Lessons from the Current Economic Crisis^{*}

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Thank you very much. It's a great pleasure to be back in Korea. I just arrived last night so please don't expect me to be absolutely current on what's happening now. I hope to have some time after this talk while I'm here to catch up a bit on events. It's always interesting to see what is going on here. The rest of the world has learned and is learning a lot from Korea and that will continue.

We are meeting at a time of virtual panic in the world about the state of the global economy. It is a difficult time and it is an important time. The first thing I want to say is that, if anyone tells you that they understand what's happening, and know what's going to happen pay no attention because they are wrong, nobody does. We are trying very hard to understand it. Understanding now is better than it was a few months ago, and things are becoming a little clearer. I will give you my views, but please remember that on every aspect – on what caused it, on what should be done, and why – there is legitimate disagreement among very able people. I have very good friends with whom I normally agree, but we disagree on some aspects.

I want to start a bit with the background and the origins of the crisis, not because I want to play the blame game-"who is the one who did the wrong thing"- but rather because some degree of understanding of what happened is important in terms of figuring out what the appropriate policy responses are. Then I want to look at what is happening and talk about what has been done and the short-term outlook. Finally, I then want to move to the longer-term outlook. If I leave one message of which I am reasonably sure, that message is that the world needs to do is to be very careful in addressing the short-term problems that we do it in a way that does not prejudice, or reduce, or make worse the long-run growth prospects. It seems to me that the danger in the current situation with the panic, with the reaction of the politicians that they must do something right now, is that actions may be taken to get out of this short-term mess – and it is a mess – that could affect things in ways that would mean that in the longer-term economic growth cannot be as healthy as it was. That is my bigger concern over

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the medium-term.

So with that let me start by reminding you that we have as a global economy as a whole had an absolutely phenomenal run over the past 60 plus years. Obviously, there were bumps in that period. There were recessions. Things did not always go right. Everybody here remembers 1997-98 with no fondness. Other countries had difficulties at various times, but those difficulties were all overcome.

That period gave us something that was unprecedented in world history. Until the 1970s economic growth was most rapid in the industrial countries. After that emerging markets one by one adopted reforms and accelerated growth. From 2002 to 2006, a period of five years, world real GDP grew at an average rate of five percent per year which is higher than in any comparable period except possibly post-war recoveries in world economic history. For the world as a whole that is rather amazing.

Early on the industrial countries were, of course, the ones that were growing most rapidly. After the leadership of a few developing countries including Korea, other developing countries began growing more rapidly. While Korea led the way, moving away from the old policies of the 1950s and moving away from the tradition of being inward, isolated, and with state control of the economy. Other countries learned from that. From all of this, we learned the importance of healthy growth of the international economy for the growth prospects of individual countries. The gains to be had from globalization were amply demonstrated over those 60 years. Throughout that period world trade grew at almost twice the rate of world GDP and those countries that were more open grew more rapidly than those that were inward looking. That's very important because going forward one of things we need to emphatically preserve is the open multilateral trading system.

That is in everybody's interest and it is important that that doesn't get damaged during the current economic difficulties. You all know the benefits of integration. There are many and they are important. They include being able to use your abundant factors well, competition, letting efficient firms grow more quickly, technology transfer, and more. It is often forgotten that increasing global integration has happened – depending on how you count it – at least over the past 200 years and that earlier it was transportation/communication costs that fell quite rapidly that led to the earlier period of integration. Since the 1940s it has been much more the decrease and the removal of

the trade barriers that were policy imposed – reducing tariffs, getting rid of quantitative restrictions – and otherwise letting the flow of commerce from country to country be along natural lines with very much lower transport costs.

In 1900, it is estimated that when a good reached the US from overseas the average transport cost for getting it there was about 50 percent of its value. Transport, itself, acted as a huge barrier to international trade. Today, that number is three percent and that's average. Communications, of course, have changed enormously over that period, too, so that business can be more efficient internationally. It is estimated that in current prices the cost of a three-minute phone call between London and New York was about \$300 in 1930. By the year 2000 it was about 5 cents and right now it's virtually free. The changes in all of these for the world economy have been huge and we have benefited enormously. In the current crisis, it is important to remember this. People say that it is a terrible threat to the system and something has gone wrong. Yes, something has gone wrong, but I think that the underlying system has shown that it can deliver. The challenge is to repair the system so that it not only continues delivering but gives us less of a problem in the future. We do not wish to throw out the baby with the bathwater. There is a problem and we need to fix it, but not at the cost of the whole system.

Before speaking specifically about the current crisis, let me first talk about two different theories of recession. This may sound a little bit academic but it is very important. You all know about Keynes and his stress during the Great Depression on aggregate demand. The solution to a recession, he thought, was that you had the government spend more or reduce taxes so that this would give more purchasing power and people would spend more and it was these increases in aggregate demand that would lead the way out of recession. There is truth to that view and I will come back to it. During the Great Depression there was a second economist who had a different theory to which not much attention was paid to at the time and yet for the current recession may be at least as important. That was Irving Fisher, a very eminent monetary theorist at Yale University. Irving Fisher insisted that what went wrong during recessions was that something happened, some kind of negative surprise, and asset prices fell. When those asset prices fell - it might be equities or housing or something else - what then happened was that people sold assets and cut consumption in order to repair their balance sheets. But selling assets because you need to repair your balance sheet means that you are increasing the supply of assets yet again which

means that those prices will fall more which means that there will be another round. He thought that the cumulative effect and the problem of recessions was a balance sheet problem. Through this mechanism, if you like, of selling assets and then getting a lower price and the lower price means that more people have to sell to repair their balance sheets and so the process goes.

The basic premise of that model is that repairing and restoring balance sheets is a key to the whole thing. In his very famous study of the Great Depression, Milton Friedman concluded that it was the contraction of credit that was a key factor in letting the depression get as bad as it was for as long as it was. But he didn't really get into the issue of whether it was balance sheet or whether it was aggregate demand or how the two interacted. Restoring balance sheets is clearly important and something that has to be done. In the current recession, balance sheet effects assume more importance than they have had in earlier recessions in the post-war period. Interestingly enough – this is important for the outlook – if you think the balance sheet approach is important, and I do think it does for the current recessions, then when asset prices start rising again – namely, once we reach the bottom – people's and businesses' balance sheets will automatically to some extent be restored. As that happens, they will begin spending more. And just as in the downturn the balance sheet leads to contraction, it also helps in the recovery and that is important in thinking about the future and what to do and how to get there.

Now, let me turn to what has happened and the origins of the crisis. As I said, a "blame game" is pointless. There will be papers written by economists, policy makers, and others for the next ten years trying to diagnose what happened and exactly why it happened.

There is close to universal agreement that a major part of the problem was that the world had a period of very low interest rates. Low interest rates had effects that laid the groundwork for the current situation. Low interest rates were a product of what was called "global imbalances." What was happening was that some countries were generating more saving than they could invest. So they invested abroad. That led other countries to a situation where they needed to invest more than their savings and have current account deficits to offset that. It turned out that most of that investment was the United States.

In order to absorb all the additional savings in the form of investment the world real interest rate became very low. There were several results. One was the housing boom, and I'll come back to that in a minute. The second was that everybody, especially in the financial sector, was busy as they say, "searching for yield." They didn't want to get just one percent or one and a half percent yield, they wanted more. But the only way to get more yield is by investing in more risky things. There is a lot of evidence that financial institutions, not only in the United States, began searching for yield, looking for ways that they could invest that would indeed give a better return than the very low real rate of interest in the US during the period after 2002. That had many consequences as people began taking risky assets on their books. But as they did so the price of riskier assets was rising. That's because everyone was looking for more search for yield. As they did so the riskier assets began to have lower yields and returns until the process reversed.

The real estate and housing boom were an important part of it. Low interest rates were a major contributing factor in the housing booms in several countries. Borrowing costs to finance mortgages are highly interest-sensitive. Spain had a huge housing boom. The UK had a huge housing boom. Ireland had a huge housing boom. The United States, Australia, and a number of other countries had them too. In all of these countries, low interest rates and the fact that real incomes were rising were factors. As that happened, housing prices began rising because people began investing not only because they wanted their own house or a better house but because they thought that it would be a good investment.

There's a lot of evidence that in many countries, much of the demand for housing, particularly 2005 and 2006, was speculative demand rather than housing to live in. Let me illustrate a couple of figures in the US. The evidence is Lee County, Florida, the state which has the second highest foreclosure rate in the US. Two-thirds of the foreclosed units have never been lived in by anybody. Why? Because people bought a condo or a small house – some of them must have had plans to retire or to use it for a vacation home or something. They had to pay almost nothing down, the banks were pushing out mortgages, and so they got all of the money to buy the unit from the bank. And they expected to have the house or the condo for a year or two and then sell it and make money. There were no intentions in many cases of living in it. That happened in many parts of many of the country with low interest rates. Second homes, vacation homes, people may have used them somewhat, but a large part of the motive was this

motive of "okay, I want to make some money, it won't cost me anything, I'll borrow from the bank now, keep it a couple years and then I'll make a profit." Some people bought to bet on price increases early, once they did, others began to follow, and the process mushroomed, with housing prices rising.

Also with low interest rates, the earning streams companies began getting capitalized in the stock market at higher multiples because of low interest rates. It led to the search for yield. It led to more risky ventures. A "big carry" trade as they call it developed in which there was a lot of borrowing in low interest countries such as Japan. You bought Yen in Japan and then you brought it to New Zealand where the interest rate was higher. You owed Yen, you paid the interest rate in Yen and you got the New Zealand interest rate. As long as those exchange rates were okay, everything was fine, but of course, they didn't stay okay.

That is a big problem now in Eastern Europe because most Eastern European countries were growing fast and had higher interest rates than Western Europe. Many householders in Eastern Europe then wanted to buy a home and therefore went and borrowed not in their local currencies but in Swiss Francs or Euros and in a few cases British Pounds. The result was that when these countries got in trouble the householders all of a sudden discovered that their monthly mortgage payment has gone up 50 percent. The interest rate may have come down, but the exchange rate is now different and there are now huge difficulties on that account in that part of the world.

The interest rate premium between the high interest and the low interest countries was one of the things that happened. The global imbalances were undoubtedly an underlying factor: they were not the only one but they were one of considerable importance. For the longer-term, it is important that we do not forget that those imbalances led to some of the trouble. People seem to forget that, had not the United States been willing to have those large current account deficits, instead of having the strong economic growth between 2002 and 2006 we would have had a world-wide recession then. The United States basically provided the aggregate demand or the extra investment that offset the savings of the rest of the world. That kept the system going.

If we go back to "normal" and have the re-emergence of global imbalances like

before there will be major problems sometime in the future and through much of the same mechanism. The low interest rates let people find cheap things and they buy more and then the price goes up and they buy more again. One day, once again, will come the difficulties. So in the longer-term and one of the lessons of the crisis is that we need somehow to modify and find a mechanism whereby we can reach international agreement better than we did. We did try. We reached agreement that something needed to be done, but we just didn't agree on who would do it. We need to find a way to better resolve these problems across nations. Otherwise, we will find the same problem or ones like it again.

The housing bubble burst in late 2006. It was after a period of very steady and very good growth. There were several factors that intensified the housing bubble. In the late 1990s, the US Congress passed a law that required American banks to extend a certain proportion of their loans to low-income people for the purpose of buying houses. The banks obliged, sometimes leaving aside all of the lending standards simply so they could go about their normal business. Some of that lending to low-income families who could not afford their mortgages and that contributed to the crisis. There will have to be a way to be more confident that those receiving mortgages can pay them. By 2006, US consumers were dis-saving four percent of disposable income by taking out home equity loans and using the proceeds for whatever they wanted. It had really gotten out of hand. The crisis in housing in the United States started in the so-called sub-prime market which were these low income families at the time when the really low interest rates ("teaser rates") that banks had given were reset. In order to make the loans many of the banks said, "okay for the first two years, you pay one percent on your mortgage. We pay all of the closing costs." Some of the loans were 105 percent of the price of the house. The trouble started when the interest rate started going up because some of these people then found they couldn't pay their mortgages. So, there were some foreclosures. When a bank gets a house back, the last it wants to do is to become an owner of housing and a landlord. So the bank tries to sell quickly. So foreclosed houses very quickly go back on the market and as they do so, of course, the price of housing falls. When the price of housing falls, other people say, "why am I paying this big mortgage when, indeed, the price I'm paying is more than the price of the house?" In many countries, I don't know the situation in Korea, but if you are going into personal bankruptcy, you cannot do so unless all of your assets are at stake. By a peculiarity of US law, a person can walk away from his house and the house is separate from his other assets so he loses nothing else. So, you go on paying for your car, your summer

vacation, and whatever and you can put the keys in the mail and send them back to the bank. It's called "jingle mail."

When housing prices fall, some of those who find their house is worth less than they're paying decide to not to pay anymore even though they could. It's not only those who cannot (there are some of those), it's not only the speculators (there are lots of those), it is also some who, just because the price falls, won't pay. When that happens the banks put more houses on the market, the price goes down some more, people find their houses under water, and we have Irving Fisher's vicious circle. With all of that added to the supply of housing, more people walked away and that's the situation we are in.

Now, as it happened, banks decided at about the same time that they were originator of loans rather than holders and they began packaging, "slicing and dicing," the mortgages that their customers bought. They thought that they were offloading all their risks from their books. I know at least two banks where the CEOs say that they did not know that there were clauses in those "slicing and dicing" packages that were sold where the bank guaranteed to buy them back. It was not known that the lawyers had put it in and the people that were buying presumably knew. When housing prices started falling, that meant that there were loans that the banks didn't know that they still had a liability for. It meant that the uncertainty as to what is in a particular package of mortgages that has been sold off is huge. Nobody knew how to restructure a mortgage very well because it wasn't as if a single individual has a mortgage and one bank holds it. What happened was that, for example, the first three years of a mortgage had been sold off to an insurance company, the next three years had been sold off to a different insurance company, the next three years had been sold off to some longer-term investor. Even finding out who held the mortgage was difficult and finding out how to restructure has become impossible.

Some part, and probably a big part of what happened, was that no one knew how much of the bad paper was still in the banks' portfolios. There is still a real problem because it is hard to value these papers. If I were a banker standing here, I would say, "if you have to sell your house today you won't get a very good price and it is not fair for us to have to sell them off so fast. That's what's wrong." But on the other hand, obviously some of these houses are not worth what they were, and there is difficulty. But uncertainty has made it so much bigger that no one is confident that the banks will be there tomorrow and so the so-called "counter-party risk" has become huge. In the United States, at least, the flow of credit has dried up to a very considerable extent. In Korea, I'm sure you're aware that the trade credit has dried up to a fair degree and that has been very important in impacting world trade. It is one part of the uncertainty. Nobody dares lend because they don't know whether the person, the bank or the institution that they're lending to will be there. I don't need to remind you about all of the bad surprises. Bear Sterns was the first to go. You then had, not surprisingly, the two big housing loan guarantee companies, Freddie Mac and Fannie Mae, which went into trouble. Then you had the American Insurance Group, AIG and it has been supported to keep it going. By the time Lehman Brothers came about last fall, nobody knew whether anybody would be solvent within whatever length of time and so nobody dared lend to that. Then, the inter-bank lending which keeps the system going had pretty much dried up.

Will there be more big surprises? I assume and I think most analysts assume that there are no more big bad surprises around. There will be surprises but the big ones, Bear Sterns and AIG, etc., are behind us. We won't have another big institution coming to the point where they too are finding themselves insolvent.

There have been housing price declines in other countries and on top of that foreign banks have also had bought some of the paper that the American and British and some of the other banks have put out so some banks, Swiss banks for example, got in caught in holding a lot of bad paper. The result has been a freeze in credit. Now when even very sound businesses have trouble getting trade credit, there will eventually be a sharp drop in economic activity and that is, of course, what happened. That in turn led to job losses and mounting pessimism, which meant a further reduction in aggregate demand. So there is a balance sheet motive for cutting expenditures and aggregate demand is falling even more because people are losing their jobs and because their assets are not worth as much.

But in the case of the United States (and probably elsewhere but the US is the one I know the best) there has also been a reaction of people saying "we don't know how much more we are going to lose," and the reduction in consumption and the reduction in investment has been much greater than you would expect on the basis of the increase of unemployment today. Unemployment in the US has gone up from about 5

to about 8.5 percent and there is no doubt that it will go up some more. However, that cannot explain the huge drop in consumption that took place in the fourth quarter of last year and the first one of this year. It is much bigger than that. It is based really on many other consumers and many other businesses not knowing how much their business will drop in the future or being unable to get credit. There are companies where the reports said that they couldn't get credit, so they couldn't keep producing because they couldn't get the raw materials that they needed. With all of that, it is perfectly clear that we have had major problems. Many in the financial sector now agree that they did not understand the risks they were taking. You may have seen Alan Greenspan's testimony that he thought that the bankers would know what risks they were taking and would be rational and that he made a mistake in thinking that. We no doubt have had a shock.

And on top of that, residential construction has just about dried up. One hopeful thing going forward is that right now new housing starts in the United States are estimated to be less than one quarter of what is needed simply for replacing the buildings that are so old they have fall apart and new family formation. So, at the moment we are getting rid of the housing stock overhang at a fairly rapid rate. In some cities in the US, very few so far but some, housing prices have either bottomed out and have stayed pretty constant or even started to go up a little bit. There are differences between areas depending on what happened earlier and it is by no means uniform. On average there are still decreases in house prices but they are somewhat more moderate than they were. There is some basis for believing that the decline is moderating and that some time in the not too distant future we will see a turnaround on that score. But we still have the problem that there are mortgages held by banks that will become non-performing that will then impair equity further. Uncertainty as to how great that is is one of the factors intensifying the situation at the moment. The crisis is definitely international; it's not just the US.

Another important factor seems to have been the freezing of trade credit, that seems to have had a huge impact among others on a number of countries including Japan, Korea, Singapore, and China. Among the OECD countries, Australia has had the smallest impact. It has lost only one percent of exports year on year, but that's the only one of the OECD countries that looks like that. The US is the third in line. It's not bad in that regard either. Other countries, as you know, including Korea have lost much more and that has been a big negative. Hopefully, the trade credit is coming back and that will help. There has already been some restoration of trade credit. There will be more.

There is some evidence that the trade numbers maybe hitting their bottom about now, maybe going up again, and that is another piece of good news.

However, this is the first recession that is truly global. In the 1997-1998 period there were some countries in big trouble, but there were also some parts of the world growing well. So countries in recession could adjust policies, let their currencies float, and their exports could pick up and help them recover. Because the recession is worldwide in this case there is much less of that mechanism this time. It's a negative factor going forward. There's no part of the world that is going to boom in a way that helps the rest of it.

Now, there are three questions: 1) When are we going to hit the bottom given the bleak picture that I've drawn? 2) Is the recovery when it starts going to be as economists say V-shaped (bouncing down quickly and bouncing back quickly) or will it be L-shaped (getting to the bottom and the come up very gradually)? and 3) What happens in the longer-term?

The starting point in assessing when the bottom will come is that we have to action on both the balance sheet side and the aggregate demand front. Anyone who thinks that they can do it on one side only is going to be very disappointed. That is the basic thrust of economic policy certainly in the United States but also in a number of other countries. Aggregate demand stimulus alone won't do it and balance sheet repair alone won't bring about the turning point. Balance sheet repair won't do it because as long as demand is falling more people are not able to pay their mortgages and so housing prices are falling further, more businesses lose orders, stock prices go down, and so on. The real question is not whether governments have taken action. The really hard judgment call is whether enough has been done or whether too much has been done or whether there's a lot more that still needs to be done before we hit the turning point is on both the asset side and on the aggregate demand side. On the financial front, restoring the flow of credit is critical and that will take removing the bad paper from the banks' balance sheets especially through the financial institutions and restoring their equity. The US Treasury is undertaking stress tests on the banks and will have the results by the end of April. If the results of those tests are fairly positive and credible, that should be a very positive sign. Whether that will be what their findings are and whether they are credible, there is no way of knowing. If they are credible and if that restores some degree of confidence in the banking system and if then the flow of interbank credit picks up, that would be a big positive for the situation going forward. That's something that we should know, I think, by the beginning of May. They will have to announce the results because if they say that they are not ready, everybody will think that there is something wrong. It will be an important announcement when it comes out.

On housing prices as I have said, there is already some evidence that in some parts of the countries things are being to look a little better and that the rate of decline is decreasing and that new starts are very low. The US fiscal stimulus is large but there are real questions as to when it kicks in. A lot of it will not have any impact on consumers or aggregate demand until at least a year from now. One of the long term worries, if the bottom is coming sooner, is will that stimulus package hit just when there is already a V-shaped upturn. What will happen then? Some of my economist friends are already worried that the stimulus is too little now and too much later on that the recovery will not start as quickly as it could but then once it starts we will then have the stimulus.

The third thing that I should mention in this regard is that the stock market has rallied over the past couple of months and as of a few days ago it was up more than 20 percent from March 1st. As asset prices go up, the ability of firms to borrow increases and enhances their financing options. As banks' asset prices go up, their equity goes up and that's important.

On the stock market front, on the housing front, and on the stimulus front, there is some hope that by the middle of the year, two or three months from now, we will begin to see signs that we are or we have started to come out of the recession and the bottom has been reached.

That's the optimistic view. But if someone wants to question this or that, I will quite agree. It is by no means a certainty. There are too many things like the stress tests that are important. The stock market could go down again, but at the moment I think that there is more basis for optimism than there has been for a while and I think that the stock market partially reflects that, but it also unleashes the banks to do more. There are some isolated reports that bank lending has increased a bit.

Of course, the United States is big enough so if it does turn around in the middle of the year, that will help the rest of the world a great deal, although recovery in most countries will probably start after the United States.

The next question is now what will happen once the bottom is hit. Will the recovery be a V or will we have an L-shaped recovery? If you take the balance sheet view, you tend to be more pessimistic. Restoring balance sheets may take time. If the American savings rate goes up, as it needs to, in the longer-term that is good but in the shorterterm it could mean a fairly slow recovery. If the rest of world then does not react with aggregate demand increases, then it could be a very slow recovery for the world. How that will play out is a matter of debate. I tend to be slightly on the optimistic side. There has been so much pessimism in the cut-back in consumption that once people are that they are not going to lose anymore they may regard that as good news and consumption may pick up enough so that the upturn can be sustained and fairly rapid, but that's pure guessing. There's nothing that makes that necessarily so and there is still the possibility of negative surprises. But, if you think that rising stock prices and assets and the housing market will come around fairly soon as for reasons I mentioned and if you think that consumers were acting more out of fear of what would happen than what was happening, there can be some reasonable basis for thinking that not only the turnaround could start in the next several months and also that once it starts, the recovery in the short-run might be fairly rapid. So, I end up slightly on the optimistic side of neutral in that I have reasonable hopes but by no means am I convinced that that will happen this summer. The pessimists are saying the early part of next year and the optimists are saying this summer. That at the moment is about the range of thinking within the United States for the global economy. The European economies will probably recover more slowly than the US. They went into the recession somewhat later. They also have their structural problems, which at first they thought they didn't. That will also take a while to work out, but it could very well be that the US led us into this and will be the one to lead us out.

The final question is the longer term outlook. It is estimated that the American fiscal deficit in the current year will be about 13 percent of GDP. That includes some of the TARP (Troubled Asset Recovery Program) and some of the lending to the banks. Of course, some of that will be recovered. If you take the congressional budget office, which is fairly neutral estimates, the US fiscal deficit will remain large going forward for a number of years. The US also faces problems from Medicare even if President Obama does not do more which he says he will because we are becoming an aging society like so many others. Without major fiscal reforms sometime in the next five

years, and nobody is suggesting that you should do them now, but once we come out of the recession it will be urgent for the US and some other countries very quickly to take measures to restore some degree of fiscal balance. If that is not done, the longerterm outlook for healthy economic growth for the world economy is not very good. The congressional budget office estimated that budget deficits will still be at the 5 percent level as late as 2015. 5 percent deficits with 2 percent growth just won't do especially if interest rates go up which they will, and that will weigh down growth. The first problem in the medium-term is what happens to fiscal behavior in the major countries. The UK has fiscal problems like the US, and a number of other countries do too. That will have to be resolved before we can be confident that healthy growth of the kind that we have had over the past 20 years can be resumed.

Question number two for the longer term outlook is what happens to trading relations. Trading relations among major nations have been governed by the WTO agreements reached under the GATT and WTO, and we have had an era in which trade has liberalized enormously. It was already a great failure in not completing the Doha Round on time. The Doha Round negotiations have dragged on and on without resolution. So even if we didn't have a recession, there would be a concern about the open multilateral trading system. There are trade issues that need to be addressed and that are not being addressed, but at the moment the focus is on short run issues because of our recessions. In the short-run, people in all countries are becoming protectionists. They want to do things to quote "help their own people," and that threatens more protectionist actions.

You all know about the American Smoot-Hawley Tariff in the 1930s that led to retaliation and contributed to a huge drop in international trade and quite clearly made the depression of the 1930s longer and deeper than it would have otherwise have been. In the November meeting of the G-20 heads of government it was very encouraging because the G-20 heads of government agreed among themselves that they would allow no new protectionist measures. They said that they'd put a one-year standstill on any protectionist measure.

The World Bank did a study in March, and 17 of the 20 countries where the heads of government said they would not adopt any new protectionist measures had adopted one or more additional protectionist measures, 47 of them by the World Bank's count last month and there have been more since. To some extent, it's understandable. Some

of these measures have been mild in light of the recession. Politicians say that they don't want a stimulus package and then have foreigners get all of the benefits, that is a reason why there should be coordinated stimulus across countries. Currently individual countries are doing things. The estimated subsidies or low-interest loans to the car industry are well over 50 billion dollars. They are not tariff protection but they are protection. They are certainly going to distort the future of that industry in a big way. The United States, the United Kingdom, France, Germany, Japan, and Canada are all guilty. There are many other industries like that. If you wanted to be optimistic you could say that the protectionist measures that have already been taken aren't as bad as they could have been.

If, indeed, we get the July turnaround, things might not be too bad. But there are things that need to happen. We need to get the Doha Round completed. We need to strengthen the WTO. One of the things that would have helped in this recession would be if all of the WTO members had their bound tariffs levels (the levels that they have committed to having) at the same level as their actual tariff levels. Many developing countries have bound tariff levels well above actuals and they are legally permitted to raise applied tariffs because they are not bound to the lower level. Getting rid of that gap forward will be huge, and there are also some other issues that need to be tackled in addition to completing the Doha Round.

Preferential trading arrangements (PTAs) are giving more and more scope to countries for discriminatory trade actions. They are getting more and more complicated as there are more and more of them. There needs to be international attention to the discriminatory aspects of PTAs.

If nothing is done and the trading system does begin to disintegrate, the outlook for healthy global growth in longer-term will be much less favorable than if action is taken now.

There is also a need for an international regime with regard to capital flows. I haven't even talked about financial regulations so far partly because I think it's not going to address the current crisis in the short term. It should be a medium term issue, partly because anything done now is more likely to hurt than help the longer-term and the short-term. There is too much knee-jerk reaction and not enough thinking. We don't yet know what is needed. Some sensible reports on financial regulations are starting to come out. I'm sure we will get some kind of international reaction. There are some very troublesome issues, which are not easily handled. I think that everyone is now aware that when you have a bank that is owned across two countries the question as to what happens when that bank gets in trouble is a very difficult one. Who is responsible? The Dutch or the Belgians as the case was. If you cannot get a bank regulator intervening in that case of that bank you can trigger a range of events that are very unfortunate for both banking systems. The proposal from some of the Europeans has been, "well, we need international regulation." The United States has said, "We are not going to have our sovereignty threatened" by having anything like that. Whether that will continue is an open question. But some kind of sensible prudential regulation that has the international dimension covered is clearly needed. The risk for the longer-term is that what is done is not very good, and will make things harder for the financial system to do its appropriate job in allocating resources.

But there is certainly enough political momentum that something will be done. As you may know, after the terrible Enron affair, the US congress wanted to prevent anything like that from happening again so they passed something called the Sarbanes-Oxley Bill (Sox Bill). In that act, they require much more responsibility from the CEO and others in firms. The CEO has to do a whole variety of things. He has to sign off that he has personally inspected every control system in the company. If you think about it, it means looking in the kitchen to make sure that the butter that comes in is appropriate and so on and so forth. It's simply cannot be done. Sox has raised costs of doing business arguably for small and medium enterprises a great deal. And the fact is that Enron broke the law. It had nothing to do with the legal framework; it had to do with lawbreakers. Fast reaction can lead to that kind of change where you don't solve the problem, but you create another one in financial regulation as well.

Assuming the forecast that we'll hit bottom sometime this summer is correct and that the upturn is moderately rapid, the longer-term risks then will come into view. Global imbalances are a threat, the international trading system is a threat, and financial regulation is clearly an issue. So while I am reasonably optimistic in the short run, I think that the longer-term outlook is a little bit more cautious because of the number of issues that we are not and probably we should not be addressing in the midst of the crisis but that will require satisfactory resolution if we are to have another period of good sustained growth as I'm sure we are capable of doing and could get back in the period after the current recession is the thing of the past. Thank you very much.

Questions & Answers

Q Although you mostly touched upon global issues, I'd like to focus on some issues related to Korea. First, you indicated the importance of the WTO and the Doha Round. In the case of Korea, we are going to wrap up the Korean-EU FTA very soon. As you know well, the KORUS FTA is still waiting approval by the Korean national assembly and the US congress. At the G20 meeting, President Obama pointed out the importance of the Korea-US FTA. What is your view and what is Korea's strategy to conclude the FTA during this global crisis? Secondly, I thought the G20 Summit produced some good outcomes like increasing the IMF loanable funds from 250 billion dollars to 750 billion dollars. How is the allocation of the IMF quota going to take place? Korea has been trying very hard to raise its quota. Do you think there is any possibility for Korea to raise its quota while also contributing to IMF lending?

A Both of those are good and hard questions. As to the FTA, the problem is Congress. It is not the administration. President Bush pushed fairly hard for it. President Obama has not had as good of a grip on Congress as one would have expected in his 90 some days. They normally say that the honeymoon for the new president lasts one hundred days, but this time it has been much shorter. There is a lot of Congressional concern. The auto industry is one reason. How that will work out is much more a question of political science than it is of economics. What happens with GM is going to be very important in all of this. It looks as if the administration will push for GM to file chapter 11 bankruptcy, and in my judgment, it is what they should have been done six months ago. There is no excuse for letting it go this long. It's a waste of money and it is making the whole world auto industry worse off than it would be. If the auto industry troubles get behind us and I think that if President Obama pushes for it, then the Korea-US FTA can go through. But it is sensitive politically with unemployment rising. They cite the number that 1 out of every 7 workers in the US is somehow connected to the auto industry. Yes, that's true but it includes service station attendants and auto mechanics. Nobody has countered that argument effectively. One of the things that I think could help is if someone mounts a campaign, and points out that when you have more cars there are more jobs in filling stations, auto repair, and related services. It's not just the original factories. And yet all of the focus is on the original factories and that is where all of the troubles are coming from on the Korea-US FTA.

The other thing that worries me to some extent is that the world as a whole has an interest in open multilateral trade, not preferential. Suppose that we get a Korea-US FTA and suppose it does give Korea an advantage in a few industries like automobiles, and then the US turns around and signs another FTA with Japan, what happens to Korean preferences? One difficulty is that Korean businessmen are going to know that that could happen. The value of getting preferential access to a market is not as much as the value of getting assured long-term access. When you think you're building up your share because you have this artificial tariff barrier that could hurt the Japanese, you're not going to do as well as when you know that long-term you're competing on a level playing field. I would argue that part of Korea's strategy should be to work within the WTO in order to get much more uniform treatment of preferential trading arrangements so that this uncertainty is not as much of a factor as it is bound to be under present conditions and when we have this many preferential trading arrangements. It's getting more and more confusing for the world as a whole.

One of the things that has to change with global imbalances is that there has to be a recognition on the part of everybody that we all need to take more of a leadership role. There has to be more leadership coming from countries other than the US pushing for things like the completion of the Doha Round, like a more level playing field for trading arrangements and other things. The US has a problem with persuading its citizens who are arguably no richer than those in other countries now that they have to bear a disproportionate share of the burden. It's hard for the politicians and I think that there can be some more initiatives forthcoming from other countries.

As for quotas and lending, I think Korea probably should, if it can, contribute to the IMF resources because it is part of that partnership and responsibility. That said, I also believe that Korea should have a greater share of the votes. Everybody agrees that Korea should have a bigger share; everybody agrees that China should have a bigger share; everybody agrees that some other countries deserve a bigger share. Nobody agrees that anyone deserves a smaller share. Now, the Europeans by any reasonable formula have too high a share. Certainly, the Europeans are going to have to give up some share at some point and they recognize that. My guess is that that will happen before 2020, but I don't think much before. In the meantime, there is going to be a real fight and Korea will get another one tenth of one percent of the votes and China will get another two tenths of one percent of the votes and so on. It will be like pulling teeth to get anything out of the Europeans. Diplomacy can help. My plea would be to recognize

that Korea has grown fantastically, it has benefited from the international economy, it created an opportunity, the benefits were huge, now it's time to take full responsibility as a dues-paying member of the economy.

Q Could you add a little bit more about whether the IMF should be bigger than now?

A Going forward somebody, somehow, has to have the authority when there are global imbalances. Let's say for example China and the US. Let's say "Okay, China needs to adjust by 2 percent of its GDP and the US needs to adjust by 2 percent it's GDP. Or China 3 percent and the US 1 percent or vise-a-versa." Nobody in the entire world currently has that kind of authority. So China says it was the US's fault and the US says that it was China's fault. There is where the discussion stops, there is no adjustment, and the whole world suffers. I think that if the IMF could, and I don't think it can, somehow get enough legitimacy so that when there was an issue you could say, "It has to be China, this much; Japan, that much," this would be crucially important. Whether this recession will get us there or not, I don't know. I hope it does, but I'm kind of skeptical. We may have to go through another round of global imbalances before we realize just how important it is to get some of these things sorted out. So my answer on that part is that the IMF tried to do it. Rodrigo de Rato when he was managing director called for multilateral consultations. He pulled together what he thought were the six major parties: the oil exporting countries with Saudi Arabia, the European Union, United States, Japan, China and one other. They all agreed that there was a problem, that something needed to be done, and nobody did anything. In my judgment, the IMF is a capable organization. It has a good technocratic staff. I think that technocrats are still pretty much trusted. To that degree, there is some argument for putting it there rather than saying that we'll do something differently.

As to the \$750 billion that the G-20 wants to add to IMF resources, that's a different issue. The IMF can have that but until it has the power or the authority on some of these global issues it's going to be dealing one on one with countries and that is not completely where the problem is. At the moment, the world needs the IMF to have those resources because right now we know that we've got the Ukraine, Pakistan, Hungary, Latvia, and other countries needing support. Mexico has taken a precautionary line. Others will come in line too. I can imagine that present Fund resources will be exhausted. So, I don't the \$750 billion is going to be a problem. I think the problem is the lack of authority on these issues between countries. There I think so

really hard thinking and some leadership needs to be taken.

Q Taking the balance sheet repair view and having heard your view on the sensible and prudential regulations. I would like to hear your opinion about what they call "the capital exit tax." I mean that I'm not blindly advocating a tax, but we all know that the short-term capital is causing problems and troubles to many countries and to developing countries in particular. So would there be some kind of readjusted or reformulated tax which charges higher rates to short-term capital and more normal rates to medium and long-term capital? Thank you.

A lot of people are thinking about it and there is disagreement. I start with the viewpoint that money is fungible and that having a well functioning international financial system will enable us to have a more prosperous world economy. The capital exit tax, the short-term long-term thing that you suggested, was tried by the Chileans and for about a year or two it seems to have had some effect. That was at a time when capital was flowing in and it wasn't much of a problem. Finally, however, what happened was that there was enough capital inflow that people were saying that everything was long-term because they had enough in the country. Finally, Chilean businessmen asked the government to remove the tax because they were paying slightly higher interest rate for their money than other people were.

There are too many ways to turn one kind of capital flow into another kind of capital flow. People are clever. They know how to turn short-term things into long-term things and vice-versa. During the Mexican Crisis in 1994, the Mexicans said, "Okay, we don't want any more borrowing from abroad; we won't permit the private sector to do it." Then a Mexican businessman went to New York and said that he had shares in his company and wanted to sell them to a New York bank with a guarantee to buy them back the following year with an additional 7%. The New York bank bought the shares with the promise to sell them back a year later the interest rate was 7 percent. It was recorded as equity as foreign direct investment, but of course it was really a loan. It is too easy. Any undergraduate class in economics by the third week ought to be able to figure out five ways of taking short-term capital flows and turning them into something else. It doesn't even take much thought to figure out how to do it. I would like to see the IMF spending more time and being charged with paying more attention and increasing its competence in understanding international capital flows, with the view that eventually with some degree of purview over capital flows at that time would be a good

thing. At the moment, I don't think that any organization in the world has the competence to do it. At the moment, we are not even working on the problem and that worries me.

Do you know that in the NAFTA agreement and the US-Chilean FTA that there is an agreement that under no circumstances will Mexico or Chile ever impose any kind of capital control over capital flows between the US and the other country. So when Mexico got in trouble in 1994, they put a tax on everybody else and not the United States. It's discriminatory. Everybody should be against that. We need some kind of discipline or otherwise we will have the same kind of mess in capital flows that we used to have in trade.

Q What do you think of this recent Chinese suggestion to make the SDR the key currency? What motivates China to make this sort of suggestion, which they never used to do? Are they trying to prolong the global imbalances?

A I think that the Chinese are taking the argument seriously that they need to take more leadership in the international situation. I think that there is a genuine Chinese motive. In a way, they are the largest shareholder in the United States because they are holding all of those dollars and, of course, if they try to sell they will drive down the price of the thing they hold. Now, the SDR is not a currency. A key currency is a key currency because everyone has confidence in it, it has purchasing power, and it has a track record. If I give you a SDR, you can't do anything with it. It's not money. SDR is a clearing mechanism between governments. Now, the G20 authorized this allocation of some 250 billion in SDR. The SDR is allocated among countries in proportion to their quotas in the IMF. This means that Korea will have its share, the United States will have its share and so on. Well, the United States isn't going to be spending any SDRs. Japan, China, etc. won't be using any of theirs. Then who will be using SDRs to clear part of their current account debt internationally? It will be the low-income countries and their share is going to be about 15 percent. So, my very rough estimate is that no more than one fifth, about 50 billion dollars, of those SDRs will enter into a purchasing stream and that's once and for all. It's not a continuing thing. It's some short-term stimulus, but it's not big.

I hope that the China is more concerned about finding a way where the international system is not so dependent on US dollars. That's probably a good thing; I'm for it too.

But how you do it, I don't know it. In order to have a true international key currency, you'd have to have an international central bank. If you think that we have political problems now in international economic issues, look at the tensions within Europe over the difference in what Ireland wanted on monetary policy and what Germany wanted. Germany wanted looser policy, and Ireland wanted tighter policy. Ireland had inflation, Germany didn't. Now, imagine worldwide. Just think of the argument about what monetary policy should be and how much the world money supply should increase. I wish I thought we were there, I know that we have to get there as a world economy. But I think that is at least a century off.

Q Nowadays there are three common questions about the global economy: how did we get into the global recessions; how can we get out of it; and how can we prevent it from happening again? My question is about the third one. How can we prevent it in the future? Secondly, do you think that the recovery is sustainable or will it end up in a W-shaped type of recovery?

A During the Asian crisis in 1997-98, some of the Indian economists wandered around saying, "see we were right to stay closed all this time." "We haven't had a crisis and all of these East Asian countries that thought they were growing faster." I went back and took Korean per capita income in 1960 and then 1998. After that I took the Indian per capita income in 1960 and then said, "suppose over the next thirty years you can have the Korean growth rate and a crisis at the end or you can have the Indian growth rate and no crisis, you would chose the Korean growth rate any day." We should not want to get to the point where we regulate and control so much that there is absolutely no possibility of a crisis. I know how to do that. Burma does it very well. You can't have a crisis there. Everybody is already starving and it will stay that way.

But that is not what we want for our economies. So the real question is how can we keep the degree of damage limited while still taking as much as we can the benefits of a healthy growing international economy and that's hard. Quite clearly there are things that can be done by way of better prudential regulation both within and across economies that will help. I don't think it will prevent any future crises because the minute we put that in, the financial system will go to work and they will invent something else. Look at all of this discussion of getting hedge funds and everything subject to control-notice first off that hedge funds had almost nothing to do with this crisis and secondly if we control them the financial types will find a new mechanism.

They are smart too. We, the policymakers, are only a small fraction of the financial types and they can out think us on any day. Much as I think we can do things and should do things, the big thing that I hope for is that people learn from this that the global imbalances were the deep-seated root of it all and that we somehow find ways of keeping them within a narrower range. Again, I don't know what's going to happen. I think over the next ten years the academics will be busy going back and seeing what they can learn from all of this. Out of that may come something that will help. What those lessons will be, I don't know.

I don't think there is any guarantee against a W instead of a V except that in the short-run I'm not that worried. I think that once we get the cumulative effects of the asset price increases, the reduction in fear, and the perceived reduced risk, I worry the other way that the upturn could be too sharp and we hit inflation too fast. Then, the sustainability over the medium-term becomes an issue, but it is not the W in this recession, but it is more that we go back to bigger amplitude fluctuations. If you look at any kind of graph of real economic activity in the US or the world since 1950, what you see is that there were bigger fluctuations till about the 1980s and then we did get a little smoother for a while and I fear that we might be going back to bigger ones as we react to this. I don't think that it's a W recession, but I could be wrong.

Q You seem to be implying that we maybe over-stimulating the economy with the possibility of lower growth rates further on as a result of that. Do you think that Chancellor Merkel's more prudent position on this is in order? I think the fiscal stimulus that has been taking place in Europe is, of course, always underestimated because of the automatic stabilizers. I want to know what you think about that particular debate.

A Automatic stabilizers by definition offset some of the downward pressure, but they do not lead to an upturn. Yes, the same deflationary impact in the US and Europe would have a smaller net effect on GDP but it would not bring them up again. I think that the bigger argument that Europeans haven't made but could make is that some of them, at least, have higher debt-to-GDP ratios and in that case the fiscal effects could be quite different. If your debt-to-GDP is high enough you can get nasty fiscal effects when you try more deficit financing. That will drive up the interest rate and you'll be worse off. I've been surprised that the Europeans that have that prospect of difficulty haven't made that argument.

I'm sort of schizophrenic. I don't think that automatic stabilizers should be two percent for all countries. Some should do more than others. Not all countries can undertake more deficit spending with equal ease. Some of them have too high of debt-to-GDP ratios.

Q I have a question on exchange rates. The Korean won has been quite unstable and I would like to hear your observation on that. My second question is on China. Many people believe that the Obama administration and also US congress would have taken a stronger position on China's exchange rate. Geithner has mentioned that his position was much tougher before and also Obama mentioned it during his campaign. I would like to hear your assessment on that. Third question is on the US economy. It looks like the US government is printing a lot of money. The Fed has announced that it is going to buy up some treasury bonds, so what do you think about the future possibility of inflation?

A I haven't not followed the Korean exchange rate closely in recent days, but knowing what has happened to trade, I would guess that having a floating exchange rate has offset some part of the impact of the recession on Korea and had Korea tried to keep a fixed exchange rate, it would be in worse shape than it is now. So, I think the answer has to be nuanced. It obviously depends on monetary and fiscal policy and everything going with it too. If Korea had tried to maintain the exchange rate in this period, there sure would have had to have more expansionary monetary and fiscal policy to get where they are now and I think that would have had more negative consequences for the economy in the longer term. I view the exchange rate as a safety valve that lets countries do better when their politicians won't do the necessary elsewhere.

On the Chinese exchange rate, it's not an exchange rate problem; it's an expenditures relative to income problem. China watched Korea very carefully in the 1960s, 70s, and early 80s. They decided they could try the same kind of export led growth which, of course, for a while they did very satisfactorily. They forgot that they were a lot bigger than Korea and they would have to come out of it somewhat sooner. Chinese consumption as a percentage of GDP, someone said while I was there, is now down to 35 percent of GDP. It's very low. Chinese current account surplus is more than 10 percent of GDP. The imbalance is huge. Obviously, the Chinese policymakers would be willing to keep it going because that would enable them to keep the employment and growth going the way it has. But, I think there is a general agreement that China

has to adjust so that there is more domestic expenditure and probably investment is so high as a percentage of GDP as to be inefficient. There needs to be more domestic consumer spending. Some of which might come from expenditures on social safety nets, not necessarily all from the private sector. I would argue that the Chinese need to make an adjustment. I don't think the exchange rate will do very much of that adjustment. They need to do more in the expenditure relative to income side. The exchange rate can help a bit; it has helped a bit. They could do a bit more in that regard. But I think that every country has a choice. You can adjust through the exchange rate or you can do it through other means. Usually a combination is best and in my judgment that would be best for China rather than doing either one alone.

On the US government, you already heard me say that inflation could happen in the longer-term. The real problem right now with all of the stimulus plans is finding an exit strategy. If the US does this and we come out of the recession, two years from now the economics team will look like wonderful guys, but the question is what will they look like five years from now. Two years from now, will the policymakers remember that they have to really reverse again and get money back into the jar? If they do, they are going to look great. If they don't we are going to have inflation and long-term problems. If you look already at what's happening in the long-term US treasuries, you can see it.