Economic Outlook for Korea and the Region^{*}

Jerald Schiff

Well, thank you all very much for coming here and having me at this early hour. I understand that the IGE has a history of inviting some well know and respected global leaders to this kind of session. I am a little bit intimidated but honored to be included in that group. Also it is quite a task to tell something about Korea to this audience but I hope that by putting it in the regional context that I can have made it somewhat worth your while to get up so early and come here.

What I want to talk about is basically to say a little bit about what is happening in the region. I say the region- I mean basically emerging markets in Asia. Primarily because the history for industrialized countries is a bit different. So to keep the focus on more similar countries I will focus on emerging Asia. Then I want to discuss a little bit how the region has responded to global financial turbulence that started in July with the US Subprime Crisis, what happened during the early days of that crisis and subsequently and what might lie ahead. Then say a little bit about the outlook for the region, mainly for next year and what we see as the main risks. And then finally about Korea and how the Korea story fits into the regional story more generally.

I'll start with the conclusions just to make it simple. Asian economies have generated considerable momentum in the first half of the year. And that momentum carried them on into that period where the turbulence began. Although there were initial fears that this might have significant impact on Asia, thus far the direct impact on Asia's financial systems has been modest and banks have not had their balance sheets dramatically affected by the US Subprime crisis. And there is no real evidence that Asia's growth has slowed in a significant way since then. So we feel that the outlook for the region remains strong, but certainly the events of the summer have increased in a substantial way the risks that generally could happen.

Let me start with the recent developments in the region. Just as a broad overview, growth in the region had trended upwards in the first half of 2007 and as it has been for

^{*} Transcription of a speech given at the IGE/Prudential Lecture on International Finance on Thursday, November 8, 2007

several years now, growth was led by India and China. Growth in China approaching 12% and in India approaching 10%. But neither of those countries shows any sign of slowing and that will have potential implications for the rest of the region. One interesting point about the region is that there is at least some evidence of a reduced reliance on exports, additional domestic demand for growth. Looking at the New Industrial Economies which is the tag-name given to Korea, Hong Kong, Taiwan and Singapore (<Figure 1>). You can see net exports overall making smaller contribution to growth although still a very important one and fixed investment and consumption tending to rise as to terms of their contributions. So we see this as generally a positive development, that Asia is becoming less reliant on exports overall, this is just the beginning of the trend.



<Figure 1>

Third quarter data for most Asian countries has not all come in but the data we do have points to continued economic strength. Looking at industrial production (<Figure 2>), and one thing I want to point out is that these numbers we have calculated a little differently from what people maybe used to seeing, we use a moving average of 3-month percentage change. So it is not year-on-year data but we present it this way because we feel that it kind of tells you more about momentum of any of these

particular variables. It is showing something like the quarter-on-quarter change converted into annual data and you can see that for all the categories for all Asian countries, industrial production is trending upwards very strongly in the summer months. Consumption also looks generally good although the story is definitely not as clear as for investment. Overall in the region retail sales have been strong. Consumer confidence has not been as strong, but as most of you know, consumer confidence in Korea has been high and has even risen.



The export story is one of a lull in the first and second quarters of the year, you can see the downturn around April pretty well much across the region (<Figure 3>). That does not mean growth was negative. Again, it just means the momentum was negative and there has been a rather rapid recovery since then. This recovery in exports has largely been driven by the electronics sector. Again all the countries in the region have seen a sharp rebound in IT. And that is certainly true for Korea. That is true within IT in a broad range of products- you can see a pretty clear pattern across different sorts of electronics products. So electronics remains key to the region, although for Korea we have seen a strong performance by more traditional heavy industries. But IT remains the key and therefore prospects for the IT sector are critical for the region.





Because exports are strong, the region continues to enjoy current account surpluses (<Figure 4>). Korea is a bit of an outlay there because as you know the current account is approximately in balance. You can see in particular China has very large and growing current account balance, which is one side of the global imbalances that we hear so much about. Because of these current account surpluses placing appreciating pressure on Asian currencies, we still see a number of Asian countries intervening in the foreign exchange market and we see reserves growing quite steadily. Again this is dominated in a large part by China, which as of this summer had reserves of \$1.4 trillion. But the region as a whole has reserves of over \$4 trillion, which as you know has led a number of Asian countries to either implement or consider implementing socalled sovereign wealth funds. Such that to be able to invest these large reserves in ways that will provide these countries with higher returns and thereby lower the cost of this intervention. Korea has the KIC, which is managing \$20 billion. China's sovereign wealth fund will be managing ten times that amount. This is something that is of increasing interest to many people, including our new leadership at the IMF that is trying to understand better how these sovereign wealth funds will fit into the financial sector more generally, how they might behave, what sorts of effects they may have on capital flows globally.

	2005	2006	2007	2008	2007	2008
			REO April 2007		Latest proj.	
Industrial Asia	2.2	2.3	2.1	1.9	2.5	2.3
Japan	3.6	3.9	3.9	3.6	4.5	43
Australia	-5.7	-5.4	-5.6	-5.5	-5.7	-5 <i>t</i>
New Zealand	-8.6	-8.7	-8.4	-7.6	-8.5	-8.6
Emerging Asia	4.8	б.О	б.1	6.2	7.0	б.9
NES	5.5	5.6	5.3	5.1	5.4	4.9
Hong Kong SAR	11.4	10.8	9.6	<mark>9.3</mark>	11.2	92
Koza	1.9	0.7	0.3	0.0	0.1	-0,4
Singapore	24.5	27.5	27.1	26.6	27.0	257
Taiwan POC	4.5	6.8	7.1	7.1	6.8	7.1
China	7.2	9.0	10.0	10.5	11.7	122
India	-1.1	-1.2	-2.4	-2.3	-2.1	-24
ASEAN5	1.7	4.7	3.8	3.2	4.1	3.2
Indonesia	0.1	2.7	1.8	1.3	1.6	12
Mahysia	14.6	16.3	15.3	14.3	14.4	133
Philippines	2.0	5.0	2.1	1.9	3.8	2.
Thailand	-4.5	1.1	1.5	<mark>0.9</mark>	3.7	22
Vietnam	-1.0	-0.5	-1.2	- 1 .5	-3.2	-32
Emerging Asia excl China	3.0	3.7	2.8	2.5	2.9	2.2
Asia	3.4	4.3	4.3	4.4	5.0	5.0

On the inflation side, there is no sign really of any dramatic inflation pressure in the region. Core inflation, which means inflation essentially stripping out food or energy prices, has either remained steady or declined. Food prices have been very volatile especially in China, as you may know food prices have jumped up very sharply, as of August it has gone up to around 18% pushing China's inflation up to around 6% overall. We don't see that yet as a major concern because we don't feel that it is likely that these prices will reflect prices more generally in China and won't get into the core inflation but is certainly something to look out for.

That's just the brief synopsis of the overall macroeconomic trends in Asia. Now I just want to say a little bit about how financial markets have behaved. Overall, Asian financial markets, particularly equity markets have done very well this year. Asia has a relatively small direct exposure to the US Subprime mortgage market and more broadly

to the complex structure credit products that have had so many difficulties in recent months. However Asian countries were adversely affected by the global sell off that started in July and August but to a much lesser extent than other regions of the world. By mid-August Asian stock markets had declined by about between 10 and 20% from their peaks and investors from outside the region had withdrawn significant amounts of money.

At the same time, credit spreads increase sharply, sovereign spreads which are not so relevant for Korea but are for countries in the region like Indonesia and Philippines which borrow in the markets. Corporate spreads followed a similar pattern and so in general, borrowing costs have increased. As you can see there (<Figure 5>), after the initial increase there was something of a normalization, as we will mention later. It is not clear if that will continue if there is another round of volatility. But I think more than the downturn, what is really remarkable is how short-lived it was particularly in the first instance.





With the cumulative flows into emerging markets in Asia from different regions we see that there was a slight dip before there was a dramatic rise in late summer, in particular since the first Federal Reserve rate cut on September 12th <Figure 6>. Flows into Asia have increased very dramatically and much more than for other emerging markets. I think that the quick recovery of flows to the region must to a large extent reflect the strong fundamentals here and that overall people expect growth in Asia to be stronger than in other emerging markets. It is sort of interesting question that I am not quite sure I know the answer to as to why flows to emerging Asia seems to respond so much to the Fed rate cut but it may have to do with the view that Asia still remains very linked to what happens in the US and contrasts to claims made by some people that it is "de-linking". It appears that the markets when they became more confident in the US because of the rate cuts about putting their money into Asia at least that is what this simple pictures seems to suggest.



Along with those flows, we can see that equity markets have recovered very sharply (<Figure 7>). It is also notable that the emerging markets that fell the most during early days of the Subprime Mortgage Crisis also recovered the most. So you see some strong correlation between the initial drop and the pickup. Which suggests that the impact on the emerging markets was mainly from an overall concern about risk rather than anything specific about those countries. Asia also has done better than other regions in this turmoil in terms of its foreign exchange markets. You can see that the

initial decline in regional currencies was smaller and there has been a lot less volatility in foreign exchange markets in Asia than in any other emerging markets in this period since the summer.



<Figure 7>

So far I have said a bit about economic developments in the first half of the year and then a bit about financial developments. The question now is what does this mean going forward, what can the region expect in 2008 and what are the main risks.

Our projection for growth in the region is 8.0% this year and 7.2% next year. Both of those figures are higher than our previous round of projections in April. We see some slowdown but overall quite a strong economy. And I think it is worth noting that in part this reflects just the slowing global economy and lower exports from the region but it also reflects a projection that China will slow in 2008 from 11.5% to 10%. It is fair to say that this is not a projection we have a great deal of confidence in. Especially with third quarter data showing that China is continuing to grow around 12%. While China is trying to reign in its economy and that those policies' efforts are reflected here. One risk that may be positive or negative depending on how it grows out, is that China will continue to grow rapidly.

Overall, if you think about what the risks are relative to that central scenario I have been mentioning, there are several. The most obvious is the sharper-then-expected downturn in the US and the European Union and I will talk about each of these in turn. Second of course is that oil prices spiked further, or even if oil prices stay at their current level. Third is that, actually I think this third point is not very likely but there is always the risk that Asian financial institutions will encounter some risk on their balance sheets. But so far, Asian financial instuitions have escaped these troubles because of basically their exposure to these complex products that were put into question during the summer months seems to be very small. But there is some concern that as in the US and EU some additional exposure could be discovered. I should have put that a bit further down the list. A more general concern is that another round of financial turmoil globally, not so much in Asia, could again reduce capital flows to the region. While again in the summer that was short-lived that is not to say that will be the case in the future. There is also the opposite concern, again as economists we can be worried about things on both sides of the ledger, so there is a concern that financial turmoil can lower flows to the region and on the other hand continuing rapid inflows into certain countries could also cause problems fueling credit bubbles or asset bubbles and finally on the upside as I mentioned earlier it is guite possible or even likely I would say that domestic demand especially in China and India might be much more resilient than we are expecting and that could help support growth in the region.



First on global growth, the forecast from the IMF's World Economic Outlook, which is produced by our research department and the basic point it seeks to illustrate, is that while the overall central scenario shows only a modest slowing of the global economy, the risks are very much tilted to the downside. There is very much an asymmetry to the risk, so you can see that the possible outcomes are much more tilted to lower growth rather than higher growth (<Figure 8>). Actually our research department estimates that the possibility of a recession in the US is one out of three. While that is not their main baseline projection it is certainly a non-trivial risk. Along with that we can see much slowing of the global economy.

That slowing in the US economy, if it continues and intensifies, then it will most likely be linked with the US housing market and I think that one thing that is maybe not fully appreciated everywhere is that the US housing market remains very weak and is likely to remain very weak for sometime. For Subprime mortgages in the US, look at delinquencies rates developing for different vintages. So for each year, look at how delinguencies rates develop over the months from the issuances of those mortgages. For the 2006 group of mortgages, already after a little more than a year, delinquency rates were already up more than 14%. Whereas in previous years, in the same period and time, they were significantly lower. So that is just pointing to the fact that one should expect delinquencies in the US housing markets will continue to be high for some time. Apparently if you look at the same line for 2007, you will see equally troubling distribution. Another fact that points to continued problems in the US is that many mortgages in the US are subject to resets. So early on they have very low interest rates, this is within the Subprime category mainly or they have various grace periods, those reset and households find their monthly payments increasing sharply. The main message here is that these resets are going to be taking place from here on through until a major part of 2009. So that is just to say that these problems are not all behind us and we should expect more difficulties as some of these resets take place.

The question becomes then if the US slows and the EU slows, will this have an impact on Asia or how much impact will this have on Asia. And there has been quite a lively discussion in the media in the region and out about whether Asia has "de-linked" from the US and from the industrial countries more generally. I guess our view is that, well, I guess I mentioned it at the beginning that domestic demand in the region is becoming more and more important. But it is certainly premature to say that the region has "delinked". The regions' exposure to exports has actually grown guite substantially over the last 15 years and of course, the US as a direct trading partner has become less important for Korea and for many other countries in the region and have been replaced by China. But it is an open question still about how much of those exports are destined for China and how much is just part of the regional production process. And we say that even if half of the exports going to China are really going to China as final demand, that even in that case, a sharp slowdown in industrial countries would have a sizeable impact on the region. In fact, the more general point is that rather than "de-linking", all regions of the global economy are becoming more closely linked. You see more financial markets, asset returns more highly correlated and you see trade flows more highly correlated. One sort of comforting fact is that if there is a slowdown, because inflation has been quite low and inflation expectations in the region are low, many central banks although not all would have scope for responding to the slowdown by lowering rates. So that gives the region some cushion if these downside risks were to emerge.

Second risk that I wanted to mention was on commodity prices and more specifically oil prices. I opened the *Financial Times* today and there were two headlines, one was about \$60 billion of write-downs of assets that we had mentioned and one was about \$100 oil prices. We can see with oil prices, futures prices are pointing to some modest reduction in oil prices but certainly there is plenty of scope for further spikes and particularly given the obvious geo-political risks in oil producing countries. I think it is quite notable that the region and global economy in general has managed to cope with a long and quite sizeable run-up in oil prices. And I guess, certainly the IMF and many others would have predicted several years ago that if oil prices had reached the \$100 mark that things would look a lot worse than they do now. I guess in the region in part the run-up in oil prices has been offset by stronger currencies so that the domestic currency in oil has not gone up quite as fast. And in many countries, high corporate profits have allowed business to absorb those price increases but it is certainly questionable if that could go on forever.

As I mentioned there are concerns that strong inflows into many countries in the region could be fueling credit booms, which could then go bust. We don't think that is a general problem in the region but certainly there are some countries, Vietnam, China and India which have quite strong credit growth largely reflecting that capital is flowing in, that the central banks are seeking to limit appreciation of the currency which then given difficulties of fully sterilizing inflows leading to more liquid conditions in the market. There is also concern that in some countries, these sharp inflows are creating booms in asset markets, stock markets for example. Again, we don't think this is a general problem in the region, I mean emerging Asian equity indexes have in fact tripled since the global bull market began in 2003. But in fact, the run-up in Asia has been less than other emerging markets and price-earning ratios don't seem grossly out of line with historical averages but they are getting quite on the high side for some countries. And for China where you can see the price-circumstances ratio are quite high, above 50 or 60 which can only be justified under extremely optimistic assumptions about future performance. I am certainly not in the business of predicting equity prices but it is just to point out that there are concerns that some asset markets are becoming richly valued.

There are also similar concerns on housing markets, I know that is a subject that is very much in the news almost all the time here in Korea. Again, we see that more as a country-specific issue, we don't see that as a regional problem overall as some commentators do. You can see that in many countries that housing prices have grown either in line or even slower than income growth but there are some exceptions, the most notable ones being India, New Zealand, Australia, many countries have also pockets of very rapidly rising prices, such as certain neighborhoods in Seoul and Hong Kong. But these certainly are not nationwide, probably not reflective of macroeconomic policies but maybe more of structural policies. So I guess overall, we would say that the criticism that the strategy that Asia countries are following that requires intervention in foreign exchange markets. Yes, in some cases these are helping to inflate credit or asset markets but we don't see that either as a problem that is extremely large at this point or widely spread, but that is certainly something that countries will have to grapple with if these inflows continue.

So far that is still on the regional side, let me touch a little bit on Korea and how Korea fits into that broader story. Like the region as a whole, Korea has weathered well the financial crisis in the summer. I guess I should not call it a crisis because that has certain connotations, but we have not come up with a good alternative so I sometimes slip into that word.

I think it is kind of interesting that if you see where the KOSPI was at the time of the

summer downturn and also where the US dollar/won rate was, you trace straight lines where it ended and you are almost back to where we are now (<Figure 9>). So it seems like the sharp dip, at least visually, did not seem to have a major impact where we have ended up. It is quite striking that we had expected that in many countries, all this global financial turmoil would lead to a shaking of confidence either on the side of businessmen or consumers but in Korea quite the opposite has taken place and we are actually in the period where people's sentiment seems quite high because equity markets are very high. Consumption in Korea has picked up very nicely in recent months. Consumer sales index and sales from top department stores are on an upward trend. Again like the region for a whole, the story in Korea on the production side is very rapid recovery in the tech sector. IT manufacturing production had slowed quite a bit in early 2007 but now has picked up very sharply. The same on the export side, total exports have been doing reasonably well and you can see there that since early 2007 it reflects the gains in the IT sector.



Sources: Bank of Korea; and Bloomberg LP.

But if you look forward and think about the global market for IT, the picture is a little bit mixed. Looking at the different indicators of forward-looking indicators of demand for electronics, the US book/bill ratio, the US purchasing managers' index and you see at

best they have a mixed picture, perhaps somewhat on the downside. So if global growth purchase were to slow, the first place one were to look for problems would be in the IT sector which could be a difficulty for Korea.

Inflation has been below the target band in Korea for a long time now until last month where high food prices have pushed inflation into the back of Korea's target band, right in the middle. And our projection is for inflation to stay somewhere in the mid-range of the target band. We are projecting growth in Korea for 4.8%, which would mean a significant pick-up in the second-half of the year. And then modest slowing to 4.6% next year that again reflects the more difficult, external environment for exports for everyone, not just for Korea. We see the current account deficits staying broadly in balance- we have projected a small deficit. I think it is quite difficult to predict any confidence but we would say that the picture is one of more broad balance. I guess the most difficult part of the current account is the services balance, as I was just discussing at breakfast, we had heard that this is the first year that the number of Korea. So I think people are responding to changes in prices and Koreans are increasingly traveling abroad and that affects the balance of payments.



Source: CEIC Data Company, Ltd; and IMF staff calculations.

Again, like other countries, the US slowdown can be a major risk despite the fact that China has replaced the US as the number one export destination. If you look at the correlation between US domestic demand growth and Korean export growth it is very close, especially since 2000 (<Figure 10>). Even if exports are not appearing to go directly to the US, in the data you can see very strong correlation, which suggests that impact of a slowdown would be sizeable. Compared to other countries, Korea is relatively safe. Looking at exports to the US and China as a percentage of GDP, countries like Hong Kong, Singapore, Malaysia and Taiwan are much more exposed than Korea (<Figure 11>).



Let me say a few things that are not really regional in nature but sort of specific to Korea that we think are worth thinking about or continuing to monitor in Korea. One is that Korea has a very high level of household debt, Korea's debt as a share of assets is actually higher than in the US or Japan. As is the ratio of interest payments to disposable income so either as a stock basis or a flow basis, Korea is carrying quite a heavy household debt burden. On one hand that kind of limits how randomly consumption can grow in this economy. Obviously if you are heavily in debt you lose your ability to go out and consume. It also makes consumption and therefore growth potentially more sensitive to changes in interest rates. When interest rates rise, for example, debt burdens can rise, quite significantly. If there is a particular issue that at least echoes some of the problems of the US, although certainly the scale of the problem is certainly very small here in relation to the US. But there are a sizeable number of households in Korea that now have moved from the traditional three-year "bullet" mortgage to longer-term average mortgages. But those mortgages typically have grace years of two or three years so next year some of those households will see their debt payments increasing in a substantial way that may have an impact on the macro economy. We don't think that that would be very large but I think that is something that needs to be kept in mind.

Just to pull back from this quite short-term view and let's look a little bit at a couple of longer term challenges that we have been focusing on in recent visits here. I think it is well known amongst people in this room that Korea has a very rapidly aging society, both because of sharp gains in life expectancy and low birth rates. But you can see that in Korea, the old age dependency ratio, which is the population 65 or over as a ratio to working age population. Starting right around now is going to accelerate very rapidly and quickly pass the dependency ratios in the G7 countries. This may be the most rapidly aging society, at least in modern history so it is quite dramatic. This will not only have an impact on the government's role in society but this is going to present huge physical challenges to the Korean government in terms of increased pensions and increased health care but also it is going to challenge the ability of the country to grow rapidly with the labor force expected to begin to decline in about a decade. Thinking further ahead we think this is probably the key challenge facing Korea.

Another point that we were discussing earlier during breakfast meeting is that Korea is facing challenges to its manufacturing sector because it is no longer a low-wage economy. And more and more workers are moving to the services sector but productivity in services is very low and actually the gap between manufacturing productivity and servicing productivity in Korea is among the largest in OECD countries, so it is really critical that service sector productivity be increased through opening this sector to competition and liberalization because this sector will need to drive an increasing share of economic growth in the longer term.

The point I want to make here is that Korea has faced much more difficult challenges in its history and has certainly succeeded in unprecedented fashion. And I thought it would be interesting to dig out of the archives of the first IMF staff report when Korea became a member of the Fund. And at that time Korea was the poorest member of the IMF, it was about 51 years ago. This first quote is of Korea at that time, saying "The development plan aims to prepare Korea to maintain an acceptable standard of living

when external aid ends... Industry is not highly developed ." So I think that puts into real stark contrast to the reality 50 years later to the reality then, so while Korea certainly faces challenges, when you see the views of 50 years ago and you see what happens you can only be confident that these other challenges can be successfully addressed.

Questions & Answers

Q First of all, I want to thank you for your very insightful presentation as you covered many things. I am really eager to listen to your view on the exchange rate. What about the trend of the dollar, do you have any views or some comments of the trend because Korean exporters suffer from this. The second question is according to your forecast. Korea's current account balance might be turning to a deficit for the first time since the financial crisis in 1997. Does that imply some concern about the Korean economy or is that some cyclical pattern?

A As an institution the IMF does not make predictions on exchange rates, that is one I would refrain from giving. But certainly for sometime there has been an expectation that part of the global rebalance that was needed would take place through the exchange rate channel and that the dollar would probably need to lead along with other things happening. In a sense it is working on a global basis because the US exports are doing much better now but I really would refrain from saying how much further we think it needs to go. Anyway, we have a whole set of economists who work on the US and they probably wouldn't appreciate me saying too much on this. But I do understand that that is a concern for Korean exporters although I guess I would point out that just because it is a reflection of the weak dollar that mimics all currencies in the region and with competitors of Korea in the global market place are also seeing their currencies strengthen relative to the dollar and actually in recent months the won has strengthened less than other currencies. So in effective terms, it is not clear if the won is strengthening any longer.

On the current account deficit, the spin I would put on it more is that both this year and next year, the current account will be very close to balance. Whether our projection is just a little bit on one side or the other doesn't ring any alarm bells for us. And I think in

our projections the small deficit was driven more by the projections that the services account would continue to widen and not so much on the trade side. That partly reflects also exchange rate changes and some underlying structural issues in the education sector which leads many people to travel abroad, so it is not all exchange rate related.

Q First, one regarding the Korean economy. Since the currency crisis of 1997, Korean economy has had very structural adjustments. How do you value the structural adjustments, are you satisfied with structural adjustments and reforms so far?

And the second one. Some argue that Korean reform and opening up of the financial market is not fast enough, how do you see that comment?

And regarding the engine of growth for the Korean economy. Many people rightly or wrongly think that Korea is caught in the slow growth trend, is it true in your opinion? Is it possible for Korea to attain high growth levels of 6 to 7% and for that what needs to be done?

Finally with sovereign wealth funds. As Strauss-Khan mentioned in an interview a few days ago, the IMF should be concerned more with new players including this sovereign wealth fund. What change would be needed in the IMF and what Korea should do for the sovereign wealth funds.

You already mentioned the downward risks for the outlook for the region and Korea but from the financial sector point of view what would be the most important factors on what has to be done.

A Well, they are all good questions, I'm not sure if I have good answers for them. About the structural changes in Korea since the crisis, certainly I think they have been quite dramatic especially in the financial sector. You can see the financial sector is quite healthy, non-performing loans are not a problem. Capital adequacy is not a problem. We don't see the sorts of issues with governance to the same extent then. Although I am not going to say those problems are completely gone. I mean, we think that overall that there is no doubt that the Korean economy is far more prepared for any kind of global volatility than they were in 1997 and so is the region. We can see that in a small way that the past year and a half there have been several rounds of global financial

volatility and in those rounds the Asia economies has outperformed other regions. So I think the confidence in structural reforms that have take place is quite evident. Of course all countries continue to face different challenges and I think in Korea those are not the same ones as the ones that they faced in 1997. I think they are more along the lines of the long term challenges that I mentioned at the end, dealing with aging population and trying to develop further the financial sector now that the base is quite healthy. Trying to open up the economy on the services side. These things are very important for maintaining or even increasing Korea's growth rate. But I don't see Korea as particularly vulnerable to anything like the kinds of crisis we saw a decade ago.

Somebody asked about the opening of financial markets, we think that the recent passage of the Capital Market's Consolidation Act is a really important step that increased competition within the financial sector will allow for a more sophisticated, more developed financial sector to emerge. So we look forward to seeing that play out. We are also aware as are the authorities that passage of that law is not the end of that process but is more like the beginning of the process, leading to a fully developed financial sector and that will pose new challenges for financial regulators and they are currently gearing up to address those. So, we think that financial development is critical and it is happening but we will have to see now that the CMCA has been passed and how the implementation will go in 2009.

About whether Korea is in a slow growth trap. I guess I would say that there are many countries in the world that would be happy to be trapped in growth that is 5 or 6% per year. But of course, in a country where its citizens have experienced growth of upwards of 10% in their past, this may seem not good enough. And it is certainly important to always do better. And I mentioned earlier, from our point of view, some key areas are trying to open up the economy where it is not fully opened particularly in the services sector, trying to make the labor market more flexible, trying to improve the business environment, trying to address problems that an aging society brings. All these problems are important and if these things are done then there is no reason why potential growth in Korea can't increase. But it is very hard to say what the potential growth is, but what one should focus on now is getting the policies right and not so much on what figure could be achieved.

On sovereign wealth funds. Yes, while I was in Korea, the IMF has a new managingdirector and one of his initial remarks was on sovereign wealth funds and it is already something on which the Fund has focused on for the past year. But I think I will leave the question as to how the IMF has to change to address that for Mr. Strauss-Khan to comment. Probably I shouldn't be commenting on these things until I have had a chance to meet the managing-director. But we are looking at the sovereign wealth fund and also other new players in the market, private equity funds for example. That will certainly be one focus of our work going forward.

Comments You know we only have 40 days to go until Korean presidential election and I really hope Korean voters select a president based on the candidates' ability or commitment to increase our economic growth potential.

As you mentioned, if you put in the right policy regime and institutional reforms, I personally believe that there is room for substantial increase of growth potential. So this should be the issue and I hope we find a candidate who can do this. In any case, growth potential will be very important and I think this usual forecasting is based upon everything constant. But once you have brought these institutional factors into the picture then the numbers can be changed and this growth potential can be changed, it is not fixed.

Q Thank you for your excellent presentation. I would like to put across this very short and straight question to you. Since that PetroChina market capitalization hit 9 trillion dollars, it is comparable to 5 trillion dollars Exxon. Under this kind of situation, would the Chinese "back hole" effect of increasing investment into China continue until the Olympics next year or will it slowdown visibly before next year spring, that is my question.

A That is a very good question, unfortunately I don't know the answer otherwise I could just leave my job and retire. I think it is very careless to predict things about equity markets. You talked about a "black hole" but we see flows to Asia as a region being quite strong so it is not necessarily the case that China is sucking out all the flows.

Q You talked about Asia as a region, or China and India but there was not much talk about Japan, which is the second-largest economy in the world. Would you make any

comments on Japan, in the context of the region or the global economy?

A I didn't talk much about Japan because the Japan story is very much different from what I was talking about. Obviously Japan is still one of the largest economies and there is always the risk that if the US economy, which is slow, we will also see some similar slowing in EU and Japan. Japan is still a very important export partner for the region and I think if I recall correctly one of the funds projection for Japan is about 2% next year so I think in general we see it growing pretty close to potential.

I guess a key question for Korea is when will inflation move out of the negative territory or close to zero territory and when can Japan begin to normalize its interest rates. Which would be helpful in terms of strengthening the yen and lessening some of the competitive pressures here and in other countries. But so far inflation has remained stubbornly very close to zero, so there hasn't been any scope for raising inflation rates. So I think that is one key issue.

Q I have two questions. One is education is one of the key issues in Korea, I am worried about education competitiveness. To increase education competitiveness, what kind of reforms are needed?

My second question is Korea worries about the economic trap between advanced economies and emerging economies, especially China and Japan. We call it a "sandwich" situation. How can we overcome the "sandwich" situation?

A Well, with regard to competition from China. Up until this point China has been a mixed blessing but it has been positive because Korea has been successful in inserting itself into the regional production process and has managed to increase very rapidly its exports to China and Korean businesses have a very high success rate operating in China. But this situation is changing now with China increasingly supplying its own intermediate goods either from Chinese firms or from foreign and Korean firms operating in China and also moving up the scale of sophistication of its products.

So looking ahead, China will be more of a competitor, in addition to being a complimentary player to this process. And I guess Korea needs to do what other industrial countries have done and move up the value-added chain and produce more

technologically sophisticated products and stay ahead of the Chinese in that regard because it will be difficult to compete on the wage side. Also to continue to move more towards a more service and knowledge-orientated economy and there the financial sector reform is key but also some of the services sector.

On the education front, I certainly don't want to claim to have any expertise on the Korean education system other than what I hear or read in the press. So I think it is best I don't try and answer that in any kind of way.