it is probably an underestimate on this chart. But, the bottom line is when you add up, on a weighted basis, the stimulus packages that have been announced, it adds up to something on the order of 1.5 percent of GDP. The IMF as early as November/December had said that what was required was about a 2 percent stimulus, and the situation has gotten worse. So, I guess one observation that I would make is that, at the moment, the stimulus packages on the table do not add up to what is necessary, and there are probably still countries who do have what we call "fiscal space" to do some short-term stimulus.

Of course, there is some concern about long term debt. And you saw in the US, President Obama has called for a session yesterday to talk about the medium-term debt profile and objectives. This is based on what economists call "Ricardian Equivalence" which is that if you start spending and people realize that, ultimately, they have to pay for it, they may not spend as much. That does not seem to have stopped the US consumer in the past, but it might now. So, the notion is that you also want to layout a plan as to how you are going to be back to some more sustainable level of debt which means that some of the expenditures that countries will be following to provide a stimulus need to be short-term and reversible. So you wouldn't, for example, in my personal opinion, you would not be so inclined to give tax cuts because politically it is difficult to pull those back. You would, however, spend more on emergency programs because you can curtail those once the recovery starts.

Now, for the World Bank point of view, we are most interested, of course, in developing countries, the poor countries. So, we have mapped here in the left circle those countries that we expect in 2009 to experience negative growth and they are approximately 80 out of 120 countries in the sample (figure 11). We have also mapped in the right circle those countries that have poverty rates which are based on household poverty and the $1.25 measure per day. The World Bank used to use a $1 dollar per day but now due to the devaluation of the dollar we are using $1.25 per day as the absolute poor. There are about 50 countries in that group. But, the ones that worry us the most are the ones in the overlap. The very high exposure countries, most of them in Africa who will have negative growth and very high poverty and therefore are the most vulnerable in this crisis. We have also looked at who has the fiscal and institutional capacity and, to make a long story short, we think that there are a number of countries, the majority that do have the institutional capacity to absorb more expenditure, but they don't have the fiscal space primarily because they have been

managing their economies well. They have brought debt levels down, and they would need additional foreign aid in order to pay for safety nets to complete infrastructure projects, to provide credit, and do things that the private sector is now incapable of doing. However, official development assistance, even before this crisis, despite promises at the Glen Eagle Summit and other places, has basically been pretty flat. We are nowhere near the $120 billion target; we are somewhere around $100 billion. As for percent of GDP, you can see that it's not moving in the right direction (figure 12).

Figure 11

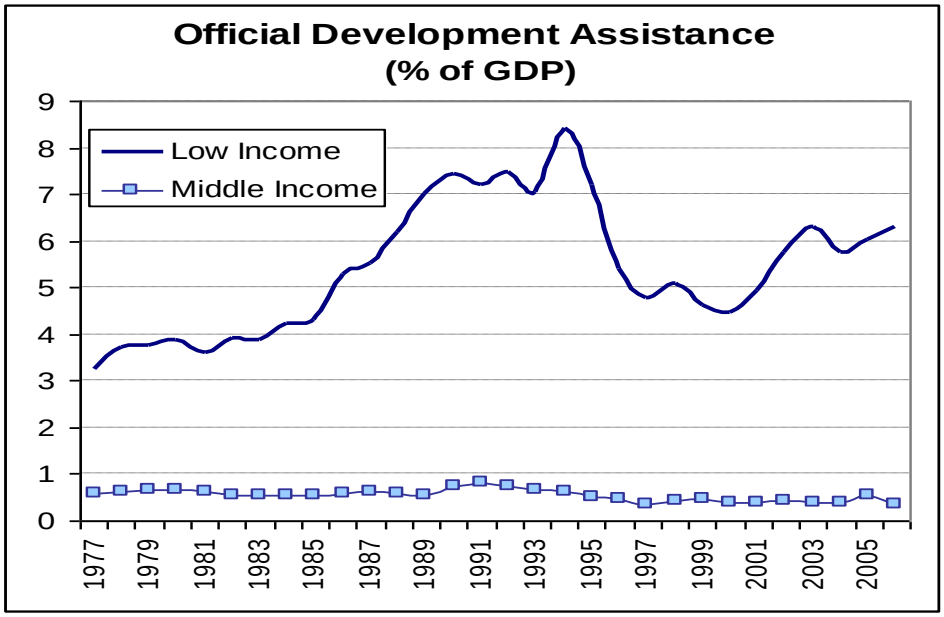


When countries are stressed with their domestic problems, it's unlikely that they will put additional money into official development assistance which we lament. And, the President of the World Bank has asked that .7% of the stimulus packages be contributed to a vulnerability fund at the World Bank. The stimulus packages, if we do the arithmetic of the 1.5% of GDP etc. 7% of that would probably be around $10 billion which would be a large increase in official development assistance.

My last two slides refer to the IMF and the World Bank. There has been a lot of tension on both. You may or may not know, but the G20 process which is leading to a heads of state meeting on April 2nd has four working groups: two are looking at financial sector issues, one at the IMF, and one at the World Bank and other development banks.

The IMF one is probably going to have to deal with issue of division of responsibility between the IMF and the Financial Stability Forum in terms of oversight and regulation, but it's also making the case that the IMF is undercapitalized. There have been some pronouncements, both out of Europe and between the IMF and Japan, that additional resources should go into the IMF. We think that that is a good step. I would also personally point out that in terms of stand-by arrangements which is the major tool during crises, a big chunk of the available IMF credit is going to a number of Eastern European difficult cases: Ukraine, Hungary, Belarus, soon to be added by Latvia and others and Pakistan and Iceland. So, it's a pretty concentrated group of those who are most in trouble. But also there are two facilities of the IMF that should be used in this crisis. One is called an Exogenous Shocks Facility, which is supposed to deal with your variation and export earnings, and at the moment they only have three countries participating for a very small amount. And, the Fund introduced a Short-Term Liquidity Facility about 4 or 5 months ago to try to provide the kind of credit that you're getting through currency swaps and other means here in Korea, and so far there are no takers. So, there is an issue of branding and the IMF has not restored its brand to the point where countries will go there unless they are absolutely broke, and that applies to Hungary, Pakistan, Belarus, etc. So, we have an under-utilized International Monetary Fund.

Figure 12



The World Bank, for its side, has ample capital. We have been repaid by many of our better-income borrowers over the years. So that we do have the capacity to increase borrowing up to $100 billion over the next three years which implies a doubling of our lending. Last year we lent about 13 to 15 billion. This year it will be more like 30 or 35 billion. We have a lot increased interest in borrowing, both to finance safety nets and also to guard against roll-over risks. So, there are some contingent loans that we are making where a country has the option to borrow a billion or two if they need it in order to finance certain programs. We have had requests from Indonesia, Mexico, and a few others, which we are honoring. For the poorer countries we have IDA which is the soft loan window, and we have resources available, but those resources will be used up rather quickly if we accelerate lending which is why we talked about this vulnerability fund, the 0.7% percent, which I list here which would go for financing, infrastructure, SMEs and safety nets. And we also have the International Finance Corporation (IFC), our private sector arm, which is doing a number of innovative things. It has a trade finance program, which it has doubled to $3 billion. It is providing some financing for bank re-capitalization in developing countries and providing other sources of funding for infrastructure and micro-credit. I know other multilateral banks aren't as amply capitalized, and there is a lot of news about the Asian Development Bank running out of capital and needing more. Given the numbers that I showed before in terms of the drop in flows to developing countries, I think this is the time when you would want the official lenders to be able to step up.

All of these are issues that are on the agenda for the G20. I think one shouldn't over emphasize expectations. These are heads of state meetings that are looking for announcement effects but a lot of these are difficult problems that announcements themselves will not solve. However, the basic issue of confidence in the system, the basic issue of trying to resist protectionism, and the basic issue of having a coordinated fiscal stimulus are three things that I think the G20 meeting could pronounce upon which would be good for everyone and good for developing countries which is the main preoccupation of the World Bank. So, thank you very much for your attention.

Questions & Answers

Q Dr. Leipziger, thank you very much for your comprehensive coverage of the situation. Unfortunately, as the situation becomes more comprehensive it also is becoming more depressing. Let me address that question of the interesting chart that you showed about Klaus' three rings. You showed the four that covered all three of them, but I am afraid that we may have to add another dimension to that. That is besides the financial, real estate, and equity, we now have the unique situation, which is a global and simultaneous meltdown. In the past, because the world wasn't globalized, the problems were in the spots. Now, we have a fully or total world, you may say that there are some pockets like China which is not in the negative, but I'm not sure that crashing down from 11-12% growth to 5% is not having an equally devastating effect on the world. So, we have this global meltdown and the people who are plugging in the numbers into their models and projecting the recovery are talking about this so called stimulus package but there isn't a stimulus effect. In fact, all of the money is not sufficient to climb out of the hole of financial losses. For example, in the US $700 or $800 billion is estimated to only be half of the financial losses. Where is the real effect of the stimulus to the real economy? So if you add those factors, I think the light at the end of the tunnel seems really far away. How do you see the models being able to make any projections on this basis? And as you previously touched on, in the past, we had two decades of growth based on the US's spending, beyond their means, which everyone claimed that it was unsustainable, but it was sustained up to this point. I'm afraid that it will never come back even if we come out of this depression. People now realize that this is not something that they can do anymore. Therefore, that purpose is gone, and I'm sure that when we add up all of those factors we will see that we are now entering a new phase of the world economy. I would like to see your view on this.

A I agree with on the models not being overly relevant because we have an unprecedented situation. Models are built on 100 observations, so I fully accept that. That is why no one is in a good position to estimate the duration of the recession. On the financial losses being larger than the stimulus, I partially agree but I think there are two different things. If you look at how the financial losses are being financed in the US, the TARP program or the money that is being allocated through expenditures is a fraction of the amount of the help that is going into the sector because most of the financial support is going through the Fed's balance sheets and other off the normal balance sheet ways. So, I think the stimulus packages will have their macro-effect. I

mean essentially there are only four aspects to demand: consumption is down; investment is down; and exports are down. So that only leaves one variable and that is "G," government. So, the question is how much will they be able to spend. Where I do agree with you is that the stimulus packages won't work as long as there is no confidence in the financial sector. So, the interaction of the two is, I think, critical and you can't solve one without the other. That's the other aspect that is absolutely frightening and unique and that's why people talk about the Great Depression. I don't think the analogy is apt because I do think that we have many more tools and the situation is not as grim, but that is why people look at that as the only experience where there was a lack of demand and a lack of confidence. So, I appreciate your observation.

Q Thank you very much. History does repeat itself. From the resume that Chairman covered, I saw that your background included working in Eastern European countries and Latin America including Argentina with work related to restructuring. Twenty some years ago, the external debt levels of those Eastern European, as I recall, was only around 10 percent of the current level. Yet, the magnitude of external debt levels in Eastern European countries and the countries suffering from the current crisis are both, indeed, global. The next round of potential crisis comes from the US consumer credit such as home equity loans, auto loans, and credit cards loans provided the so-called Obama-package or Geithner-plan do not play out as quickly or as fast. That's another tsunami that will adversely impact the international economy in my opinion. So far, for the last three decades or so, first Japan and nowadays China have been funding the American deficit, meaning the treasury bonds. Given the level of the deficit of the US to the trillion of dollars, the deficit for this year is expected to be around 2 trillion dollars. Next year, could add an additional trillion. Given the level of the bottomless pit, or abyss, however, it's becoming more and more apparent that the deficient levels are rising. So, in the future who will be willing to buy US treasury bonds? Your chart shows only slow recovery in the US saving rate. Normally, when a country issues a bond, the citizens of that country buy those bonds. However, in the case of the US, the saving rate is really low. So who are the buyers? The Japanese? They have their own problems. China? The Central Bank of China has started to diversify away from the US dollar. So, it's a big question.

A On the Eastern European side, to be fair, I think my experience was in East Asia and Latin America, not Eastern Europe, but I think it is one of the warning spots at the

moment. I think the World Bank issued a notice a couple of days ago that the banking systems in Eastern and Central Europe were at high risk. If you look at my chart on the IMF, that is where most of the resources are going at the moment. So, one does not want to push problems on to others, but my guess is that in Eastern Europe this is something that the EU is going have to address because having the Ukraine, Hungary, and Poland in deep trouble is not good for their region.

Do the Europeans have the financial resources to put more into bailout packages? I think the answer is yes. Now, the ECB is more limited in its role. I mean the Fed has probably gone beyond what in a textbook you would have expected the central bank in the US to do, but it does have this dual responsibility of fighting inflation and maintaining economic activity whereas the ECB is only an inflation fighter. Nevertheless, if you look at regions of the world that have fiscal space, I think the two regions are really East Asia and Europe. In Europe, it's variable because a number of countries were up at the Maastricht level of fiscal spending before the crisis. I should also say, though, that except for countries like Chile, very few countries were running anti-cyclical fiscal policies. So during the booms, Italy, France, and other countries were above the Maastricht levels. So now they don't have that much space. It's a long way of saying that I agree with you that the Eastern European problem is big. I don't think the IMF itself can solve it. It's going to require a European solution. If you take the case of Ukraine, there is an analogy to the Korean crisis of 1997 which is that, as Professor Ahn mentioned I was here then, the money on the table in 1997 was never going to solve the problem if the New York Fed had not called all of the lenders into the room and said that you are now going to rollover for six months because the hole is too big. The analogy in the Ukraine is the same. It's just that the banks are Austrian banks and others. So, there has to be a regional solution.

On who is going to buy the US debt, well, that is a good question. I understand the economics of it, that you have a country that's emitting a lot of bonds. Why should anyone buy them? My answer to that is what's your alternative. You have cash, what are you going to do with it? I was remarking to someone in jest that the second largest stock of debt, is actually Italian sovereign debt which you may not find as attractive as T-bills. So, there is an exchange rate issue going forward, no doubt about it. In the short term, I think to finance the packages, there is going to be an increase in the interest rates. You know, many of you are bankers, and I respect that, but I think the perspective of a banker is not five years. You have to put your money into something,

right? So for the next three months, six months you are going to make some decision. If you can make a better return on the US treasuries than you can on the Italian EU issued debt, you will do it. Going forward, I think there is a structural question. I don't know the answer to the question. How fast will US savings rates go up? What other spending will there be? What will the medium term debt position of the US be? I don't know that. But, I think it's sort of easy to say that no one is going to touch US issues. However, in the end, people buy them. I think the answer is that the alternatives are worse.

Q Thank you very much for your excellent speech. First of all, I appreciate the IBRD assistance given to Korea, about 10 billion dollars, during the Korean economic crisis in 1997. At that time, the World Bank recommended or educated Korea in two things. One is FLC and the other is the London formula. The forward-looking criteria, which you so kindly advised Korea, classified a three month no-payment on principal and interest as a bad debt loan. The second bond was the London, which was as you know, to walk out and seek the 100 largest companies in Korea. My question is why doesn't the World Bank give advice to the US because the origin of the present recession is from the center of Wall Street.

A I'll give you the World Bank answer, and then I'll give you my answer. The World Bank answer is the US is not a borrower from the World Bank and if anyone is going to give advice it has to be the IMF because the relationship that the IMF has with all of its countries is one of advisor. In the World Bank system, the US is a donor. They give us money. We only give advice to those who borrow from us, and so far, the US is not borrowing from us.

Below that, I think there are a few strands in your question. The first is whether or not the US could learn from the experiences of other countries dealing with financial crises because this is not the first financial crisis. The whole discussion of whether or not one can divide things into the good bank/bad bank model, for example, is something that the US has never had to face before even during the savings and loan. It was pretty simple. Someone had to take over the bad assets. The problem with the good bank/bad bank model used in Argentina and other places is that in this crisis it's very hard to decide what is a good asset for two reasons. One is that some of these assets have cross guarantees and all sort of difficult structures that make them hard to

disentangle which is part of the origin of the crisis which is that there was bad supervision and risk taking that was unconscionable. Therefore, you can't decide what's a good and bad asset so easily. Secondly, in today's market a lot of good assets look bad. There are some analogies and some lessons one can draw from previous experiences, but not totally. The second thing I would say is that what this points out is that countries like the US and institutes like the IMF and the World Bank and others, I think, are faced with having to be a lot more humble in the advice that we give. I remember working on Latin America where we would give advice to a country like Bolivia in the 1990s having difficulties with its banks, we would say "don't extend the deposit insurance across all deposits," "don't guarantee liabilities," and "don't refinance at the Central Bank all assets without taking a look at the quality." There are a lot of things that we have told countries not to do that are currently being done. It's force majeure. It's an unprecedented situation. If you or I were sitting in the US Treasury, we'd probably do something similar, but it points to the fact that there is no right and wrong in a lot of these areas. One has to be a lot more humble in the way one gives that advice. I think the US, on some level, is understanding that.

Q After the current recession is over, the world economy may suffer some really high inflation. What actions do you think need to be taken to account for this while also worrying about getting out of the current crisis?

A Well, I don't know the answer because at the moment the risk is deflation in a lot of countries, but I do see your point of view. I think if the stimulus packages are in the ranges of 1.5% to 2%, we are talking about making up for a fall in aggregate demand. So, I think that in the broadest macro sense we are not over-stimulating it, but for different countries it will apply differently. It depends on how markets react. I think the big difference between the US and Europe is that the European central bank has the anti-inflation objective very clearly in mind and for good reason because inflation is built into expectations, wage contracts, etc. and once you get inflation into the system it's very hard to wring it out. On the other hand, I would point out that we haven't seen a situation as bad as this since the 1930s. So, we are talking about a once in 70 or 80 years event. I think that the amount of hardships and collateral damage that will be caused by the longer and deeper recession in terms of protectionism, job losses, and closing of plants. I would weigh those heavier than the inflation rate. I think that you can wring inflation out of an economy. It takes a bit of time and it's not pleasant, but it can

be done. At the moment, I think the risk is much more on the downside. I would be more in the favor of taking a bit of a chance on the outcome. No one knows what inflation outcome will be. I wouldn't let the inflation fears stop me from acting on the fiscal stimulus and trying to get the economies moving. It's not an issue in the US, it's not that big of an issue in Asia, but it is an issue in Europe.

Q Did you or the IMF or the World Bank provide any warning signals while Wall Street was producing a slick repackaging of the financial derivatives? Also, do you trust Mr. Geithner professional opinion? Thirdly, what kind of package would you suggest the Korean government to implement?

A As to the first one, to be fair, the roles of the Bank and the Fund should be clear in this. We are not regulators or supervisors. I think the Fund for its side did point out structural imbalances, that the US was "living beyond its means," and it did point out that the Chinese surpluses were unsustainable. The reality is that big countries don't have to pay attention to the IMF unless they get into real trouble. As for the second question, I don't know whether it's a question of trusting or not trusting the administration, but I don't think anyone knows the size of the hole. That's the reality. The analogy I would make is the *Chaebol* in Korea in 1997 because of the high interest rates that were imposed by the IMF, every *Chaebol* on paper was bankrupt. The same is true with a lot of entities in the US, or in the financial sector now, which is if you mark the market and they actually have to meet some requirements, a lot of them can't do it. So, I think the question really is to try to separate out the assets that are currently impaired but in a normal market they would actually be okay from those we are now referring to as toxic assets. Many mortgages in the US are perfectly sound. The question is how can you restore credit, restore lending based on assets that are sound while reserving against or putting capital against or getting government guarantees against those that might or might not be good and then dealing with the third category which is the bad assets. In a sense, it's not good bank/bad bank. It's good assets, bad assets, and those that you don't know because it depends when you are looking at them. Is the snapshot today or is the snapshot a year from now? So, I think that this Treasury team is better able to deal with it than the past Treasury team.

On the safety nets, I mean that we give countries a bit of advice on safety nets. We normally say that they should be well targeted, minimize leakages, and that it's better if

you have an existing safety net program that can be expanded or augmented rather than starting one from scratch. The advantage of that is that it can be scaled back down after the emergency is over. In general, we are in favor of cash transfers, at least in developing countries. I guess we would have to take a look at what makes sense in Korea. It's extending unemployment insurance, extending the coverage because normally the number of weeks is usually inadequate to find a new job during recessions, cash transfers for the absolute poor, and I think that, although not a safety net, emergency employment programs do make sense. You should also try to do things that are smart investment in the sense that they position you for the recovery. You have a choice between just painting bridges, which would create employment, even if they don't need it and doing something that improves the logistics chain or something that gets you in a position to be more competitive such as the green investments. The real issue is the speed. You can start repainting a bridge tomorrow, but to do a green investment of a complicated type may take a year. You have a trade off there. How urgent is it to create aggregate demand right away? At the moment, I think that speed is important.

Q You mentioned about not worrying about inflation. I'm seeing it the other way around. I think we should actively seek inflation because it is ultimately the solution. If you look at the problem today, it is the overhang of the debt that we cannot handle: people, corporations or nations. I feel that the stimulus packages will bring about inflation, which, by definition, would reduce the value of debt. You mentioned that one of the problems is that you don't know how bad the hole is and it is getting worse each time the real estate value goes down. Therefore, you can't determine what is good debt, what is bad debt, what is good mortgage because what is good today is bad tomorrow as the price goes down. Reversing the process with inflation reducing debt, I think that is that fast way we can get out of this mess.

A Well I agreed with most of your previous comments, but I don't agree with this one. I agree that some countries will generate inflation and that inflation can be good for the government because it allows them to cancel off some of their debt, which is also true. However, my response is two words: Latin America. Latin America followed an active policy of not caring much about inflation. It also created what is now known as the "Lost Decade," because at the end of the day, their macro was so messed up that it took them a decade to fix. So I wouldn't actively generate inflation, but I understand that the

mechanics are right. If you have inflation, then the debt value goes down. That's one way to finance. I wouldn't actively encourage it. It may happen, but I wouldn't actively encourage it.

Q I agree with you that continued inflation is dangerous, but what I am proposing is a one time shot. The way we got of the Great Depression was, never mind about Keynesians and Nubians, was really due to US and global spending. The problem with Latin America, I agree with you, is that Brazil, for example, had a built-in long term expectations about inflation. So, I think that this entire matter can be solved with a one time shot like what happened during the Great Depression.

A Yes, but, first of all, you can't legislate a one time shock because once you do a one time shock you have ripple effects. The ripple effects build in expectations. I agree with you that WWII was helpful to come out of the Great Depression. There were also a lot of price controls during WWII. The US just didn't simply allow prices to go up. Analytically you're right, but as a practical matter, I don't think it's the right approach.

Q We have been seeing a large amount of stimulus packages by countries all around the world. As you pointed out, 1.5% of GDP has been a ballpark number. The aspect of these stimulus packages is where to put the money. We have been talking about the lost decade in Japan and then at the time people criticized that the stimulus money was wasted because most of the money was spent on highways leading to nowhere or bridges that were not needed. I also heard that even in the US there is a lot of debate over what projects should be funded. Actually looking back at the Great Depression, some people say that WWII, not the New Deal, saved the US economy. Would you make a few comments on what you think are some appropriate projects that should be funded using money from the US stimulus package? What are some projects that would be appropriate for Korea? At the moment, there is a lot of debate over how this stimulus package should be used.

A I would say that if unemployment is a big issue and you are going to have to spend a lot more on unemployment insurance, and that when people become unemployed it causes a ripple effect of households and social disintegrating so that one aspect of deciding what projects to do should be the job creation component. If you

put on the table a billion dollar space satellite, for example, which will provide 100 jobs versus another program that improves that port in Busan, I would go for the one that would create more jobs. I would also go with one that positions a country like Korea or whoever else that in 2010 you'd be more competitive. The green investment idea is a little more complicated. I don't know enough about it, but it could or could not meet my criteria because I don't know how quickly it could be started. I don't know what its job content is. But, it does have the potential if it has the technology component to position Korea to be an exporter of a new type of technology. It's possible. If there are hybrid ships that can be built like hybrid cars and Korea is the first, then okay. It could be interesting. The problem is I don't see it creating jobs tomorrow because I don't think anyone has these so-called "shovel ready projects" which is a list of projects and all you have to do is put the money in and you're ready to start.

The reality is that there is no right or wrong. People don't really know. In the US, we have states saying that they don't want to participate in this stimulus plan. They don't want the money because they don't like the conditions attached or they don't like the sectors being promoted or whatever else. There was a big debate in the stimulus package on how much tax relief versus expenditure. There was a political difference of opinion. I happen to be more on the expenditure side because it's difficult to know the impact of tax relief. It can be saved or whatever. It's a long answer to say that you have to decide what is the objective you want of the expenditures. If the objective is job creation, it leads you one direction. If the objective is to position the country to be more competitive a few years from now, it leads you in another direction. If the objective is regional in nature, that there is much more unemployment in one part of the country than another part of the country, it might lead you to a third. So, I think in individual cases, policy makers have to decide what is the objective they are trying to achieve. Of course, policy makers may say that they want to achieve all of them. Then you have some interesting decisions to make because not every project can serve every objective. So, you have to decide the balance between them. This isn't a yes/no answer but it gives you some thoughts on your question.

Q Would you comment more about the G20? What are some of the politics and economics behind it? Will it work? Why is America pushing for the G20? Are they trying to make it look like a consensus? Maybe, that's a negative perception. What is the story behind the G20?

A That's an interesting question. Everyone has their own view. Let's look at the economics first. The G7 is not very strong representative group because a number of the economies are not the biggest. So the G20 is seen to be more representative and it covers 80% of GDP. When it was set up, it wasn't set-up in a strategic way, it was set-up in a casual way. So there are some questions about why some countries are in and other countries are out. Will it endure? I think the G20 is on a rising path and the G7 is on a declining path. The reason for that, I think, is because of the G7 have not proved themselves to be overly effective in the last couple of years. They just had a finance meeting Rome and nothing came out of it. I think the G20 has potential to be a new influential group. Whether the US is pushing it or not is not clear to me. I think that the first G20 heads of state on November 15th meeting held in Washington was called by President Bush for probably two reasons. First, it was nearing the end of his term and politically it might have been a good move. Secondly, there was talk about moving the conversation to the UN, which for people like me who focus on economic policy would not have been ideal. So, I think the US embraced the G20 in November, and then it took on some momentum of its own with the British being in charge this year. It's on the upward trend. Let's see what it can produce. My guess is that the G20 may well supplant the G7.

Q When do you expect the financial crisis in America to end?

A May 7th. The reality is that nobody knows. I agree that stability in the US is a prerequisite for stabilizing the overall situation. It seems that the US administration is going at the problem in the proper way. They have something for mortgages and for banks. I picked May 7th to be provocative, but I think it's within the ballpark. I believe it's within a matter of months, but I don't honestly don't know.

Q How would you evaluate or assess the Korea's response to the economic crisis?

A Well, the right answer is that I don't know. In any grading scheme there are absolute and relative grades. First of all, you have to keep in mind that nobody is handling the crisis well. Without knowing the details, I would say that at the moment Korea seems to be doing relatively well. But at an absolute scale, I would have to do a

lot more analysis and work before giving an assessment. When everything is a mess and all of the variables are changing and in a flux, and you are able to keep your head above water, then you are doing well.

Q First would you like to make any special recommendations to the Korean government in terms of the stimulus package? And my personal question is that in order to stimulate private consumption, the Korean government is contemplating offering a consumption coupon instead of tax. Is it an effective program and would you recommend that?

A I wouldn't want to comment about that because I don't know enough about it. The bottom line is that given how export dependent Korea is and given the projections on global trends in terms of exports, you have to find some other aspects of demand that will carry you through 2009 and part of 2010. Government spending is one and domestic consumption is another. So, how you stimulate it, I think, is what Korean policymakers need to decide. I don't have enough knowledge to say do this program or do that program. But, I think the idea that you want to stimulate along with government spending is correct. On the size of the package, at least you know that it's 2.5% of GDP in one year. That sounds like a big number. Now, luckily you have the fiscal space to afford it. I would say that it sounds good, but again the composition of the 2.5% requires greater scrutiny and it comes back to my previous point: what is the objective? Is 1% of it aimed at jobs, and 1% of it at future competitiveness, and 0.5% at being leader of the green technology? I don't know what the composition of it is. Whether it's Korea or Germany or the US, the important thing is that you want the stimulus to take hold by the middle of 2009. You can't afford a stimulus package which doesn't have any impact in this calendar year because this is the year in which it has to bite. So, the question is how quickly can these expenditures be started. Only half jokingly did I mention painting bridges, but the advantage of that is that it can start tomorrow. At the other extreme, is something that involves a long lead time in terms of planning R&D, etc. I would think that there should be some balance between the two, but I am more in favor of the shorter term at the moment to cushion the shock of 2009 because if you can't restore some level of aggregate demand then you're going to have to expend fiscal resources anyway. You're just going to be using it for welfare, for social protection, for unemployment. It will be a budget item anyway. So it would be better to make it a productive budget item than a reactive budget item.