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INTERNATIONAL CAPITAL MOBILITY AND DOMESTIC ECONOMIC STABILITY

Wednesday, July 14, 1999 -
Friday, July 16, 1999

to be held at
Australia National University

THE REINVENTING BRETTON WOODS COMMITTEE

would like to thank the following organizations
for sponsoring this conference:

Australia National University,
Bankers Trust Foundation
&
The World Bank

International Capital Mobility and Domestic Economic Stability

Australia National University
July 14-16, 1999

Tuesday - July 13, 1999

7:30 PM Dinner at the Boathouse Restaurant

Wednesday - July 14, 1999

9:00 AM **Welcome**
- **Ross Garnaut**, Director, Asia Pacific School of Economics and Management, ANU

Introduction to the project
- **George Vojta**, Vice Chairman, Bankers Trust Corporation
- **Marc Uzan**, Executive Director, Reinventing Bretton Woods Committee

Introduction to the conference
- **Dipak Dasgupta**, Task Manager, *Global Development Finance*, The World Bank, Development Prospects Group
- **Dominic Wilson**, Research Associate, Australia-Japan Research Centre, Asia Pacific School of Economics and Management, ANU

9:30 AM **Panel I - Eastern Europe and Russia**

Chair: **Grzegorz Kolodko,** Visiting Scholar, IMF, Warsaw School of Economics & Former Deputy Premier & Finance Minister of Poland

Russia - **Vladimir Popov,** Professor of Economics, Moscow Academy of National Economy

Hungary - **Istvan Abel,** Division Head, Monetary Policy Department, National Bank of Hungary

Poland - **Nancy Wagner,** Senior Economist, IMF

10:45 AM Coffee Break

11:15 AM Discussion

12:45 PM Lunch

2:00 PM **Panel II - Latin America**

Chair: **George Vojta**, Vice Chairman, Bankers Trust Corporation

Brazil **- Eliana Cardoso**, Lead Economist, The World Bank

Mexico **- Rogelio Ramirez de la O,** Director General, Ecanal SA

2:45 PM Coffee Break

3:00 PM Discussion

4:00 PM **Panel III - Asia**

Chair: **Soedradjad Djiwandono**, Visiting Professor, Harvard Institute for Development

Indonesia **- Ross Mcleod,** Fellow in the Indonesia Project, ANU and Editor of the *Bulletin of Indonesian Economic Studies*

Thailand **- Peter Warr**, John Crawford Professor of Agricultural Economics, ANU

Korea **- Hak Pyo,** Professor of Economics, Seoul National University and University of Tokyo

6:15 PM End of first day

8:00 PM Dinner at University House, Australia National University

<u>Thursday - July 15, 1999</u>

9:00 AM **Panel IV - Asia continued**

Chair: **Masaru Yoshitomi,** Dean, Asian Development Bank Institute

China **- Ligang Song,** Director, China Economy and Business Program, ANU;

Yiping Huang, Economics Division, RSPAS, Asia Pacific School of Economics and Management, ANU

Malaysia **- Chandra Athukorala**, Senior Fellow, Economics Division, RSPAS, Asia Pacific School for Economics and Management, ANU

India - **Narendra Jadhav,** Advisor, IMF

10:15 AM Coffee break

10:30 AM Discussion

11:15 AM **Panel V - The cases of Australia and Turkey**

Australia **- Stephen Grenville,** Deputy Governor, Reserve Bank of Australia

Turkey **- Ozer Ertuna**, Professor of Economics, Bogazici University

12:00 PM Discussion

1:00 PM Lunch
Guest Speaker: **Ken Henry**, Acting Secretary, Commonwealth Treasury of Australia

2:15 PM **Panel VI - Concluding session with papers covering policy recommendations for emerging markets**

"External Vulnerability in Emerging Market Economies: How High Liquidity Can Offset Weak Fundamentals and the Effects of Contagion" **- Chris Mulder**, Senior Economist, IMF

"International Policy Advice in the East Asian Crisis: An Interim Assessment" **-**

David Vines, Director, Global Economic Institutions Research Program, ESRC

Ross Garnaut, Director, Asia Pacific School of Economics and Management, ANU

"Sequencing of Capital Account Liberalization: Lessons for China" **- Lei Zhang,** Professor of Economics, University of Warwick

Discussants : **Dipak Dasgupta**, Task Manager, *Global Development Finance,* The World Bank, Development Prospects Group
Masaru Yoshitomi, Dean, Asian Development Bank Institute

3:30 PM Coffee break

3:45 PM Discussion

4:45 PM **Conclusions**

- Ross Garnaut, Director, Asia Pacific School of Economics and Management, ANU
- Dipak Dasgupta, Task Manager, *Global Development Finance*, The World Bank, Development Prospects Group

6:00 PM End of second day

8:00 PM Dinner

Friday - July 16, 1999

9:00 AM **Informal wrap-up session with the World Bank, RBWC and ANU**

- **Dipak Dasgupta**, Task Manager, *Global Development Finance*, The World Bank, Development Prospects Group
- **Ross Garnaut**, Director, Asia Pacific School of Economics and Management, ANU
- **George Vojta**, Vice Chairman, Bankers Trust Corporation
- **Marc Uzan**, Executive Director, Reinventing Bretton Woods Committee

12:30 PM Lunch

1:00 PM Close of Conference

List of Participants

Istvan Abel, Division Head, Monetary Policy Department, National Bank of Hungary
Chandra Athukorala, Senior Fellow, Economics Division, RSPAS, Asia Pacific School for Economics and Management, ANU
Eliana Cardoso, Lead Economist, The World Bank
Dipak Dasgupta, Task Manager, *Global Development Finance,* The World Bank, Development Prospects Group
Soedradjad Djiwandono, Visiting Professor, Harvard Institute for Development
Ozer Ertuna, Professor of Economics, Bogazici University
Ross Garnaut, Director, Asia Pacific School of Economics and Management, ANU
Stephen Grenville, Deputy Governor, Reserve Bank of Australia
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Hak Pyo, Professor of Economics, Seoul National University and University of Tokyo
Rogelio Ramirez de la O, Director General, Ecanal SA
Ligang Song, Director, China Economy and Business Program, ANU
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Nancy Wagner, Senior Economist, IMF
Peter Warr, John Crawford Professor of Agricultural Economics, ANU
Dominic Wilson, Research Associate, Australia-Japan Research Centre, Asia Pacific School of Economics and Management, ANU
Masaru Yoshitomi, Dean, Asian Development Bank Institute
Lei Zhang, Professor of Economics, University of Warwick

INTRODUCTION

RG: I'd like to extend a very warm welcome to our many visitors from afar. It's a great pleasure to have you with us at the Australia National University. To share with us your thoughts on a set of issues that are on the minds of all of us at the end of the 1990s: the reconciliation of international capital mobility with domestic economic stability. We were very pleased at ANU to be working with the Reinventing Bretton Woods committee with sponsorship from Bankers Trust and the World Bank in addition to the ANU.

We at the ANU have been deeply involved in the discussion on the east Asian financial crisis and that's on the foundations of decades of work on the economies of the rapidly growing economies of east Asia and some of my colleagues will be presenting some of their work in the next couple of days on that. It's of special interest and pleasure of ours at this meeting to have presentations on other parts of the world which have been experiencing financial crisis and we look for a lot of value from that comparative analysis and so we look forward to deep discussion of important issues over the next few days. The formal part of the meeting will end tomorrow afternoon with our summing up and we'll have an informal meeting on Friday morning for people interested in the continuing work in this area.

Without further adieu I'd like to introduce George Vojta, not a newcomer either to the western Pacific region or Australia. Vice Chairman of Bankers Trust, a strong supporter of the academic as well as the official business discussions of the implications of international financial mobility.

GV: Thank you very much Ross. Good morning ladies and gentlemen, I will be extremely brief. I would like Marc to do the preponderance of the introduction from our point of view. Let me just say I am delighted to be here and glad to see all of you here and thanks to our hosts again. As you all know, there are many bodies, many people thinking about the direction of the international monetary system and I think that's very good what this project is aiming to do is in particular look at some of these issues, including the capital movement issue, as we are going to focus on at this meeting, but particularly from the point of view from the non-G7 countries and particularly with reference to the linkage of the private sector to the institutional arrangements relative to the global financial system. I personally think that the G7 leadership move thus far has been commendable and serious but it is geared to the establishment of global standards in many areas as you well know, but to achieve genuine progress it seems to me that without the buy-in or internalization of these reforms by the wider community beyond the G7 and at least the understanding, and where appropriate, support to the change that is forthcoming from the private sector, we haven't achieved the true reform that seems to make sense given the nature of where we are and the types of financial crises we are experiencing. So I look forward very much to this step in the project, as you know there are other steps contemplated, which we hope to discuss with some of you before we break up and I thank you for your participation and your papers and I think we'll be off to a great start and I think this group and its successors can make a worthy and significant contribution to this very important debate to the world community. Thank you and let me turn it to Marc.

MU: Thank you. Thank you first ANU for sponsoring the event with the World Bank and Bankers Trust Foundation. We are very happy to be in Canberra for the next few days. I just wanted to give you some background on the Reinventing Bretton Woods Committee. I met a couple of people in Washington and at previous conferences and since 1994 the goal of RBWC was to try to build a dialogue between the Bretton Woods institutions the private sector and academics on the change needed for the world economic institutions. Our goal was: what is the current architecture and what is missing from this architecture before thinking about building a new one. So since 1994 we have been building this dialogue and building a network among policy makers and market participants and we have found that after the Asian crisis and the Russian default that there have been a lot of projects around the world among think tanks and universities and our view was that we need to go back and look at what happened to countries. That is why we decided to commission a set of papers to look at country-specific issues and after to try to get the input of emerging economies and policy makers and after to try to provide the view of the private sector without coming with a new ambitious proposal, but being very pragmatic about the change that would be needed. So that was the idea behind the first phase of the project and we hope we will be able to continue the other phases in the next few months. Thank you.

DD: Thanks and good morning. I guess I will jump into some of the issues if I may and then tick off the issues we are interested in hearing. Events in the last two-and-a-half years or more or indeed since the Mexican crisis in December 1194 essentially force us to face up to certain questions regarding what should the stance of national policies be with respect to international private capital flows. I think these questions, especially in the context of how to manage the implied volatility and risks of private capital flows that we have now discovered. Now within that context I would like to highlight seven issues that I think are central to the conclusions of this conference to be able to learn how the individual country lessons answer any of these seven questions.

The first question is: is it true, and if it is true why, that volatility in international capital flows, whether at the aggregate level or at the national level and both in terms of volumes of flows as well as in spreads, is much higher than mature industrial countries? That's kind of the first aspect of the proposition that we need to ask ourselves. I think this question now is more in the realm of established fact, much more so than question, that the degree of volatility that we have been seeing, the reversals, are unusually the case in developing countries and in individual countries circumstances the volatility is about 5-7 times greater than the volatility that is present at the aggregate level. So investment in developing countries as a group seems to belong to an asset class that is not quite the same as other asset classes in the world economy. That's the first question I would like to throw on the floor: is it true that developing countries are perceived to have the characteristics of junk bond markets, as I propose in my paper. And if it is perceived to be junk bond markets and some of the credit ratings from the international bond markets suggest that this is indeed the case, with far and few exceptions then the question is: what can one do, either how did we get into that and what can one do to get out of that?

The second question is that, more than just volatility, it is the pro-cyclical nature of many of the components of private capital flows that seems to be increasing in recent times. The normal theoretical account of why access to global capital flows makes a lot of sense, one of them anyway, is that even though anticipated adverse shocks, whether home grown policy ones or whether from international factors, that one could be able to borrow and finance their way through in times of such adverse shocks. This thing seems to be turned on its head, now what we see is pro-cyclical volatility in capital flows, so that if there are adverse shocks what we get is a flight of capital from countries. Now there are different definitions and tests of how strongly one defines pro-cyclicality and that's a second issue, by broadening the question is it true that international capital flows are counter-cyclical as in the normal case, or is it pro-cyclical? So that's the second question and a subset of this question is that there are certain kinds of flows that seem to be worse culprits in this regard than others and one of the clearest ones that has emerged from the kind of experience in the last two-and-a-half years is the short term flows. Short term flows seem to have especially these characteristics of huge reversals, sudden reversals and these reversals take place when adverse shocks, externally or internally, hit countries. And the question there is why short term flows have such characteristics, are there certain moral hazard issues in the international financial architecture that makes inter-bank short term capital flows much more volatile and much more able to flee countries in great trouble. So that's what I would call a subset of the second issue.

The third issue is when countries run into trouble and there is capital flying out of the country in one form or another, they force policy responses of a certain type, and the forced policy responses are essentially tightening of fiscal policy, a high interest rate and essentially the deflationary measures to reestablish the paradigm approach that if you have to reestablish credibility in the international capital markets that you have to undertake deflationary measures and then suffer the consequences of that. This is the disciplining role of international capital markets, how large is this disciplining role? How effective and efficient is this disciplining role? And is it at all appropriate in the context of the countries we are talking about? So that is the third set of issues that we hope we will get an understanding of within this couple days. But it goes beyond that, we also need to understand a little bit more clearly what are the critical transmission mechanisms for these shocks from the capital account to be transmitted to the current account and into the real economies of these countries and I would propose that we are still skirting at some level of understanding that is not deep enough yet in order to understand how financial markets affect real economic variables in these countries. So that's another huge research agenda but it seems to be fairly central.

So these are the kinds of settings on which national policy needs to work against, but before I turn to this, I had the fortune to read some of the national papers and what was striking is that some countries have done OK in the past two-and-a-half years, they haven't had to face many of the turmoils we saw. These are, for example, Mexico since 1994 seems to be doing wonderfully well, Poland is a striking case where Nancy's paper talks about Poland has remained receiving capital flows, Hungary to some extent and Turkey avoiding a crisis which has been widely predicted for a fairly long time. So there seems to be a group of countries which either based on fundamentals or luck seems to be doing fine. The tone of the papers I read talk about how it's not luck it's because somehow they've got fundamentals right in these places to be able to attract the right kind of private capital flow and to be able to manage the volatility relatively well therefore. And then the obverse is countries like Russia, Brazil and, of course, east Asia before that which are castigated because they had poor fundamentals, either the exchange rate overvaluation, in Brazil and Russia, leading up to inevitable crises, so there seems to be this kind of tension in the national papers, on the one hand: only if we had the fundamentals right then we wouldn't have this kind of problem we're talking about, so somehow national policy seems to matter a great deal. Now I would propose to you that underlying it are two essential different views of how international capital markets react with national policies. One is the efficient market hypothesis which we've fairly grown up with, which is that financial flows are the function of strong macroeconomic fundamentals and good institutions. And another which is the market failure hypothesis, which is no the financial markets are rife with information asymmetries with great problems in contract enforcement across borders and no bankruptcy mechanisms, things which are essential underpinnings of financial markets and reasonably efficient financial market behavior in domestic settings, actually have a lot of problems in cross border dealings and therefore we have this tension: is it that we have to fix the fundamentals and we won't have these problems or is it that we need to worry about the sources of market failure in global capital markets that leads to these swings between euphoria and panic? I would submit to you that at some point we would have to understand the difference between Mexico today and Brazil today. Is it because Mexico runs such wonderful fundamentals relative to Brazil or is there a deeper underlying problem.

The fourth one I guess is coming down to the policy response more narrowly. The clear question is the question of exchange rate policy and I think there we are heading into fairly familiar territory that we are basically junking what was in the earlier part of the 1990 was the received wisdom that nominal anchors make a lot of sense, we didn't hear the theory very well earlier about what the nominal anchor was supposed to be about. Now it seems to be fairly clear that one of the lessons of this crisis is that fixed exchange rates, pegged exchange rates are pretty dangerous and that flexible exchange rates are the way to go. Now a little prior to Argentina's recent problems we were also given to understand, or the received wisdom was, that there is a choice: you either have to have a currency board, very fixed exchange rates or you have to be fully flexible, but even the notion of currency boards is coming under greater scrutiny, that where it works is a very limited set of cases or circumstances. Again I pose these not as conclusions but as questions to go over. So exchange rates I think there is a lot of momentum that one of the ways to crises like these is to have more flexible exchange rate policy.

Then there are issues on fiscal policy. What have we learned in regard to how fiscal policy should operate. One thing is clear that if you are running very large budget deficits and you are borrowing to finance that I think that's clear you can't afford to run huge budget deficits and still be able to ride this wave of capricious global capital flows fairly effectively for fairly long periods of time. But then you still have the question of what are we asking fiscal policy to do and is it the appropriate role in the kind of stabilizing sense.

Monetary policy, of course, is tied closely to exchange rate policy and there is some issues there too on the sterilization of short term capital flows and what is the way out and I think essentially the story there is flexible exchange rates gives a lot more room.

Transparency, corporate governance, standard setting. There is a lot of talk about is it really that central or is it much more peripheral. Will ever very transparent systems solve the problems we have talked about the risks and managing the crisis.

Finally, the fifth question I want to pose here is given that we have failures both in international markets and assumptions of perfect domestic policies that perfect policies cannot be expected to operate at all times. The big question I would like to pose for you is on the openness of capital accounts. What is the degree, what is the sequencing, what is the right approach to opening of the capital account? And that includes the prudential regulation of banks and marketplace incentives and I would propose that we try to understand this question in the historical context. Australia, of course, we are lucky to have large experience of capital controls in this country, which I understand Ross was part of the process of dismantling, but the entire experience of Australia's capital controls might shed some light on industrial countries and generally.

I'll just briefly mention in closing two last points. What's the role of private sector debt? The question I pose is really that if it is that private sector approaches the question from the point of individual country credit-worthiness issues and how much money should I put in that country, I think it loses something that is more important when you aggregate the whole story of what's the right role of the private sector in setting up mechanisms to deal with managing the risks of volatility because in its absence, if it is that the taxpayer will in one form or another be asked to pick up the pieces through multilaterals or through the bilateral countries themselves, then I guess we will force some of the rules onto the setting anyway, so it's worth the private sector watches what these rules that are now coming up are. And last but not least, and I guess again I'm looking to hear about this, is the political economy of booms and busts, the nature of the political process in most countries seems to be that booms are great, busts, even if they are impending, seem to take a long time for the politicians to get there act together to prevent these and I would like to understand what it is, if anything, that we can do to prevent that long-standing problem. Thanks.

RG:	Thanks Dipak. Quickly, Dominic Wilson.

DW:	I'll add just a few words to Dipak's comments. I think one of the positive things that has come out of recent episodes is a greater focus on the benefits and risks of greater capital mobility. As Dipak's background paper elaborated, we are now more aware, I think than we were, that the benefits and risks are finely balanced, particularly for developing countries and for countries to exploit the potential gains of access to foreign capital requires a more complex set of preconditions than has usually been acknowledged in the past. Dipak's already highlighted a long list of common themes and I would just like to echo those by raising four questions that I hope we can come back to in each of the discussions.

First, what appear to be the major risks involved in maintaining an open capital account, particularly for developing economies and how do they vary according to an economy's stage of development.

Second, what are the conditions, particularly for developing economies, to open the capital account successfully. In particular what kind of institutions, what kind of macroeconomic policies and what kind of exchange rate settings are best suited support and sustain an open capital account at different stages of the process.

Third, what policies are available to help countries reconcile the scale and volatility of private capital movements with their domestic economic goals. And what evidence do we have about how well those policies work. And in particular, given what Dipak raised, if you go for a strategy of using a nominal anchor, do you need an exit strategy and do you need to think more clearly at the beginning of the process about how you're going to move on after stabilization has been completed.

And finally, I guess a slightly different issue, how much control can countries really exercise over the degree of capital mobility? Is a move towards greater capital mobility an inevitable fact for all countries at all stages of development; that they've simply got to learn to live with or is something where the progress can be more tightly controlled.

Without anticipating the discussion, I suspect having read some of the papers, the answers to these questions is often a good deal broader than is often acknowledged. Despite some of the common elements that seem to run through many of the crises that we're going to be looking at over the next couple of days, it's also clear that there are substantial differences in experiences. In some cases, crises appear to have arisen from exchange rate-based stabilization, in others they were more directly associated with the process of financial liberalization, in some cases there were public sector imbalances, in other cases private decisions seemed to be more central to the story, in some cases the crises were widely anticipated, in other cases they weren't, so I'm looking forward to everyone's views and once again it's a great pleasure for us to have you all here.

RG: Thanks Dominic. Some big questions from Dipak and Dominic, they're questions that I hope that at least some of the presentations can start to answer and then in our discussion and the wind up discussion we can come back to them.. The aim of this stage of the project is to come out with a book that the conclusions of which will embody the wisdom that comes out on these and related issues. So to get into the substantive part of the program and to begin to provide us with the material that will answer some questions, I'd like to introduce Grzegorz Kolodko from the School of Economics in Warsaw, former deputy premier and finance minister of Poland. Grzegorz.

EASTERN EUROPE

GK: Thank you very much. Good morning everybody. It is my privilege to chair the first panel. We have six panels, five regional and the concluding discussions confirming the observations from these panels. As for the first panel, we have eastern Europe and Russia, with three different papers. The first is on Russia by Professor Vladimir Popov, currently with Russian Academy on National Economy, but traveling widely recently with United Nations World Development Institute in Helsinki, Finland and then lecturing in USA and Canada. Then we have the paper by Istvan Abel, jointly with Zsolt Darvas from the National Bank of Hungary. That is somehow a different paper because it is somewhat shorter than the other papers, but therefore I can assume that the Istvan paper has been read ahead of some other papers which are nicely written but very long. Then we have paper on the famous case of Poland by Nancy Wagner who is a senior economist at the IMF. By the way, I am listed in the program at the IMF, which of course I am not. I have the privilege until very recently to be visiting scholar with the fiscal affairs department and when we were starting to prepare this conference I was invited in my previous capacity, but I am here as professor of economics at the University of Rochester for this forthcoming semester. As you will see from the papers there are common features and very significant differences. From an outsider perspective often we are seeing that researchers, advisers and experts are putting the countries of eastern-central Europe and the former Soviet Union together, but actually, maybe contrary to expectation, the more we are going into this process of post-Communist transition and integration into the global economy the more we do different in this part of the world. Ten years ago, countries like the Czech Republic of former Czechoslovakia and Tajikistan of the former Soviet Union both belonged to the same Comecon grouping, but now I think the Czech is much closer to, say, western Europe than to a country like Turkmenistan which is still lagging behind in this process. Here we have the leading countries of the transition, which not only refers to Hungary and Poland, but also the Czech Republic to which Mr. Abel refers in his paper, but also Russia. Because as we will see, I believe, from the discussion the case of Russia is very much different from the case of Poland and if this panel will bring us a little more insight into the strategies in Poland and, to an extent, Hungary and why it didn't work in Russia then I think we will meet our expectations. Therefore, let me turn to Vladimir and ask him to present his paper. I believe we must stick to the schedule so we must make coffee break at 10:45. So each panelist contain your presentation to 20 minutes. Vladimir, the floor is yours.

VP: Thank you so much Grzegorz. The purpose of my presentation is to tell the Russian story, the story of the Russian financial crisis and probably I should warn you from the beginning that my explanation, the explanation you will see in the paper, is not a conventional one in the sense that it contradicts the conventional explanations that you may find in the Russian and western literature. There are at least three conventional explanations. The first one is of course the Asian contagion and the Asian financial virus. The explanation is that everything was perfect in Russia but the external shocks led to the collapse of the Russian ruble. The second explanation, probably more popular than the first one, is that there was a debt pyramid, that the government was pursuing a bad macroeconomic policy, that the central bank was pursuing a pretty good monetary policy, however the central bank is not powerful and was not able to do much because the government was running huge budget deficits. Well, to be fair there were budget deficits, on the magnitude of 5-7% of GDP, very considerable, in recent years. They were mostly financed by issuing short term debt and this short term debt contributed to the accumulation of the debt pyramid and finally the pyramid collapsed. Well the government says we knew about the problem when the government faces the criticism from the former heads of the central bank, we were doing everything we could to cut the budget deficits, we knew this thing was going to explode, however, there was only so much we were able to do. Because the parliament was so anti-reform minded and the parliament was not passing the legislation we were suggesting which would allow us to increase the tax revenues and since parliament didn't pass the legislation, the anti-reform minded parliament is the scapegoat and it turns out that the major reason was the debt pyramid. The third explanation is even less sophisticated. The third explanation is that of crony capitalism that stresses the governance problem, that make reference to the corruption, collusion and nepotism, and basically states that Russian oligarchs were so short-sighted that they were not able to agree on simple matters to increase the revenues of the government budget and to ensure some kind of macroeconomic stability there are hints, at least, that funds were embezzled in Russia, including the IMF credits, and even hints that they were directly stolen by the oligarchs and since this happened and the credits were not put to work, well the collapse occurred.

Now I would disagree with all these explanations and I would put forward another explanation which may seem very trivial and simple and I would argue that the explanation of the Russian crisis is a very simple one and I will try to consider the alternative explanations to show that they are wrong and at the end I will try to draw some conclusions.

Now first the Russian story. I'll just try to tell some basic stylized facts about Russia. Macroeconomic stabilization in Russia started in 1995 and if you have a chance to look at page 17, figure 6, this is how the macro stabilization in Russia was carried out. On figure 6, you may see that in the middle of 1995, the exchange rate of the ruble was pegged and so this was an exchange rate based stabilization, a pretty classical program of exchange rate stabilization. Before that inflation was running at 100s and even 1000s percent. On July 1, 1995, the central bank pegged the ruble and committed itself to maintaining the exchange rate of the ruble. There was a corridor, a sliding corridor, so this was a crawling peg and the limits of the fluctuation of the ruble were increased up to 15% after the Asian crisis. This happened on December 1997, so from the first of January 1998, the new limits of the corridor were actually established, however this was a minor change. Basically, the major change was that after the 3 or 4 years of the slide of the ruble and after the 4 years of very high inflation, the government pegged the ruble and successfully, as it seemed, for three years the government enforced this macroeconomic stabilization. If you go to page 16 you may see the annual and monthly rates of inflation in Russia. Inflation was brought down from about several 100 and 1000 percent in the period of 1991-1994 to six percent a year, July to July. So inflation was only six percent a year right before the currency crisis in August 1998, which was, by the way, a better record than in most economies in transition, for instance in Poland, for most countries inflation was higher than 6% per year so for economies in transition this was a pretty good result. The success was based, if you turn the page to page 19, you may see in figure 7 the success was based on two successful policy measures. The first one, fiscal and budgetary policy was pretty successful since the government, facing falling revenues, yes revenues were falling by themselves chaotically, this was not a prearranged government decision, the government was struggling with the falling revenues, however, the government was not able to stop the decline of the revenues, but the government was able to cut expenditures in line with the falling revenues. So that, at least, there was no major increase in the deficit. The deficit was contained to 5% of GDP and this was a success of the government. This was pretty difficult for the government to do because the GDP was falling so when the revenues fell as a share of GDP, from about 50% before transition to about 30% in 1997 and the GDP fell itself. This involved tremendous cuts in real government expenditures. The deficit itself was financed in a non-inflationary way because the central bank created the market for short-term, ruble denominated securities, called GKOs, and these short term securities were the major vehicle of financing the government deficit and that is why the government was able to bring down inflation. Now it seemed that for three years, from 1995-1998, the government and central bank were pretty successful and inflation was going down and it seemed the growth rates of the Russian economy were about to resume. If you go to page 17, there was a transformational recession in Russia for the whole period of the 1990s and it's only in 1997 that the economy reaches some kind of growth, 0.6%, so basically it was equal to the statistical discrepancy. After macro stabilization of the second half of 1995 and the whole year of 1996, it seemed like the economy was about to start to grow and then there was the currency crisis of 1998 and the output fell again. Now the weak point of macroeconomic stabilization in Russia was that this was a stabilization based on straightforward pegging of the exchange rate and the real exchange rate appreciated dramatically and it reached over 70% of the PPP rate, as a matter of fact, there are tables in the paper, but if you compare Russia to the other transition economies this was the highest indicator. Slovenia (is the only rate near Russia's), which is by far the most successful transition economy which enjoys GDP per capita of about $13,000 which grew from 1993 for several years, so Slovenia can afford it. However, for Russia, this was by far an overvalued exchange rate and if you compare Russia, not only to transition economies, but to other economies, to economies of the same level of development and GDP per capita, as a rule of thumb, the actual exchange rate is sort of 50% of the PPP rate so 70+ percent was obviously a Dutch disease for Russia and there is a very trivial story how the overvalued exchange rate undermined the Russian trade surplus and Russian balance of payments and Russia faced the trivial balance of payments crisis. If you look at page 20 you will see that on figures 8 and 9 how the balance of payments deteriorated. Exports were about the only thing that was growing in the periods of transition. All the real indicators were going down. The export sector was the only growing sector and this sector stopped growing in 1997. When the exchange rate appreciated exports stopped growing, even before the collapse of oil prices. And if you look at the real indicators, these are dollar figures, the story is pretty much the same. There was a reduction of exports so the government killed the goose that was laying the golden egg and there were huge imports going into the country, absolutely unsustainable, there were no Russian goods on the shelves at all, so it looked like Russia was only consuming foreign products, because Russia exported mostly oil and gas and non-ferrous metals and this is not visible in the shops anyway, so all the goods were foreign made goods, so it looks like the country is consuming because of the cost of imports. So the current account was positive all the time for Russia, unlike for other transition economies and unlike southeast Asian countries, so the Russian pattern was the net capital outflow, the capital flight from Russia was so high that the current account surplus was barely enough to cover the capital flight, debt service payments plus capital flight. So during the year's of reform the current account was always positive and the reserves were not increasing so the capital flight was eating up all of the trade and current account surplus that were earned during this period ... the Russian ruble is overvalued it is necessary to devalue the ruble. Now this is the story of the crisis; it may seem very primitive one, but I would argue this is the story that reflects reality.

What are the alternative explanations? The first one. Well Asian contagion, no one really takes it seriously because other countries faced with the problem of the Asian virus managed to handle it. In several European countries stock markets fell but the exchange rates were actually supported by the government and central banks.

Debt pyramid. The debt indicators. If you look at the table showing the debt levels for different countries and Russia and the table (page 11) suggests debt indicators for Russia were pretty low by international standards. The debt/GDP ratio, the debt service level were pretty low by international standards and even the short term debt to GDP ratio was pretty low by international standards and obviously there was no reason for the government to default on the debt. It was possible to continue the accumulation of the debt and there was no major problem with the debt service payments. Now when I am saying that I am sort of overexagerating, maybe I don't have the chart here, but I can show you the chart showing international reserves and the part of the Russian short term debt held by residents and as you will see, sometime in February 1998, half a year before the crisis, the short term debt held by non-residents exceeded the outstanding the level of foreign exchange reserves which was the obvious mismatch, so when I am saying the debt problem was not really the reason for the collapse of the ruble, I am a little bit pulling your leg, but not without reason. As a matter of fact, the same thing happened in Mexico exactly half a year before the Mexican crisis, sometime in the middle of 1994 the outstanding value of the Tesebonos exceeded the foreign exchange reserves and of course foreign investors don't like it and they started to pull out and this is a very bad policy. If the outstanding value of the short term debt exceeds the level of the existing value of foreign exchange reserves of course this is a gross mismatch. However, the Russian case was different from the Mexican case. Why? Tesebonos were denominated in dollars and the Russian GKOs were denominated in rubles; the Russian short term debt was denominated in rubles. So in Russia, once the government devalued the ruble, say in summer 1998, before the crisis. The outstanding value of the debt, the dollar value of the debt, but the debt was denominated in rubles, so if the government would devalue the ruble before the crisis, when the government devalued the ruble in August, the outstanding value of the debt immediately shrank. If the government devalues the ruble by two times, the outstanding value of the debt would shrink from $15 billion to about $7 billion and this would restore the reasonable ratio of the short term debt held by non-residents to the foreign exchange reserves. So, as a matter of fact, default was absolutely unnecessary. Default on the debt denominated in national currency is something very strange. There should be very strong arguments to prove that there was supposed to be a default on the part of the debt that was denominated in national currency. There may be a soft landing, there is no reason do it through a hard landing. You can always print this money if you don't have the other options and that is why the debt explanation is not really reason.

Now there another explanation and the other one is the explanation about the crony nature of Russian capitalism. There was an article in the Economist and maybe some of you remember the article, at the very end of the year, in the December issue, and the article basically said that the root of all Russian problems is the misunderstanding by Russians of the nature of money and I sort of call it the Dostoyevsky argument because there were exclusive references to Dostoyevsky. Dostoyevsky has a novel called The Gambler, where he talks about the Russian soul, about demonetized (?) Russian soul and this and that and the article was actually explicitly using this reference to Dostoyevsky and they also made reference to 70 years of Bolshevik policies which were intended to eliminate money completely. This is a very popular argument. If you have 70 years of communism, they say well what do you want? Of course you have currency crisis. Right. It's like you come to a doctor and the doctor asks you your age and then he says 'well what do you want? At this age you're supposed to have all these kinds of diseases.' Now this argument is dead wrong, because it is based on the wrong facts. From 1947 to 1987 inflation in the former Soviet Union, open inflation and suppressed inflation, which had increased the monetary overhang, these had been just 3% per year. A better record than in most western countries, only countries like Germany and Switzerland can be proud of having such a good record. So the macroeconomic policy of the Soviet planners was much more prudent than the macroeconomic policy of the new Russian leaders and even more prudent than the macroeconomic policy of the western countries. There was monetary reform in 1947, confiscatory monetary reform was a robbery, however this reform was a very efficient robbery, prices were decreased two times and since then there was macroeconomic stability until Gorbachev, so even the Soviet planners, they knew how to maintain macroeconomic stability. So references to 70 years of Bolshevism, when they're made by the current Russian leaders, is absolutely unpersuasive because the Soviet macroeconomic policy was by far better and by far more prudent than the macroeconomic policy in the 1990s. Also, and it may be strange, but the level of monetization of the Soviet economy, M2 to GDP ratio, or the level of creditization as they call it, bank credits outstanding to GDP ratio, in the Soviet Union was much higher than it is in Russia. It was about 50%, in Russia it's about 10-15%. Even though in a centrally planned economy the role of money and the role of credit, of course, was very limited, but even with this limited role the Soviet economy was much more monetized and the payments were made like clockwork, on time, not like they made today in Russia and there are the arguments to support the view. The bottom line is that if you believe the oligarchs were shortsighted, well of course they were shortsighted you cannot call them long sighted, but if you say this was the major reason of the crisis, then the explanation is basically the debt explanation. Why? Because if the funds were embezzled, the government was supposed to borrow more and more and once the government borrows more and more then we come to the debt theory. Well this was not the case. First, there was no major change with respect to corruption and bribery and crime in the Russian economy in recent years, except for some stabilization, since 1995 there was some stabilization. So there wasn't major change in embezzlement of funds and so on. There wasn't a major increase in robbery, except for some stabilization. And second this explanation cannot really be the dominant one since if the money was stolen, it turns out that this should have led to increased level of the debt. This was not the case. The international debt as you see from figure 11, this international debt was not really substantial and it was possible to accumulate the debt, to continue to build up the debt pyramid for about another two or three years at least.

So I come to the conclusion and probably if I can have a couple of more minutes. So if you look at figure 13, you may see how industrial output, how the government manufactured the crisis. Actually, the first conclusion is a very disappointing one. The Russian story is an extremely frustrating one. It looks like the government just decided to test whether text books are right or wrong and the government decided to stage an experiment on its own. This was a trivial and pure Keynesian type crisis because there were two effects. First over-appreciated ruble and the shift in demand from domestic goods to international goods. Second, there was a very tight monetary policy. 6% inflation is a very low inflation for Russia and with monetary policy, this situation with the Russian government and the central bank were more catholic than the Pope in a sense. This led to the crisis. Now unlike southeast Asia, after the crisis, one month after the crisis, when the payment system was sort of restored there was a sharp recovery and output started to grow. This is how the market corrected the mistake of the government. This is the story of the government failure, not the market. The market actually worked and the economy started to grow and is growing up until now. Of course it's a short-lived growth, it won't be sustainable without major investment, however, it was the restoration of the production levels to the same point. So the first lesson from the Russian currency crisis is you should avoid appreciation of the real exchange rate. There is view that there may be a prolonged period of appreciation, well it turns out there cannot be a period of prolonged appreciation. The second conclusion, I'll just name it. There are lessons to be learned by Russia from the Asian crisis about the stability of the banking system: twin liberalizations and so on. I'm sorry for overusing my time.

GK: That is perfectly well. We will be back with this policy to be more catholic than the Pope, we have had the Polish Pope recently in Poland we wouldn't dare to be more monetarist than the IMF and maybe that is the root of the Polish success. Let's listen to Abel.

IA: Thank you very much. Well I know my paper is real brief, but I was the last one who sent it in so I can't assume you've had the time to look at it. So first I will try to summarize. If you look at the broad picture, what we learned fro the Asian crisis, we basically can assume there were four components of the problem. Main causes probably, we can mention short term foreign debt, then fiscal deficit as a second type of problem, then exchange rate system and finally the banking system was also part of the problem. If we try to characterize the situation in transforming economies, calling these four typical problems then we can see that in Russia as Dr. Popov has just presented probably can find all four of these components and there is only one other country where we can find at least two of the four. Namely the Czech Republic where we can blame the banking system as being kind of underdeveloped and loaded with bad loans and bad banking practices and also the exchange rate rigidity in the Czech Republic was quite evident. If you look at Poland and Hungary in contrast to these two other countries. We may find positive factors, namely we can, if we want, we may assume that the exchange rate system in Poland was not as rigid as in other countries and we also may assume that Hungary had a much stronger banking system than any other transforming economy when the crisis started. So the base of these rough characterizations, it is no surprise that the currency crisis hit the Czech Republic. Actually the crisis started earlier than the Asian crisis. It was in May 1997. If you look at the history of the Czech crisis it was surprising that, although the crisis was quite serious, there was no contagion. There was a following crisis in the Slovak Republic but there was major impact on Hungary or Poland, although we would have assumed more serious impact on these two countries. Of course the Russian crisis in August 1998 was more dramatic, but still Hungary survived this crisis with minor changes compared to other countries. Mainly the Hungarian exchange rate system survived and the currency remained within the narrow band. If you look at the figures 1, 2 and 3, and also figure 4, they give you a kind of impression of the exchange rate system we have. It is difficult to compare these countries because what you see in figure 1, the Czech currency was first fixed and that was a narrow band and when the crisis hit they abandoned the band and there was a free float, while in Hungary since 1995 there was a narrow band, a crawling band. The currency was pegged to a basket and the band was +/-2.25% and in the center there was no change in 1995. While in Poland the exchange rate was similar, but with a wider band, you can see on figure 3 the changes in the band, first from +/-7% to 10% then later 12.5 then 15%. So on the basis of this characterization, basically I thought the Polish exchange rate system was not as rigid as in other countries. Like in Hungary we can say this narrow band is quite a rigid exchange rate system. But still if we compare the exchange rate movements in figure 4, I would say there are many differences but there are striking similarities too, in the sense that the movements are pretty much correlated. Why then is the contagion not evident in this history of this crisis. If you look at macroeconomic parameters, if you compare several indicators we can again see many differences and many similarities between these countries. Let me refer to figure 5, 6, 7 and 8. If you look at the interest rate and interest rate premia, we can see that in all of these countries there was a sharp response to the shock, so all of these countries used policies and I would assume the proper policies to respond to the crisis: changing interest rates. And of course these policies had an impact on the economy, but I want to stress there are striking similarities and correlations when you look at the indicators. Probably the only indicator where we can see many differences is the stock prices, figure 9. There are analysts that concluded that Hungary's narrow band exchange rate system, although it was able to maintain relative stability of the exchange rate, but the cost of this stability was much higher volatility in the capital markets and mainly in stock exchange prices. Comparing the performance of the Budapest, Warsaw and Prague exchanges, we can see that that's right, we can see higher volatility in Budapest, but still the directional movements were very much correlated and if you look at figure 13, which compares Budapest stock exchange with the Dax index, the German stock exchange index, then again we can see the similarities in the direction of these movements. What can explain these similarities? First of all, these countries, all of them, very much depend on foreign investments, foreign capital and of course the change in the German stock market or any European stock market will have an effect on these regional markets pretty soon. Another important macro factor is the fiscal situation, but even in that sense we don't see major differences, especially one aspect, namely the fiscal deficit is...the importance of foreign participation in financing the fiscal deficit is important in all of these countries and of course the sharp change in funds coming to finance these deficits had a very remarkable impact on the economic situation. Let me refer to figure 11 where we tried to show the correlation between the Hungarian exchange rate movements and the difference between short term and long term treasury bill rate. Let me explain, foreigners are not allowed to invest in short term government papers in Hungary, they normally invest in longer papers like 5 year bonds and another thing which is also important, during the stabilization, there was an almost steady decline in inflation and an almost steady decline in interest rates, so long term rates are normally lower than short term rates. When there is an increasing demand for long term papers which is basically a reduction in the yield in the long term means that the difference in the short term yield and long term yield is reduced and we can see that when there is this type of movement in the difference between the yields it is indicated there is a capital inflow, financing budget deficit.

DD: Could you clarify something. What is the definition of the position of the exchange rate?

IA: That is a capital inflow which normally comes to buy long term papers and then the difference between the three month...

DD: I understand that one, but the position of the exchange rate is it...

IA: Yeah, this is within the band.

DD: Oh, the position within the band. The deviation from the center of the band.

GK: You can get it from figure 11.

IA: It may be complicated but it is meant to say if there is a capital inflow then we have appreciation and of course if there are volatility, figure 10 basically gives you the picture of the capital inflow, which was of course quite volatile. Figure 12 gives you the same thing as figure 11. So the conclusion is that the fiscal system and the financing of this fiscal deficit and the loose exchange rate system makes these countries extremely vulnerable to capital inflow. All of these countries. But still there are major differences and to identify the causes or explanation of these major differences, I have a few conclusions. Namely macro fundamentals are very important in explaining the movements and though they are necessary conditions for a stable situation, they are not sufficient. Certainly not sufficient to avoid contagion type impact. To reduce the risk of contagion, countries may want to diversify exports and financing as well. But even if they are successful in doing this diversification, they are exposed to contagion because history shows that regional crises are much more frequent than single currency crisis. So if there is a regional problem then most of the countries in the region are hard hit. Two key issues are in making the system less vulnerable. One is definitely the banking system and the second one is the fiscal system, not just the size of the deficit but probably even more important is how it is financed and what is the function of short term capital, short term debt in that financing. Of course the exchange rate system is important, but the importance of the exchange rate system in that sense is secondary because it just reflects those movements which are developing.

So basically my main conclusion is that the difference between Hungary and the other countries is the banking system. This is the only systemic difference that we could find. The Hungarian banking system at the time of these crises, 1997-1998 was dominantly foreign owned. All of the commercial banks are privatized except for one bank which basically went bankrupt and then the state had to move in so we again have a state-owned bank. The banks were not just privatized, but sold to strategic partners, mostly AAA global banks. Thank you, I think I have used all of my time.

GK: Thank you Istvan. So now we are turning to Nancy Wagner of the International Monetary Fund. She will present the paper on Poland's experience with capital flows in the 1990s. So I am even more keen to listen than anybody else to learn another explanation of how have I succeeded over 1994-1997 when I was in charge of these policies. Nancy please tell us.

NW: I was going to say that I am in a rather unusual position, in that I'm sitting next to someone that probably knows more about Poland than I do and yet I'm the one who's talking about it.

So I'm going to give a brief overview of Poland's experience of capital flows in the 1990s. You can essentially characterize Poland's experience as 4 distinct periods with respect to capital flows. If you take a look at figure 4, I characterized it as early transition during 1991-1992, debt rescheduling period which ended in 1994, maturing transition of 1995-1996 and EU prospects from 1997 on. The early years of transition were characterized by the fact that Poland had very high level of external debt so official flows and what's called exceptional financing, namely running arrears and debt rescheduling played the dominant role in Poland's external financing. At this time private capital flows were actually negative on a net basis because there were huge payments for amortization. There was a Paris Club debt reduction agreement which occurred in April of 1991 which did sharply lower Poland's debt, but they still had a major problem with their private sector debt as well. At this time during the earlier transition Poland also began its structural reforms to attempt to attract capital flows, so they liberalized foreign direct and portfolio equity investment in 1991 and they liberalized portfolio debt investment in government securities by 1993. But it really wasn't until the so-called debt rescheduling period, namely by October 1994 there was a turning point in Poland's situation with the conclusion of the London Club debt reduction agreement, also known as the Brady plan and at this time Poland shifted from being a heavily indebted country to a moderately indebted country and its international creditworthiness was also being enhanced by growing political and social stability.

So this led into what I refer to as maturing transition, that basically the London Club agreement was a catalyst for a major acceleration in capital inflows and portfolio investment picked up sharply in 1995 and FDI inflows surged. This was not all a positive situation from the viewpoint of the central bank because in 1995 there was a growing current account surplus while at the same time there was a major reversal in the capital account and this led the national bank to start to conduct very large scale sterilization operations. Official reserves skyrocketed but at the same time so did the quasi-fiscal costs that the central bank was incurring from these sterilization operations. This surge in inflows also led to concerns about exchange rate appreciation, potential loss of export competitiveness and in fact, in the event by 1996 the current account surplus had disappeared and turned into a deficit and of course the worries were the inflationary impact. So in 1995 one of the actions taken by the central bank was to replace the crawling peg with a crawling band with fluctuation margins of +/-7% and this induced some exchange rate risk and the like. And at the same time they also lowered their base lending rates in an attempt to reduce the interest rate differential which had become so attractive to the portfolio investors.

Now moving into the next period, the so-called EU prospects period, beginning around 1997 there seemed to be signs of overheating in the Polish economy. So the NBP (National Bank of Poland) ended up reversing course and raising the interest rate again and they also boosted reserve requirements to quite high levels. In fact the reserve requirements, even as of today, stand at 20% for local currency demand deposits which is very high when you think about their moving toward EU convergence. The raising of the interest rates, of course, also led to a pickup in capital inflows again and a return to heavy sterilization which, of course, created the additional, sort of vicious circle of high interest rates from the sterilization attracting even more capital inflows. The inflows came in not just because of the interest rate differential, but Poland had very strong macro fundamentals at this time. Growth rates from 1995-1997 were in the range of 6-7% per year, which for the transition economies was pretty phenomenal and they were also having a strong drop in inflation also. So by early 1998 the inflows had pushed the zloty close to the upper limit of the band and the newly created monetary policy council which was going to make the monetary policy decisions for the NBP started in February of 1998 and their first action was to widen the band to +/-10%.

With respect to how Poland dealt with the Czech and Asian crises. It weathered those crises very, very well. You might say there was almost a momentary drop in the stock and the currency markets, but there was a quick rebound, again investors took a look and said the fundamentals in Poland were quite solid, so there's no reason to pull out on a longer term basis. But when the Russian crisis hit Poland did go through a much bumpier ride. Part of it certainly was the psychological effect of the geographic proximity because in terms of the primary transmission mechanisms of contagion Poland was on fairly firm ground. In terms of trade exposure, Poland had very successfully reoriented the vast majority of its trade towards the EU and other more developed countries and at the time of the crisis trade with Russia was only about 8% on a formal basis, but if you include their informal trade, they have a large amount of what I think in Turkey is called suitcase trade and in Poland is called unclassified transactions or unregistered trade. If you include that plus trade with the rest of the CIS, it might have been as high as 20%, but still it means the vast majority of their exports were unaffected directly by this crisis. And also in terms of banking and corporate sector exposure that was very low. Their banks had followed very prudent lending policies and in fact banking sector exposure was estimated at less than one percent of assets in the banking system. Nevertheless there was a massive withdrawal from Poland's financial markets and at this time the zloty, which had been right before the crisis been hovering near the upper edge of the its +/-10% band, fell to bellow parity. The first time really during the entire year that it weakened that much. Foreign investors pulled out approximately 20-25% of their holdings in government securities and the main index in the Warsaw stock exchange plummeted by more than 30%. So it did experience quite a hit from the Russian crisis. At the same time though, the recovery was quite rapid and this quick rebound suggests a lot of the sell off was primarily liquidity driven. Namely that Polish markets are among the most liquid of the transition economies. There was also a very high share of Poland in most emerging market investors portfolios, so Poland was the ideal market to tap if you needed to cover your positions and I felt one of the most interesting aspects of the crisis was the authorities' reaction at this time. They sent, you might say, several signals to the market which emphasized that they believed Poland should be judged on its fundamentals and not as just a transition economy in line with Russia and the like. So one of the things was that when the zloty fell as far as it did, they didn't intervene in the markets. Which really quite surprised a lot of market participants at the time, but they held true to their belief that they wanted to allow for exchange rate risk and for people to not expect for the central bank to come in and rescue them. They also, in early September, right at the peak of the crisis, cut their benchmark rate which they had been planning earlier and this even further surprised the markets and was taken as a very good sign and in fact, the zloty actually strengthened after they cut their rates, precisely because it was seen as such a signal of confidence. In November the government also went ahead with the largest IPO that had ever been seen in central and eastern Europe, namely an IPO with their telecommunications company and, despite the very rough market conditions, it was 2.5 times oversubscribed so again that was a strong signal in their faith in the economy. The subsequent crisis had even less impact on Poland's markets than the Russian crisis did. With Brazil the markets basically shuddered a little, but the zloty quickly recovered to trading on the very strong side of the band. And in fact, as a result of the continued strong zloty and signs of weakening economic activity, the NBP again cut their key interest rates, you might say during the peak of the Brazilian crisis as well and this did finally lead to sharp weakening of the zloty to close to parity. The Kosovo was had relatively little impact on Poland as well. I think even less so than perhaps even seen in Hungary to some extent since Hungary, because Hungary being a neighbor of Yugoslavia had more of an impact towards trade and the like. And since January 1 the Warsaw stock market has now been up by more than 30% so that's another reflection of strong continuing interest in the Polish economy.

So then the question is, how vulnerable is Poland to a financial crisis of its own or through contagion? First of all, Poland had a very small proportion of its debt in terms of short term debt. By way of comparison with Mr. Popov's discussion of Russia, Poland's short term debt right now stands at less than 13% of its reserves and this is in large part due to the fact Poland still maintains restrictions on short term capital flows and the national bank of Poland has very high reserve cover. Part of this is because they've had such strong flows which led to very high reserves. Their banking sector is also among the healthiest in transition economies, perhaps not quite as strong as Hungary's since Hungary has largely foreign owned with very strong bank backing, but most of Poland's banking sector is privatized as well. They have very good supervisory regulation system, they still have some areas which they could improve, such as consolidated supervision and the like, but it still ranks among the very best in the transition economies. In fact Standard and Poor just upgraded Poland to I think it's BBB, and they have it on positive outlook for another potential upgrade in the near future. Nevertheless, some hazards that Poland is facing is the fiscal situation this current year has been a bit more difficult than expected and part of this is they did some massive fiscal reforms at the beginning of 1999 so some of this may be one-off structural problems with the fiscal situation. But at the same time their current account deficit is also quite wide relative to what it has been during the rest of this period, now it's in the range of probably 5-6% and usually when you're getting close to 6% that rings some alarm bells, but on the plus side, the bulk of Poland's financing of its current account deficit has been and continues to be mostly FDI and this is very promising for Poland. In fact during 1998, FDI inflows actually increased by more than 50% over 1997 despite the Russian crisis and in fact inflows reached their peak in November and December of 1998, so even in the face of the crisis they were getting very strong FDI inflows. And another aspect that makes Poland somewhat unique relative to other eastern and central European countries is that privatization has played a relatively small role in these FDI inflows. This is because Poland has taken a rather gradual approach to privatization which as we've seen with countries like the Czech Republic has probably been a very appropriate approach to privatization. And many enterprises still remain in state hands and right now they're planning a very ambitious..

...and other forms of capital inflows and that has been the case with Poland as well, but one other caveat I think that is worth mentioning is that the FDI inflows into Poland have been increasingly in the form of what are called intra-company loans so that in 1995, for example, less than 20% of the FDI were loans of this sort, but as of last year it rose to almost 50% of the FDI. The reason I mention that is that this is a potentially more volatile form of FDI than just equity investment and indeed we have seen some examples of that in the Asian crisis and I believe Indonesia in particular had a rather large outflow of so-called FDI which was actually the reversal of these loans, which contributed very much to the capital outflow crisis. So that's just something to sort of keep an eye on for Poland.

I just wanted to mention a few of the recent and forthcoming changes in monetary and exchange rate policy which could have some impact on Poland's vulnerability or not. In late 1998, the NBP switched to inflation targeting very explicitly which means that their previous semi-exchange rate targeting has now been replaced with another approach to monetary policy and also at the beginning of this year we have a new foreign exchange law which took effect which is a further step towards liberalizing the capital account and now formally makes the zloty an externally convertible currency, but they have, for this year at least, still retained the restrictions on short term capital flows. At the same time the exchange rate band has been widened further and again the NBP chose to widen it further during a period of strong inflows so it doesn't appear to be a sign of weakness or fears of losing it on the down side, but they've widened it now to +/-15% and they've also made it very clear that they're intending in the not so distant future to move to a full float. Another thing which is going to have perhaps a bit of a sharp impact on how they're going to handle monetary policy later in the year is they're also intending to lower their reserve requirements before the end of the year and as I pointed out reserve requirements are quite high right now and if they bring them down to a reasonable range to be competitive with the EU banking system that's going to be a pumping of a lot of additional liquidity into the system at this point, but it's also a very necessary thing for them to do to allow their banking system to remain. And finally they had been planning as of January 1, 2000 to fully liberalize their capital account in accordance with their OECD agreement and that means all the restrictions gone on short term capital flows and the like. Now in view of what we've all learned regarding the recent crises, I think there may be some room for them to negotiate this with the OECD to determine whether they think this is the best move at this time. On the plus side though, one of the aspects when they do this full liberalization is presumably they're going to be allowed to keep one aspect of the current foreign exchange law, which is that they can impose restrictions very quickly in what they refer to as emergency situations. Emergency situations are regarded as any very sharp decrease in reserves, a sharp deterioration in the balance of payments, any excessive increase in the money supply that they deem as owing to capital inflows and any threat to the stability and integrity of the financial system. So this is sort of a safeguard that even if they go to full liberalization they hope to be able to keep them out of serious troubles if they start to see some signs of difficulties. But it's also quite interesting to note that these emergency restrictions also have another limitation: they may not be in place for more than 6 months. So it's recognizing that capital controls usually can be circumvented by the markets over time, so this is sort of what I regard as a success case among the transition economies in handling the capital flow situation.

GK: OK. Thank you very much all the three contributors. I think they were extremely interesting papers and comments and this is a good beginning for the debate. We will resume in half-an-hour for the discussion.

GK: ...the debate of how the post-communist countries in transition of eastern Europe and the former Soviet Union are being integrated into the world economy. My understanding of the globalization is that it wouldn't make that much sense if not these post-communist transition countries because what sort of global economy would it be if not such a vast part of the world was not integrated into the global economy. But also from the presentations so far, I wonder for some time are we talking the same language and using the same criteria when there is a normative approach: that something is good or something is bad? That something works or something fails. The question is good for whom? Works from what sort of perspective? For instance when we listen to the Polish story, it was pointed out a couple of times that was managed in a good way or that has brought a good result or Polish capital market served as a sort of caution against offsetting or balancing the positions of the portfolio investors in the emerging markets. So therefore from the perspective of the institutional portfolio investors, that is the good case, but is it the good case from the Polish economic development viewpoint or the well being of the society involved, etc. As for Prof. Popov's paper I do remember and we can go back to this discussion who was saying what and what was the advice of the policy prior to the crisis, but for instance, the insistence for sustaining actually fixed exchange rate, 6.1 or so rubles against the US dollar, at whatever the cost on the side of the nominal, that is after the inflation also the real interest rate was very much the policy advice of the IMF until the August 17 crisis which is actually not the beginning of the Russian crisis because Russia is in crisis permanently over the 1990s. So the question is, where were all these good advisers and policy makers and where were also the investors prior to August 17 when actually it was supposed to be clear that Russia was facing towards another face of crisis which will be open financial crisis and an explanation that it's too big to fail somehow must be referred to, but I'm not sure it was that simple. When I asked recently a banker, that's one of the major European banks playing on the emerging markets how things are doing in Russia. He said not that good, we lost $300 million after the crisis. I then ask him how much money did he make before you lost this $300? He said, well wait a minute Greg, slightly over $1 billion, so I'm still teaching my students that they made $700 million. They didn't lose $300 million. So therefore the question of when is it good and when is it bad and from what perspective. So there are many issues, let's try refer to them. Unless anybody has what's not an argument or comment and just a question or clarification to get a little bit more knowledge from what's been said please don't hesitate to raise the question. OK. Mr. Dasgupta please.

DD:	I had a question on the nature of the restrictions on short term capital flows in Poland. What was their design, a little bit of the details, what instruments have they been applying?

NW:	The national bank requires that you get a foreign exchange permit to be able to either lend or get credits abroad for less than one-year maturity.

DD:	And the permit process is kind of given on the basis of what? Is there some kind of criteria that they'll be given depending on?

NW:	That I would have to say I assume so, but I don't know the specifics of what the criteria would be for giving a forex permit.

VP:	Thank you so much. Just to follow up on that and last night's conversation with Eliana Cardoso. Do you think these restrictions were efficient? Would you say they contributed to the low dependence of Poland on short term capital flows? Are they indications that capital control actually works?

NW:	It does appear in Poland's case that they were relatively effective. At the same time one interesting development was that there was a large increase in what are called non-deliverable forwards on the zloty which was a way of circumventing to some extent some of the controls on the zloty. But it doesn't appear that it got out of hand at any point and certainly I do think these particular restrictions have been relatively effective.

EC:	Related question. Effective in achieving which objective?

NW:	In terms of the composition of the flows: that it was oriented toward longer maturity.

EC:	Good. No contradiction.

DV:	Before I go on, could I just flag, I would like to hear this argument develop because I think it is going to be a very significant one over the next day-and-a-half and Eliana was putting a very strong position at dinner last night that this is useless to do this. It would be very interesting...

GK: Yes Eliana, would you bring your arguments to this table because not everyone had the privilege to listen to hear arguments last night. I tried to overhear, but I couldn't. But that is discussion, this is still Q&A.

DV: On a different topic. Vladimir two questions. First of all your argument is crucially dependent on the claim about overvaluation, the data for which appears in one of your tables, on page 20, but Chandra and I have been trying to decode this table and we haven't completely succeeded and I wonder if you could help us. Mr. Chairman since this table is central to the paper. (Page 20, Table 3)

VP: So you want me to comment on the table?

DV: Could you first of all explain how it's constructed and then explain the meaning of those numbers for Russia? Starting in a range of 30 and 100 in 1991 and ending up at 1.5 in 1998.

VP: Basically it's the same thing as the ratio of international, or depending how you compute the exchange rate, it's the ratio, in this case, of American prices to Russian prices. The other way to put it is this is the ratio of the actual exchange rate to the PPP rate and in this case that's the rate of the dollar in Russian rubles. So, for instance, in 1992 the exchange rate, roughly, the actual exchange rate was 200 rubles per one dollar, the PPP rate, this was right after prices were deregulated and the convertibility of the ruble on current account was introduced so it was 200 rubles per$1. The PPP rate was 20 rubles per $1, so everything was incredibly cheap in Russia. The ratio that you see here for 1992, between 10 and 45, means that 200 rubles divided by 20 rubles is equal to 10, if the ratio is 10. So Russian prices at this time were only 10% of American prices. As there was an appreciation of the real exchange rate, there was two rates: PPP rate which remained pretty much the same and the actual exchange rate which were getting closer together, right? By 1998, the ratio of Russian prices to US prices was something like 70% or the inverse ratio, the ratio of American prices to Russian prices, was 1.41 this is what you see for 1998. Now it may be slightly confusing because in another table the inverse ratio is reported, which is the previous table, which is not only for transition economies, but for all the countries. There is a ratio of actual exchange rate in national currencies in US dollars to PPP. So the indicator is the same, but for national currencies. So in table 2 on page 12, the inverse indicator is reported as compared to table 3 on page 20. So it depends how you measure the exchange rate, the exchange rate of national currencies in dollars or the exchange rate of dollar in national currencies. That's the only difference. So basically think about it as the ratio of international prices to domestic prices and this makes it much easier.

PW: Consumer prices, wholesale prices or what, which prices?

VP: These are for consumer prices. This is taken from Planecon and they follow consumer prices. They compute, for Russia I'm pretty sure this is consumer prices. For some countries this may be the deflator for GDP. This is how they do it at Planecon, they take the ratio for a particular year and then they extrapolate it using the deflators for GDP, but for Russia I'm pretty sure this is consumer prices.

DV: Do you're telling us that disregarding the very extraordinary years beginning in 1991 and 1992, there was an adverse trend from 1993 of, say 5, somewhere between 2.5 and 8, the number goes from 5 down to 1.5 so you're saying there was an appreciation of the real exchange rate of the order of 300 or 400 percent.

VP: Exactly. Actually it was more than that, 700%.

DV: From the starting year.

VP: Yes from the starting year it was 700%. Real appreciation occurred in all of the transition economies and this is the highest ratio of national prices to international prices, except for just 2 other countries: Ukraine which was pretty much in the same position and Slovenia. Only Slovenia has a higher ratio.

DV: Can I ask my second question. That's been very helpful to have that clarified. Now the overall argument. I have a Russian student that's been working on the crisis that has a different interpretation than you and I just wondered if you could comment on that interpretation. That at the center of the public finance problem in Russia has been how to raise tax revenues and the difficulty in doing so of which the virtual economy is a symptom. Avery large proportion of those revenues have come from the oil sector. and at the time of the crisis there was a catastrophic collapse of oil prices, which led to fiscal tax raising capabilities plummeting and required for the public finances to be remotely balanced that there be recourse to other sources of tax increase. Her argument is essentially that these other sources were unavailable or too politically unpopular and that the required fast reduction in government expenditure to accommodate to the falling revenues because of the fall in the oil price wasn't available. So the only alternative was to allow the exchange rate to fall so as to raise the ruble value of tax receipts that could be raised from the oil sector.

VP: OK. Well, if you would have a look at page 18, figure 7 there is a figure which shows the dynamics of government revenues and government expenditures and this is true, government revenues were falling rapidly, however the major fall occurred before 1996. Since 1996, government revenues are pretty stable at the level of 30% of GDP so there was no major change in government revenue as a percentage of GDP at that time and actually in real government revenues, because in 1996 GDP virtually stopped falling, previously it was falling by something like 15%, but in 1996 it was -4% and in 1997 it was +0.6%, so the real value, if something happened in 1996 and 1997 that was some stabilization in government revenues, in real terms and as a percentage of GDP. True the government expenditure was greater, there was a government deficit on the magnitude of 5-7% of GDP, however, this deficit was not increasing. Now what really matters is if this deficit contributed to...well first the deficit was not monetized, so this is excluded. The deficit was financed by foreign borrowing partly and by domestic borrowing. So partly these were the borrowings of international financial institutions and partly these were the borrowings in the form of short term securities sold mostly to the Russian banks, something like two-thirds of the securities were sold to the Russian banks, if not more than that and only one-third and maybe less, the exact data is not available because of gray schemes, one-third was sold to the foreigners. Now with respect to the debt. You can explain the crisis if the debt was really mounting up to the point that investors questioned the ability of the government to service the debt. Now usually the country risk, the risk whether the country is credible or not in borrowing the funds from international or domestic market, this risk is given by the difference in the interest rates on borrowings in foreign currency abroad and inside the country. Now this difference was not higher than in Malaysia or Mexico, well slightly higher. The country risk would be given by the borrowings of the government...I think I...I got it wrong...by the borrowings of the government in the international markets and by the interest rate which is paid by the prime borrowers. So this difference was actually negligible. It was 6% for the prime borrowers, it was something like 10-15% for Russia at various points of time, so it was not considerably higher than for the other emerging market economies before the crisis. So no one questioned the ability of the Russian government to service its debt, international debt or domestic debt. What was questioned was the ability of the government to maintain the exchange rate of the ruble. Why? Because the difference between the real domestic interest rates in ruble terms and dollar rates was huge and getting greater and greater up to the point it exceeded 100%. Domestic interest rates in dollar terms if they are converted to the dollar terms. Then they are over 100%. The government was borrowing at 150%. At one point the returns on the short term government bonds was 150% under the condition that dollar was stable. So the dollar returns of the foreign investors that were buying ruble denominated short term government securities were over 100% because inflation was running at only 6% and the dollar was stable so the dollar returns were as high as that. Now this is the currency risk. Currency risk is given by investment into the ruble denominated securities and by investment in Eurobonds. The government was selling Eurobonds for foreign exchange and the returns on the Eurobonds were 15% and the returns on the GKOs in ruble denominated interest were 150%. Which tells you something about the currency risk. So there was no country risk and no one could have imagined that there would a default. There was absolutely no reason whatsoever to proceed with the default. They're still looking for the person that first pronounced this word in Russia. It's known who's making the decision, but they're still looking for the person who first suggested this kind of a decision.

GK: Of course they won't find the person because for somebody who is familiar with the Russian language, the Russians they use for the English word 'default' the world 'default' only written in the Russian Cyrillics and they believe it is an old Russian word. Rogelio Ramirez De La O, the floor is yours.

RR: Vladimir I am sorry to bring you back to the table, but just help me understand and make a comment. Argentina is supposed to have, according to this table, the same real exchange rate relative to PPP than Russia. How do you interpret this? Please make a comment on that.

VP: It seems like Argentina is not doing greatly so it is something that in this respect is quite consistent. Now there is one group of countries in the table 2 that actually has the exchange rate pretty close to PPP and these are oil exporters of the Middle East and this is obviously the Dutch disease. Now another exception is Argentina and I'm not knowledgeable enough. Actually I would like to hear what is going on in Argentina, but it seems to be an exception rather than the rule. Now the only other insight on the issue is that the Argentinean economy is smaller than the Russian economy and for the small economies it is easier to have flexible prices in the sense that prices respond to the fluctuation of the world price. So Argentinean economy is more connected to the world market. I don't know the exact indicators for the share of exports as a percent of GDP, I am sure they are much higher than in Russia. Once you are connected to the world market, say you are Hong Kong or you are a Baltic state or Bulgaria where the population is only 9 million people, you basically can have a currency board because your prices are already flexible in a sense that they respond to world market prices. If you are the size of Argentina and even more so Russia, then part of your prices are not connected to world market prices so the currency board which transfers all of the external shocks into the fluctuation of the money supply through the fluctuation of foreign exchange reserves may be too costly in the sense that it may be repressive. It may actually depress the national economy. Once there is an outflow of capital and a reduction of international reserves and money supply, it may have a greater real effect than for an economy the size of Hong Kong. Now Argentina is in between Hong Kong and Russia in this respect and I think is the only insight I have on the issue, I'm just not knowledgeable enough to discuss this case in detail.

GK: Mr. Ross McLeod please.

RM: Thank you. Also a question for Vladimir. I would just find it helpful if you would run us quickly by the monetary history of what went on in Russia. I don't have a feeling for what was happening to money supply during this period. You said that the budget deficit was not being monetized. I'm wondering if money was growing rapidly and if so what was the source of its growth if it was not the budget deficit.

VP: It was the government budget deficit for the period 1992-1995. As a matter of fact, even earlier, since Gorbachev times. In 1987 the monetary policy became very loose and monetary policy contributed, there was a government budget deficit, so in a sense the central bank, at that time of the Soviet Union, was issuing credits to the government. At that time there were no government bonds so these were direct credits of the central bank to the government and one should say that the central bank was more responsible than the government because the central bank tried in the old Soviet times since 1987 when the government deficit ballooned the central bank tried, and the central bank was forced to issue, formally it was independent even in the days of the former Soviet Union, but of course it was controlled by the government and by the party, and it was forced to issue credits to the government, but it tried to cut the credits to the private sector. So for 1987, the policy was still sort of reasonable, monetary policy was reasonable, but then the government deficit was growing so fast that it was not possible to cut the credits to the private sector so the money supply started to increase. So this contributed first to the increase in monetary overhang because prices were still controlled before 1992 prices were controlled so there was a gap that increased between the demand and supply of goods at fixed prices and this gap was increasing and increasing, until 1992 and then in 1992 when prices were deregulated they jumped immediately 3.5 times, in January 1992 it was 250% and it happened basically on one day, January 2, 1992, January 1 was Sunday so from January 2 prices were deregulated. After that inflation and monetary policy was very loose and inflation was very high. I can go deeply into, which I wouldn't do now, but I just want you to know I can tell you how monetary policy interacted with nonpayments, because the problem of 1992-1995 in Russia the tightening of monetary policy produced all the time the huge increase in nonpayments, trade arrears.

For instance, prices increased in the first half of 1992 10 times, though money supply increased in the first half of 1992 only 2.5 times. What accounts for the difference? The difference is the increase in arrears. At that time there was a saying that in Russia there are three ways to pay. One is in rubles, another is in dollars and the third one is not to pay at all, which was the accumulation of trade arrears and this was more important since summer of 1992 than payments in rubles or dollars. So the amount of trade arrears was comparable to the size of money supply. So I can speculate about it and describe the situation. However, let me just say that before 1995 the monetary policy was very loose and the fluctuations in the money supply were reflected in the fluctuation of prices with a lag of three to four months. Since 1995 inflation was brought down and this was because of the tight monetary policy, because when the exchange rate was pegged the central bank had to proceed with a tight monetary policy and since that time, I think the increases in the money supply was something like say 20+% in 1996 and even lower than that in 1997 and this reflected, this contributed to the decrease in prices. Money supply in 1998, from January to August, before the crisis, it did not increase at all in nominal terms, not to speak about the real terms because inflation was increasing, so in real terms it actually shrank. There was a demonetization of the economy going on in 1998.

GK: Mr. Narendra Jadhav, please.

NJ: I have a question and a comment on the Poland paper. First the comment. Figure 13 on page 33, which gives the FDI developments to selected emerging markets. I find that the picture given is somewhat misleading for two reasons. One is that China is conspicuous by absence. If you look at the numbers here, Brazil, which has the highest FDI during 1999, is about 19 billion while China during the same period had more than 32 billion. So probably inclusion of China would give a more representative picture. Second given the choice of years here, from 1996 to 1998, is somewhat unusual because two out of three of these years are abnormal years because of the Asian crisis, 1997 and 1998. If you look at these same countries for a larger period during the 1990s one will find that Poland is not among the top 10 performers. Coming to the question , it was mentioned that the inter-company lending has imparted a sense of greater volatility to the capital flows to Poland. I would like to know how this happens and what is the mechanism behind it and to what extent has it adversely affected the FDI flows to Poland. Thank you.

GK: Eliana is that the same issue?

EC: Yes, it's a comment on the fact that introducing China would give a better view of what's happening to FDI. I think it's well known that at least one-third of FDI to China is round-tripping, so you are about to distort the message that Nancy's sending here rather than clarifying it.

NW: Also, regarding the exclusion of China, I actually do have a footnote, footnote 32, which explicitly says I have excluded China from this particular graph because originally I had it in, but China's flows were so overwhelming it basically put the others right down along the margin and you couldn't see any distinction. So it is really just more of a presentation issue that it would have been possible to see any differences.

EC: Presentation saved you.

NW: Exactly, for precisely your reason as well. You had another question.

NJ: The years 1997-1998, why have you not taken the entire 1990s, rather than focus on 1996-1998?

NW: Largely it was because, as I pointed out, Poland had a very different experience with capital flows over the course of transition and, in a sense, I was emphasizing where they stood in the more recent years, so it was actually a choice of emphasis on my part, because if you use the entire period, Poland had not been attracting much interest in the early years of transition. In your other question on inter-company loans, it has not, so far as I can see, induced greater volatility right now, it's more an issue that it has the potential to because generally such loans can be of a very short term nature and there are no restrictions in Poland on short term loans of this type, only of this type. As I pointed out, in some of the Asian countries, Indonesia in particular, it did turn out to be an unexpected source of volatility. So it's more of just an issue of keep an eye on the developments on this, rather than just looking at FDI as carte blanche, as covering the current account and there are no risks to volatility because we had so much FDI. It's more an issue that I think needs to be kept in mind when we discuss FDI as a source of low volatility.

GK: OK. So now we are moving to the discussion. Prof. Pyo please.

HP: Actually in case of Poland, I don't know whether we can legitimately exclude Chinese statistics. I don't know whether the debt or FDI statistics is wrong, but exclusion by itself is not going give us any full picture of FDI inflow. So one way or the other, I think the consideration of China explicitly is almost inevitable, for the discussion of this kind. That is my first comment. The second comment is related to policy issues that Dr. Wagner implied toward the end of her paper. In her paper there is no explicit trend in trade account or current account in the case of Poland. There is a mention that macroeconomic stability has been quite sustainable and therefore leaning toward OECD prescription of opening up even short term capital account beginning in the first quarter of year 2000 and so forth. I'm not sure if that policy prescription or recommendation is valid at this point because I cannot see the trend in external accounts other than FDI movements and I think that in the case of South Korea's experience and any other country's experience relying on positive elements of FDI is a very dangerous prescription for opening up the capital account and I think at really trade account statistics and whether or not trade surplus has been sustainable over a reasonable period of time. Therefore the argument of opening up short term accounts starting from year 2000 does not seem to be well justified at this moment in the case of Poland. So I would like to listen to your comments on that.

GK: Mr. Chairman please.

RG: Thanks Greg. I said in my opening remarks I thought we'd get a lot out of the comparison between eastern Europe and the former Soviet Union and east Asia and the presentation we've already had have already raised some important hypotheses when viewed from the experience of this region. I'd like to put down a couple of hypotheses that emerge from these papers and the experience of the countries we work on here that we should keep in mind over the next couple of days. There's a story in the Poland paper about the importance of the steadiness of policy, the story that the cut in interest rates which, over the coffee break Nancy said to me was associated with a bit of a monetary easing, but not a substantial monetary easing and the associated increase in incentive to invest capital inflow and some appreciation of the exchange rate and the story we can gather from that is clearly one of steadiness of policy and certainly not a tightening in response to anxiety about external conditions being helpful to maintaining capital flows and maintaining financial stability. In the Russian case that Vladimir's has described to us, one bit of the story that came out more strongly in the exchanges just now than before is a story of a pretty strong tightening of monetary policy in the lead up the crisis. If nominal money is held constant right through 1998 and you've got a continuing inflation, albeit not as virulent as earlier, but a contraction of real money supply. Put that sort of contraction of real money supply on any economy and you get recession. That's unsteady macroeconomic policy. Just putting a few of the western Pacific stories beside that to round out a hypothesis. I don't want to draw conclusions from them now, but it's something I want to come back to tomorrow afternoon. In Indonesia and, at least superficially, there are some similarities between the Indonesian story and the Russian story. Big weaknesses in institutional fundamentals: weak banking system, non-transparency, poor regulation and in the period leading up to the crisis, some, but not huge, in either case in the several years prior to the crisis, not a huge appreciation of the real exchange rate, but some; part of the cause in a slowdown in export performance, but macro conditions yet not pointing inevitably to imminent crisis from the normal way we look at these things and yet in both cases you get suddenly a great plunge in financial asset values and real economic activity and I think there's a story there about unsteadiness in policy, partly in response to worries about vulnerability to financial crisis precipitating crisis. Just take a few other countries from the western Pacific that can be drawn into the same sort of comparison, if you look at Australia, New Zealand and Canada and...

CA: ...work in changing the maturity structure of debts as to make the economy resilient to the contagion coming from the Asian crisis. Again, Istvan's point on Hungary supported the point, although he did not directly mention it, he emphasized the soundness of the banking system, at the same time he highlighted that Hungary had short term capital controls. Maybe helped them maintain the currency band and achieve stability and Eliana objected to the issue.

EC: That I don't remember.

CA: No. You said that capital controls don't work, right?

EC: Not today.

CA: Somebody quoted you earlier...

EC: Right. I'll come back to that.

CA: All right. Now, there is plenty of evidence coming from various other studies, Chile, Colombia suggesting that capital controls as a macroeconomic tool work in the short run. Now my general impression is this: when people look at hard data, you find evidence in support of the view, when you simply speculate and think about...

EC: You're killing yourself.

CA: Please wait. When we simply speculate the possibility of manipulating transactions you tend to become skeptical of this issue. My evidence I will discuss to day also supports the general view based on hard empirical evidence. Now, I think the confusion here connects to this fundamental factor. People do not make a distinction between shifting money out of the country by manipulating trade transactions and investing overseas using domestic savings. These are two entirely different things. When it comes to trade transaction manipulation, yes, there are various ways of shifting money out of the country, but here we are talking about controlling institutional savings. Even George Soros in his new book has clearly mentioned that his activities in the global capital market are significantly affected by national control. Simply because it takes many months for a speculator, if he wants, to forge a link with the trade to manipulate the thing. They make money through very quick decisions, those quick decisions are affected by Tobin taxes and other controls. They cannot go through an export and manipulate transactions. Therefore, there is a clear need for separating trade-related money shifting and controlling institutional investment. When it comes to institutional investment. The available evidence everywhere supports the view that in the short run, capital controls are effective as a macro management tool. I'm not supporting the view that we should continue with capital controls, but in a crisis situation, they have a role to play and Barry Eichengreen in his survey of world monetary history Globalizing Capital, 1999, he clearly makes the point that as a macro management tool capital controls have worked everywhere in the short run. Thank you.

GK: Thank you, Mrs. Cardoso, please.

EC: I want to make two comments. One is on interest rates, the other is, of course, on capital controls. On interest rates, I believe it has to be true that the response of policy to an external shock will have to be different depending on the country context and its currency regime. To believe that Brazil could have responded to the currency attack in mid-January this year by lowering interest rates would be insane. What you would have seen would be the vicious circle of devaluation and inflation. So even if in some circumstances, Australia or Poland, the right policy is to keep to your monetary policy and let the exchange rate move, you are not suffering a major currency attack, as Brazil was suffering where it was forced to change the regime and that it has to build credibility in a completely different way. So I wouldn't advocate cutting interest rates under any circumstance and in any country, at any point of time.

DD: Is the key difference between Brazil and, say, Australia is that because of the difference in exchange rate policy or is it deeper than that?

EC: No, I think it's deeper than that. I think of what you had in Brazil was a currency attack and there was nothing like that in Australia. Australia was having an external shock and it was adjusting to the external shock, taking advantage that it had a floating exchange rate and could let the exchange rate accommodate part of the shock and thus didn't need to respond to these external shock by increasing interest rates, in the case of Brazil you had a currency attack. Nobody trusted this economy anymore, so you had an overshooting of the exchange rate and you had to respond to this overshooting by creating the impression that monetary policy was not going to let the inflation rate explode and thus you would not see the vicious circle of another devaluation and further inflation going on and on. I will come back to that issue when I discuss the Brazilian case this afternoon.

On capital controls, I would like to spend 5 minutes rather than making a very brief comment. On Chandra's point, I think you have to distinguish between capital controls on inflows and outflows and when you talk about emergency response, you are certainly talking about an exception to most of the discussion that takes place nowadays. Nowadays there is a complete distrust of controls on outflows because people find ways, as you mentioned, through trade manipulation to avoid the control. Yet in an emergency you may make use of them and it may be effective in the very short run. So I am not disputing your views. On Nancy's case of Poland. Yes, I think the evidence for Poland is consistent with the evidence for Chile, Colombia and Brazil that have used capital controls during all the 1990s and the evidence in those countries, as much as in Poland, is that, temporarily, the controls can change the composition of capital. Yet, I find the evidence not fully convincing and one of the reasons is the table you have on FDI in the 1990s. You have 28 countries. For 14 of those countries the ratio of FDI to GDP was. by the end of the 1990s, above 3 percent of GDP. In those same countries, at the end of the 1980s, early 1990 those ratios were below half a percent of GDP, very close to zero. So you have seen an increase of more than a hundred percent in those flows to those countries, independently of capital controls being in place or not. I suspect that privatization in the 1990s had more of an impact on attracting FDI than any controls used in any of those countries. Let me talk a bit more about the empirical evidence for Chile, Colombia and Brazil because I have followed these issues very close and I have read everything that has ever been written on the issue on those countries on capital controls. I have looked at the evidence carefully and I have done work on Brazil myself. What does the evidence show? Most of it, using VARs, vector autoregressions, most of them show that temporarily there is a change in composition, but they don't control, in none of those studies, for privatization and some of the other things that were happening at the same time. The evidence for those countries also show that controls did not slow down total flows of capital, that it did not create independence for monetary policy, even though you can observe some interest rate differentials between those countries and foreign countries, it isn't clear that it has been useful in achieving its major goal which was to slow down those capital inflows and thus allow a reduction in the costs of monetary sterilization that all of those countries were forced to take in the 1990s. So in this context, I think it is important to ask two questions. What is the objective of controls and have controls achieved these objectives? I would believe that when we talk about when we say we need capital controls is because we think that capital can go from very big inflows to very big outflows, causing crisis. So when we talk about putting on controls, we are actually trying to achieve a slowdown or to put some sand in the wheels of flows and thus avoid crisis. So the question is, have capital controls reduced those massive flows? Have they actually been there to avoid crisis in the countries that have used them? And the answer is no, they have not. In the case of Brazil you had controls during all the 1990s and you ended up with a major currency crisis in the mid-1990s. In Chile you had controls and you are undergoing now a big crisis. The economy has stopped growing since late 1998 for three quarters in a row. A reason why it stopped growing is because capital inflows during the 1990s have financed fantastic current account deficits of more than 6% of GDP, for years and years in a row. The moment capital stops, independently of its nature, independently of the maturity of the capital that's already in the country, you have to reduce the current account deficit because there's no finance coming in. Even if the maturity of the capital that came in before is 50 years, if no new capital is coming in and you cannot finance a current account deficit of 6% of GDP, you are going to go through a contraction. That's what I call a crisis and capital controls have not been an answer to that problem. If I look at Colombia, the other country that is always used as an example of effective capital controls, look what happened last week. We are exactly at the border of the next crisis in Latin America. The exchange rate has been forced to be devalued by more than 10%, you have seen a major contraction in the economy. Unemployment is 20%, the highest level ever seen in Colombia. Capital controls didn't work. You may say, ah it didn't work because other things were done wrong. Sure. But if other things were done right you wouldn't have needed capital controls. So that's why I argue capital controls are not the answer for the crisis. I don't say that in an emergency you may not have to use them. Maybe. Temporarily, they may be effective. But they exactly are not the answer for massive capital flows because they don't stop them. They did not stop them in the 1990s and thus I'm not convinced they will in the future. Why not? Because they're used by countries separately. It's not a universal policy. And that means capital can avoid those controls by moving operations offshore. Even in Chile, where controls were more perfect than any other country because they were across the board, every type of capital, any money coming into the country would have to have a share of it in reserve. Even in Chile, there is a striking evidence of operations offshore to avoid the capital controls in Chile. Right? So theoretically we can build a very strong argument for a Tobin tax across all countries. Empirically it's not going to work because the US and Germany are opposed to it. So if the two biggest countries say no, as much as we can make a theoretical case in favor of a Tobin tax for every country, we may not be able to implement it for every country, we cannot have effective capital controls.

GK: OK. Now I will take the floor and restart from where you have brought this argument. This is the point. You are talking a lot about the conflict of the interests. Yes? You are from the Fund and the Fund is run by the USA, G7, Germany, etc. and you said that as long as USA and Germany will not accept this sort of policy, it's not going to work. I would challenge you. I would challenge it and I don't like all this way of reasoning because the policies of the countries involved, whether it's Russia or Poland, Brazil or Chile, is not to be subordinated to the interests of the United States or Germany or G7, but to the interests of long term development of these countries and therefore, one must see all this debate within the framework of the means and ends of the policies. Neither the capital control not the capital flows, inflow outflow, are the ends of the policies and I do not expect, as you do not expect, and here we are in full agreement that the IMF or US Treasury will change attitudes towards these swings in short term capital, the capital control, not because we differ from Larry Summers, we'll differ until the end of our lives because he is American Treasury and I was Deputy Premier and Finance Minister of Poland and yet we don't differ that much because we are from different groups. We differ because we have different interests. So what's my interest and why Poland has succeeded? Because we did what we wanted to do, aiming for the end of the policy, which is sustainable development, not at the means of the policy, which is, for instance, short term capital liberalization. Always (others) insisted to do so, to do faster, to do more, etc., etc. and one had to prove a strong political will: no. Because it's not going to work on behalf of the long term development of our economy. And of course there is this strong lobby, using influential professors, using corrupted media, using corrupted policy makers, using international organizations, using all the means just to convince that the finance minister is crazy, that he should give to the total liberalization because this is the music to the ears of everybody. So all of the workers are going to the streets to strike in favor of short term capital liberalization, despite they don't have an idea about what we are talking about. So one must be able to fight with the insistence of the IMF, with the editorials in the New York Times, with the lobbying of portfolio investors, that is the big investment banks, which of course not are the bank from Czech Republic, or from Hungary or even from Russia, they are the banks from G7 basically. Not even from Australia, there is a little bit, but Australia is more in the Pacific Rim, not in eastern Europe. Therefore, the political component of the debate is always missing from this analysis and of course this is not the subject of our conference, but being on both sides, in the Fund and in the Polish government, at the universities, at the streets and in the parliament, the political economy of the process of liberalization is some times much more important to understand what's going on than these technicalities, which of course are necessary to be logical and literate in all these issues. What we did in Poland, I think, has worked to the extent because we simply didn't allow our economy to be exposed to much for the change of the mood of these short term speculative investors, so we didn't allow too much of an inflow and, of course, we don't try to restrict the outflow of the capital because it is corrupting the economic system, people and investors are trying to find a way out, how to get the capital outside, but since there were some restrictions or regulations, despite the insistence of this neo-liberal orthodoxy that we shouldn't go along this line, there was not yet much of an inflow of short term capital, therefore, does it change the structure of the inflow of total capital. In a sense yes, I agree with you that it doesn't shift the capital that would inflow otherwise as short term into the long term, no it doesn't work this way. But simply if the short term capital is not coming, the relative weight of the long term capital or direct investment in the statistics is stronger. Our strategy in Poland was very favorable or friendly to the encouragement of an inflow of long term capital, especially direct investment. Now you are saying this is also a risky game, yes it is a risky game, but there is much less risk than short term capital. You can't change the inflow of the FDI by the strike of the computer key, as you can do if there is no control of portfolio capital. So you can look in the dealer rooms in the investment banks, I have been to very many of them, JP. Morgan, Morgan Stanley, etc. There is the monitor with the young fellow who has just graduated from Yale School of Management or Harvard Business School, just playing the game. It is completely irrelevant for him if it is Poland or Turkey, is it Argentina or the Philippines, this is just emerging market, that means the place to make a good rate of return and he is unfortunately he is very poorly educated in development economics and he really doesn't understand where from is this market. If there is a rate of return of 20% in real terms, 50% in real terms, in dollars, as opposed in Russia, at the same time the economy is shrinking, the output is shrinking, competitiveness is falling, etc. This is just redistribution. We do not have nothing of this capital because if it is not contributing to the growth of the economy it is just simply sucking the blood of the economy and from this perspective, this foreign inflow of the capital did play a part in the Russian crisis, unlike in Poland where we were very favorable to inflow of FDI, long term capital and not that favorable towards short term capital. Now you were saying, and that is a very good point, I overheard it last night and you repeated it last night. That actually this game with the inflow of FDI is not that good because when it stops the crisis is there, as for instance, in Chile. I may understand it, but this is not the crisis, what I don't understand with your argument is that what you're saying that if there is 6% current account deficit, which is matched to the extent in Poland in 93% by inflow in FDI and the FDI for whatever reason stops, there is the crisis. No there is no current account deficit. The inflow of the FDI is creating and financing this deficit so if there is no inflow of FDI there is simply no deficit. We have this current account deficit in Poland now, 4,5,6%, that is financed by an inflow of FDI and if in 2000 there is no inflow of FDI, you do not have simply this 4,5,6% current account deficit, but in the long run...

EC: This is not the general rule, it may be the case with Poland.

GK: Well, OK, but if it is not the general rule then do not make a generalization from your observations, because again it depends on the specific conditions and the policies being applied within the framework of these specific conditions. Last comment here is that the long term, sustainable development strategy for development how I manage it in my country, that actually attracting the inflow of FDI is only supplement to the domestic savings. All of these countries, Hungary, the Czech Republic, Poland, the most successful post-Communist countries, as well as Asian countries which are being affected by this syndrome much more, and maybe China, must learn the message from the crisis which has not happened yet. That they cannot rely on the inflow continuing forever of FDI. There maybe the same problem and maybe that is the beginning of the crisis after the Chilean recent developments. But if this strategy is not contributing to growing the marginal propensity to save domestically and to invest, if there is not a policy favorable to domestic capital formation, these strategies are going to fail and that is only the beginning of the Poland story. You said there are 4 periods, I am prepared to say there are three basic periods in Poland. The beginning transition strategy with the shock without therapy, then there was the therapy without shocks 1994-1997 and now a necessary cooling down period to the economy, but there may be a fourth period when this inflow of FDI recedes and it must be offset by higher domestic savings and if this strategy will work, therefore the shrinking inflow of long term foreign capital can be matched by growing domestic savings and growing domestic capital formation and that is the only way to avoid the crisis which has not yet occurred in countries like Poland or Hungary of Czech Republic without claiming who is doing better that's not the competition, to say we are doing relatively better than anybody else and if one is taking a look at Poland from Russia it looks like part of the west. There is the very good that one economist, expert is flying from London to Moscow and another is flying from Moscow to London and both for technical reasons land in Warsaw and they were convinced they came to the final destination.

EC: Just on the savings. If the current account deficit is growing, the savings are declining. Right.

GK: Right. If the current account deficit is growing, it means that we are investing foreign savings. That is current account deficit.

EC: Current account deficit is the difference between your income and your expenditure.

GK: Fine.

EC: So if you spend more than you earn, you have a current account deficit. If you're current account deficit is growing, your savings are shrinking, not growing.

GK: You mean...Anyhow, the challenge is to raise domestic savings and that is the only long term answer for all these policy challenges. Prof. Djiwandono.

SD: We should listen to Nancy's comment and I have a short reply. I intended to join the discussion, but I just want to make a short comment. I guess what we have been learning from the crises is seeing if there is some kind of similarity, some typology, but they are distinctly different from one case to another. In the case of capital control, if I can offer some kind of comment on how it works or how it didn't work, etc. First on the story. Actually on the story. It was disheartening for central bankers in Asia that, prior to the crisis...

GK: Please keep to these countries.

SD: But on the capital control itself, if there is any claim to be working, it seems to me lately with respect to Malaysia it's partly there is no competition with the others. In the past we had this so-called competitive devaluations.

GK: I'm sorry, but we must stick to these countries.

SD: But on the capital control itself may comment itself, if it working, it is because the other didn't follow up there, so you are benefiting from the liberal environment, but you make your control for yourself.

GK: Thank you, speakers now and each be as brief as necessary. Nancy first:

NW: OK just briefly about something you had said as well regarding the FDI flows and the current account developments, as a matter of fact, a rough rule of thumb that had been given for Poland is that for each dollar of FDI was related to 80 cents worth of imports. So as FDI inflows dry up, presumably, so will the current account deficit problem be sharply reduced. I do believe that Poland has followed a successful strategy with the degree of capital account liberalization they have taken so far. My own personal view is I am hopeful that they will not necessarily go forth with full capital account liberalization as of January 1, 2000 because although, as I pointed out there banking sectors is one of the strongest in the transition economies, it is still at relatively early stages of development compared to the developed economies and for this reason I am not sure it is quite ready to stand up to US and EU standards for capital flow liberalization.

GK: Istvan.

IA: Yes. The question of what we can do with short term flows and why restrictive policies might be counterproductive. Of course, if we create distortions, increase the rates, then we increase the interest premium we generate for the flows. Actually the problem, what you really have to cope with is not directly the short term flows, you have to prevent unsustainable projects to get financing. What type of problem is this? Of course if the budget is running high deficit and finance unsustainable projects then just to be able to finance the budget you will have to increase interest rates and you will be confronted with the problem of inflows. But if you fix the internal environment. If you fix the banking system, which basically intermediates these funds to the project, if the projects are sustainable then short term or long term capital is welcome. That's why I would conclude the Hungarian experience by saying, of course for short term periods you might have to rely on controls, but this is not something that solves anything. This might give you some relief to concentrate on another aspect of the problem. Of course, making the exchange rate volatile again may help you reduce the incentive of the capital to inflow, but it will have cost implications to other sectors, so all of these things boil down to the basic issue of what type of institutional set up, what type of regulations, what type of banking system and behavior is that which will ensure that the projects that get financed will be sustainable. Thank you and the last word to Prof. Popov but that doesn't mean the last word belongs to Russia.

VP: It looks like that. If I can shortly comment on the topic that was raised by Ross Garnaut and this is the appropriate policies under the particular conditions and of course policies are supposed to depend on the diagnoses, the prescriptions and I think the parallels between Australia on the one hand and New Zealand and Canada on the other that tightened the monetary policy and Russia, New Zealand, Canada and Russia was absolutely justified. In those countries the problem was either macroeconomic imbalance like Russia, Russia created without any reason, without even external shock. Created its own shock, not an external shock and tightened monetary policy and maintained the overvalued exchange rate. And in Canada and New Zealand, there was a shock and the government responded with a poor macroeconomic policy, however the other comparison would be between Indonesia and Russia and this would be not so much justified since the reasons for the crisis were absolutely different. In Indonesia this was neither macroeconomic imbalance nor the external shock. Basically this was the over extension of private credit and the collapse of this over extension. So, in the papers, all the currency crises and this is what I do just for myself, are divided into three types. The first one is macroeconomic crisis which is caused by the inconsistency of macroeconomic policy objectives. The second one is the government debt crisis, macroeconomic fundamentals are perfect, but the government debt accumulates, there is a debt crisis, which as a side effect hits the currency. Then there is a private debt crisis and this is what occurred in Indonesia. The over extension of credit by the ICB and finally the collapse of credit. As it turned out, the private sector does not know how to internalize risk. The government fundamentals were perfect but the private sector still over borrowed and overlended. Now in this case, no macroeconomic policy change is appropriate. If macroeconomic policy was reasonable, it was supposed to stay the same. The exchange rate is supposed to stay the same and the tightness or easiness of monetary and fiscal policy is supposed to stay the same if they are OK. What is supposed to be done is to cure the banking system. Now since it is not possible to do it immediately, the macroeconomic policy has to absorb part of the shock. So in this case some easing may be advised. However, there is no case like that, but there could have been a case in east Asia when the credits would be issued to the country in advance and these credits would be used to restructure the banking problem.

GK: Thank you very much. Definitely the major conclusion from this session is that what really matters the most is the policy. But the good policy can only be based on good theory and if we are able to push forward with this debate that will be fine. As for Russia I think it is definitely the case that the policy has failed and let me end with the story of how it has failed. The professor is asking his student how is it possible that just one person has committed so many mistakes on one page of paper and the student looks at the professor and says that was not done by one person, my father has helped me. Thank you.

LATIN AMERICA

DD: We have two cases today. The first one on Brazil and Eliana is going to talk about starting with the causes of the crisis and then extending to some of the forward looking issues and messages there and then we have Rogelio who'll be talking about Mexico and I guess also starting with causes of the crisis, but then I hope drawing some parallels and maybe if you would draw some questions about what we heard this morning and take us through a little bit some of the capital control issues. Why Latin America for example is as a region very strongly against capital controls. I have some views about why that is, so... but I guess its more political at the end of the day. So without further ado.

EC: Everything is politics.

DD: Everything is politics.

EC: Let me fist thank you Ross, Marc, and Dipak for the invitation I am truly delighted by the opportunity to visit Australia. Let me pick up on Dipak's suggestion that I should draw some comparisons and I think I see some common macroeconomic themes between Brazil and Russia. I think before the currency crisis in Brazil we also had overvaluation that was complicated by a very quick debt build-up, and I am going to look at this issue more carefully during the exposition of the Brazilian case. I also find it interesting to call attention to differences in the size of countries and the kind of issues countries are going to face. These can either be complicated or facilitated by their size. And again there is a parallel between Brazil and Russia. They are more or less of comparable size and that means that the absolute values of flows to those countries are very big and they are big relative to other smaller countries. And that certainly poses questions when it comes to the slowdown of capital flows. How much the countries are going to suffer in relative terms, but it also opens opportunities for responding to crisis more quickly. The economies are more diversified and then they tend to be more resilient to shocks. Finally I would like to say it is very difficult to discuss what are the policy options open to a country without taking into consideration where they come from. What is the economic history of these countries and what is the context where the choices are going to be made. And this is particularly clear in the case of Brazil, so we can not look at what has happened and Brazil in the 1990s without asking where was Brazil coming from. And Brazil was coming from the debt crisis in the 1980s. A debt crisis that left not only Brazil but all of Latin America to be stagnant during the 1980s. And the outlet in the case of Brazil to the debt crisis was accommodation and it was accommodation through inflation. So until 1994 we had extremely high inflation rates in Brazil. Actually on the month before the Real plan, July 1994, the monthly inflation in annualized terms was up to 4000% per year. And inflation had served to disguise Brazilian problems in different ways. First of all we have had long discussions about the impact of inflation on deficits and most of the discussion has centered around the "Tanzi effect". The idea that when inflation increases real tax collection goes down and the deficit tends to increase, but what we have observed in very high inflation economies is exactly the opposite effect. That is an increase in the inflation rate reduces the size of the deficit in relation to GDP. And the reason why this is so is because inflation has a very important impact on expenditures. I mention here a few of those effects and what happens is that in economies where inflation is very high you tend to underestimate the amount of fiscal adjustment that has to take place when you stabilize the economy because the deficits appear smaller than they actually are. The structural deficit or what I call the virtual deficit, the deficit that would exist if inflation wasn't there tends to be bigger than the one you observe when you have mega inflation. And the reasons are the following: First, the effect on real interest rates - when inflation is very high real interest rates are lower than they tend to be when you stabilize. When you stabilize inflation disappears, real interest rates become higher than they were before and that means that expenditure with interest payments tend to increase when inflation disappears. Second, we have the fact that if you have very high inflation and government delayed payments of wages and salaries as it used to do in Brazil you get a big cut in your real expenditures. If inflation rate is 1000% per year as it was in the 1990s in Brazil until 1994 a delay in 15 days of your payment reduces real payments in a significant way. In third place what you observe is that countries that have suffered from inflation for many, many years have learned to deal with delay in tax payment. Usually you reduce the lag in tax collections and you impose fines on delayed payments. So your real tax collections tend to stop declining when inflation increases. Still you keep the same kind of budget arrangements when it comes to expenditures. You make expenditure allocations in nominal terms when inflation increases your real expenditure increases and that's one of the reasons why the budget deficit, the real budget deficit, tends to decline when inflation increases. Finally, in countries that have important public banks as was the case in Brazil inflation is high the banks enjoy a very high inflationary revenue. And this inflationary revenue is used to finance subsidies given on credits to different activities in the economy. When inflation disappears if the subsidies aren't cut and inflationary revenue is not there anymore to finance those subsidies it means that your deficit is going to appear higher than it used to be. So what happened in Brazil is that in 1994 by the time you had these very high inflation rates the deficits tend to look as those they were very small and you even had the illusion that you had a surplus rather than a deficit. So, by 1994 the year when you start the stabilization programs you had a primary surplus that was about 5% of GDP. Interest payments were about 4% of GDP. So, the economy despite the very high inflation rate had a budget surplus of around 1%. After the inflation disappeared the deficit became much more transparent than they were before and not only did the deficit become more transparent you didn't have any kind of the promised adjustments that were made in 1994. Your primary surplus disappeared; you had managed to stabilize the economy by the use of very tight monetary policy and the use of the exchange rate as an anchor and that means that your interest rates will increase dramatically to 8% of GDP. So a surplus had turned into a deficit by 1998. So what you saw in Brazil then was a response to a persistent inflation that was also a response to fiscal deficits that were structural, that were if you were measuring those fiscal deficits at zero inflation were to be significant. But that inflation turned into nonexistent during most of this period or into very small deficits consistent to the seingorage the government could collect at the government could collect at that very high inflation rate. In 1994 when you had the Real plan you had a monetary reform, you had the exchange rate used as an anchor, and the seingorage of the commercial banks disappeared but not the seignorage of the central bank. That remained at 2% more or less the level of the previous forty years. That meant that once the banks didn't enjoy an inflationary revenue anymore that many of them got into trouble. And the fiscal deficit deteriorated not only because of the reasons I pointed to before, but also because the government had to raise fiscal revenues to finance the recapitalization of the banks. So, in summary we're looking at the situation in the mid-90s up to 1999 were you have a stabilization program based mostly on very tight monetary policy, on an exchange rate anchor, and no adjustment on the fiscal area. No real significant fiscal effort was taken. And real interest rates during the second half of the 1990s were on average 22% per year. So, if you have an economy that's growing at 3% per year and real interest rates that are 22% per year you can imagine how quickly the debt/GDP ratio is going to grow. That's exactly what happened in Brazil. In 1996, Popov showed a table the debt/GDP ratio in Russia and Brazil were the same around 25-26% of GDP. And in a few years the debt/GDP ratio climbed up to 44% in 1998 and 50% in January 1999 after the devaluation. So, the increase in the debt/GDP ratio was very much the result of the extremely high real interest rates in this economy. And in 1999 also the effect of the devaluation on debt that had been in good measure issued in dollars. So, behind the growing fiscal problems in Brazil there were not only structural issues but there was this type of monetary policy - very high interest rates building up interest payments and building up the need to issue new debt because the primary surplus wasn't there to finance the interest payments. And it would be impossible to generate a growth in primary surplus to finance interest payments when the interest is of that kind of magnitude. The missing strategy of course was the exchange rate as much as in the case of Russia you see a big overvaluation after 1994. Most of the overvalutation occurred at the end of 1994 beginning of 1995. Since then there were very small devaluations taking place, a very slow crawl. So, if you look at the real exchange rate between 1996 and 1998 its more or less 30% above the average for the whole period. The real exchange rates made for a deterioration in the trade balance, deterioration in the current account that was financed by growing capital inflows that were attracted by the very high interest rates. So, you have this kind of perverse policy where to stabilize you use tight monetary policy, real interest rates attract capital, the capital is in part contributing to finance the current account deficit that is there because the exchange rate is overvalued and the capital inflow thus allowed to sustain the overvalutation until a moment where the debt build-up creates tremendous insecurity, a run on the currency, and a collapse in the exchange rate. A very classical story as opposed to the Asian crisis that some people have a hard time understanding and can not tell where it came from. In the case of Brazil, I think there are very few doubts. Everybody can tell the story back and forth, it looks very much like a classic run on a currency where the government had run unsustainable deficits and tried to support an overvalued currency by capital inflows. What happens is that until early 1998 the debt had been diversified but by mid-1998 the fixed rate debt has practically disappeared with the loss of confidence no one wanted to lend to Brazil except short-term indexed debt or dollar linked debt. So, what you see is that by mid-1998 by October 1998 a few months before the crisis the debt had turned completely short-term and whatever was not linked to the dollar was linked to the daily interest rate, fully indexed. So, when the crisis come and you have a devaluation that is a problem because the debt was now denominated in dollars and its value automatically increased with the devaluation. The question was then what to do, how to control the speed, how to prevent the free-fall, what was the relationship between interest rates, exchange rates, and inflation. How would you avoid complete collapse of the economy? How to get away from the precipice? You'll have to forgive me I'm going to use five minutes to show you a very simple model that puts all the variables in relationship and tries to explain why the answer to the Brazilian problems in January of 1999 was an increase in the interest rate. And also to understand why the policy worked so well remember that the interest rate was increased to 45% in mid-January and since then it has been declining systematically. Last week it was at 20%, only a few months after the initial increase in the interest rate. And I think what the model I'm going to show you allows one to understand is what was the combination of policies that were chosen and how did it work. The model has two equations, one equation describes the budget finance and the other describes the inflation dynamics. Let me start with the budget. My initial hypothesis is that the government decides to finance part of the deficit by printing money. And the part of the deficit that is going to be monetized is a function of the interest rate for the following reasons: imagine you have two groups of investors in the economy, one that is very much risk averse and thus when interest rates start to go up it becomes afraid that government is going to default on the debt and will refuse to hold the government debt. That means to convince the other group to hold the debt the government would have to increase the interest rate even more because its now only a smaller group of investors that would be willing to hold the government debt. Now increasing interest rates has clear costs not only in terms of recession but also for the credibility of the government policy. And that means that as interest rates increase the government may choose to increase the part of the deficit that is monetized. So the first equation which is shown here shows the budget deficit as a function of the interest rate and adding the inflation rate to be consistent with the previous discussion I had at the beginning that the budget is a function of the inflation rate but I am going to keep this out of the discussion to keep it clear. So the share of the budget that is monetized increases with the interest rate. Delta M is the required increase in money to finance the share of the budget deficit that is monetized as a function of the interest rate. And the first equation is just a modification of these relationships. All I have done is divide both sides of the equation by income and divide and multiply this side by money and by assuming a steady state relationship where money growth is equal to inflation I get my first equation that gives me the required inflation rate to finance the budget deficit and the budget deficit as a share of GDP. Of course, when I have M over Y I have the share of money demand in income I put it on the other side I have velocity. So that's my first relationship and I'm going to draw it in a diagram later on, but basically what this relationship is telling me is that given money demand that is an inverse function of the interest rate and given the share of the budget deficit that I decide to monetize there is an inflation rate that holds for this to be true. The second equation is just inflation dynamics and what it is says it that there is inertia so inflation today repeats inflation yesterday and if the observed real interest rate, which is the nominal interest rate minus inflation, exceeds the steady state real interest then I have a recession and inflation tends to decline. The opposite is true if the nominal...if the real interest rate falls below the real interest rate. Hold it the opposite I mean. Anyway, if in steady state inflation today is equal to inflation yesterday and that means that the nominal interest rate would be equal to the steady state real interest rate plus the inflation rate or inflation is equal nominal minus real. This is the diagram that represents the two equations. The dotted line is my budget equation. It shows me the inflation rate that is necessary to finance a budget deficit given money demand. The other equation, the straight line, gives me the steady state relationship for the interest rates. To the right of this schedule I have a recession, inflation is going down. To the left I have a boom, inflation is going up. And I have two equilibriums, a low inflation equilibrium and a high inflation equilibrium. This one is stable this one is a saddle path. This line BB' is my saddle path. And the question is what happens if I have a devaluation or an inflation shock that immediately pushes my inflation rate up. If the shocks are small and the inflation rate increases up to A then I would have some increase in inflation rate some increase in the interest rate and the economy would cycle around the stable equilibrium. But if the shock is very big and my devaluation makes for an inflationary shock that puts me on a point like C above my saddle path monetary policy has to respond by increasing interest rates. If I increase interest rates by exactly the right amount I will go to point B' and from then I would observe falling inflation and falling interest rates. The problem is if I have an inflationary shock, a devaluation I cannot give people money to buy dollars and induce further devaluation and further inflation. I have to increases the interest rate to discourage them from doing so. The question is by how much should I increase the interest rate. If I increase it by too little so I'm to the left of my, above my saddle point, to the left where I should go that means that inflation is going to be rising above interest rates I will never converge to equilibrium I will have more inflation and more devaluation in the future. If I increase interest rate to much create to big a recession inflation is going to fall ahead of interest rate real interest rates would be increasing my debt situation would further deteriorate and I would not converge to equilibrium. In the case of Brazil they seem to have done just right. They increased interest rates, they convinced markets that they were committed to not let inflation and devaluation to go on. Confidence was restored and they could then start reducing interest rates, inflation rate came down and by now we realize inflation rate is much below what was predicted. I don't have time to continue but during discussion we can talk about why it was so difficult to predict inflation in Brazil and how adjustments have taken place that you didn't have an explosion of inflation that the IMF predicted wrongly. Actually inflation is predicted to be around (depending on the index your looking at) not more than 10% at the end of this year. Recession much less than was predicted, instead of 3.5% negative people are now talking about minus 1%. There are still some questions ahead of us some of them related to the size of the current account deficit that still has to be financed. Those are numbers for 97-98. Net capital flows to Brazil per year have been around more or less around 30 billion dollars. If you look at what is going to happen this year we had a trade deficit of 7 billion last year. They started by projecting a 10 billion surplus given the devaluation, this is not going to materialize recent projections are talking about 4 billion in trade surplus and that means that our current account deficit given interest payments and dividend payments that have to take place in response to previous capital inflows still going to be close to 30 billion dollars and where are those huge amounts of resources coming in if you also consider that amortization will also have to take place that's also close to 15-20 billion dollars and only money from multi-laterals is not going to be enough. What is the private sector going to do in response to policies in Brazil are extremely important. Since I started with history let me finish with history. These numbers are the accumulated net liabilities of Brazil since 1950 and what you see are very clearly four periods. A period that goes from 1950 to 1970 where you have close to zero current account deficit, very small one. It's a period where capital flows are extremely constrained so the country cannot run current account deficits because there is no way it can finance those current account deficits so debt that is being accumulated is close to zero. 1970 things change. You have oil price shock contributing to an increase in our current account deficit that are then going to be financed by the petrodollars that banks were pushing to Latin America and all other emerging markets. There is a very quick build-up of debt that ends in the debt crisis of 1982 followed by a period in the 1980s where the debt accumulation is almost not there. There are periods of current account deficits, current account surpluses until 1993 and from then on you have the huge 1990s capital inflows. And then a very quick accumulation of net liabilities abroad. The question now is are we going to have a sudden stop of those capital flows and then again the 1980s crisis or whether the slow down is not going to be so dramatic, so you can adjust slowly to the slow down in capital flows. Do the necessary reforms and rather than having another lost decade you have a period where adjustments take place in a more reasonable way. Let me stop here I think I spoke too long.

DD: No, no I think we'll get a lot more questions. So, perhaps will go to Mexico. You may want to stick to the really strong conclusions you want to reach.

RR: Yes, yes, right. Thank you very much to the sponsors and to Marc Uzan. Its been very pleasant to be here. I want to raise four issues. One is the policy setting in Mexico and I want emphasize the intellectual element in this policy setting. Then I want to talk about very basic flows in the policy setting. Then I want to issue some lessons over the adjustment and the past and present policy regime and whether we can differentiate them and to what degree. And then I want to address three key issues one of which is related to these future foreign financing needs of Mexico.

The basic policy setting to start with the first point is very much borrow thought by Mexican cabinet in the Salinas administration from Mr. Nigel Lawson who was Chancellor of the Exchequer. I notice that Vladimir also raises the same parallel, which was basically what I call a naive view of the current account deficit because it sets the current account deficit in a rather static fashion. And that is Mexico is undertaking reforms, the reforms attract foreign capital, and the foreign capital becomes imports. And therefore by definition the current account becomes only a reflection of the capital inflows. But this reasoning taken one step ahead by the Salinas cabinet meant we don't have to worry about the current account deficit because as it is reflecting foreign capital inflows when the capital inflows stop the deficit will be corrected automatically. One step ahead of that reasoning is since the fiscal deficit is zero because the government of Salinas was undertaking a very good fiscal program then its also a current account deficit that is privatized. And the government has no business worrying about the current account deficit. Built on this very basic argumentation we have an exchange rate policy that considers the exchange rate as exogenous, the capital inflows become endogenous to the system. Very much the same story we heard this morning and also in the case of Brazil. We understand of course that Mexico was trying to stabilize the macro economy and it was a very fashionable thing to have an exchange rate anchor. And Mexico was one of the first countries that copied the exchange rate anchor for these purposes.

Well, the basic flow is this argumentation would be current account deficit. I would propose that if we take into account the exchange rates appreciates over a very short period of time but at the same time the government signals that it has an exchange rate that is exogenous and therefore the government is going to target the nominal exchange rate. Then the signal that investors get is to invest and lend for domestic consumption and the production of non-tradables. And that's where the argumentation that the current account deficit automatically adjusts for the reduction of capital inflows breaks down completely. Because the economy goes on auto-pilot producing non-tradables and consuming independent of the fact that the capital inflows have been reduced. And that's where you have a serious problem far from the automatic adjustment that would be predicated, and in fact requiring an adjustment in the rate of savings of two or three percentage points, which is not going to come about smoothly. It would probably call for a crisis.

The causality that I would suggest is that we have a stabilization program producing an exchange rate appreciation. The exchange rate automatically has an effect on the allocation of resources. This allocation produces a current account deficit and current account deficit compels policy makers to adjust monetary and fiscal policy in order to keep the inflows coming. You can see from my tables that the problem really was that from 1992 and 1994 and its precisely 1993 when you get all of the warning signals that are typical of these situations. Where you get a current account deficit that is exploding when the rate of GDP growth is reducing. Then you get that most of the current account deficit is being financed by 'hot money'. Where I have made distinction in this table of the different categories of portfolio investment and I can sort of arbitrarily set a figure for hot money inflows, which in the year 1993 were in excess of the current account deficit.

Policy becomes perverted also partly because once the country is in the boom situation. And I recall Dipak this morning raised the question this morning of boom and bust. When the country is in the boom situation policy makers in the country become very comfortable. Its very possible, and this was the case in Mexico, where they delegate exchange rate management in excess to central bankers. What the central bankers did in Mexico was to follow a band exchange rate system, but you will notice that the exchange rate did not move along the upper line of the band. Precisely because when they are comfortable with the exchange rate appreciation they send a signal to portfolio investors that within that band the currency is going to remain on the strong side of the band. There you get the capital inflows playing not for the currency to move along the band, but for the currency to remain on the stronger side of the band for most of the time. In the case of Mexico the central bankers did come with a little gimmick. Exactly the year 1993, which was to impose a micro-band within the band. By doing this micro-band what they were saying was we will intervene anytime the exchange rate any day will deviate more than 1%. By doing that what they did was keep the peso far, far from the upper line of the band. When the upper line of the band was well below what would have been a PPP adjustment in the currency.

OK so the crisis is very much the outcome of creating an excessive exposure to short-term capital inflows. Any trigger would have done the job that was done in the year 1994. In the case of Mexico it was a series of political events that sent or put the writing on the wall for portfolio investors. And you can see in another table of mine how the peso instruments held by the private sector absolutely collapsed. While the dollar indexed instruments called tesobonos exploded from 1 billion to 18 billion in a year. Precisely in a parallel way the peso instruments fell. We're talking about the year 1994 when there were no more net inflows. So, what happened in 1994 was the government was one step ahead in running a very risky policy of converting government peso securities into dollar indexed securities, which is one of the charts that I think it was Vladimir showed on a point in which the level of dollar debt exceeds the level of international reserves. One very important consideration to make at this juncture is that anything these countries do at this point to manage short-term obligations is going to have tremendous impact on fiscal policy in the years ahead.

I'm going to just raise this point in relation to the cost of the bank rescue. The lessons and the present regime. The first lesson I would draw from this is that even though Mexico was undertaking structural reforms and some of these were impressive particularly the NAFTA. Structural reforms are not enough to prevent a currency crisis. Not particularly when they are out of synchronization with what happens in the build up of foreign obligations. The second lesson I would draw from this is that the key to the crisis and key to post crisis relative success of Mexico is the floating exchange rate that Mexico has had. The floating exchange rate came very much as a matter of necessity because the level of reserves was 6 billion and Mexico had borrowed from the US Treasury and something very humiliating for the Mexican economic team that Guillmor Mortiz keeps repeating was to have US Treasury officials visit him and ask him for the monthly data and sit with him and discuss what was Mexico doing in relation to the targets. So that there was no option but to take a floating exchange rate and what we have seen in the workings of the floating exchange rate is that its possibly (it started as the necessity) but I think its possibly the best regime Mexico has ever had and particularly in the background of the Asian crisis in 1997 - 1998, Russia, and Brazil. If we take a look today at Latin American countries we see that Mexico is the best performer in terms of growth and external balance in Latin America.

The present regime has some problems and I am going to just mention three. One is that of course we have volatility [TAPE BREAK] We know is not sustainable over the medium term. The second element is that the monetary policy we have is a little rudimentary and it has not solved the problem of high interest rates and in that degree it has not really helped the recovery of Mexican commercial banks. The third problem is that being a regime that is so if you like of such a fragile background. Since Mexico has not had a floating exchange rate regime before of course always invites speculation as to whether the regime should go into a fixed exchange rate or go into dollarization following the suggestion of the Argentines. Or like ?Japan the right wing party is now proposing that the floating regime become the regime by law. Probably not knowing what they are talking about because when we talk about a floating exchange rate regime that functions it means that the Bank of Mexico has been intervening in a very modest and careful way, but it intervenes. What central banker would want to intervene even if knows this going to produce the desired result when there is a law that absolutely tells that it has to be floating. So you can see that the discussion of the exchange rate regime is not yet over. And we will continue to have if you like flirtations with other regimes despite the fact the floating exchange rate regime has performed quite well.

Three issues about challenges and problems. One is the banking system was very much also influenced by the boom environment and the strong peso policy combined with very bad supervision and very bad bankers. I think the cost of rescue will reach 100 billion dollars. A year ago the estimate was 70 billion dollars, but you know in the past few weeks we've known of some banks that have been rescued in addition to those resources. One of them is the third largest bank Serfin and we have two or three more in the pipeline. Relating to this problem Mexico has presidential elections and every presidential election for the past five elections we have had big devaluations and crisis. So, the present government has asked the IMF to please stand-by or to grant us a stand-by loan and to maintain the supervision over Mexico. Partly to instill confidence that this time we want to get it right and that we want to have a smooth transition through 2000. But you see the letter of intent with the Mexican authorities sent to Camdesseus is rather candid and it tells you to what degree we must deal with transparency. In one paragraph of the letter the authorities say the public debt of Mexico is 27% of GDP, brackets excluding the costs of the bank rescue obligations. From the Mexican congress we know that the last calculation of the bank's rescue obligation would raise the public from 20% of GDP to 49% of GDP. So, I'm now finding out that we are catching up with Brazil in terms of public debt relative to GDP.

Another beautiful paragraph of this letter of intent is that in the budget we are only reflecting the cost of interest on these obligations for the real component of the interest. So, that in real terms the public debt arising from the bank's rescue does not increase over time. So, that if you have a 22% interest on these obligations and the rate of inflation is 18% your only recording 4 percentage points instead of 22 because the other 18 are being capitalized to the debt so that the debt never falls as a percentage of GDP. Its rather astonishing that the IMF will let this go without trying to induce greater transparency in the Mexican budget. What thing that may happen is that the Mexican fiscal accounts year 2000 will lose any credibility whatsoever because its not possible to hide a problem as big as that under the carpet. With accounting gimmicks that I understand ...[Dipak interrupts, "Your eating into coffee"]. Let me just call your attention to the last table that we have and that is Mexico's financing needs are even with a current account deficit very modest, 15 billion dollars per year maybe rising to 20 billion. Very modest current account deficit, leaves a very large residual component to be financed by portfolio flows. And I think that with the projections that Eliana has done on Brazil is almost leading me automatically to discount the Brazilian current account financing as impossible because the Mexican current account financing at half the current account deficit Brazil has in my opinion has problems over the medium term. Thank you very much.

GK: It's a question to both panelists. They're two excellent papers, but since some of you are there to discuss the case of China or Malayasia ... I would dare to touch upon Argentina another major economy in Latin American region. How much do you believe its possible in the real world, and we are in the real world, to talk up the exchange rate because that was a very bizarre move and it seems to be successful so far just to make a statement that the Argentines are going to institute the dollar as the legal tender. And instead of directing the discussion on the national scene as to how big the devaluation will be after giving up the currency board the debate should they give up the national heroes and replace them with the American presidents on the bank notes that are going to be introduced. Actually this trick has worked despite I don't think there are convincing macro economic fundamentals that we may consider this proposal to be a serious one or should and therefore if it is possible or feasible and seems to be manageable. Is it good advice for other countries to follow? How do you see this whole exercise? Is it only just talking-up say psychological political trick, which has worked in the case of Argentina? Would it possible to introduce such a solution without the approval and legal act of the US monetary authorities?

EC: I started my presentation saying that its very difficult to consider options without looking at the country history, and Argentina is a good illustration of the point. Argentina has a history of hyper inflation until early 1990s and the only way Argentina found of bringing credibility to the country, to price stability was by moving to a currency board and having a fixed exchange rate. Of course the fixed exchange in a country as big as Argentina with very big capital flows and very volatile capital flows has a series of problems because it has to give up monetary policy and all the shocks since the Asian crisis, the Russian crisis, the Brazilian depreciation had to be answered by an increase in interest rates with a fantastic cost to the activity level of the economy to the debt build-up of the government and so on and so forth. Yet if you look at the Argentinean case and you ask is there is an option, could Argentina devalue and get out of the problems in the same way as Brazil did I would say it can not do that. And it can not do that because in certain measure it does not have a national currency anymore. More than 60% of deposits are dollar denominated, all the contracts are in dollars, the rents are in dollars. Everybody contracts prices in dollars, so if you devalue its hard to believe you would get a change in relative prices because all prices that are not in dollars would immediately adjust. So, you would fail to achieve your objectives because in a way the economy doesn't have a currency prices would adjust automatically you would end up with out a real depreciation and you would have fantastic bankruptcies, both the corporate sector and everybody else is very much exposed in dollars. In that way Argentina has a very special problem it can not get out of the trouble it is in by devaluing the currency. The only way it can adjust relative prices is by cutting wages, salaries, and domestic prices. That as you know is a political problem it is not an easy thing to achieve. The way they have tried to get around the problem is that they promise they would dollarize rather than devalue. Suddenly the talk of dollarization stopped having the same kind of impact Argentina would like to see because Wall Street started to ask what is the rate at which you are going to make the conversion. And that's a killer right because that's exactly what Argentina is trying to avoid is the speculation that there could be a devaluation. So, if Wall Street starts asking what is the rate of conversion its bringing through the back door exactly the threat that Argentina is trying to avoid, and suddenly the solution doesn't look as good as they thought it could look. Can they dollarize without the US support? They could, it wouldn't be advantageous but they could. The minor issue and one people have paid more attention to is the loss of seignorage and that's something the US is willing to negotiate, to give Argentina some compensation for the loss of seignorarge if Argentina were to move to the dollar. The big problems are the ones that the US does not agree to move along to support Argentina. The three big no's: no access to the Fed discount window, no supervision of Argentinean banks, no change in monetary policy to accommodate Argentinean needs. So with these three big no's dollarizing becomes much more of an issue than a remedy. Especially because if Brazil is floating and Argentina is not and most of Argentina's trade is with Brazil and they are too close every time Brazil moves around its going to reflect in Argentina and the monetary policy in the US is not going to respond to accommodate the shock that Argentina just had. So in a way Argentina is between a rock and a hard place but being there means Argentina will not be able to have the same way out that has been open to other countries, which is the float. The situation is getting difficult. If you read the newspapers today the stock market in Argentina fell by 9%. I don't know if it was Tuesday or Monday I'm always confused by the time difference...The next two months before the elections are going to be difficult. No good news on that front. Its not true that Argentina has not done a lot of reform, they have. They actually have made tremendous progress in the 1990s. It's a pity that the history they had before condemned them to very, very tough political options.

DV: They are squeezed by a 600 to 800 basis point spread. Is there anyway out of that squeeze in the medium term?

EC: If the market thinks the exchange rate is over valued the only way to convince the market that there is no overvaluation is by cutting domestic prices, by cutting costs. Right? Either you do it by a change in nominal wages, which is not something your going to achieve. Or you do it slowly by increasing productivity, which is what Argentina has been promising and you did see big increases in productivity in Argentina in the last 5 years. Not enough to counterbalance real appreciation, right? The fact that your exchange rate can move and can turn-around relative prices quickly it's a trick that's difficult to reproduce by productivity growth.

DV: Is there no way you can convince the market that there isn't going to be a parity change? This rumor in Wall Street does seem to be a savage repayment for six years of painful work on the currency board.

EC: Well you can try. I don't know how you can convince them if everyone can measure relative prices and see that its very much out of place, right? You can promise whatever you want and in the end they may have to dollarize. They may have to convert everything to dollars because they may not have an option. In the same way that Brazil didn't float because it wanted to float it was really forced on Brazil. Brazil had no way it could dollarize and no way it could move into a currency board with the kind of fiscal problems the country faced. So the only option open to Brazil was to devalue. It may well be that the only option open to Argentina will be to dollarize. When you come to a crisis it's a crisis because there aren't options. If there were options then it wouldn't be a crisis.

DD: Can I ask you a related question? Why wouldn't one be able to tamper with the tax system to achieve the relative price objectives that a floating exchange rate regime would have? For example ...

EC: Why would taxes move relative prices? You say that you raise taxes, you cause these fantastic recessions and wage earners agree to have a nominal decline in wages is that what you have in mind? Or you subsidize trade, WTO let you do that?

DD: What it could do is to raise the differential rate of the VAT tax on general consumption much more than it is currently now. I'd say your introducing similar tax on tradeables and non-tradeables, so I'm not sure I'd by the argument that they've run out of all the options.

EC: But I don't see why increasing VAT would be an option. It would increase prices of tradeables and non-tradeables obviously VAT has to fall on all prices including imported goods. It may help solving Argentina's fiscal problem, which has not been solved yet. This may be part of the problem. The IMF has made a speech where it believes that the solution to Argentina is labor flexibility.

DD: What does that mean?

EC: You could change labor market rules, and that would increase, maybe make labor wages more flexible, maybe bring them down. It isn't clear, but the speech coming out of the IMF is very much a speech where the problems are labor rigidities and that's where you should be making progress. But if I translate it into a language that I understand they're basically saying you have to cut wages, you have to cut costs. And you can not say it openly politically it doesn't look so good.

MY: I missed this morning... My question is very primitive a comparison between a Russian and Brazilian crisis in the following sense. That is both countries had high inflation in the beginning and then monetization didn't work, so that national bond got to be say absorbed in the markets. Then domestic markets are not big enough to absorb national bond therefore non-residents are introduced to buy some of the national bonds. Such kind of combination, namely financing national bond by both residents and non-residents is not necessarily classic case of the crisis in the past. That is a combination of sort of current account crisis due to large fiscal deficit at home but at the same time the capital account convertibility to finance the domestic fiscal deficit. So that combination appears to be new [inaudible] but you called it sort of classical crisis and when I worked for the IMF in the 1970 - 1974 classical crisis is just purely current account crisis. Due to very poor macroeconomic performances, but in the 1990s appears to be the combination of both.

EC: You made so many assertions that I have to answer a few of them before we get to agreement. The first one is that domestic/public debt in Brazil is entirely domestic. The external debt of Brazil is mostly private debt. If you look at the public debt its domestic instruments issued domestically, if they're held by domestic residents or by foreigners I don't think this is important. They're mostly held by national banks by domestic banks most of the domestic debt in Brazil is in the hands of domestic banks and that's one of the reasons banks responded so strongly to the devaluation is that the moment you had a devaluation assets and liabilities changed. Since they were exposed in a positive way because they were holding dollar linked domestic debt with the devaluation they were left very comfortable and you didn't see a crisis that similar to the Asian crisis. On what I called a classical crisis I was referring to Paul Krugman's classic study on a run on domestic currency. If you remember Krugman's model it's a model where a government has a deficit and people are waiting for reserves to be slowly depleted to run on the currency. What makes Brazil different from the classical story is that you have an active monetary policy. Instead of just losing reserves slowly and having no intervention in the case of Brazil they kept raising interest rates so they kept intervening in the monetary market to avoid the currency collapse. So in that way its not classical because monetary policy was not fully passive, but it was responding. But its classical in the sense that you have an economy where part of the basic imbalance is a government that is running a fiscal deficit that in a way is seen as unsustainable.

DD: In this context what I wanted to put on the table for you is a comment on the question of, "Is Brazilian crisis and the way it has been handled at all comparable to the Russian situation", and one of the strong points when I was listening to Brazil was the insistence at every point in time that the Brazil situation has nothing to do with the Russian crisis. Primarily not on account of the transmission mechanism or its fundamental causes but A) they wanted to make this distinction absolutely clear, so that the markets don't misread whatever intent might be there in misreading the two to be the same and B) there was a lot of talk about how the Brazilian system is much more transparent and how strong the institutional settings are and I presume they meant by that the political process.

VP: Can I just comment briefly on the Brazilian and Russian crises? I think one of the major differences, and this was the earlier point I was making, is that the Russian crisis was a pure balance of payments crisis. In a sense that the currency was over priced. The Russian ruble was over priced. The Brazilian story is pretty much the same as I understand from what you said. However, it had been complicated by two other considerations. The first one is the government debt, which increased dramatically in Brazil. This was not the case in Russia. Even with the short-term debt this was not the case in Russia. The second difference is that the Brazilian debt was either dollar denominated or indexed. This was not exactly the Russian case. The Russian debt was denominated in Rubles and it was possible to handle the problem without any defaults. In Brazil this was not an option.

EC: I believe everything you said is correct. Yet I would find it difficult to believe that Russia doesn't have a fiscal and quasi-fiscal problem. I think as much as in Brazil the problem is in the exchange rate based stabilization, over-valuation, very high interest rates, making the debt increase. Even if the fiscal deficit wasn't there to start with, you ended up with one. You have loss in tax revenues, and I find it difficult to believe that Russia is so special that you don't have any fiscal problem at all. On the default I think you did have a default, even a more clear default than Brazil had. And actually a default where if I recall well, the story told by Deutche Bank there was a discussion where the IMF was involved and it was discussed what was the size of the default that was going to be imposed on private banks, so that it would come out of the crisis in a more fiscally sustainable situation. Its exactly because there was the default and a big loss of private banks during the time of the run against Russia that you had such big contagion across the world. The fact that people perceived that payments could be suspended made for crisis everywhere else in emerging countries as opposed to what happened in Brazil, which I don't think what happened in Brazil is something we could applaud. But what happened is banks made a big profit. On the two weeks following the devaluation banks made 10 billion dollars in the futures market. They have placed themselves well and Banco do Brazil who were operating for the Central Bank had intervened on the other side and made huge losses. The fact that banks didn't suffer any losses with the currency crisis helps us understand why the repercussions in other countries have been so small as opposed to what happened in response to the Russian crisis. So as opposed to what you say I think the default in the Russian crisis was more obvious than in the case of Brazil. Perhaps it was easier for you to do it exactly because you were intelligent enough not to have linked your debt to a foreign currency. That's the mistake that some of our countries have made. Mexico in 1994, Brazil recently, and a few other Latin American countries have seemed not to have learned. You shouldn't do that, right? This is a killer to index your domestic debt to a foreign currency.

GK: The similarities between Brazil and Russia are very interesting to point to, but I'm afraid they are only at the surface of the problem. If one is trying to compare Russia and Brazil I'm very much with him or her there is a great deal of rationality to do such a comparison. But I would compare the next decade in Russia with the previous decade in Brazil. Russia at the beginning of the 21st century is going to be the Brazil of the 80s. Not of the 90s, we'll be back with what I said 10 years from now. So you may see the future of Russia with the prism of the past of Brazil, not the other way around. Now, lets go back to politics because as far as these technicalities are concerned its exciting but with all knowledge about what we don't know, what I don't know, I think that the questions have already been answered on this side. But there are so many questions that aren't answered on the political side. You said that there was no other option for Brazil at the time but to float and to accept a sort of ...

EC: In mid-January there was no other option.

GK: Yeah, OK. But the Fund was against. That was done without the approval of the Fund and the Fund was taken by surprise. I know it from behind the scenes who was calling whom, of the denials etc., etc. Between Brasilia and the town of Washington. And actually the Fund was taken by the surprise. It was not agreed up front between the IMF board or Mr. Camadesseus, Stan Fisher, on the one hand and another important person with the same famous name Cardoso etc. How it was?

DD: Is that a question?

GK: The question is, "Why was this being said here that it was unavoidable?" Why are things that are a must not accepted? This is the same as in Russia, which is not now being discussed. In the sense that the exchange rate upon which the Bank has insisted still in July of 1997 and that was part of the IMF led package bail-out for Russia, which was much difficult to put on the table and much higher and twice bigger bail out package for Brazil. The answer is very simple because much more money has been engaged in the Brazilian game than in the Russian game as far as the investment banks is concerned. You just pointed that somebody has made 10 billion dollars, so still without the proper political analysis I'm not sure we will understand what really is the core of the problem. Because the problem is not with currency, the exchange rate mechanism, the problem is with the force of the capital between different players here. But anyhow the question is how it is possible that Fund where I suppose that the things are understood much better than elsewhere is not accepting on the right time the policy which is the only option as you have said a couple of minutes ago.

DD: Its not clear to me that you could make that assertion that the Fund was not aware of what ... this was a long played out thing.

EC: It is true that the day they floated. How do I say? It happened in two stages first Chicolades(?) made a big mistake of inventing that diagonal band. That was a surprise to the IMF and to everybody who can think straight, right? So the diagonal band was just an unhappy invention that lasted 24 hours and immediately after that Brazil was forced to devalue. It should be said that much earlier the Bank had insisted with Brazil to float and Brazil had resisted. Not only the Fund, the Treasury by the time of the Russian crisis there was pressure on the Brazilian government to float and Gustavo Franco, who was the president of the central bank said no way, that he would resign if he was forced to float. In that way the Brazilian government couldn't move and there wasn't enough consensus in government to float the exchange rate until January when the pressure became very, very strong, Gustavo Franco moved out of the central bank Chicolades(?) comes in makes two big mistakes, goes out, and they float. And it may have happened that the decision to float was taken without consulting with the IMF or letting the IMF know about it a few hours late. I guess the IMF might have been displeased for not being consulted. Not that they disagreed with the policy that was taken. I don't know what your asking me, whether your asking me for the facts or your asking me the question, "How could the IMF disagree?" As far as I know the IMF was not in disagreement. I think the IMF may have been displeased to learn about it a few hours later rather than before hands.

GK: I'm just trying to link something in my attempt to understand what's going around. Because again your experience also has a political economic component. We must remember that in the meantime there was the general election and the question is what would happened if the floating occurred prior to reelection of President Cardoso. Would he be reelected if there was floating? What means from the electorate viewpoint? Bouncing inflation, at least for some time just you know at the peak of the presidential election campaign. One may say that would be the good cause to lose this election and therefore we would not be back discussing the politics of this process not its economics. That for instance it could be insisted on the Fund by American policy makers, for another geo political reason, don't push it to this end don't support this policy because for another reason they would like Mr. Cardoso to be reelected. The same for instance as it was displayed in Russia and now I'm going to Mr. de la O because you mentioned that we had the presidential elections forthcoming in Mexico. Its much easier to read the policies in the forthcoming future from the political analysis than from all these charts and figures about exchange rate, interest rate, and tax rate because much more important at this phase of debate is neither exchange rate or interest rate but electorate.

DD: Eliana you don't have to respond.

EC: Well, he's very provocative and I think he's bringing up many different issues here. One was yes inside Brazil the government had made a bet. They wanted to win the elections, politicians they believe first duty is to win elections. So, they were fighting to win the election and the bet was they could manage through the election without a devaluation and without floating. That was internal politics in Brazil, right? The other thing is that apparently the IMF does not have the right to intervene in domestic politics, and it has to negotiate with elected governments. Whatever they are, so they negotiated with Cardoso because he was president. He's reelected, so they will negotiate with him again. I'm not a supporter of the IMF as you've suggested this morning, at all. I think it does good things and it does bad things. I'm not trying to defend the IMF, but there is one thing we can not go against, which is both the IMF and World Bank are multi-lateral institutions that have a board of directors where the decisions are voted. Of course the US has a heavy weight its going to dominate those votings. I have no doubts about that, but if you look at the IMF staff what can they do? They can only negotiate with elected governments in the best way and to their best knowledge and using the best understanding of the situation. Whoever is government that is not their business. They are just the counterpart.

GK: I agree with you, but I'm trying to be an advocate of the [inaudible] to act in favor of the IMF in my way of understanding what supposed to be the position of the IMF. I'm afraid that you are right but you may be wrong or we may be wrong, so lets leave Brazil or Mexico. Also in Mexico the election is forthcoming, but only yesterday I read for instance US government is simply saying that if Pakistan doesn't withdraw from Kashmir that will not allow the IMF to go forward with the next tranche of the loan to Pakistan. So, this is what I don't like and I know it is simply not being decided by the IMF. IMF is not a political organization, but the big powers ...

EC: Which countries? Very political.

DD: Very political!

GK: The governments are, the main shareholders, and since we are here the name of our conference is saying something about reinventing the Bretton Woods organizations. And I'm saying I'm supporting the IMF and its also my experience. I would like the IMF to be a more independent organization and this is my point. I'm afraid that sometimes the IMF, much more than the World Bank, is simply doing what is expected from the G7. You know this is too much an instrument of G7 geo political policies. Than attacking the issues of sustainable development, consolidation of stabilization, and the stability of fighting poverty, etc., etc., etc. We are talking what is to be done but sometimes you know the politics is much, much more important than the perfection in exchange rate or interest rate management because this is not what the story is about. This is only what the IMF is trying to say, and I would expect that as far as policy to work towards Mexico is concerned that they have sent the letter to the IMF. But what is the answer for the letter? Its not to be decided by the IMF board independent by the other parties involved in this process of global economic, financial, and political game which are really in charge of what is ultimately been decided by the IMF on the grounds of politics not on the grounds of economics. I simply don't ignore the role of political economy analysis into all this consideration because I think this is the missing element in otherwise perfect analysis we have during this and other conferences. Thank you.

DD: Thanks Mr. Kolodko. David.

DV: I wasn't going to say this. I was going to ask another question, but Gregor has raised a deep rather fundamental issue.

DD: Which you'll be touching on tomorrow, right?

DV: It hadn't been the core of my ideas. There's a deep issue that you raised about the extent to which mistakes which are made by the multi-lateral institutions are mistakes or whether they're malicious intervention in the pursuit of hegemonic national interest of the US. And its very easy to look back on the 1990s and look at the mistakes of the liberalization era as not mistaken analysis of neo classical economics really rather primitive and not understanding market failures and information problems well, but instead the manifestation of vested interests with multi-laterals urging liberalization in order to allow US capital into areas were it previously had not been able to venture. Its very tempting to take the second interpretation, but I think in most cases there is a less sad interpretation of the motivation, purpose and effects of multi-lateral organizations that they are mainly (this is all just hunch) staffed by people who attempt to do their best and make mistakes and this has been a very difficult era to understand what good policy consists of. Its clear that the world was not sustainable in the way that it was run before the Washington consensus. The Washington consensus was a response to very seriously changed circumstances in global trade and monetary relations. We now look back at the Washington consensus of the early 90s and think it was pretty naive, but maybe more naive than malicious. I think its incumbent on an analysis of the kind your wanting to draw to try and ask very precise questions. Can I really identify occasions in which advice was given that flew in the face of what analysis would have led well minded people to recommend because of pressure from vested interests. Its much harder to substantiate those latter claims.

DD: We're going to have this discussion tomorrow. I wanted to get back to Latin America. I think in the absence of ... does anyone want to ask any specific questions on the Latin American comparison? Otherwise I'd like to make some summing up comments.

VP: This is not a question, this would be a comment as it compares to the Russian crisis [Tape Break] very large flow deficits. There was government budget deficit, however there was a difference with Brazil because these deficits were very reasoned. The macro economic policy under the Soviet regime was very prudent there were no government budget deficits virtually at all. They started to accumulate only from 87 but then they were wiped out by high inflation. So, Russia had a new macro economic stabilization program in 95 with a very low accumulated government debt. This government debt continued to be low, short-term, long-term debt continued to be low right up to the moment of the crisis. Edwin Dover (?), once likened the process of fighting inflation through financing the deficit by issuing securities and selling securities to the public to hunting the tiger with the non-rechargeable gun. He said if you miss the first time you may not have another chance. Meaning that there is just so much time you have to allow the government budget deficit to accumulate. My point is that Russia had not yet reached the critical point of the accumulation of the government debt and in a sense the government didn't see the tiger but shot because it was frightened. It closed the opportunity for international financing just because it was so much frightened it decided to fire the bullet. Now about the default, the second point ...

EC: On the deficit what you just said makes your case even more similar to the Brazilian one. You say Russia has deficit since 1987. Well in 1991 Brazil washed out the debt problem with the Kolov (?) plan. If you remember the deposit freeze and brought debt ratios to very low levels. Between 1991 and 1994 because of very high inflation the measured deficits were extremely small and in 1994 I just showed you a diagram we had a surplus. So, the deficits start to increase after 1996 when the debt/GDP ratio in Brazil was exactly the same as Russia and still everyone points to a fiscal problem in Brazil. I suspect Russia has a big fiscal problem. If Brazil has one Russia has one too. And its not smaller.

DD: I have two minutes left, so can continue this Brazil, Russia comparison as an aside. Anyone else?

IA: I'd like to challenge this statement that Russia has no deficit. Where is the pension fund? We assume that there is no deficit yet the pension fund disappeared from the system.

DD: Is there a deficit problem in Russia - yes or no?

VP: The pension fund is evaluated as the revenue of the consolidated government. Pension fund is in the consolidated government as a matter of fact. Pension fund doesn't have that large deficit. They just don't pay pensions, yeah, that's another story. If you look at the amount of pension its very small. Its on average only one month pension. Besides that they don't have the deficit. Now if I can briefly comment on the default.

DD: Can we do it later? I'd rather not take up the time of the next session. What I'd like to do is conclude with one minute of summing up and not allow Rogelio and Eliana to come back, but maybe to come back later. I think the panel discussion on Latin America leaves me with a lot more to be asked about what was happening in Latin America. I would have liked to have known more about why there are such deep downturns in Latin America when capital flows dry up. I would like to have known, I don't think I got answer, on whether fixed or floating exchange rate the issue of which one solves the problem has really been resolved. I think part of the reason is Argentina sticks out as sore thumb with this whole thing. I think one of the classic thing that happened in the Latin region is that conversion out of the kind of exit strategy out has people convinced that they finally made it to floating exchange rate and it appears safe. But it is Argentina, which is out on a limb because it has some peculiarities of its own with a currency board. But then I listen to Rogelio talk about that maybe even that is not so sure. Then there are questions about the region as a whole is so much more dependent. It's a low savings, basically a middle income set of countries, and therefore borrowing much more from the rest of the world. Up to the 90s when the euphoria was going on we were hearing how Latin America had done all the policy reforms right. Set its banking in shape, got its macro fundamentals in order. Its suddenly seems like there's a little more jitters in the house of cards. So, we look forward to hearing more and turn it over to Ross for the next session.

ASIA

SD: Well after listening since this morning about what happens economically in Poland, Russia and Hungary and then we moved to Latin America, mostly Brazil and Mexico and now this will be the first panel on Asia. I think tomorrow will be another panel to continue on Asia. The first panel this afternoon will be discussing three cases: Indonesia, Thailand and Korea. These are the three hard hit countries in the Asian crisis and it also happened that these three countries were the ones that went to IMF for help. We can see how they're differ and similar in terms of responding to the crisis and the way in the end the IMF helped them and what kind of things can be learned from what happened after the IMF came in the picture. So we will have Ross Mcleod will be discussing the Indonesia case and after that Professor Warr on Thailand and Professor Hak Pyo on the Korea case. I think right now I would like to give the floor to Prof. McLeod.

RM: Thank you Soedradjad. It's not Ross Garnaut but Ross McLeod. Sorry to confuse you. My approach in talking about the Indonesia case I think is going to be rather different from most of the presentations we've heard already today. I want to focus on the handling of the crisis in Indonesia rather than poring over the entrails of the preconditions, in other words I'm not going to spend very much time at all talking about what Indonesia looked like before the crisis. But I want to focus on the handling of the initial disturbance, which was the floating of the Thai baht in July of 1997. I'm doing this because I believe it's very important to understand not only why some countries haven't even faced the crisis but why some countries have done better than others when the initial disturbances hit or when the crises got under way. My framework for analysis is the so-called second generation speculative attack model, which as I understand it, the central feature or idea that there is a perception amongst the public that in the case of some adverse disturbance, some adverse shock. The government won't do the right the thing. The government will respond in not a sensical manner and, to be specific, the government will respond to this crisis in a manner which causes a significant increase in the money supply or specifically base money and, that being the case, a change in the exchange rate becomes virtually inevitable and so this is what drives the speculative behavior. So it's not a question of people panicking, people speculating without any reason, it's a very rational response if people have that perception about how government will react to an initial disturbance. So that's the kind of model I use and I argue in my paper that that model fits the Indonesian experience, I think, extremely well. In discussing how Indonesia has handled the crisis, I distinguish three phases. In the first phase, which only lasted for 2 or 3 months, things seemed rather astonishing at the time in terms of movement of the exchange rate. But in the second phase, anything that happened in the first phase came to be seen as quite trivial by comparison and then in the third phase, which we are in now, some stabilization is occurring.

I've got a number of pictures I want to show you. This is what that exchange rate movement has looked like. The vertical lines I put on the graph kind of divide the thing into phases. Phase 1 you can see was really quite a substantial depreciation in the first few months, but it's really quite trivial compared to what happened in phase 2. So you've had a movement of the exchange rate from about 2450 in June of 1997 rising up to something like 15,000 in July of the following year, an enormous movement of the exchange rate in that second phase. Later on, more recently, things have been improving from that point of view. Second picture I'll show you is what I consider to be more important and that is what's been happening to GDP. It seems to me I don't get so excited about changes in prices like the exchange rate or share prices as most people seem to do. What I do get excited about is this drastic decline in GDP and as you may know GDP fell by I think 15 or 16% last year in Indonesia. This graph shows a trend line which projects GDP growth at about 7.5% which is what was typical in Indonesia prior to the crisis and then the heavy line shows what has actually happened to GDP and if you want to think of it in this way, GDP is now running about 27% below what it could have been if Indonesia's growth had be maintained. This is what matters to people. The people who lose their jobs, which is reflected in the fall in output. That's what's really important and one of the things I'm drawing attention to in this paper is I think people get much too excited about what's happening to the exchange rate and share prices and so on. Whereas what really matters is what's happening to output and I think policy in Indonesia is largely responsible for what happened to output

I mentioned the kin of model that I am using which makes the assumption that governments are likely to screw up on policy after some adverse shock hits, well this is exactly what happened in Indonesia. This show base money growth. The dotted line is the actual figures. The heavy lines there are the target trajectories for base money growth that was set in the various IMF policy Letters of Intent and you can see that the targets kept on getting missed so they simply raised the target line and shifted things up. Specifically right through this phase 2, basically base money targets kept on being missed and missed by a huge margin. It's not until the latter half of last year that base money growth was brought under control. The result of growth of base money was a huge growth in the inflation rate. I should tell you that inflation was only running at about 5% when the crisis began to emerge and you can see there that is has jumped to about over 80% year on year in the middle of last year. You can see a) the huge change in the growth of base money and you can see pretty direct relationship…

DV: That's CPI inflation?

RM: It is CPI inflation, yes. The last bit of it I will how to you is interest rates. The SBI is like a certificate of deposit issued by the central bank, Bank of Indonesia, so its certificate Indonesia. The one-month maturity is, this is just an indicator rate that I am showing you for example, you can see there was quite a significant increase early on, but it's really when you get into phase 2 that you get an enormous increase in interest rates. I think I say in the paper that this rate stayed above 30% for 14 months on end and above 50% for 8 months on end. I believe that imposed a crushing burden on the corporate sector or business in general and that is one of the main reasons the growth has fallen off so greatly.

Let me now, just to tell the story, I guess the simplest way to do it is to take a chronological approach so let me just go through some of these points. They're in the paper if you can't see this far. The condition of the economy prior to the crisis was pretty much terrific. It's always been somewhat of an embarrassment for us, folks like me who focus on Indonesia because none of us saw the train coming down the track and this is the reason why. Indonesia had had very high growth for many years on end, it had inflation well under control, only about 5% just before the crisis hit, the exchange rate was very stable for about 11 years it depreciated at about 4 or 5% against the US dollar, but in a nice steady fashion. The international reserves, as far as I can understand them, grew by about 38% in dollars in the 10 months before the crisis hit, that's just a huge increase so the balance of payments was very strong. The government ran a conservative fiscal policy for some three decades. Sticking to what Indonesians call a balanced budget policy, it's not quite as understood conventionally, but generally the fiscal stance was quite conservative. We had stable or declining government debt prior to the crisis. The government was in fact prepaying some of its foreign debt because its budget surpluses permitted that to happen. In the share market, different from Thailand, for example, share prices were very healthy, they were up to peak levels right up until the moment the crisis started, whereupon they began to fall very quickly. And that shows the exchange rate at 2450 to the US dollar just before the crisis started. So then things start to happen. The Thai baht is floated in July this immediately starts speculate against the rupiah. Frankly I couldn't believe it at the time, because, as I said, foreign exchange reserves had been increasing at a very rapid rate prior to this and reserves were very large so why in God's name would anyone want to speculate against the rupiah. Well God knew and I didn't. I certainly didn't. The first response was simply to widen the intervention band to try to keep the central bank out of the market, but the rupiah quickly moved to the other side of the intervention band from where it had been. Then in August, August 14, our colleague Soedradjad announced to an astonished press that the rupiah was going to be floated henceforth. I put floated in inverted commas there and I make quite a lot of discussions in the paper along the lines that this is not a float as I understand it. I'll come back to that later on.

Now moving on from the decision to float, the rupiah began to depreciate very quickly, straight-away, I think entirely unexpectedly from the government's point of view, because, as I say, the rupiah had been tending to appreciate, not depreciate prior to this. And immediately, the government seems to have taken the approach of sacrificing monetary stability in order to halt depreciation. This is why I don't think it's what I understand is a genuine float. To me a floating exchange rate policy is you hand the exchange rate over to the market to determine and you have something like a constant growth rate of the money supply as your nominal anchor. Well allegedly the rupiah value was being determined in the foreign exchange market without intervention from the central bank, but the intervention had simply shifted to the money market where interest rates were pushed up very high. In fact the government went quite a long way to push interest rates up by sucking base money out of the system as it had done on previous occasions and it did so in a really kind of gross fashion. Two-thirds of the reserves of the banks, that is there deposits with the central bank, disappeared virtually overnight. Now if you think about it, there's no way banks can adjust to a sudden decline in their reserves of that magnitude in such a short time. So I've described that as a policy blunder in the paper. Maybe Soedradjad will put me right, this is the first chance I've had to talk to him since all of this has happened, but I don't think it was he that made that decision anyway, so I hope I'm off the hook there.

There are different figures here. Unfortunately Bank Indonesia reports are a little difficult to understand, so I've given a few different numbers here. This is just evidence of what was going on at the time and why base money had shrunk so much and why interest had gone up so much. Despite that there was still a depreciation, quite significant at the time. When we move into September, the government decided had had to sort of be seen doing something, so one of the things it did at that time was to cut back on its own spending in order, it said, to keep the budget balanced. It thought that as a result of the depreciation its revenues were going to decline and therefore it said we must cut our expenditure. It occurs to me also in line with some of the discussion we've had that some of this sort of thing is kind of cosmetics for the international financial community. In other words, there was a sense at the time that the international financial community wanted to see blood on the floor. This is a direct quote from Peter Drysdale sitting down on the end. He said that to me at the time, I remember it well. The financial community wanted to see that the government was getting really tough, even though this particular policy, it seems to me, was the reverse of what was required. You had a fall off in private confidence and therefore private spending and so, if anything, the government should have been boosting its spending to offset that, but instead it went in the other direction. In October, I've said here that the government has abandoned its floating rate policy, not that it ever announced any intention to do so, but if we look at international reserves figures, we find international reserves began falling at this time. I just warn you that in the paper I have wrongly written 3 billion rupiah, I think the correct figure is $3 billion. Reserves fell by 11% or $3 billion during the month of October alone and still the rupiah kept on declining.

We move on to the next three months I've argued that the central bank lost control over base money. It rose by 66% in just 2 months and the reason was that when the IMF came in it had put a lot of pressure on the government to close banks and after two weeks of negotiation it was decided to close 16 private sector banks. It was hoped that that would send the signal to the international investment community, again, that Indonesia was serious about fixing things up, getting its house in order and that this would generate confidence, but it had precisely the opposite effect. Unfortunately there were rumors going around at the time that really the IMF wanted to have 40 or 50 banks closed and the final number was only 16. So people were worried about which bank was going to be next. The government at the time promised that deposits of up to 20 million rupiah would be guaranteed, so small depositors didn't have to worry. But that was only on the order of 5 or 6 thousand US$ and all the big guys that had millions of dollars on deposit or really large sums, that guaranteed meant nothing to them so they started rushing to withdraw their deposits and that's when the central bank had to step in with liquidity support lending to keep the remaining banks afloat.

This is basically the start of my second phase when the handling of the crisis gets right out of control, money supply goes crazy. I've given you some numbers there about how much Bank Indonesia had loaned to the banks. I've noted that reserves have fallen by $5 billion in those couple of months and now the exchange rate is fallen through the floor or gone through the roof, depending on whether you are looking at numerators or denominators. It's up to about 10,000 rupiah by the end of January. Basically what that meant is that the central bank was financing the speculation it was trying to put a stop to. It was supplying money to the system. The banks were largely owned by conglomerates, the banks would make loans to affiliated companies in the conglomerates, those companies or individuals would go to the central bank to buy foreign exchange, then, because they had just withdrawn deposits from the banks, they could go again to the central bank and say 'sorry we've run out of funds again, can you give us more liquidity support.' So Bank Indonesia would lend them some more money and this is just a cat chasing its tail. It could never, there's no reason for it to stop, it fed on itself, I guess you could say.

DV: Half of that story is intervention. How much intervention was happening? You can't come through that story unless the money disappears out by giving the people who want it foreign exchange at the central bank.

RM: I'm not quite following you, but you might be saying, well what I am saying was the central bank was lending that amount to the banks, this amount was being used to buy foreign exchange that went out of the system again, the remainder remained in the system and generated inflation.

DV: But the central bank was the counterparty of that running down of the reserves to give people foreign exchange.

RM: Yes, the central bank was selling its foreign exchange. It was lending the banks money which was then being used to buy foreign exchange reserves.

In the first half of 1998 interest rates went way up and I think the probable explanation for this was that inflationary expectations had been ignited and they stayed up at high levels for a very long period of time. This is when GDP growth fell, well, turned negative in a very big way. There are some figures there. Inflation surges, base money continues to increase throughout that six month period, inflation takes off. Reserves are roughly constant at that time, but bear in mind the IMF was lending Indonesia quite considerable sums. The in the second half of the year things begin to stabilize. As I showed you in one of the graphs, the government at last brought growth of base money under control. Inflation disappeared extraordinarily quickly. By September, I think, a negative number was registered. It wasn't maintained, but it's back now. Inflation has been slightly negative for the last 4 months from memory. Interest rates have fallen quite rapidly, nominal interest rates that is. Again I assume that is because inflationary expectations have now been knocked out of people's heads. By the end of the year, a dollar cost about 8,000 rupiah.

In the first half of this year, we've got a return to slightly positive growth, inflation, as I just mentioned, is down to nothing, stock price index is up to levels it was at prior to the crisis and the rupiah has continued to recover, I think it's now worth about 6000 or 6200 to the US dollar.

So that's very quickly the story of what has gone on and I'm already over time, am I?

DD: You forgot to mention current account deficit.

RM: Yes I didn't mention the current account deficit. It's an animal that doesn't excite me at all. I have to say, so it's not important to me. If it's important to you, the number was about 3 or 4 percent of GDP prior to the crisis.

Regarding exchange rate policy, I made a point of saying floating exchange rate, I put that in inverted commas, partly because the government didn't have a floating rate with a nominal anchor in terms of a fixed rate of growth of the money supply or a fixed rate of inflation. I also mentioned later on they started intervening directly in the foreign exchange market. It seems to me that, I'm just amazed, maybe I'm simplistic, but I can't understand why people don't really think in terms of a simple policy, namely having a genuinely floating exchange rate and simply adopting one variable as the nominal anchor. To me, my choice of preference is controlling base money growth. Indonesia has always tried to control about 5 of those important variables. It has tried to control the exchange rate, nominal, it has tried to control the rate of inflation, it's tried to control rates of growth of various categories of money and bank lending and to some extent it's tried to control interest rates. I think the most important lesson to be learned is that governments cannot control all of those things. Accept it, live with it. Choose one of them and just stick with that. I think that is really important source of bad handling of the crisis in Indonesia.

I'll just make one other comment because I'm conscious of using up other people's time. And that is in relation to the run on the banks, I've already noted that that was somewhat artificial, but even if it was a genuine run on the banks, it seems to me the appropriate way to handle that is to realize that what people are trying to do is to get out of assets they have no confidence in. In other words they're trying to get out of bank deposits because they are afraid there will be a loss of value. Well there are two important kinds of deposits. There are demand deposits, for which all you have to do is replace them with cash and that's very easy to just by lending the cash to banks which then allow deposits to be done. But if we're talking about quasi-money deposits, that is time and savings deposits yielding interest, the public are not going to be happy with cash as a substitute when they lose confidence in the bank, they're not going to be happy with cash as a substitute for that. So in my opinion what should have been done is the central bank should have issued more of its own certificates, the SBIs, to replace time and savings deposits in the portfolios of the public. It seems to me that would have been far less disruptive of the whole system, so you would basically have the central bank imposing itself as an intermediary between the public and the banks. The public no longer trust the banks, but they do trust the central bank, so sell them certificates and then lend money thus raised to the banking system. That would have allowed banks to maintain there portfolio of loan assets, it would have allowed the public to have more or less the same portfolio of assets as it did previously and it would have avoided the huge increase in base money which generated the inflation which justified the speculators first guess about how the government would respond. Thank you.

SD: Thank you, Ross. So now we have Peter Warr, we have 2 Peters and 2 Rosses actually.

RM: Excess supply.

PW: The Monty Python joke about Australians is that we all have the same names. We're all either Peters or Rosses or Michaels. That's just to avoid confusion. I'm going to talk about Thailand and before I do that you need to know you've been given two versions of my paper on Thailand. The first version was odd, in the sense that it only had the odd numbered pages. The paper is already odd enough without that. We discovered that mistake and gave you a second version with all the pages.

Thailand was the first Asian country to succumb to the present crisis and it is held to have been the initiator of a contagion that had a very large negative effect on other countries in Asian and other countries in the rest of the world. So unlike the presentation that my colleague Ross McLeod just gave on Indonesia, I do want to talk about the causes of that and the role played by capital mobility in the causation of the Thai crisis.

Let's look first the measure of the importance of the crisis. This figure is in you copy of the paper, I believe it's on page 24. We can divide the last 50 years of Thai economic history into three distinct phases. 1950-1987 was a period of stable growth averaging about three percent per capita per annum, three percent per person or about 4.5% in real terms overall. Quite a respectable rate of growth sustained over a very long period. The second period was a boom from 1987 to 1996 during which GDP grew in real terms at almost 10% per annum and well over 8% per person, an phenomenal period of economic boom, unprecedented in Thailand and almost anywhere else in the world. During that period of economic boom, Thailand was the fastest growing economy in the world. The third period, starting in 1997, was the crisis. The point is the crisis was the collapse of the boom. It was not the collapse of the Thai economy, as the journalists like to say, by which I mean the following. Suppose the boom had not occurred, but that the pre-boom rate of growth had been sustained and we'd had neither the boom nor the crisis. GDP per capita in Thailand would be substantially below it present level today if that had occurred. The crisis was not the collapse of the economy, it was the collapse of the period of super-growth. That's an important point, it helps us put the crisis into perspective. If the pre-boom rate of growth, that is the period ending 1987 had been sustained until 1996, GDP per capita would be about there, about 30,000 baht per person 1987 prices, about there 1996, and its level today would be well below the present level.

OK. I want to talk about what caused that. Now the distinction that is fundamental in understanding crises like the Thai crisis, the new idea in the macroeconomic analysis in these matters is the distinction between vulnerability to a crisis and the trigger that causes the crisis. Unless we make that distinction, we are not really getting at the heart of issues and I want to draw an analogy to help you to see what I mean by that distinction. It's an analogy that since we're in Australia, has a very Australian flavor. On a wintry day like this you couldn't imagine that bushfires would be an important phenomenon, but in the summer in Australia, it's hot and dry and bushfires are a real danger for people who live near forested areas. The greatest danger of the bush fire is that it will burn your house down. That's the second greatest danger I suppose, the greatest danger is that you'll be in the house when it burns down. That's rare, houses burning down is not rare. OK the distinction is between the trigger, that is whatever causes a fire to begin and the winds that blow it in the direction of your house, that's the trigger. The vulnerability, whether you have a lot of grass and shrubs and trees next to your house. The importance of the distinction is that fires happen and they're largely uncontrollable. Not throwing lighted cigarettes out of car windows, not throwing them out of your house window: that's a good idea, but fires happen anyway, they're a natural phenomenon. But vulnerability is about when a fire occurs it burns your house down. That's the thing to be avoided in the case of bushfires, there's a limit to the extent you can stop fires happening. So the focus I want to place is on the concept of vulnerability. I think that this concept of vulnerability has changed the way we think about macroeconomic fundamentals. It is changing it. Because we used to say that, we used to have a list of fundamentals that included current account deficits, rates of inflation, government budget deficits, not any of which were closely related to the concept of vulnerability. We need to expand our set of economic fundamentals to incorporate the concept of vulnerability. I think that work is in its infancy. I like very much, Dornbusch's way of putting this concept of vulnerability. He says, 'vulnerability does not mean that things will go wrong, it means if they go wrong, they will go very wrong.' If you're in a state of vulnerability, you've got trees growing next to your house, if things go wrong, that is if there is a fire, then you're in big trouble. That's the concept of vulnerability. The distinction between whether things will go wrong and how bad it will be if they do.

Now in economic terms the important concept is the way in which expectations of a devaluation will be affected by random external shocks. Some of the shocks will be external, some may be internal, political shocks, changes in the weather, natural disasters of various kinds. External economic events. They could all be triggers that could change expectations. The concept of vulnerability is about the degree to which expectations of a large change in the exchange rate will result from that trigger. I'm assuming a fixed exchange rate, I've already slipped in the word devaluation a moment ago. Let's assume a fixed exchange rate. Sachs, Tournell and Velasco have developed a framework which draws on their work from Mexico in which they distinguish three measures of vulnerability: the adequacy of reserves; the presence of a real appreciation of the exchange rate in excess of the natural rate of real appreciation; and the third, bank exposure. So I'm going to talk about those concepts in the light of Thailand and the role of capital mobility in all that.

First a few facts about Thailand. Thailand had a fixed exchange rate from 1950 to 1997. The baht was pegged to the US dollar. The closeness of that peg varied from time to time, but, except for 2 devaluations in 1981 and 1984, the baht US dollar rate scarcely varied. Thailand had capital controls from the 1950s right through to the early 1990s and they were progressively dismantled from 1990 onwards. Thailand experienced substantial capital inflows. They were moderate prior to 1987, of the order of $500 million, FDI inflows for example, but from 1987 onwards, the rate of FDI inflow in particular accelerated dramatically...

...a little bit of algebra that I think is helpful, here we have an identity, the change in the level of international reserves is a sum of the balance on current account and the balance on capital account. Let's distinguish between 2 kinds of capital inflows, net capital flows. First, short term capital inflows. I will mean by that capital inflows that can be changed at short notice into capital outflows. I mean such things as portfolio investment by foreigners, short term loans by the domestic banking system from abroad, foreign ownership of domestic bank deposits, that is accounts by non-residents in the domestic banking system. That is short term or volatile capital flows. That's what I mean by k*, by delta k* I mean the change in the stock of volatile capital owned by foreigners, by delta k0, I mean that component on the balance of capital account which is the change in the stock of non-volatile capital, in particular, FDI inflows and long term loans from the banking system. Do a little bit of rearranging, take this term to the left hand side, on the left hand side we have the change in the level of reserves minus the change in the stock of volatile capital. On the right hand side we have the balance on the current account and the change in the stock of long term capital. The purpose of this is I think the important thing to focus on in terms of reserve adequacy is not how many months of imports your reserves can purchase, for example, that's a concept of reserve adequacy that was relevant once, but is not relevant now. The important concept.

EC:	A clarifying question. Why do you put portfolio investment in the short run? If you try to sell it to take your money out, the price falls quickly as if you try to sell your house to take your money out.

PW:	It's a debatable point whether it should be included in short term capital flows or not, which is why when we talk about the composition of short term capital flows, I will talk about its components. Including the distinction you just made. OK, the important concept is the stock of international reserves, compared with the stock of volatile capital which could be presented against those reserves at short notice, if those expectations change in the direction of expecting a devaluation. Why is that relevant? It is relevant because the owners of this short term volatile capital fear a capital loss, the capital loss that would accrue to them if they kept their assets in the country and there was a large depreciation of the exchange rate. That's what they fear. It's a component of the total volume of funds which could be presented against reserves at short notice. It's not the entire stock of volatile capital it's merely a component of it. Nevertheless, making those distinctions that I just talked about is helpful in the Thai context. Page 25 of the paper. It's helpful because take a look at the volume of reserves. That's that heavy line you see there on figure 2. Compared with the accumulated stock of short term volatile capital, shown by this line. I'm not going to talk for the moment about non-volatile capital. That's the line there. The important thing is the stock of reserves compared with the stock of short term capital. I've created these stocks by going back to the balance of payments data and accumulating the stocks over time. The data published by the Bank of Thailand for example don't tell you these stocks, you have to construct them yourself. OK from 1994 onwards, that accumulated stock of short term capital, it includes portfolio capital as Eliana just pointed out to us, it exceeded the total stock of Thailand's international reserves and the gap between them continued to rise over time. In other words, come back to the equation we just looked at, the adequacy of Thailand's reserves putting the change in the two levels of those stocks, that is expressing them in flow terms, the adequacy of reserves was declining steadily and the stock of volatile capital exceeded reserves from 1994 onwards. What was the composition of that? In figure three we have the breakdown of that stock of short term capital. There's the stock again into its components. Again the solid line is reserves. This set of triangles is portfolio investment, this line here is the stock of short term bank loans from abroad, this line down here is the stock of non-resident accounts in the domestic banking system. Have we correctly identified volatile capital there and what are the important components? Look what happened to reserves from the time of the crisis onwards, look what happened to the stock of volatile capital. It's not too hard to see that what happened to reserves was due to the behavior of this volatile capital. Now I guess the data support Eliana's intervention because was a change to the stock of portfolio capital responsible for that drain on reserves. No, that stock scarcely changed. It was the outflow of the other two components of the short term capital stock. Short term bank loans and nonresident accounts that accounted for the drain on reserves.

GV:	Are the reserves adjusted for futures obligations?

PW:	No they're not.

GV:	So that's even worse then.

PW:	Yes. OK I've done this same calculation you see here for Indonesia and Korea. There's no chance that the chairman will allow me to present that this afternoon, but if there's a demand for it I can present that during the discussion.

The second dimension of vulnerability: real appreciation. OK skip over to figure 5. Figure 5 has 4 measures of real exchange rates. The one I like the best in view of the fact that we are here at ANU. the home of the Australian model of the balance of payments, we love the distinction between traded and non-traded goods around here. In fact, I get carried away with this distinction even more than most of my colleagues, I actually go out and measure them. So what I have done here is I have constructed indices of traded goods prices and non-traded goods prices from Thai data. The method by which those indices were constructed is explained in the paper. I won't have time to discuss it. It's a direct measure of domestic prices of traded and non-traded goods, not a proxy based on exchange rates adjusted by CPIs or wholesale price index or something like that. It shows a very substantial rate of real appreciation over this period. If you...

(Incomprehensible Question)

The issue is whether you use wholesale or consumer price indices to deflate the exchange rate, my preferred index uses the domestic consume price index and the foreign wholesale price index do the deflating because I think that gives a better proxy for traded goods prices relative to non-traded goods prices. The reasoning is explained in the paper, that's what I mean about the preferred index, but I won't have time to talk about the details of the other three indices. They're all imperfect, very imperfect proxies for the traded/non-traded goods price ratio, which is what we want to know about in this context. Here's that same index I've just talked about, traded/nontraded goods prices, over thirty years. The first oil shock increased traded goods prices internationally and that was manifested in their prices in Thailand. The second oil price shock in the late 1970s did the same thing again. 1980s onwards, a steady period of real appreciation in Thailand, far in excess of the rate of real appreciation that we might expect on Belassa-Samuelson grounds.

OK. That's the real exchange rate. Bank exposure. Figure 6, has two measures of bank exposure. The solid line is a measure of exchange rate risk. It's the ratio of foreign liabilities of the banking system to its loans to the private sector within Thailand, all measured in domestic currency. The dashed line is the measure of exposure to a domestic contraction. It's the ratio of total bank credit to the private sector to GDP. What we see is over the period of 1988 to the crisis of 1997 a very substantial increase in those two measures of bank exposure.

Put those three things together: reserve adequacy, real appreciation, bank exposure. We see a very clear picture of why Thailand was so vulnerable to a crisis. Why there was lots of grass and lots of trees growing right next to the house and it didn't take much to burn the house down. What was the trigger? The trigger, according to me, was a termination of the very rapid growth of exports from Thailand. Prior to 1996 exports had been growing at about 20% per annum. In 1996 growth was approximately zero or slightly negative. There's a bit in the paper about the reasons for that export slowdown, it's somewhat speculative, but there was a slowdown. But that's the trigger. A slowdown in exports should not cause a crisis. Would not cause a crisis, you simply borrow to smooth over the balance of payments problems that are caused. But if you're highly vulnerable, as Thailand was by 1997, then a slowdown in exports like that can lead to the expectation of a devaluation. That's what happened and all of that volatile short term capital headed to the exit. That was the crisis. Reserves were entirely inadequate to cover that level of demand. Lack of transparency on the part of the central bank and of the domestic banking system as well led to mistrust on the part of the public of the statements being made by the leadership of the central bank and rightly so. The governor of the central bank was saying in early 1997 'yes we have a drain on our reserves, yes there is a capital outflow, we can handle it no problem.' That was false. The volume of volatile short term was about double the volume of reserves. There was no way they could withstand that demand on reserves. Capital controls, do I have time?

SD: About one minute.

PW: Thailand dismantled their capital controls. I have summarized in the paper what their capital controls were. They were substantial: both controls on capital inflows and capital outflows. They had an effect during the period before 1990, as measured by divergences between domestic and foreign interest rates and the existence of those capital controls conferred on the Bank of Thailand a degree of monetary autonomy in spite of its fixed exchange rate. If capital mobility was very high, no such monetary autonomy would have been possible. I wrote a book with a Thai colleague in which we showed there was a degree of monetary autonomy, but that autonomy was temporary and small. The role of the capital controls was to slow down rates of capital movement, not to stop them and that's basically my perspective on the capital control story in the context of Thailand. If Thailand had retained its capital controls from the early 1990s and not dismantled them once they started to bite, they started to bite around 1997 onwards when capital inflows became large, the capital controls became very inconvenient from 1997 onward if you wanted to bring large sums of money into Thailand. Before that they weren't biting very much. Once they started to bite they were taken away. If they'd been retained that would have slowed down the rate of capital inflow, would not have stopped it. So here's the question, the question I really don't have the answer to, earlier today, Dr. Athukorala Eliana Cardoso were talking about capital controls: their effect is temporary, their effect is small. True, but is that enough in the context of a financial panic, is the temporary small effect of capital controls sufficient to dampen the rate of capital outflow sufficiently to enable you to do something? Is that temporary effect sufficient? Definitely capital controls are not and could never be a substitute for the prudential banking regulation and a sensible exchange rate policy that is really needed to reduce vulnerability to a crisis. They could never be a substitute for that, can they help in the context of a panic? I think the question remains open.

SD: Thank you Peter. I think the order seems to be going very well. We started with the worst and then second worst and maybe among all these bad case this is the best I guess. Let's have Prof. Pyo.

HP: Thank you. The Korean case is here and there, has been well documented, so what I will do is just characterize what I think is important factors contributing to financial crisis. Then I would like to move onto sort of post-crisis assessment of IMF-led rescue packages and World Bank-assisted corporate restructuring process because the Thai crisis, of course, the roots could be somewhat different pretty much the same as the South Korean case except industrial structural differences between the two countries. My paper begins somewhat with a political-economic perspective, analysis of the financial crisis. The mainstream or dominant proposition was that financial crisis in South Korea was a kind of shocking financial crisis. Fundamentals remained very strong, balance of payments deficit was quite manageable and for example fiscal deficit was non-existent, even surplus was going on and so forth and exchange rate was reasonably flexible, plus savings rate, how can an economy with savings rate over 30% can fail and go bankrupt almost, national insolvency. How can you imagine in modern macroeconomic terms a country which saves over 34-35% could go bankrupt? What I am saying, the reading of these macroeconomic fundamentals was somewhat misleading. I think we should pay more attention to how to read this macro. fundamentals. What went wrong, what was wrong with it? Even though I detected here some of the major indicators which went wrong apparently before the crisis, I still believe the proposition that the Korean financial crisis could have been avoided if there were right macroeconomic policy combinations. Even after Thai crisis and it was more of a political failure rather than an economic failure. Of course there were some fundamental disparities, but still I believe it was more of a political crisis rather than an economic crisis and that is the reason why it is reviving very fast, because from the political crisis, the country has been recovering very fast.

Well the fundamental setting of this crisis and why did overinvestment occur during the pre-crisis period, even though the country's domestic savings rate was over 35%. I would like to call your attention to table 1, page 21. The third row indicates investment and savings ratio and over the period from 1991 to 1993 0r 1992, still domestic investment ratio was high, but in 1993 domestic gross savings ratio exceeded investment ratio, but after that continued to have large domestic investment ratio, surpassing already record high level of gross savings rate. So without explaining overinvestment drive, without explaining what caused this overinvestment drive, any kind of attempt to explain financial crisis in Korea is a failure. We have to explain why did they invest so much over the 1990s? It takes a much more theoretical framework rather than empirical framework and the theoretical I relied on was that Korean case, and that's the reason Korean case should be somewhat distinguished from Thai crisis or Indonesian crisis because industrial development structure is somewhat different. The pre-crisis equilibrium, which had been there for over 20 or 30 years, was basically kind of regulatory equilibrium which we define with my colleagues at the University of Tokyo, I used to refer to this as excess competition model. Where government either explicitly or implicitly regulates entry or exit of firms in to certain industry. Ministry of Trade and Industry has a bunch of industries, Ministry of Telecommunication has a bunch of industries, Ministry of Transportation has industries and so forth. So under this regulatory equilibrium, once you are in the club, then banks know that you are in the club. It's a typical pattern of moral hazard. If you go out of business, somehow bank will bail you out and bank expects that and central bank expects that. So under this regulatory equilibrium, what I am describing is a kind of typical pattern of moral hazard. What is important is the distinction between Korean chaebols or conglomerates and, for example, Japanese zaibatsu. There are basically two fundamental differences. One, just because of pure domestic economic size, which I estimate Korean economic size is roughly 5-9% of Japanese domestic market size. Therefore in Japan you could see two types of conglomerates, like Sony, Toshiba, Matsushita type, very specialized Toyota type international multinational enterprises. At the same time you have a very much diversified group such as Mitsubishi group, Mitsui group or any kind of much more Korean-style, chaebol-style zaibatsu. There could be a coexistence between this highly integrated, specialized multinational conglomerate as well as more diversified zaibatsu style. In Korea, specialized chaebol is much more risky than highly diversified chaebol because pure domestic market size is much smaller than Japanese market size and the industry equilibrium is regulated by the government. So therefore, If Hyundai as a group or Samsung as a group specialized in one industry like automobiles or electronics, they might not have survived this crisis. Therefore this difference in industrial structure is very important. Therefore when IMF and World Bank comes up with these policy prescriptions fro corporate restructuring, I think the lesson we learn from it is that you really have to look at country-specific case and should not really generalize to dissolve these zaibatsu or chaebols, trying to let them specialize in one line of business because that might increase the risk of failure even further. Under this regulatory equilibrium, what happens is that the overinvestment drive could be made due to some economic fundamental changes. For example there was a democratic transition, the pseudo-military government has been dissolved and Korea entered into a very rapid period of democratic transition, it has not yet been completed. So under this democratic transition, there is no absolute power. In other words, the very condition, the most important pre-condition for this regulatory equilibrium to exist and to be stable is to have some kind of absolute power or replacement of orderly market mechanism of this absolute power. But what happened was due to this democratic transition, banking supervision, even the central bank was fighting against the ministry of finance over the issue of banking supervision. They were on the streets. Central bank employees were in the streets in the summer of 1997. So what I am describing in this paper is the total lack of, not only absolute power, but also lack of policy coordination. It has been relatively well managed the economy up to that point, but during the crisis, before the crisis at least for one year the macroeconomic management and coordination massively failed to some extent and that contributed to the sort of impending crisis.

How could we have detected this crisis? What I would like to show you is one of the macroeconomic indicators. This is not foreign reserve, this is monetary based concept. Monetary policy movement before the crisis. Even though this is not really clear, you have the crisis here in 1997 and this in the annual growth rate of reserve money and even before 1997 December crisis, reserve money is already drastically contracting, monetary base is. So that somehow this was not caught, not only by Korean authorities, but also many sort of international institutions and investors. This drastic drop in reserve money, monetary base has already put the economy in a near credit crunch situation and then financial crisis probably has worsened the situation. And why did this reserve money contraction occur? Because the contraction of the economy had already occurred in the second half of 1996 and first half of 1997. Therefore this not being able to detect this macroeconomic indicator was also very unfortunate.

DD: Why were they contracting the monetary base?

HP: The monetary base, if you look for example at economic indicators in for example Table 1 and 2, there were already a business slowdown in 1996 and 1997, therefore reserve money was somewhat contractionary in movement. Secondly, as I estimated in another paper, the rate of return, growth rates of return on physical capital in Japan started to decline very sharply in 1985 and in case of Korea from 1990, even below the average OECD level. So therefore there was a kind of very drastic decline in capital efficiency or drastic decline in real rates of return in both countries, That's why I am arguing that Japanese stagnation at this moment is a real sector phenomenon, in my judgment, rather than financial sector problem and also financial crisis in Korea has a much deeper root in real sector declining capital productivity and this reserve money reduction is pointing to that trend. If you look at, for example, foreign investment movement, this is quite a similar story to Thai case, and FDI has never been any sort of disturbing factor. Most of the disturbing factor was bond investment, portfolio investment and if you see before the crisis and after the crisis, this whole pattern shows very turbulent exit and entry of bond investment and what I argue, many Korean authorities, bureaucrats took a sort of comforting remarks, saying that 'we will open up bond market to only 10%, stock market to 20% and so on, so therefore we should be safe from contagion.' And what we learned was not this relative magnitude 10% or 20%, what matters is not net flow or net stock of foreign debt. At the time of crisis, what matters is absolute gross stock of debt and sort of gross figures rather than net figures because you cannot really liquidate very fast your assets abroad. Overnight you cannot sell them all. So what you have is our bond market was opened up to only 10% evaluated volume, but when that 10% almost simultaneously made an exit, then when the foreign reserves could not take care of that exit and when short-term maturity loans could not be extended, it doesn't matter how much percentage you have opened up your bond market, it matters how much was the total amount of bonds which were exposed to foreign investment. So all these relative figures, like reserve money divided by monetary base and all these relative figures do not mean that much at the time of crisis in my judgment. What matters is absolute amount, gross debt rather than net debt and directly usable foreign reserves rather than net foreign reserves.

Lastly we can take a look at foreign exchange rate movement and foreign debt movement and I think exchange rate policy is a very important policy because most emerging market economies do not have a built in stability or flexibility in the economic system. Typically, price has been controlled in Indonesia and Thailand and elsewhere in transition economies as you know, interest rate has been repressed or controlled, stock market has been controlled and so forth. With all the se rigidities, somehow we should have allowed foreign exchange market to bear some kind of internal or external shocks. So even in retrospect, Korean authorities before 1997 should have allowed full flexible exchange rate market, they should have allowed depreciating Korean won over a one month or two month period, sharply, but keeping their foreign reserves intact. If they had followed that after Thai crisis as Taiwan did successfully, I think Korean won could have been saved. I think the financial crisis could have avoided, but political economic situation after Thai crisis, was as I described in detail. In October 1997 virtually all Japanese banks did not allow short term loans to be extended because the Kim Dae Jung government may be elected, Kim Dae Jung government may nationalize everything: I don't want to bet on this newly elected government and so forth and Japanese banks knew the political situation best in Korea. No other banks could know better than Japanese banks because Japanese banks had a long history of political connections. So all the rest of the foreign banks and investors followed Japanese banks situation. If I were the Japanese banks I would have done the same thing, because you want to put your short term loans not extended. Look at the political situation for another three months or six months and maybe will loan again, but you want to protect your assets and it was unfortunately coinciding with Hokkaido Bank and all these Japanese banks failure to some extent, so Japanese banks did not have any option except to withdraw short term loans. Typically that was the beginning of the crisis.

Lastly, foreign debt. Korean government is somehow trying to advertise foreign debt is slowing down and for example, the net debt figure is declining because foreign assets is mounting so net debt is declining and I tell them that net debt does not mean that much because these foreign assets are borrowed assets. So you don't have to advertise what you are doing there. It's living on foreign debt and you don't have to advertise that outside the government. Now unfortunately I didn't spend that much time on IMF-led rescue packages, but if you'll allow me additional 2 minutes I would like to mention.

I in detail describe in this paper that Korean economy somehow managed to avoid national insolvency and that was very lucky and fortunate happening and it was well coordinated by international financial institutions such as the IMF and World Bank and I think Korean people owe that to international coordination of policy making. The national insolvency could have devastating effect, it is not only economically unacceptable, politically, security-wise almost an unimaginable crisis. But somehow, the handling of this crisis after December 1997 was somewhat errant and I think both international institutions and other developing countries should learn from our experience. The initial assessment, even though as I indicated reserve money was already contracting, the typical prescription was high interest rate policy, tight, super-tight monetary policy combined with super-tight fiscal policy and that initial assessment and policy prescription turned out to be wrong and I think IMF admitted that, but IMF also argued that within six months or so they tried to be flexible, allowing fiscal deficit to some extent and at same time allowing interest rate to go down and so forth. So on the one hand, whatever policy authorities we blame, we should admit that we made some initial assessment mistakes but somewhat we were flexible to accommodate and avoid that mistake somehow. But during that 6 month, 9 month period there has been widening income inequality gap because the rich could save a lot of money by depositing their income to banks at the interest rate, 20%, and then after 6 months stock market was doubled from 400 to 800 index, but during this turbulent economic condition, only the poor and the middle class did not have any leverage, so that this widening income gap is potentially generating social disintegration, to some extent.

The second thing is regarding corporate restructuring effort made by the Korean government. They concentrated on top 5 chaebols for example in the name of big deals and they tried to make some kinds of big deals and then save the economy. This is the mistake they should have avoided and they are making the same mistake as previous governments made. That is government intervention in basically market failure case...that 5 companies will survive from this financial crisis. They put all the money on these 5 chaebols without relying the rest of the other chaebols, so that this is creating another round of moral hazard and curiously enough World Bank or I think IMF did not really blame explicitly another round of moral hazard or government created these big deals and this is causing what I call industrial disparity. The typical, one of the great strengths and engines of growth of the Korean economy was not only competition among top 5 chaebols, but also competition from top 5 chaebols to rest of about 25-50 chaebols. So inter-chaebol compassion was the main source of growth in Korean industrial development. For example Samsung could never win game in liquor industry. They have been knocking at liquor industry but liquor industry was always dominated by another two or three highly specialized chaebols. Samsung could never win the game in the food product industry because that was specialized by smaller chaebols and so forth. So that this inter-chaebol competition, especially between top 5 and the rest of the chaebols, are the typical pattern of industrial competition and somehow during this process it has been, not only neglected, but also sort of the competition was avoided. As a result there is a much more polarization in industrial structure and competition schemes. So my conclusion is that IMF and World Bank should have advised Korean authorities and almost should have pressed Korean government to rely on more market oriented restructuring programs. Once we used these public funds for saving key banks, as I explained in this paper, there shouldn't be any restrictions on the sales of banks to residents or non-residents, there shouldn't be any kind of restriction, if you want to put on sale. In addition, there shouldn't be any direct involvement of the government. Why are government authorities negotiating with foreign investors by exchanging letters of intent or selling one bank? The reason is that if government kept doing it there would be responsibility taken by management taken by the banks' union, no responsibility taken by banks shareholders, if everything is done by the government there will be another moral hazard created so therefore I was wishing that Korean government could rely on much more market oriented method of corporate and bank restructuring and should not be satisfied at the present state of reform effort as it is. Considering still large amount of absolute foreign debt and social disparity as well as industrial disparity. Thank you.

SD: Thank you. So we have the three cases. I guess it's not just the problems and that Asia is different one from the others, but also the way we hear the analysis. One is distinctly different from the others. The Indonesian case presented by Ross he concentrated on the policy management. He sort of didn't look at it on the origin and then we see Peter Warr saying that the origin is also something important and we try to identify the origin and why were we vulnerable? I think both of them can be a guidance. We can discuss further on that. The last case was with Korea, looking at the characteristics as well as some of the policy. If I may say so I guess in both the Indonesian and Thai case they look at the actually either the fundamentals or domestic origins of crisis. Where on Korea there was some critics on how to handle it. We still have about 40 minutes so I will open the floor and you could either ask about some specific technicality or comment directly. The floor is yours.

PW: Maybe I can give a better answer to the question Eliana asked me during the presentation if I may.

SD: Can you do it very fast, the others would like to raise some issues?

PW: I'll wait.

RG: I'd just like to draw out Prof. Pyo a little bit on the section of his paper, page 10 on monetary and fiscal policy. A lot of the emphasis in the presentation was on the extra things that the IMF didn't do, competition policy and so on, but if we just focus on the macro things you made a very strong statement on the excessive contraction of money in the lead up to the crisis and the endorsement of Cordon's (?) point about excessively tight fiscal policy. Forget the extra things on the Christmas tree, just on fiscal and monetary policy, if Korea had run, what one might call a normal rather than a highly contractionary monetary and fiscal policy through late 1997 and through 1998, how would the economy have behaved?

SD:	Is it related?

VP:	Can you explain once more, the question was asked, what was the reason for such a contraction of 16%+ in the base money -12% in the time when foreign exchange reserves seem to be growing and there was an inflow, what was the reason for such a change?

HP:	If you look at, for example table 2, it may give you a better picture because it is the same as table 1, but I compiled quarterly data, which does not have 1996 figures, but if you look at reserve money, which is basically monetary base, in the second row of table it was very rapidly contracting considering the economic growth rate in 1996 and 1997. This was due to a couple of factors. First as I said, there was already, there must have been pre-warning signals. Korean companies knew, some of the big companies knew that declining rates of return was almost unbearable, so they tried to reduce investment as far as they could, even though up to the last minute, high debt-equity ratio companies would have no other option, except to rely on new loans or extending loans. So what I am saying reserve money contraction clearly indicates at pre-crisis point, very rapid reduction in investment and sort of economic conditions were already pointing downward and that's what I am saying.

Regarding Prof. Garnaut's question. It is a very difficult question in the sense that what would have happened if Korean government or IMF did not recommend tight monetary and fiscal policy at the beginning of the crisis. What would have happened if they had gone on reasonably moderate increase in monetary growth as well as fiscal policy. I think still the economic stability could have been maintained. Monetary policy should have been much more shock absorbing. It was basically foreign currency crisis. It was not sort of domestic banking crisis, so to speak, in the short run, in the long run it could have been said that way. But basically it was mismatching crisis. Short term loans could not be covered by foreign reserves, that was the simple short run triggering phenomenon. Therefore monetary policy could have been much more shock absorbing because foreign liquidity is not being provided therefore domestic monetary policy could have been not overly expansionary policy, but could have been shock absorbing policy. Especially if they caught the trend that reserve money over four quarters have been already declining at unusual rate. Therefore we should admit there should have been much more flexible monetary policy target. Fiscal policy again. Fiscal policy that should have allowed much more reasonable flexible fiscal policy. Somehow IMF succeeded in correcting through a series of consultations over 2 or 3 quarters and they began to realize the recession is almost like depression, much steeper than they initially anticipated, therefore, they corrected their policy advice to accommodate. It was very fortunate, but it does not necessarily mean their initial policy prescription was right and we have to learn from the experience.

SD:	OK, thank you.

PD:	I just wanted couple of quick points to my colleagues Peter and Ross, since they're in Canberra and I'm in Canberra I needn't spend much time on it. One point, Ross, I just struck by the absence of much political discussion. After all we were witnessing a catastrophic political and social crisis. The collapse of one of the longest living regimes of the 20th Century, Suharto had been in power for almost 33 years and you mentioned policy confusion maybe you want to flesh it out a bit. It does seem to be really quite important. There is the argument Lee Kuan Yew advanced recently that if Indonesia had just had to cope with the economic crisis or just had to cope with political crisis it might have been containable but the two combined made it so much more difficult and of course they interacted. Peter, it just strikes me with your definition of mobile capital, isn't the best definition really if you've got an open capital account, something like M2 to reserves, my understanding of capital flight in many countries is that it is in fact domestic capital which goes out first since they're the ones often who know what's really happening more than foreigners and so I wonder whether you might have another theory which is simply M2 to reserves or something like that. And a third point to both speakers it's just striking when one thinks about that in both countries it's perhaps just a rather tragic accident in history, but in both countries you had a process of financial deregulation. Indonesia 1988, Thailand as I understand it 1993, and shortly afterwards, the technocrats in both countries were disenfranchised. Just by accident as it were, but it's perhaps a rather unfortunate accident in history, or perhaps I should be addressing that question to Soedradjad, not Ross and Peter.

RM: Yes, I didn't really talk about politics that much in my paper, but clearly it is extremely important in Indonesia. For those of our guests who are not familiar with that part of the world, President Suharto had been in power for 32 years before he fell last year. He was the government, nothing moved in Indonesia unless he said it was OK. So the impending end of his regime was very important, very much on people's minds and he was getting quite old and he was also due for reelection in 1998, just a few months after the crisis began. I do have a wee footnote in my paper, it's number 4 and I just noted policy incoherence was in part a reflection of the political instability which was, as I said, inevitable as the end of the Suharto era drew closer, because one of the things the great man didn't do in power all those years was to prepare the way for a successor and so there was always very great confusion over who would follow him and what kind of regime would come along. He happened to get ill at the beginning of December which is just about, or just a little after the time I've identified as my phase 2 or where things start to get out of control and the sort of analytical model I was using fits that rather well too because I guess I was at pains to say it really doesn't matter so much what the trigger is, the initial disturbance, what matters is people's about how the government will respond to it. Well if Suharto was suddenly ill and if he was to suddenly die, nobody had the slightest idea who was to follow and therefore what kind of policies would be brought in immediately thereafter. So money supply getting out of control was one strong possibility. Neverthe less, although politics was undoubtedly important in its interaction with economics during this period, I would still argue very strongly that even what I regard as the good guys amongst the Indonesian government had what I think were wrong ideas about macroeconomic policy. One thing was the balanced budget policy. The history of that is that Indonesia had hyperinflation during the 1960s and was basically the result of very large budget deficits. From that was learned you don't have large budget deficits and so they always followed this balanced budget policy. But of course the hyperinflation wasn't caused by the budget deficits, it was caused by the monetization of those budget deficits. There's an important distinction there because you can get money growing very rapidly for reasons other than large budget deficits and so what we witnessed towards the end of 1997 we had a government that was bending over backwards to try to prevent itself from having a budget deficit and yet at the same time its central bank was literally pouring money into the economy. So we sort of worry about the balanced budget so that it doesn't create money but at the same time the central bank is creating huge amounts of money, doubling the base money supply in the space of several months.

Secondly, I am critical of the government, quite aside from political issues, on this sort of predisposition to control everything. To try to control money and the exchange rate and interest rates and inflation and the current account deficit and maybe a few other things as well. I think that mentality is still there and I think it's one of the lessons Indonesia still needs to learn. I came across something very interesting just recently in the form of a new law for Bank Indonesia, the central bank, and in that law there is an article which discusses exchange rate policy. Two things I can say. One is that the objective of the central bank is said to be stability of the rupiah and that is interpreted both in terms of prices and foreign exchange value and that, it seems to me, seems to rule out a floating exchange rate policy. You can't have a stable rupiah which is floating. In the elucidation of that or perhaps another article, the law actually talks about three different types of foreign exchange policy or system that could be implemented. One of which is fixed exchange rate, the second of which is a managed float and the third is a floating exchange rate and the definition of a floating exchange rate is where, what it basically amounts to that there is no target for the exchange rate, but there is intervention by the central bank, so it seems to me that still in the central bank there is an unwillingness to countenance a genuinely floating exchange rate. That's a long answer to your question. Although there's not very much discussion of politics at all in the paper, I wanted emphasize what I believe is policy changes and policy adjustments that need to be made and that have been responsible for things not going very well in the past.

MY: You keep on saying the substantial increase in basis money generated inflation, but that base money is due to the function of the lender of last resort, right? If so that is simply substitution between deposits and base money so that money supply as a whole may not be increasing. So lender of last resort function doesn't necessary lead to high inflation in economics. But how do you think so?

RM: In my presentation I thought I had made the point that the volume of lending by the central bank was not consistent with the amount of deposits being withdrawn from the banks. In fact the deposits were growing all the time, which is an indication really that the central bank was being fooled into lending all of this money without there being a general run on the banks.

MY: Then for different reasons the Bank of Indonesia is printing money, is that your point?

RM: I guess, I don't know what their motivation was.

MY: You said because of the bank run the base money increased. If that was the case that was simply the substitution between deposits and base money leading to inflation. Lender of last resort doesn't lead to any inflation, usually.

RM: What I am saying is that when the first group of banks were closed this created fears amongst depositors and there was a run on the private banks, funds were simply shifted from the private banks to state banks and foreign banks, but beyond that, shortly after that, the people who own banks saw in this a wonderful opportunity, this is my interpretation. They saw a wonderful opportunity, 'gosh, we can go to the central bank and tell them we've run out of deposits or deposits are being withdrawn and the central bank will very kindly top the deposits up for us.' And so they started making loans to themselves or affiliated companies, those loans then created deposits the deposits were then used to purchase foreign exchange from the central bank. That's the sort of story I'm talking about.

MY: Currency run you are talking about.

RM: Well it's a combination of the two things being fed by the central bank.

MY: You've got to distinguish between domestic bank runs that impact on money supply and then currency runs. They are very different.

RM: Yeah, the two things going...I'm saying people were pretending basically that there was a bank run.

MY: No I'm talking about your analysis not attitude of the people. Your analysis says that increased base money due to function of lender of last resort which was in turn due to bank run in classical sense.

RM: No, no I put lender of last resort in inverted commas, because it was really far in excess of the amount that was needed to cover the bank runs, it was being used to finance currency speculation.

SD: I should say something. I have been trying to, my disagreement with him is historical so that's why I have kept quiet. Yes, that is really questionable on the analysis. I think is it very difficult to say that the bank run is sort of a fake run. It was a real run and it's very difficult for me to see that the run was a fake one. The other part which makes things difficult if you explain about inflation you also didn't make any allocations of imported inflation. The import content of Indonesian consumption are so huge and of course with the depreciation of 85%, I don't think it's fair to put the increase in price just because of the high price of dollars to import these commodities. When it was stabilized, was it because now we had become disciplined? This is the problem of post-sequencing and everything happens so fast, such that it is very difficult to say that when the inflation was very high, it was because of the increase in money supply. When the inflation was so low, what was the cause of it? There are other elements which have to be explained here so the thing wouldn't be too, I think you use your own word, too simplistic. Because I think that's very true that if we use the second generation analysis you've got everything like that. Like whether the increase in the money supply actually is not substituting the decrease in deposit maybe we have to look into that area very carefully. Actually what happened these banks have problems in their accounts with Bank Indonesia and so this is the lender of last resort action. Now about the generation of that money, etc. maybe we have to look into that more carefully, but later on if you continue by seeing that's the cause of inflation, I think we have to account for the cost of inflation from other areas. We can go back into that later on otherwise we will just talk about this alone. Peter.

PW: Everyone will have forgotten the question by now. Why didn't I use M2 on reserves? Because what I wanted was a measure of volatile capital in the numerator relative to reserves. M2 would be too broad. M2 is not all highly volatile. I wanted a narrow measure because my objective was to show an increase in that stock relative to reserves. If that narrow measure was sufficient to exceed reserves, as the data show, then I've made my point. If I took an excessively broad measure as you are inviting me to do, I wouldn't be able to say that. That's a theoretical point, that's why I did that. Now and empirical point. It doesn't work. Let me the opportunity to advertise a recent working paper with Chandra sitting opposite me where that's one of the measures we explored. We criticize it on theoretical grounds and then we demolish it on empirical grounds. What we try to show is that measure, M2 on reserves, does not allow us to distinguish between the 5 crisis countries in Asia and the 6 non-crisis countries of Asia, which we identify in the paper. All the 3 measures I talked about in relation to Thailand do enable us to make that distinction. They separate the crisis countries from the non-crisis countries. Well the good news is that the paper with Chandra whose title is Vulnerability to a Currency Crisis, it's being circulated to the group. Your question is related to Eliana's question who wanted me to take an even narrower measure and leave out portfolio capital. So my answer to Eliana is that what volatile capital is is ultimately an empirical matter. I misled Eliana in one important respect, I may have said that I was measuring the stocks of capital in domestic currency. That was wrong, as the figure shows on page 28 it's measured in US dollars, that was an important error on my part. The important point for Thailand is that including portfolio investment stock in the short term capital stock doesn't help much because it was not the source of the capital outflow, the diagram shows that. But if you redo this analysis for Indonesia you find a very different story. You find that the outflow of portfolio capital was very important. Yes the price of those assets fell. Nevertheless the volume of dollars which was required for the conversion of rupiah into dollars when the outflow of that capital occurred was a very large part of the total capital outflow, which shows conclusively that that was highly volatile capital. So in the Indonesian case, definitely the inclusion of portfolio investment stock is necessary in order to make the correct measure of volatile capital. Neither for Thailand nor for Korea is that the case.

There was also a question about the technocrats. Yes that's right, the technocrats were disenfranchised. Most seriously, the officials in the Bank of Thailand were being lent upon by the government of the day to go easy on domestic bank regulation. There was direct political interference with the operation of the central bank even though prior to the 1990s there was great independence of the central bank and they had an excellent record of monetary competence. It was political interference with the Bank of Thailand that caused it to make such serious mistakes. There was a report into the failure of the Bank of Thailand recently, 100 page report that sells for $100, can you believe, and it was a bestseller in Thailand. That's how interesting the Bank of Thailand was.

MY: When published? The blue covered one.

PW: Last year. Yes the blue covered one.

PD: Can I make a very brief point on this issue, since an important conclusion that Peter draws in his paper is that really, and I agree with it fundamentally, at the official level anyway, is that it was errors of macroeconomic policy, as he puts it, the outcome of complacency over a period of a very long time that were the origins of the crisis, but as soon as you make the point that Peter made in respect to one dimension of policy and the lack of independence of the central bank in dealing with the problems that unfolded one has to ask, and if some Thai central bankers who were responsible were here I'm sure they'd want to ask, what was it that led them away from their best instincts with respect to the exchange rate, because, as I understand it, there's a fair amount of evidence that there best instincts with respect to the exchange rate was to take early action and that early action was foreclosed in the political process really. I think it is worthwhile going beneath the superficial explanation of why things turned out the way they did in Thailand in respect to not only the formulation of policy with respect to the regulatory system, but also with the operation of macroeconomic policy.

SD: Can we go to Eliana.

EC: I have two comments. One on capital volatility and the other on interest rate policies after a crisis. On capital mobility I have to say that I enjoyed Peter's presentation much more than the qualifications he gave us right now. I thought he had a very compelling story and I was buying into it very much so. His interpretation of what is mobile capital is not convincing. All capital, as opposed to labor, has very fast legs and all capital is easily scared of a devaluation. You would say it is more or less mobile by comparing the loss you would suffer by trying to sell it quickly to get out of the country with the size of the devaluation you're going to have to face. So if the threat of the devaluation is big enough, all capital is easily mobile and it can run away very quickly. So if you are threatened by a devaluation of 500% and if you can, the day before, sell your capital by losing 100% of its value, I'm sure it becomes easily mobile abroad. That's more or less the spirit of the question I was posing to you. I don't think it destroys your story, your story relies on other elements and it's very convincing, but the separation of what's mobile and what's not, it's difficult to make because you would have to compare relative losses.

On interest rate policy after the crisis. I came out of this session really confused. If I look at monetary policies in Indonesia, Thailand and Korea and I look at real interest rates in these countries, measured by using different deflators, I have 2 countries that really increased interest rates, that have tight monetary policy and raised real interest rates consistently after the crisis: Korea and Thailand. In Korea, it had the desired results, it reestablished credibility and led to a fast recovery. In Thailand it failed completely. What is the difference? Korea had a relatively sound banking system. In Thailand the banking system was bankrupt, so the moment you increase interest rates, bankruptcies increased and you create a major disaster. In Indonesia, the evidence is not there at all that you had seen a tight monetary policy. On the contrary, monetary policy was completely erratic, it was accommodating, inflation increased because you had a lot of devaluation, there was this huge supply shock, monetary policy was accommodating, real interest rates were, according many indices, even negative. According to other indices, completely erratic, so you couldn't say Indonesia had a consistent response to the crisis, in the middle of the political crisis what you had was a complete mess, rather than a consistent response to the run on the currency.

SD: On the first part, maybe that's one area for the policymakers sometimes we have difficulties, that is in defining what is short term and what is long term and if we look more on like contract, you tell whether the contract is less than a year, etc. While on the policy management, when we have to manage flows, the most important is the debt due. I think this is something, I admit, you find out when you have to face it that the most important thing is the date due. It doesn't really matter when you are talking about 1 or 30 years, if it's due tomorrow it is short term and sometimes that's confusing.

PW: Very quick answer to Eliana. Eliana argues on some kind of theoretical basis that all capital is mobile. OK, but it's not all equally mobile. Which is more mobile than the others is an empirical matter, not a theoretical matter, so we look at the data and we see which capital is mobile and which is not. It's an empirical matter, that's my answer.

MY: Peter, on that point may I say it's not just a theoretical. Peter said, the concepts of fundamentals has to be changed. Why? Because the nature of crisis changes. Previously current account crisis so IMF quota is big enough to take care of current account crisis. But this is because with capital account crisis, the quota is not enough, that is why we need some sort of international lender of least resort. Then talking about whether reserves should be compared with volatile short term foreign capital or compared with domestic money depends on the nature of crisis. In many Latin American countries crisis is related to a real loss of confidence in their own currency, then there will be a currency run. In that case reserves should be compared with domestic money supply. So this is not just theoretical question or empirical, this is a question of the analysis of the nature of crisis.

SD: If we can have more time from the chairman than we can accommodate all the questions.

RR: Peter Warr raised an interesting question, somewhat provocative. That was whether capital controls could make a crisis less acute. Let me propose a tentative answer from a very narrow standpoint, which is Latin America, particularly Mexico. If you impose capital controls at the point of crisis, you are provoking a bigger crisis, because precisely the point of crisis is that it has already the component of panic and in a typical country where there are no capital controls and we have a panic and then we impose capital controls we will get very perverse results from capital controls. Mexico has had this experience and I think Latin America has plenty of these experiences and that is why we don't like capital controls in Latin America. It is not a question of ideology, it's not a question of culture, it is just practical experience. Now if you like capital controls as a concept, I think you have to think about imposing capital controls during the good times and that is where the difficulty lies. During the good times, almost all of the emerging economies want to attract capital, so capital controls become a nuisance, so that is why Brazil dismantled capital controls at some point and other countries dismantled capital controls at other points. So that Chile had capital controls and it has worked well, Chile is too small an economy to be used as a benchmark, I would suggest that when we talk about capital controls, we distinguish very small economies from medium sized economies because it is just not the same thing. Thank you.

DD: Can we hear a little about Australian capital controls since we are in Australia?

SD: Tomorrow I think we will have that. Prof. Pyo please.

HP: I'd like to comment on Eliana's comment with regard to interest rate reduction, why in case of Korea interest rate reduction was made possible, while in case of Thailand, it was not making progress and so forth. This raises important issue as addressed by Mr. Ramirez just before. Korea, just the opposite policy of Malaysia short term capital control. I don't think it was forced agenda, Korea could have fought the recommendations given by IMF and World Bank, but I was also proposing complete elimination of capital controls...by allowing for the capital control is allowing more moral hazard, more rent seeking, almost uncontrollable political-economic elements settling in on purely economic decision-making, so the almost complete decontrol of capital control has contributed to lowering interest rates because the foreign capital instead of being reversed kept flowing in after the crisis and contributed to eliminating the credit crunch to some extent, of course with some time lag. One of the main reasons why we should not rely on capital controls even in the short run is because of the rent seeking and moral hazard behavior. many developing countries cannot control that. Every government comes up with political reform process and so forth, and many of the Japanese colleagues of mine were suspicious and skeptical, why you are not adopting any capital control? Why do you have to liberalize everything? But I was saying that just because we could not control our political reform, out corporate reform, our rent-seeking behavior, our corruption, our corporate governance, because that's the only way, even for example exchange rate: without really fully opening capital market you can hardly manage full flexibility in terms of exchange rate operation. So therefore, right or wrong, Korea has moved just to the opposite direction and we will see the long-term sustainability and it is too premature whether the further liberalization program will succeed or not. But for the time being at least, the short run evidence is pointing in that direction and it depends on the industrial structure and development stage at which the concerned economy has arrived. And I am not saying that Malaysia took the wrong policy, I'm just saying Korea took the opposite direction and I think it did contribute to lowering rent-seeking and moral hazard.

PW: I agree with all these points that have just been made, by Dr. Yoshitomi, Dr. Rogelio, Dr. Pyo. The important thing is capital controls cannot be the answer. Avoiding vulnerability has to be the core macroeconomic answer.

DD: But I thought one of your measures of vulnerability was excessive growth of short term credit? How are you going to do that without capital controls?

PW: Good question.

SD: I guess we have run out of time. For those with comments, continue at the dinner table. I am not going to make any conclusions now, because as we see it's very difficult to make conclusions out of these things. A lot of things have been answered, but more are questions that have to be answered. Political aspects can be explained by each at the table, but there are many others that need to be explained.

PW: Ross has told me the answer I could have given to Dipak: float the exchange rate.

SD: Thank you very much.

DAY 2

MY: ...Malaysia, India, first on China. Dr. Yiping Huang.

YH: Thanks very much. For China is of course so far no crisis has affected the country, so far, but people are getting more and more interested in the Chinese economy after the east Asian financial crisis started in 1997. At least for two reasons, many reasons, but I would like to list 2 reasons. The first is people all knew that China's economic growth follows closely the east Asian model, what we call a number of characteristics such as the rapid expansion of labor intensive manufactured exports in early stage; the overall outward oriented growth; high savings rate accompanied by massive inflow of capital; and also in the domestic financial sector you find a very significant dominance by the banking sector in financial intermediation. So look at the Chinese economy post-reform, you tend to think China was perhaps one of the east Asian economies to some extent. Then a natural question is whether China would be the next in this crisis. So it would be very interesting to watch China's change, changes in China closely.

The second reason to look at China is because several months into the crisis in east Asia, China perhaps was the last one remaining sustaining rapid growth, major economy I mean, you have some small economies. So it looks like, given that what we call competitive devaluation in the region, the economic trend continuously went down. To many people the Chinese economy or its exchange rate regime were the last hopes in the region for the economies to arrest the downward trend and to restore an equilibrium in the original currency system. Certainly of course China took up the challenge and the government made a number of statements that China would not devalue its currency, the renminbi, from late 1997 until now it is still making similar statements or commitments. But economists always had a concern about how long China would be able to defend its, what we called over-valued exchange rate or renminbi value. So it's quite critical for us to look at Chinese economy closely.

Now the general expectation early on was that perhaps a currency crisis would not set on stage in China for a number of reasons, but there would be also some adverse effects through the real sector variables, primarily foreign FDI and stagnation of exports. I'll discuss these a bit later in more detail, but the government in early 1998 was quite optimistic about the prospects of the Chinese economy. Premier Zhu Ronji when he took office in early 1998, he predicted a minimal impact of the crisis on China and he actually announced a very ambitious package of reform policies, including restructuring of substantial SOEs, reform of the financial system and downsizing the government organizations in three years. It was very ambitious to most China observers. And also he made a commitment to a stable exchange rate and finally he announced a huge stimulation program to lift the real growth rate for China, including a very large expansion program of about $750 billion over three year period. Now there was some clarification, but basically the scale remained the same depending on how you define public expenditure infrastructure projects. The short term objective in that year was to achieve an 8% growth rate in 1998.

Now it's been 2 years since the crisis broke in east Asia. How has Chinese economy performed in the past 2 years? Basically. I included a chart in the paper, but basically what we found is, according to the official statistics at least, the Chinese economy performed quite strongly and we could say it is quite healthy so far. Growth rate, GDP growth was quite high in 1998, 7.8% and maintained quite strong momentum in the first half of this year. Now prices fell significantly 2.6% in 1998 and a bit more in the first half of this year, what people might call price deflation in China. Now thirdly, current account surpluses stayed at levels of previous year, so the foreign exchange reserves and exchange rate in the regulated market was quite stable. What we find was a bit discouraging, of course as expected, was the stagnation and then decline of FDI inflow and exports. These are some of the issues people are concerned with.

Now looking at the risks of a crisis, when the crisis began looking back what people expected at that time. People warned about the possibilities of, the risks in the economy and the possibilities for them to lead to great instabilities, there were 2 kinds of problems. The first is perhaps there was a possibility of a currency crisis caused by balance of payments problems or heavy outflows of capital and then you have a problem with exchange rate. The second is perhaps a banking crisis mainly caused by bank runs due to loss of confidence or just the accumulation of bad debts and then the insolvency of the banks. In retrospect, I think we could say that China was quite successful in averting a currency crisis. Now as I mentioned early on there are a number of similarities of Chinese economy and other east Asian economies, but at the same time we may ask where China was different. I'll list a number of factors. The first is China had always maintained, in the 1990s, a strong current account surplus. The only exception was in 1993, but most years were quite healthy current account surpluses. Second is 60%, well China was one of the largest capital importers in the world, next only to the US, but 60% of capital inflows were in the form of FDI and more than 80% of international borrowings were long term debt from international organizations and foreign governments. China had very large foreign exchange reserves, about $140 billion at the end of 1997 and this increased a little bit a year later. Which was roughly similar, slightly greater than total external debts. So that could add some weight toward confidence in the currency. And finally there is this control of capital flow, inflow and outflow. Well this of course would help China prevent some attacks on the renminbi in international capital markets by some speculators. Economists some time disagree how important a role capital account control played during this period. Our assessment is that probably capital account control was very important in helping China to avoid this crisis. The main reason is, capital account control itself was important, but it was also responsible for a number of factors we mentioned early on. For instance, FDI as the major form of capital inflow, that is partly because you have a very strict capital account control and you cannot borrow freely as otherwise you would in other countries. So that's just a very preliminary assessment.

Now, more significant risks would be with the domestic financial sector. People are always mentioning the high ratio of non-performing loans in the banking sector and you may find that most of the SOBs, the state-owned banks, are actually technically insolvent. Financial rigidity was produced not only by its own institutional weakness but was also related to problems in the other sectors, for instance the money losing SOEs and also the fiscal policies, the government always would have a large volume of what we call policy loans imposed on the SOBs. During the past 2 years the government made a significant effort to improve the structure and performance of the banking sector, but perhaps the efficiency or the financial performance worsened over the past 2 years. The main two reasons you can look at are, the first is substantial increase in public spending. Sometimes it's just forced lending by the government for branch managers of banks to make loans. And the second is the declining profit margin for SOEs. Total loss increased by more than 20% in 1998 and of course that what also contribute to the rapid accumulation of non-performing loans. Now there were no official data available about the level of non-performing loans after the number I just quoted in the middle of 1997, but there are a number of estimates around ranging from 30% to 60%. My own judgment would be perhaps in the 30% to 40%, 60% is rather extraordinary. The problem with the domestic financial sector, well I think in the short term there will be no major crisis with the banking sector. If you ask whether there will be runs on the banks I think, yes if you are talking about localities but perhaps not if you are talking about nationally. The deposits were strongly guaranteed by the government and the government still, as of last year, has the financial and fiscal resources to settle any local instability should it occur. Hypothetically we think of 2 possibly disastrous scenarios if it happened to the banking sector. The first is if China opened up the financial sector abruptly and liberalized the capital account without a certain period of preparation. What would happen, SOBs at the current conditions will quickly lose depositors and perhaps also lose a lot of good customers. Then you will find a quick deterioration in the balance sheet of the banks and the SOBs could quickly run into trouble. Of course given the interest rate differential between the renminbi and the US$ at the moment, if you liberalize the capital account quickly you would also end up with immediate pressure for further devaluation of the Chinese currency. The second disastrous scenario relates to accumulation of problems in the banking sector itself. For instance, the non-performing loans continue to accumulate at a certain stage then there will be great difficulties for the banks to operate. One possible trigger could be slow growth of the economy. We know that slow growth of income means slow growth o deposits and slow growth of the economy also means a reduction in the profit margins, usually in the Chinese case, for the enterprises and then there will be a further increase in the stock of non-performing loans. So that could be another trigger and I think that gives one partial explanation why the government wanted to lift the economic growth rate.

Now talking about rapid growth or slow growth there is currently a big debate in China about whether there is a deflation. deflation depends on how you define it. What we usually think is a deflation, just like at the word itself, it is like price inflation of price deflation, but in the Chinese context, the Chinese translation somehow implicitly contain some meaning of price deflation and recession. So there is a bid debate whether there is price deflation, whether there is a recession. Our assessment is that if you look at the price changes. We also included a figure in the paper showing very clearly price deflation up until the first couple of months of this year, but there was no recession if you look at the growth rate of income of industrial output of GDP and so on. In the short term, people would say, for instance in Beijing, are quite happy when you find the price drops significantly for food stamps and vegetables and a number of things. But in the long term the government was worried about a substantial drop in the profit margin of enterprises, which would perhaps damage the long term capacity of production in society, also including investment. So that's why it was a big issue in policymaking.

Now most important, I guess, after you observe this deflation, is to find what were the causes of the price deflation and what might be the effective measures to reverse that trend. A number of reasons are given in the Chinese literature, I think we can classify them into three types of factors. When you have a price deflation, if you have a simple diagram, the first group of factors is insufficient demand or the drop in demand. The second is excess supply, possibly. And the third is the change in value of money or the numeraire. It could be money supply or exchange rate. Now the first group of factors is insufficient demand. Mainly people talk about uncertainties associated with various reform measures such as pensions, housing, insurance, medical care and education, plus the layoff of the workers both with SOEs and the government organization. So the common feeling when you talk to ordinary people in Beijing, in China, they don't know what might happen to them tomorrow. So it is a rather understandable that if they have increased their income they would put some money into banks because the saw the hardship of their neighbors who are laid off. And also they see dramatic increase in education fees for the children. If they have little kids at home, then perhaps they want to save more and consume less. So it's kind of a change in expectations, expected income and expected expenditure. That's why households usually are very likely to consume their income. Excess supply is related to overcapacity because of the traditional system in China there were repeated constructions of factories, especially, for instance in electronics and textile industries. So there might be problems, well the numbers are showing that even in 1995 the average capacity utilization was between 60-70%. So that was quite a big problem. And the last factor, the change in the value of money or the numeraire, people are talking about 2 types of monetary policy from late 1997 associated with this soft landing program, so that could be a reason why there is deflation. Our interpretation of the problem, of the phenomenon more relates to the exchange rate policy. When China committed to maintaining, what we call, the overvalued renminbi value, that means you have difficulties in the export sector, relative to the other east Asian economies, you would have a shift in the demand curve for Chinese exports. That means either force down your price or reduce your supply. That means for domestic producers you would transform between supply to the domestic market and exports, because the change in relative price you switch a little bit, well you transfer some supply originally for export market to the domestic market, so there is a pressure overall for domestic prices, including exports. If you want to keep export sector, then what you have to do is force down the factor prices and the prices for intermediates.

That's basically, I don't have time to go into details, but that's basically what we interpret as the causes of deflation in China. This gives us the understanding of what might be the most effective measures. Just to run through them quickly. Basically people looking, Premier Zhu was very anxious working with his advisers to find effective measures to stimulate the economy. Basically three measures. The first is easing money supply, the second is to stimulate private spending, perhaps through housing reform and finally, increase in public spending. Now e find at this moment that easing monetary policy is not an effective measure. Looking at the numerous cuts of the interest rate in the past which was ineffective in stimulating spending. The main reason was that even though you are cutting the nominal interest rate, the real interest rate had been increasing since early 1990s. So there is a question you should cut more or whether at the moment enterprises and households are just not that responsive to changes in interest rates. Another argument is of course when you want to maintain the exchange rate, the overvalued renminbi value at the moment, it would be incompatible, if you want to loosen money supply, generate further pressure on the exchange rate. Private spending at the moment is hard, given the expectation change and given the problems in the housing system because a mortgage system is not yet in place and a number of other factors need to be developed so it is very hard in the short run. The most effective factor we think to stimulate the Chinese economy is the private spending. While it is the most effective factor to stimulate the economy, but we have to acknowledge a number of problems, such as the, what is the capacity that the Chinese economy and government can support in terms of borrowing and spending. And there are a number of other side effects such as inefficiencies with the public finance sectors and the problems with future servicing of these debts. Also you would have impact on private spending, to some extent public spending may crowd out private investment. The last section of the paper I want to cover is basically concluded by a very brief prospect for the Chinese economy in the next couple of years.

MY: Is it quite bright?

YH: Yes the prospect is quite bright, but we also argue that the next couple of years will be the most critical and difficult years for China, especially for its macroeconomic policy.

MY: Thank you. The next is on Malaysia. Chandra Athukorala.

CA: I'd like to start my presentation with an apology for the many typos in my paper simply because it completed it about 4 hours before the conference started yesterday. The simple reason is that in the other IMF program countries, once the countries decided to go along the IMF path, the policy hasn't changed that much, but in my case, Dr. Mahathir has made my life difficult because there has been a significant number of significant policy shifts along the way. Therefore, I had to monitor changes up til the last minute. Now, this is my proposed structure. Unlike in other papers, I am going to cover the pre-crisis situation, the events leading up to the crisis, as well as the role of capital controls in macroeconomic management. Then the focus is basically twofold. Firstly to examine the role of capital mobility in making the country vulnerable to the financial crisis and secondly, the use of controls as a crisis management tool. The key theme running through my presentation is the role of macroeconomic policy in reaping developmental gains while maintaining domestic stability. I have structured my presentation in seven parts, firstly the pre-crisis capital account regime, then capital flows and signs of vulnerability, then crisis and policy responses, then impact of the new policies under two sections, firstly I look at the way new capital controls as an element of the economic package has enabled the government to go along with domestic macroeconomic expansion, then capital account process in my presentation I will focus the ? section.

Let me begin with the capital account regime. The key points are, unlike many other developing countries, Malaysia throughout had a full commitment towards an open trade regime and Malaysia achieved Article 8 status at the IMF as early as 1968. Becoming the third country in the region after Hong Kong and Japan to achieve that status. Other crisis countries, like Indonesia and Thailand achieved Article 8 status in the 1980s. Now this factor is very important because the FDI flows coming into Malaysia have been of high quality compared to capital flows coming into other countries simply because of theoretical reasoning highlighted by (? authors) paper in the 1960s. When you put money into a controlled trade regime, it can mis? in terms of growth impact. Whereas in Malaysia, they started liberalizing the capital account after liberalizing the trade account and their capital account liberalization has been gradual, even though by developing country standards, it remained very liberal throughout. However, there were 2 key elements in the capital account regime which continued. The first was close monitoring of bank borrowing by the domestic companies and secondly, bank borrowing, domestic borrowing by foreign companies. These two elements have been behind the domestic policy regime throughout. However, by the late 1980s, as part of the new reform package, there was a clear shift in capital account liberalization policy aimed at making Malaysia a financial center. The market in one of the islands, belonging to manager, called ?, as a financial center they wanted to develop like a tax free zone like ?. At tha same time there were a number of changes in foreign investment related to investment coming into share market activity. All these things set the stage for massive portfolio capital flows coming into the country. However, as we will see later on Bank Nageramalia (?), the central bank, continuously monitored foreign currency borrowing.

Now with this background, let us turn to the second section, the nature of capital flows and signs of vulnerability. Here I have become convinced after listening to the Chinese case that one has to make a clear distinction between FDI flows and portfolio capital in a realistic assessment. They are 2 different animals, you can't put them together. Now in the Malaysian case FDI flows have traditionally dominated capital flows, however in recent years there has been a significant new development which is massive portfolio capital coming into the country under the newly liberalized regime. Again, interestingly, central bank control on commercial lending has been effective throughout. There has not been massive build up of foreign currency denominated bank borrowing in Malaysia, but there was another door opened by the government in a very, I think, there has been some vulnerability here. Firms which are not able to borrow overseas turn to the share market and ?, the new capital center helped in doing that. Then capital accumulated in terms of portfolio capital was significant during this period. This diagram clearly highlights the point. Again, I firmly believe that analyzing vulnerabilities of a country to a financial crisis requires identifying mobile capital separately. Here mobile capital is accumulated portfolio capital plus other short term borrowings. Foreign reserves divided by total mobile capital. You can clearly see a massive decline in the reserve coverage of mobile capital in Malaysia during that period. These are annual figures, if quarterly figures used these would have gone up to here. By the time the crisis started reserve coverage of mobile capital had declined well below 100%. I was around .65 or 65% at that time. The simple point I make here is that even though Bank N.'s policy of monitoring bank borrowing had worked there was a back door opened by the new policy regime which made Malaysia vulnerable to the crisis. However, that is not the full story. This would not have caused the crisis if the macroeconomic management policy regime remained sound. Now what happened in Malaysia was that in the early 1990s, because of the growth euphoria and Mahathir's aim of achieving ? status by the year 2020, there was a massive investment boom in the country, even though many people felt that the Malaysian macroeconomic regime was sound, it is a wrong interpretation. They simply look at the budget deficit which was basically a perennial surplus in Malaysia...had been increasing in an expanded economy and it gave a misleading picture about the budget situation in the country. There was massive money, financial flows shifting into non-payable sectors including a new capital and the world's biggest airport and there were a lot of ? coming along the way. Now this resulted in a severe macroeconomic imbalance. Then to make matters worse, the capital account had been liberalized without achieving required conditions for sound corporate governance. As you know, crony capitalism is a key feature of the corporate sector in Malaysia. The new money was poured into this business sector which was dominated by family links, companies promoted under party patronage and so on. There was no new legislation to make sure market activities transparent. Then there are two key elements of policy mistakes. There was proper corporate governance to set the stage for capital account opening and secondly the macroeconomic house what not in order. In other words there was a substantial deviation stance of the government from the long-standing prudential macroeconomic management. Those were the key factors which set the stage for the crisis. On the one hand, the capital account was open and massive money flows were coming into the country and on the other hand there were policy slippages on the macroeconomic front, both related to fiscal management and related to corporate governance.

Now let me turn to the next section, crisis management in Malaysia. Now, as you know, at the initial stage, crisis management in Malaysia was basically one of denial. Mahathir repeatedly said that we do not have macroeconomic problems. He was in fact pointing to wrong indicators. GDP growth, high savings and all these commonly quoted indicators are irrelevant in a crisis. Important factors are the signs of vulnerability. In the policy debate, the emphasis was on these conventional macroeconomic indicators. On the basis of these indicators Mahathir started attacking speculators and made the situation worse. Then in December, after about 6 months of policy indifference, there was a significant policy package announced by the then finance minister, Anwar Ibrahim and many news commentators called it IMF policy without IMF. It was in fact an IMF package, but after about 3 weeks of the package, again there was a policy backslide, mainly because of political infighting within the ruling party. Now, therefore, the situation from about January 1998 until the new policies were implemented ?. Now this policy uncertainty and lack of transparency resulted in further declines in the value of the currency and a matching collapse in the share market. Now in this situation a new policy intervention unavoidable. There were three alternatives open to the Malaysian policymakers. The first one was to continue with the approach by overseas borrowing and the government attempted this with a planned bond issue of $2 billion to begin with, but they had to cancel the bond issue because credit rating agencies had cut Malaysia's rating at that time. It was natural in the given policy climate. The second alternative which was in fact hinted by Bank N. in its annual report was to enter into an IMF agreement. And it clearly said that in order to gain confidence, you need IMF support, even though you do not have a foreign currency problem. However, the Malaysian authorities were reluctant to follow that road mainly because of their considerations about IMF objection to their new economic policy norms. To elaborate on this point, Malaysia is unique in the world in the sense that it is the only multi-racial country to achieve so much economic advancement in a short period of time. Chinese account for about 40% of the population and Malays count for a little higher than the percentage of Chinese. This ethnic composition has been the key factor governing Malaysia's policy....it is true that the policy was unfair to the Chinese and the Tamil minority, but all the communities benefited from this policy and the authorities were reluctant, naturally, to backtrack from that policy. Of course, the other political story as well, which I have elaborated in a footnote, is the leadership struggle within Mahathir and Anwar. I don't have time to go into that. Then it is true that there was crony capitalism within the economy, but it was hard to make a distinction between crony capitalism and ? norms. Naturally, policymakers concern about IMF involvement at that point was a reasonable one in my view. They wanted to recapitalize the ailing banking system. In that process they didn't want to have any compromise related to ? norms. That was the case with corporate restructuring as well. Then their choice was a dramatic policy u-turn which involved a new change in policy package or, to use Krugman's new terminology, return to depression economics, with the help of capital controls.

Early in the discussion yesterday, there was some confusion about the use of capital controls in crisis management. Nobody, no sensible economist would advocate capital controls as the only policy tool. What Malaysian authorities wanted to do was to use capital controls as one element of a macroeconomic expansion policy package. The purpose of capital controls was to delink the domestic interest rate from the foreign interest rate and then set the stage for a dramatic macroeconomic expansion. In the policy package, apart from that, there was an exchange rate peg at 3.8 Malaysian ringgit to the US$. Now it's important to note these two elements can be easily discussed separately. Exchange rate fixing is not an essential element in a capital control based policy package. Floating exchange rate is quite consistent with capital controls, as in Chile and some other countries. However, at this stage Malaysian authorities were of the view, that the currency had depreciated so much, well below the level consistent with macroeconomic fundamentals. Therefore they wanted to fix the currency. Now a fixed exchange rate is supported currency controls, they're the other link, right? But one can implement capital control based macroeconomic adjustment package with a flexible exchange rate.

Then let us come to the section combining these two...

DD: Chandra, can you spend a little time explaining the nature of the capital controls, maybe a minute or so before concluding.

CA: Yes. Now capital controls, originally there was a 12-month withholding period related to short term capital, portfolio capital and then there were various controls on foreign investment by domestic firms and households and foreign bank borrowing. After 4 months of the first announcement, this was replaced with, capital controls were replaced with a Tobin tax, which I have summarized in Table 5. Instead of the 12 month withholding period, now you have a two-tiered tax on repatriation of capital and profits earned on portfolio investment. You can look at the table later. In my paper, I have made the remark that the new levy is much more market friendly than the well-known Chilean levy. It's much more flexible, we will come to that point later. Now firstly about the impact of controls in regaining macroeconomic autonomy, the data clearly supports the view that capital account controls have been able to clearly separate domestic interest rates from the world interest rate regime. Domestic real interest rates have turned out to be severely negative compared with the real interest rate. Then, again, the fixed exchange rate element has done a very good job at the initial stage in giving exporters more certainty and a greater degree of currency stability. This is figure three in the paper, here I measure the Morgan real exchange rate index which is simply a comparison of trading partners wholesale price index with the domestic wholesale price index. It is a good indicator of competitiveness of exports of a given country. It is not a good indicator... But in this crisis context I think it is much more important than the other price ratio which becomes important later in the adjustment process. Now the Malaysian real exchange rate has been more stable and the degree of depreciation, here the depreciation means an increase in the exchange rate, right, has been much greater than the situation in Korea and Thailand. In Korea and Thailand in recent years, real exchange rate has started appreciating because of massive capital inflow, but the Tobin tax in Malaysia has been helping the exporters in the short term adjustment process by taming these short term capital inflow. In other words, against our general expectation that the fixed exchange rate would become a burden, in fact so far it has helped Malaysia maintain stable incentives for export production, now...

MY: …So far it has helped Malaysia in maintaining stable incentives for export production.

MY: Would you conclude soon.

CA: Yes. Then the conclusion.. there are three basic points to highlight. Firstly, there are widely made claims by some eminent economists like Stiglitz, Bhagwati and Sachs that Malaysian political reform process was along ? line and there's no problem in the domestic policy ring saying its wrong (?) It's true that in the early 1990s, Malaysian macro policy regime was sound and the sequencing of reforms was according to textbook rules but here were significant violations of these conditions as part of the growth euphoria in the 1980s. The second point I make is the capital control in Malaysia as a short term policy has worked. Now remember again that the key point is that capital control is only one element in the policy package. Third point is that a number of economists including business school economist recently in a submission to the US ? have made the point that other countries have also started recovering and therefore Malaysian recovery is not joining and one should not read too much meaning into it. In my view this is to quote the famous ? Henderson, do-it-yourself economics, if you simply compare cross countries in terms of one indicator, you have to consider initial condition, nature of the crisis and sources of vulnerability and the social political situation within which decisions have been made before coming to a conclusion. The final concluding remark is that my inference that capital controls in Malaysia context have worked as a short term policy tool by no means implies that Malaysia should follow this policy in the future. It is only for the short run. Malaysia's future lies in regaining macroeconomic stability and correcting the policy mistakes the government has done as part of the growth euphoria. Otherwise it cannot achieve its goal of achieving developed status in the year 2020, in my view.

MY: Thank you. Next on India, Mr. Narendra Jadhav.

NJ: Thank you chair, good morning friends. At the outset let me thank the organizers not only for giving me the opportunity to be in this beautiful country and organizing this conference so well, but also for choosing a theme which is so relevant in the current context of the debate on the new international financial architecture.

I am going to talk about India's experience in "managing" capital flows, maximizing potential gains while minimizing the costs, including the contagion effect. India's experience in this regard is quite distinctive if not unique. India has been a late starter to the world of capital flows and yet it has been among the top ten beneficiaries of net private capital inflows in the community of emerging markets nations. On the other hand, recent experiences show that while Korea, Thailand, Indonesia, Malaysia, Philippines were singularly affected by the reversal of capital flows in the after math of the Asian crisis, India came out relatively unscathed. Let me begin the discussion by a quick overview of various dimensions of capital flows to keep the Indian experience in a broader context. As far as the magnitude is concerned one can see quickly from table 1 that aggregate flows comprising the net private flows as well as the official flows have risen spectacularly from an average of $47 billion per year in the 1980s to $161 billion per year in the 1990s so far. Cumulatively in the 1980s, total private and official flows amounted to half a trillion dollars whereas in 1990s, the total is close to $1.5 trillion. Private capital flows of course has been the reason for the spectacular increase and now they have displaced, one can see from the table, that they have displaced in 1990s the official flows as a major source of financing balance of payments by a considerable margin. The ratios also work out that way. Even at the aggregate level, one can say that there was a lot of volatility in the private capital flows, which is evident from the table. As for the composition, we go on to the second table, a lot of things that were said yesterday are shown in this table 2. We see that FDI has been the most important source of financing and it has also been a remarkably, growth has been remarkably steady in the 1980s and 1990s despite all the similar crises that occurred during these two decades. Portfolio investment and other flows, namely bank loans, trade credit and so on, they have exhibited substantial volatility in these two flows. More interesting is the destination of these flows from which we go on to appendix table three. Ass can be seen form the table, during the 1990s, private capital flows to all regions were uniformly were higher as compared to that in 1980s. As expected the western hemisphere recorded the largest absolute increase. It is also notable that the private capital flows to the western hemisphere actually accelerated after the Asian crisis in the years 1997 and 1998, relative to the 7 year period before the Asian crisis. Apparently as a direct consequence of the slowdown in massive capital flows to Asia. The capital flows booming to Asia can also be seen from this table, at one time in average terms during 1990 and 1996, close to 39% of the total net private flows were directed to Asia. What is even more interesting is that the distribution of the private capital flows has been quite skewed during the 1980s as well as 1990s and you can see here one can see that the 10 largest recipients of the private capital flows received as much as 95% of the total flows in the 1980s, whereas the proportion has still remained very high in the 1990s, amounting to about 63% in the first 9 years of the decade. In contrast, if you take the 10 largest countries by GDP and, what I have done is that for 1990s, 1996 was used as the reference year for taking the 10 largest GDP countries and average of 1990 to 1998 was used for zeroing in the 10 largest recipients of capital flows. You will see that the 10 largest emerging market countries received only 37% of the flows in the 1980s and the proportion has subsequently risen to about 53%, that gives you an idea about the skewness of the distribution of private capital flows.

Coming to India proper, the experience can be seen in three distinct phases. The first phase runs to middle of 1980s, the second phase from the middle of the 1980s to 1991 and the third phase is the post 1991 period. Initially India adopted a development strategy that has been variously termed as inward looking and interventionist, the basic philosophy or the salient feature was accent on import substitution rather than export promotion, financing the investment needs of the economy mainly through domestic sources rather than foreign sources and confining the reliance on external financing to official flows especially multilateral institutions and largely on commercial terms. The result was the real GDP growth in the first three decades from 1950 to 1980 was barely 3% and the balance of payments came under serious strain on occasion during these three decades. The requirement of shifting the economy to a higher growth trajectory and also the need for enlarging the export base meant larger investment requirements, which unfortunately in 1980s for India coincided a deteriorating external environment which was characterized by a significant decline in official concessionary flows. Under these e circumstances, recourse to external debt on commercial terms became inevitable for India. As such , syndicated bank loans and financing through bonds were resorted to on a large scale including recourse to deposits from non-resident Indians or NRIs, but under those circumstances, the fiscal situation deteriorated rather sharply. The turning point came in 1991 when a combination of large fiscal deficits, political uncertainties, an outbreak of debt crises raised serious questions about the sustainability of policy. Access to commercial borrowing totally dried up, as the credit rating agencies downgraded India at that time, there was also a large withdrawal of the NRI deposits. In addition, there were also some difficulties in rolling over the short term debt. Consequently the foreign exchange reserves had dwindled to a level of less than $1 billion at which time the possibility of default became very imminent and it was precipitating a major balance of payments crisis. But that crisis of 1991 turned out to be a blessing in disguise because it served the purpose of a wake up call for India. Immediately after the crisis a comprehensive framework of reform was put in place, reviving and rather intensifying the liberalization effort that had begun in 1980s. The capital account liberalization in India is seen as an integral part of this comprehensive package. It is important to emphasize that in India capital account liberalization is not seen as a single event, it is seen rather as a process to be embarked upon cautiously as a part of a comprehensive reform program, as well as in terms of our assessment of the emerging scenario relating to international economic and financial architecture.

What was done after 1991 initially was the broad approach to external reform, had the following features: the move to a market determined exchange rate regime, liberalization of current account transactions while continuing the current account deficit within prudent limits and ensuring that capital outflows do not occur under the guise of current account transactions. Second, compositional shift in capital away from debt to non-debt creating flows. Third, discouraging volatile elements of the NRI flows. Fourthly, strict regulation of external commercial borrowing, especially of short term debt. And fifth gradual liberalization of capital outflows. It is important to note that this framework was complemented by a wide range of supporting reforms in the area of foreign trade, industrial and financial sectors. India accepted the Article 8 obligations of the IMF rather late, in August 1994, immediately thereafter, the specific framework for capital account liberalization was sought to be achieved in a phased manner. The Tarapore

Committee was appointed which submitted its report in May 1997 which laid down certain sign posts or preconditions for capital account convertibility which included fiscal consolidation, a mandated inflation rate and, above all, strengthening the financial system. It is interesting to note that this report was submitted before the outbreak of crisis. Crisis broke out in July, July 2 when Thai baht was floated. This report was submitted in May 1997 which had all the elements of the preconditions which are required for a cautious approach to capital account liberalization. In a quick follow-up, another committee was appointed to specifically look into the financial sector problems. ? committee which submitted its report in 1998. It is within this broad framework that the process of capital account liberalization has taken place in the 1990s. Cautiously, but systematically moving out of the control regime. The process has been gradual, but with a clear sense of direction.

Just two or three minutes on the nature of controls that we have on the various categories of flows. As far as FDI is concerned, we have a dual route for direct investment. We call it automatic and non-automatic. Which is differentiated on the basis of sector size and extent of ownership. In the former case, that is the automatic case, activities and extent of ownership are listed and approval is given by the central bank of India, the Reserve Bank of India, and that approval is automatic, whereas in the non-automatic case the approval is accorded by a high-powered board on a case by case basis. Having introduced this system, over the years, the approval criteria have been substantially broadened, the process has been streamlined and the procedures have been made more transparent. As far as portfolio investments are concerned, they're restricted to foreign institutional investors, FIIs, and the NRIs. There are no restrictions on total inflows, but there are limits on both total holdings of FIIs and NRIs in a company and on the holdings of a single FII. Currently the limits are 30% and 10%. More recently, FIIs have been permitted to invest in debentures in the government-affiliated securities and treasury bills. Indian companies have also been allowed to access funds abroad through global depository receipts and Euro-convertibles. As for the other concern, take the case of NRI deposits. In the aftermath of the 1991 crisis. It was realized that NRI deposits is a very volatile and costly source of external financing and therefore control of such inflows was exercised in the early and mid 1990s through specification of interest rates as well as using variables of requirement, which have been recently de-emphasized. As to the external commercial borrowings, there are, these are subject to quantitative ceilings. The annual ceiling is maintained for both short term as well as medium to long-term debt flows. And a small component (?), both of commercial borrowing is subject to case by case approval based on size and sector. The short term debt, including trade related payments beyond 180 days is subject to a strict case by case approval of purpose, amount and terms.

To what extent has this strategy worked? To see that let us take a look at the capital flows to India. We go on to table 1 in the text. As can be seen the net private capital flows to India have increased from an average of $2.3 billion per year during the 1980s to about $5.2 billion in the 1990s. The average for 1990s might have been slightly higher but for the slump in 1991 and 1992 because of the balance of payments crisis. But the difference between the performance of India and other countries becomes sharper if we compare the average situation in the 1980s and average situation in the 1990s. During the 1980s, the average private flows to India were of the same order as China, they were one-half the average level for the 5 Asian crisis affected countries and slightly higher than one-third of the average flows to the 10 largest emerging market economies. This picture of the 1980s changed dramatically in the 1990s if you look at the 4 year period immediately preceding the Asian crisis. I am purposely omitting 1991 and 1992 because those were the abnormal years for India. So if you focus on 4 years immediately preceding the Asian crisis and compare India with others, what we discover is something very striking. The average level of capital flows to China was 12 times in these 4 years, for 5 Asian crisis affected countries, it was 9 times, for the 10 largest emerging market economies it was 18 times the corresponding level of flows inn the 1980s. In contrast the capital flows to India during the same period were only 2.5 times the capital flows during the 1980s. The composition of capital flows which is given in table 3 will show that while in China the flows were essentially FDI, for the 5 Asian crisis affected countries they were more substantially by portfolio flows. By contrast, FDI flows have recorded a very steady growth in India, whereas portfolio flows have emerged only in 1990s.

Let me attempt a preliminary assessment now. An assessment of any country's approach to capital account liberalization must address at least three critical questions. One is how the strategy has worked in terms of its intended effect on volume and composition of capital flows. Secondly, what has been long-term effect of this policy, the strategy on economic growth and activity and third, most important in the present context, to what extent did the strategy of capital controls add to the resilience of the economy to weather the international financial crisis. Let's first talk about the effectiveness of the strategy. Several speakers emphasized yesterday, that the institutional capacity of developing countries to implement effective capital controls is generally deemed to be much weaker than in the industrial countries and therefore capital control may or may not have the intended effect. In the Indian case, the volume and composition of capital flows seems to be broadly in line with expectations. To be sure, the economy did have to contend with occasional surges of capital inflows, as well as some disruptions. The surges of capital flows, in excess of what was deemed to be desirable occurred in India during the years between 1993 and 1997, but could be dealt with appropriately, by appropriate short term policy responses, which took a number of different forms including reviewing the restrictions, liberalization of capital outflows, raising the reserve requirements, partial sterilization through open market operations and so on. The opposite thing happened in 1998 when a number of countries, including the US, imposed sanctions on India. At that time a sudden disruption in capital flows, especially the debt flows were anticipated. Under that situation, rather than dipping into foreign exchange reserves which would have affected market sentiment or curtailing the current account deficit through drastic import cuts, which would have affected the real economic activity, a conscious decision was taken to enhance debt creating flows at the least possible cost and accordingly bonds of 5 year maturity were issues which fetched on very good terms $4.2 billion of foreign currency deposits with the Reserve Bank of India. It shows that a coordinated policy framework and careful calibration of policies to market pressure enable an effective management of capital flows without any disruptive shocks to the economy. As far as the economic activity is concerned, the real GDP growth, as I mentioned earlier, during the decades of 1950s-1980 was only 3% in the 1980s, first half, it accelerated to 5.7%, in the second half it accelerated further to 6%. In the last six years of the 1990s, the average GDP growth has been 6.7%. So it is clear that the periods of high growth have been associated in India with the period of capital account liberalization. It may be noted however, that the economic growth picked up in India well before the capital account liberalization was initiated in a major way and therefore it may not be fair to conclude that India's economic growth was constrained on account of its gradual approach to capital account liberalization. Finally, the most important part, the effect of these controls on the resilience of the economy. One way to compare the resilience of the economy is to compare India to the 5 Asian crisis affected countries and that has been done in table 4. As can be seen, in terms of all the conventional indicators, current account deficit as a % of GDP, external debt, external debt service or foreign exchange reserves, on the eve of the Asian crisis India was consistently and considerably less vulnerable than the 5 Asian countries which it turned out later were severely affected by the crisis. India 's position is very clear compared to the crisis affected countries. The difference is even starker in terms of the short term debt. IN 1996, short term debt, and there was more of this discussion yesterday about short term debt, short term debt as a % of GDP ranged between 19% for Philippines to 50.2% in Korea, in contrast, India's short term debt has been brought down to only 5.3% of the total debt in the fiscal year 1997. As a % of foreign exchange reserves short term debt in 1996 was placed 80% for Philippines, 100% for Thailand, 177% for Indonesia and as much as 203% for Korea, in contrast it constituted only 17% for India in the year 1997. Yesterday we also talked about the value of short term debt vis a vis the level of foreign exchange reserves. The short term debt of India today is about $5 billion and India has foreign exchange reserves of more than $30 billion. It is clear, therefore, that India's policy of limiting debt creating inflows and severely restricting short term capital inflows did make her distinctly less vulnerable than the 5 Asian crisis affected countries. In sum, while India's performance may not appear to be spectacular in terms of attracting private capital flows prior to the Asian crisis. It was broadly consistent with what was deemed to be desirable. It is also noteworthy that in the aftermath of the Asian crisis, while the 5 Asian crisis countries and China witnessed sharp reversal of capital flows, India was the only country which remained unaffected. In fact, among the top 10 recipients of foreign capital flows, India was the only country that recorded larger net inflow in 1998 than the average for the pre-crisis period from 1993 to 1996. In sum, the fact that India had successfully out of the vortex of the Asian crisis seems to reflect in no small measure a prudent management of capital account, characterized by pragmatism and appropriate contextual response in the face of rapidly changing economic environment. This is of course not to say that there is any room for complacency, a more effective supervision of the financial sector is imperatively needed, besides greater market discipline, better corporate governance and strengthened accounting practices. These are the issues that are currently getting the attention of policymakers in India, under the second generation of reforms, which I believe will result in further progress towards capital account liberalization in India. Thank you.

MY: Thank you, Narendra. Floor is now open for question and comments.

RG: Chandra described a simple-minded negative assessment of Malaysia's exchange control experience as 'do-it-yourself economics,' but the main context in which that sort of argument has been applied is in response to simple-minded arguments that exchange controls have performed well simply because the Malaysian financial markets and economy has done better since September last year. The argument is some times made that the rise in the stock market, the stabilization of activity since last September is proof that the exchange controls have worked, but I think it is valid when those sorts of arguments are used in defense of the exchange controls to point out that in comparison with other east Asian countries, the performance of Malaysia is not distinctively good since last September. Now that's a simple-minded way of making a comment on the effectiveness of the exchange controls, but I think it's valid as a response to the opposite assertion. On Yiping's presentation, I'd like to draw attention to an interesting and important question that he mentioned, underline it really, and that is, and it's a point that's not well understood in the discussion of the Chinese case, both in China and internationally. If you do run a fixed exchange rate and you suffer a huge real appreciation because of what's happening in your trading partners, you've got a large problem unless you have a large domestic price adjustment and, what we all know from the classics, that domestic adjustment is one way of restoring sense to the exchange rate and I'd just like to underline the importance of that point that Yiping made that others have been missing. That in some circumstances, where you've got flexible costs, flexible prices a fall in the domestic cost level is one way of moving towards restoration of equilibrium in the exchange rate. The same sort of things have been happening in Hong Kong and there are signs that maybe it's working in a way that will be effective in Hong Kong.

CA: Maybe the way I put it ? but still I believe my inference. Indeed, comparison, what people say that Malaysia did not have a foreign debt problem and therefore it was better placed, now the other explosive mix that had developed until the crisis, capital market opening, share market bubble, real estate bubble and the credit accumulation. When you consider those things, the Malaysian situation was as explosive, if not more, than the situation in other crisis countries. It wasn't market participants like Soros. I'm not saying that he's a good economist, but he has made the point. Then again, Dominic during tea time made the point, given the worst case scenario related to Malaysian policy, even if you find that a massive collapse didn't happen in Malaysia following the imposition of capital controls, still its supportive of the policy stance. I mean that's the worst case scenario you have to compare. But if you compare, but if you compare across countries, say the only country that has done better than Malaysia is Korea, but Korea is a different scale, with a massive industrial base, a diversified economy and domestic firms with a lot of exports. Malaysia that's not how that is. Say, Sweden after massive currency crisis recovered in 2 years. One-and-a-half years, with a flexible economy, so all these factors have to be taken into account.

If the Chairman permits me may make 2 comments on Yiping's paper. Now Yiping highlighted the role of exchange control regime and the way it cushioned the Chinese economy, one footnote to that is that, as you mentioned earlier, China expanded the economy in the crisis context, that expansion was made possible by capital controls and it was much in line with the Malaysian experience. The second point is that even though China has maintained the exchange rate at a given level, China has had a ? compared to other countries, that is massive surplus labor. If you calculate a proper real exchange rate using ? as a deflator, China's competitiveness is still very great.

YH: I don't actually have anything to add, just to support what Ross said and Chandra on the labor, that probably gives one reason was China was able to adjust the wage rate relatively more flexibly than the others.

MY: Dr. Cardoso.

EC: I have 2 questions. The first concerns a few numbers in Chandra's tables. Table 1, the second line. I think there's a typo there. The number for 1990-96, 13.9% of GDP is not the average of the numbers in the columns from 1990 to 1996, so there must be a typo somewhere. If you add up 4.2, 1.7 plus the other numbers, you don't get an average of 13.9.

CA: No, this is the weighted average, this is not the simple average. I had to put a footnote here...

EC: Weighted? What do you mean weighted average?

CA: In other wards, you take the total capital ? for the period and then divide it by 13. In a way it's like...

EC: It's funny that you get a number that's not an average of the percentages, but anyway we can talk about that later. The other problem is, if I look at the bank credit flows. the last line of table 1 and then I look at debt to foreign banks, the change in debt to foreign banks does not correspond to the bank credit, so I again find the two tables inconsistent.

CA: These are the flows...

EC: Yes but the change in stock should correspond to the flow. Right?

CA: You have to consider the denominators used in the calculation.

EC: Those are not percentages, they are absolute numbers.

CA: The first table gives the percentage composition. This is simply the percentage based on the total, I did not add the simple figures, but the total capital for the particular period and then for each component then the total for that period.

EC: But it's funny to look at those compositions though because you have negative flows, right? So when is minus 6.80%.

CA: Yeah.

EC: OK, I thought it was difficult to make out those tables.

MY: 1994. In 1994 the outstanding debt declined from 1993, so it must be negative.

EC: The other comment is on capital controls and capital account liberalization and relating to the discussion yesterday, I think it's important to make a distinction between countries that do not have liberalized the capital account and thus have exchange controls and capital controls and they stick together because there is a long tradition of a capital account that had been kept closed and a country that has liberalized the capital account and after that tried to introduce capital controls. And the reason I mention that is the comparison between India and Brazil before 1989. Until mid-1980s, Brazil had a closed capital account and very effective exchange controls. When the crisis increased at the end of 1980s, people learned to bypass controls and use under-invoicing of exports to get rid of it, to a point where exchange controls became ineffective and the country was more or less forced to liberalize the capital account and after liberalization tried to impose capital controls and those were not effective. In the case of India I think you have something like Brazil before mid-1980s, an economy that has not been subjected to major stress of very high inflation and very high depreciations has kept the capital account closed and in that sense, the exchange controls have been effective. This is in contrast with the experience that we discussed yesterday of Chile and Colombia that have liberalized the capital account and after that tried to introduce capital controls. So there is a difference between the recommendation that we had for Poland to liberalize the capital account slowly and trying to impose controls that have already liberalized, so the effectiveness is not the same in all those case.

DD: Eliana, how would you respond to the Malaysian case in that regard?

EC: Well, the Malaysian case does not look very transparent to me, I don't know how to read it. I couldn't understand not even the numbers on the table, so I don't know how to interpret it.

MY: On Malaysia there have been speculative attacks?

CA: Yes, massive.

MY: So these speculative attacks, I think, would have resulted in, sort of, international liquidity crisis, right? Then there no provision of international liquidity for defending the crisis in Malaysia, then domestic economy must have been suffering from very high interest rates, without IMF prescription, even without IMF prescription, you've got high interest rate in Malaysia, so the domestic economy was deteriorating, so monetary policy applied for only domestic economic management, applied only for taking care of international liquidity crisis of Malaysia, then the domestic economy almost collapsing, therefore, I think in the case of Malaysia, other Asian economies, the nature of the crisis is international liquidity crisis. Then we need sort of new instrument to take care of that kind of currency crisis. Whereas, taking care of the domestic financial problem. So if we had only one instrument, monetary policy, without having provision of international liquidity, then IMF tended to advocate assigning monetary policy to external currency defense, at the cost of the domestic banking crisis. So this is essential I think. When we have two targets of achieving equilibrium, currency and domestic financial situation, but we have only one policy instrument, monetary policy, therefore monetary policy was assigned to defend currency crisis, then domestic crisis gets aggravated. That apparently happened, I think, in most of the Asian economies, but in the case of Malaysia, but later on, in the middle of 1997 or, 1998, sorry, September or August, but particularly under the attack on the currencies. Almost close to double play, played in Hong Kong, I think, in the case of Malaysia. Anyhow, my question is: we may have needed two policy instruments because, we call them twin financial crises, currency and domestic banking. Therefore we didn't have any international lender of last resort, or sort of provision for international liquidity to take care of currency crisis and therefore we end up with collapse of domestic production and so on.

DD: A question I wanted to ask, following on from Eliana is, are we saying that the Malaysian controls worked or didn't work?

MY: No, we have to analyze. from this kind of analysis, what I said, it may not work so well, because we don't have the provision of international liquidity, so substituting for that, Malaysia introduced capital controls to get monetary policy autonomy to deal with domestic situation.

DD: Did it work?

MY: It worked, yes.

GV: You say yes?

MY: So, but who knows, after September 1, this year, what would happen to Malaysia.

CA: All these issues are discussed in the paper, you did not give me time. I just want to answer Eliana's point. Data, I don't see any problem with the data, I checked it carefully. Your second point is exactly the point I made yesterday. One cannot generalize for every country. You had to consider specific country situations. Therefore, maybe it is difficult to generalize from Malaysia to other countries and your point about the impact of liberalization of controls, depends on the pre-crisis control regime is very well taken and I'm going to elaborate on that point when I re-write the paper. This policy dilemma is discussed in the paper. Actually what happened was banking sector had accumulated a lot of debt. In that situation monetary policy was important, if they increase interest rates, then it would have led to banking sector collapse, that is the reason why they imposed controls. Then to use macroeconomic expansionary policy. The point is discussed in the first paragraph on page 17. Exactly your point is summarized here.

DD: Can we follow-up on this discussion on Malaysia? I mean, Malaysia has a lot of short term liabilities on its books as it's going into thinking about controls, right?

MY: No, no, portfolio.

DD: Only portfolio?

MY: Yes, but who knows if it's short or not.

DD: So it slaps capital controls in place. Who's money didn't leave Malaysia at that point? Was it domestic residents? Or is it foreign investors?

CA: That's a very good question and again the point is, once the capital market was opened there was a significant increase in foreign share market activity, about 40%. But the key point related to share market activity is, in emerging markets, is that when foreigners come into the country, big investors, domestic investors consider them as market leaders. I talked to many share market dealers in Malaysia, they only keep an eye on the big guys to see what is happening. Therefore it is wrong to interpret a percentage figure to imply the magnitude of the influence of foreign capital in the share market.

DD: Let me ask the question again, capital controls in Malaysia, if it is effective, it is preventing someone from taking the money out. Correct? Whose money is it effective against in taking it out?

CA: Both money owned by foreign investors and domestic money. In an open capital account regime, if the supervision by people ???? if the capital account is open even the domestic can take money abroad and in the paper it is clearly discussed that by the time capital controls were implemented, more than 35 billion ringgit, which is more than the domestic supply of ringgit was in Singapore, money market. And it created a massive problem in macroeconomic management of the country. All these ringgit were equal about 70% of M2 in the country.

DD: So what's the exit strategy now in Malaysia?

CA: Domestic firms and households are not allowed to take money out of the country.

MY: You know, Malaysian ringgit was somewhat internationalized. It isn't really Tobin tax. Tobin tax is a transaction fee.

EC: No I think it is ?. This kind of control ex post id called ?(defoe) It is not called a Tobin tax.

CA: No the Tobin tax is the second round of reform. I didn't mention this. Earlier it was outright control, in March they replaced outright control with a graduated Tobin tax on capital flows.

DD: Why do you call it Tobin tax? Exit tax.

CA: No, Exit tax.

MY: Tobin tax is a transaction tax in the foreign exchange market in general, right? Some percentage.

CA: I don't know. Even M. Miller used the term Tobin tax.

DW: I also had a request for a little more information on the Malaysian experience. If you look through the tables, one of the things you notice is that in 1994. There was, table 1 page 26, in 1994 there appears to have been a very sharp reduction in net capital inflows, a lot of that seems to come from a cutback in bank credit. There's also, if you look down, the short term debt to external debt ratio falls quite sharply and if you look at the reserve cover, it's at that point that reserve cover goes back over 100% of short term liabilities, so in terms of a lot of the new indicators of vulnerability that we've seen coming out of the recent crisis, there's a definite improvement in 1994. Now my dim recollection is that Malaysia imposed temporary capital controls then and this, I guess, superficially looks like that was having some impact on some of the measures people care about and I was just wondering if you could say a little more about what happened at that time.

CA: Dominic, as always your point is very important. Now in 1994, Malaysia implemented short term capital controls for 2 months, actually it worked. It was more or less like a dress rehearsal which came in 1998 and this figure for 1994 I had to put a footnote and clarify it. But the point is important because a lot of people say that Malaysia imposed capital control on the advice of Paul Krugman, which is not true. Well before that, Malaysian policymakers knew that in the case of emergency, capital controls are a very important policy tool.

DW: These capital controls were removed then shortly after being...

CA: Six weeks.

DD: On China, there's several references in your paper to an overvalued renminbi. That is one question, why do you call it an overvalued renminbi when China is running a current account surplus. The second question is how, do you feel comfortable with the growth statistics that are being quoted. Is it really 7 or 8% growth and there seems to be some questions about the data on China coming out. And third is, just a policy question. There's a sense in the paper and in a larger context in China to that somehow, China is losing market share to other competitors and that sooner or later China will need to devalue.

YH: Quickly. First, of course, it is quite controversial in Asia to say whether the Chinese exchange rate or Chinese currency is overvalued or not. The judgment, the evidence we base for our judgment first is if you look at the official, regulated market it seems that there was still showing a slight trend of appreciation actually. But the fact that most of the people who want to buy and sell foreign exchange in the market are shut out of the market. One simple example is you look at the foreign exchange holdings in Shanghai last year, the household holdings increased by more than 50% in one year. You see why people are just, want to buy the foreign exchange madly. The other number we can look at last year is current account surplus was still around $30 billion, but foreign exchange reserves only increased by about $5 billion, actually some people argue that half of this $5 billion was attributable to the changes in yen exchange rate in the second half of the year. So there is something going on in the demand and the supply that do not show up in the regulated market. The second reason we look at is the current account and changes in export and imports. The Chinese currency is basically, now it's really the only one experiencing real appreciation. Now last year it was OK because, we argue in the paper, the crisis would have two kinds of effects on China's export sector and the current account. Last year it was OK because first it was simply an income effect. Crisis affect the economy and reduced their demand for Chinese exports, but China performed quite well in certain markets, like US markets, European markets. This year it is becoming big trouble. Once these economies start to recover, on one hand they would start to increase their demand for exports from China, but more importantly, they compete strongly against Chinese exports in other markets. There's a figure, figure 2 in the paper, showing the change in export growth in Asia markets and you find a very significant change from the beginning of this year. China's exports dropped significantly in the first 5 months of this year and imports jumped up. So you won't expect similar current account position as last year, it will deteriorate. Whether this year will turn it into negative or not is a question, but definitely the condition drop, so the pressure is mounting. Actually if you watch statements by Chinese officials, you find people start to voice the possibility of letting exchange rate be determined by market forces. Of course, at the political level they still want to honor the commitment, but that means the pressure is quite high now.

DD: Whenever we've looked at the issue of China's market share, China's product markets in the US, none of the market shares have been going down, its world trade has been slowing down and that's a big reason why China's exports would slow down and we don't see, there's much more complementarity between China's exports, I mean in the products that China specializes in doesn't look like, even with the devaluation, like you know, except with the possible exception of Indonesia.

MY: On that issue, in your paper, page 5 figure 1, real exchange rate. This is real effective exchange rate? Or...

YH: It's adjusted for by the inflation rate.

MY: So this is not effective one?

EC: It's, the Morgan Guaranty is the effective exchange rate, it's the measure against the 14 major trade partners. If it's the Morgan Guaranty it's industrial prices in China compared...

MY: No it's different one. This is not...This is after renminbi devaluation in 1994 or before?

YH: After. We set 1994 as 100.

RG: It's a version of real effective exchange rate.

MY: A version. Is it close to Morgan Guaranty or IMF? It is effective exchange rate right?

RG: It's an ANU calculation of effective exchange rate.

DD: On growth rates can I...

YH: Yes, quickly, the growth numbers range from 7.8 with reliable data, I've talked to some experts in the States who say probably the growth rate last year only was between 3 and 4%. Our assessment was, we believe that there was some watered contents in the data. Simply for two reasons. I explained in a footnote, last year 8%, during most of last year it was a political task instead of just economic activity, because the central government emphasized achieving 8%, so there was great pressure on local officials. And it was partly reflected in the reporting numbers by the provinces to the central government at the beginning of this year, except in one province, Tibet, all the others reported numbers above 8% and then they aggregated out the national average as 7.8% and all people just wondered why that was the case. Anyway. Even the spokesman for the state statistical bureau acknowledged that there was water content in it. The other indicator people often use is the 2.5% increase in energy production, mainly electricity. Even taking into account efficiency improvement, you hardly think 2.5 increase in electricity production would be able support 7.8%. Our assessment would be probably lower than 7.8 but looking at the prosperity of the market in China, perhaps the growth rate was reasonably between 6 or 7%

MY: So 6 or 7% growth rate is consistent with price deflation? Probably assuming that enormous GDP gap, enormously high underlying growth rate, otherwise you do not have that kind of GDP and hence price deflation. How do you consistently explain it? High growth rate and price deflation.

GV: I think we'd better cut into this...

RG: I'll answer that in a general way, there's no general rule that says you can't have steady growth in a deflationary environment. The strongest growth in American history was in the 30 years after the Civil War when the price level steadily fell. Look at Friedman's monetary history of the United States.

MY: No, I'm asking how do you explain it. In the case of the US, we could explain it.

RG: We could but it would take a lifetime. Greg.

GK: I want to make a couple of points. I think it must be very seriously considered and reconsidered why these 2 biggest economies in terms of population, 2 billion people, China and India, are doing better than anybody else. And I think it's partly the answer that the Chinese and Indian economies are fastest growing economies recently has much to do with the pace of liberalization. That is a very great challenge to liberal orthodoxy. Because it is against the main stream, somehow China is developing much faster and India, than any other country in this or in other part of the world. It is not that easy just to say they should accomplish much more or they could accomplish much more if they liberalized faster. That must be proved and I dare to doubt that if China liberalized and India liberalized faster than they do, and they do liberalize gradually, they could have much more problems than actually have now. Secondly, that is always very interesting to compare China and India because they are the mighty countries of this part of the world, but I think there is a great deal of justification to compare China and Russia and this comparison is much more striking. One must remember that both countries, that is China and Russia, are coming out of the cold, this post-Communist countries and if you are developing the course of development in the 1990s, that is maybe the biggest difference ever since Russia has halved her GDP, it shrunk by 50% in real terms over the course of the 1990s and China was able to double GDP in the course of the 1990s. And this is also very much due to the path of privatization, deregulation, liberalization and open up competition in relation to the global economy, so we are facing to completely different strategies of post-Communist transition and integration into the world economy. And by all means in 1999 we know who is the winner. The winner is China and now everybody must comply with China from the economic viewpoint and nobody must comply with Russia from the economic viewpoint because Russia does not matter that much as far as her economic position is concerned...

MY: That is very much dependent on the resolution of the SOE problem is China. So that probably too premature to say that.

GK: My point, what I am trying to say that this monetary approach is very attractive, but one must tale a little bit closer look and go a step farther because very many things are evolving in a different way because of the institutional arrangements. Actually in China, unlike Indonesia or Brazil, this aspect of institution building due the post-Communist transition, due to market-oriented reform is of crucial importance. Much more is to be expected in China not because the interest rate or exchange rate are managed but what is going on as far as denationalization, deregulation, privatization, new institutional arrangements, the same as it is for Russia.

MY: Mr. Kolodko in the afternoon we are discussing these issues, deregulation, institution building, also.

GK: As for Malaysian case and capital controls, otherwise it must be evaluated against the other market scenario, we do not have the knowledge what would the development be like in Malaysia if not the capital control was introduced and the ringgit fixed, but as far as we may imagine, I think it would be much worse. It would be much worse and whether we like it or not. On the grounds of fundamentals and sound macroeconomic reasoning, the capital controls, I think it must be admitted that in Malaysia that to an extent it has worked. The problem is as always, the exit strategy. People will say 2 years from now, the time series for countries like Malaysia, Thailand, Korea, Indonesia for 1997-2000 you see that in the medium term growth will be sounder and the construction will be lower in the case of Malaysia than other countries. And last comment about Chinese devaluation, I think that one should expect devaluation later this year. I'm not sure that the decision has not been taken already by the Chinese leaders and monetary authority. Again it must be seen through the prism of institutional arrangements. In China, unlike in Poland or Australia, there is not an independent central bank. That is very much a political decision which must be taken within the Institutional framework for China. But I would bet that devaluation of about 8% is due later this year, but it would be executed in a very different way than it was in Brazil or in Russia or in Indonesia . It will be executed in the Chinese way and it will work. There will be a devaluation by about 8% and then there will be a stabilization policy to sustain the new exchange rate and to develop an economic priority of boosting exports. Otherwise, the expansion of the Chinese economy depends much more on the expansion of the domestic demand, both the infrastructure and the consumer sector, than it depends on exports. But I think it is necessary to see a devaluation soon.

MY: The session is closed.

AUSTRALIA AND TURKEY

SG: I'm going to talk about Australia. I'm going to talk about two aspects. One is why we seem to be immune to the contagion of the region. I think that can be answered fairly quickly. I also hope there is time to talk about the bigger issue of how Australia might contribute to the reshaping of the financial architecture, which I think was given enormous impetus from the Asian crisis. So, why did we escape? It is certainly true that 18 months ago we thought Australia would be adversely affected by the Asian crisis. But I don't think we ever thought or for that matter any one ever thought that we would have a crisis similar to Asia. In other words, a huge reversal of capital flows, and we were fairly confident that wouldn't happen because we weren't subject to what seemed to me the two fatal flaws that were central to the Asian crisis. One was the huge and volatile capital inflows, and the second fatal element was they had very fragile financial sectors.

Australia had neither of those problems. While we expected to get quite a bit of secondary effects. In other words our international environment would be much harder, much less benign. Nevertheless, I don't think we ever thought we would be subject to the contagion that swept through Asia. Because its true that we have a big capital inflow. After all over some decades Australia has had a current account deficit since the early 80s. A current account deficit of around 4.5% of GDP. But that's actually small compared to Thailand. Thailand in 1996 had capital inflow equal to 13% of GDP. I think the other thing about our capital inflow is that it was quite stable. Even in the mid-90s, with the famous Banana republic crisis, which saw a large change in the value of the Australian dollar. The current account and capital inflow only changed by about 2% percent of GDP. That's distinct from the enormous reversals we've seen in Asia were we've seen them go from current account deficits of 6 or 7% to current account surpluses at least as large.

The second element was the strength of the Australian banking system. They were particularly strong, and I think its worth pausing a moment to say why that was so. The central issue was that we had our "learning by doing crisis" back in the late 1980s. I think its worth recording that every episode of financial deregulation has been accompanied by a period of crisis and turmoil. In Latin America, you might remember, the definitive work on this was called "Good-bye financial repression, hello financial crash." That was 1985, that was written. And after all the United States only a decade ago went through the Savings and Loans crisis. Direct result of lopsided regulation and market distorting official guarantees. The UK and Japan both had crises within short living memory. Of course the classic example was Sweden. Sophisticated country, which had a total melt down of its financial sector in the early 90s.

Australia of course was not an exception to this, but we had ours back in the late 80s. Failure builds character they say, so to does failure give rise to corrective processes. We certainly had that experience in Australia after the 80s and during the 90s. Also the corporate sector of Australia learned the dangers of currency speculation. And while I'm recording the joys of been there done that it might be worth remembering the aspects of that experience that is common with Asia. Of course, we had our foreign currency denominated borrowing experiences there were the famous Swiss Franc loan affairs, but fortunately they were at least in macro terms quite insignificant. While we're talking about our luck I might just recall that we had our foreign exchange crisis, the banana republic crisis that I just mentioned, in the mid-1980s, and that occurred separately from the prudential problems which we had 5 or 6 years later (late in the 80s and the early 90s).

On the other hand Asia had its foreign exchange crisis super imposed on its prudential crisis. I might just note though because it will come in later. One of the experiences in the 80s that is still relevant, and that is the exchange rate seems to move by more than the text-books would suggest it should. Over the course of the cycle, I'm thinking here of the commodity cycle, the exchange rate moves by 25 or 30% and that's to say the least a puzzling experience. So much for our escape. Ross has suggested that I should say something about contrasting Australia, Canada, and New Zealand. I hadn't planned on saying any more about this. In some ways this is a sweet moment for central banks, for the Australian central bank, its not often that things go well and you get a bit of praise for what your doing. It seems to me to be the moment to sit quiet and do nothing and say nothing. I'm reminded of the Galbraith point about when your up on a pedestal there's a long way to fall. I'm also reminded that when things turn out well there may be some element of policy involved (I think there is), but there is a lot of luck if you like. So, we're not looking to take to much of the credit for things at the moment because we don't want to much of the blame when the luck goes against us later.

I think there is an interesting comparison between Australia, New Zealand, and Canada. First with Canada we have the same issues - commodity prices moving against us, dangerous world, downward pressure on our exchange rates, and we were able to sit that out through the middle of last year in a way that I'll talk a little bit more about in a moment. Without putting up interest rates, I thinks this is the critical difference. We went through the whole of that period without changing interest rates, and in fact when the period was over we reduced interest rates slightly. So, I think that helped the process of avoiding the recessions or small recessions that we saw in the other two countries. I think the obvious point to make is the fall in the exchange rate, which occurred in all three countries, was in a sense the classic textbook thing that you'd expect to happen. Indeed, that's part of the process. I think the fall in the exchange rate was the thing that buffered the Australian economy from many of those secondary effects of the Asian crisis that I talked about earlier.

But why was it that in Canada and New Zealand it was also accompanied by some slowing of growth. I think in Canada they did raise interest rates, and in some ways you feel sorry for them because I think they had a different climate in which to work. In the middle of last year we were seeing headlines saying in these circumstance maybe we would raise interest rates, but nobody was telling us that if we were real central bankers, if we had any backbone at all, then we would raise interest rates. The Canadians, I think, were under enormous pressure, a kind of macho thing, are you real central bankers? If you are then you will raise interest rates. We didn't have that pressure on us, and while a lot people thought we might have to raise interest rates and it was certainly a possibility. We didn't have quite the same pressure that the Canadians had. Its always difficult to talk about New Zealand because we're so similar in lots of ways. We're like siblings I suppose when you talk about each other its always taken the wrong way. I think we have very similar monetary policy, but its true that New Zealand had higher interest rates. There are those who say that was the result of the monetary conditions index, there are those who say that was the tail end of pressure on Auckland housing prices. But whatever reason New Zealand did go into this period with much higher interest rates than we had and perhaps they had those few quarters of slower growth.

I want to use what's left of my time to talk about what's in many ways the forward looking issue. And that is the reform agenda, and since the crisis in Australia I think we've tried to take quite a prominent role for a small or medium sized country in the international architecture debate. I think there are five issues that come to mind that we've talked about. One is representational issues G7, G3, G10 who should be deciding all of those things, the IMF. Second issue is the hedge funds. The third issue is the possibility of bailing in the private sector. The fourth issue is capital controls, and would also take an interest in the transparency debate. I say something about each of these things in the paper, which either has been distributed or will be distributed very shortly.

So, I've only really got time to talk about one of these issues, which in some ways is the sexy one. Its the hedge funds. Before I talk about this I should emphasize that we're happy with our floating exchange rate even though it moves around a reasonable amount. We think it works well, and the float has been enormously beneficial for Australia. We've come to expect overshooting as a puzzling but tolerable quirk of the markets. In the most recent episode, coinciding with the Asian crisis, we saw a variant on this theme. We saw speculators who believed that they could make money by taking the exchange, which has already overshot, so that it overshoots even further. You quietly take a short position in a currency that is already a bit undervalued and then by a mixture of highly public short selling and vigorous expression of market and press opinion you get the exchange to move down quite a bit further and as it does a bandwagon forms, market players are anxious to sell the currency as it becomes cheaper. Remember we used to think demand curves slope down, they don't slope down in this market. When it goes cheaper people take a further short position in the currency in the belief it will become cheaper still.

As the herd moves in the original speculators can square up their position at a profit. That's the world we saw in the middle of last year. We saw it in a number of places and we saw it hear in Australia. The most disturbing element of this is that it was part of a concerted effort at market destabilzation. Some of the players of the time told us there objective was to put down the Yen to a state where the renminbi was under irresistible pressure to devalue . That would have broken the Hong Kong dollar peg and Australia was a minor secondary target, collateral damage for these masters of the universe. As it turned out we came through this episode quite well, but its matter of historical record that the episode came to an end because of the combined effect of the LTCM near meltdown and the financial crisis in Russia. We were saved by crises elsewhere.

While we came through that quite well and we're confident that we have the resilience to whether other similar episodes we carry from that experience a strong viewpoint into the debate on the international financial architecture concerning the hedge funds. Or as they're known in that context, "the highly leveraged institutions." There are those who deny even now that the hedge funds played a significant role. For those pundits it might be enough to simply observe that the hedge funds themselves don't deny their actions. George Soros has written a best selling book about it. It walks likes a duck, quacks like a duck, and it says its a duck. What more evidence do you want? The movement in the exchange over the period in a large currency, such as the Yen, provides more evidence. As the hedge funds cut their short position in Yen to cover their disasters in the Ruble the Yen rose 15% in a little over a day driven by events unrelated to the Japanese fundamentals. You've got to ask is that a well functioning market.

When we first talked about our experience with the hedge funds in mid-1998 this was derided as the Australian anecdote. But you might recall the old quip that the plural of anecdote is data. Hong Kong, South Africa, Malaysia, and Thailand all pointed to their anecdotes. Then came the near collapse of LTCM and the tenor of the debate changed. As the LTCM crisis recedes international concerns have become more muted or even stifled. The G7 authorities are prepared to concede that there were prudential issues involved in the high leverage of these funds that threatened those who had lent to the funds, but there's less recognition that there's a market integrity issue involved here. The general damage they do by inducing more volatility and otherwise unnecessary interest rate increases into exchange markets.

I've almost used my time so I want to skip to another area that is in my paper and I just in a since I hope whet your appetite to read it because I think a lot of this debate should be seen in the context of the broader debate on globalization. One of the books which has given us some useful terminology on this is a book written by Thomas Friedman, The Lexus and the Olive Tree. I read this, one is hesitant these days to say anything good about a bank in case one's accused of only saying it because one's being paid 1.2 million dollars. Anyway this Friedman is the one who talks about the electronic herd, which is the anonymous fund managers behind their screens. He sees the proper response emerging markets should take is to don the golden straight jacket. His specifications are basically the story of the Washington consensus. All of that, I think, makes quite a bit of sense. But I think, given some provisos I think this is very good guidance the Washington consensus does make a lot of sense. But we've got to be careful that we don't oversimplify it. In the process of accepting the golden straight jacket it seems to me that we ought to recognize that the straight jacket itself is made up of a series of rules its not actually an Adam Smith style free-market finishing point of the golden straight jacket. It is a very complex set of rules, some set down by governments, some set down by markets. We have some control, some input into setting those rules and that is essentially is the task now with the restructuring of the international financial architecture. We need to figure out what those rules are, they can't be found in Adam Smith. They are much more complex than that. And we need to make sure that all those who have some interest in the outcome have some input into the writing of the golden straight jacket rules. I'm going to stop there thank you.

OE: I'll use only half of my time don't worry. I'm a managerial economist, which means that I'm an economist among managerial scientists and a managerial scientist among economists. I come from a different world, so I may have a different look at some of the issues we have been discussing here. The first thing I want to mention is what we have learned from some crises in Turkey. To start with I think the reason for most of the crisis and most of the volatility that we have been talking about is the disparity in the prices. That is inflation, exchange rate, and interest rate. Disparities here are the main causes of the crisis, not the capital flows. Before we liberalized our economy in Turkey we had two really important crises before. One in 1960 and one in 1980 these were at the time of closed economy, but they were caused by a disparity in prices. I'd like to show a picture of that. This crisis was before the liberalization process and one crisis within [garbled].....

Now we had fixed exchange rate and fixed interest rate but inflation in the economy, increasing inflation. We had a very severe crisis in 1960 it ended in a coup. Army took over. Of course the cure was deflating the currency, increasing the interest rate, making interest rates real, and then it continued for some time. Later on in 1970 we had at that time fixed interest rates and fixed exchange rates but periodic adjustments. Because of oil shocks and other reasons again Turkish lira started gaining value because of inflation and interest rates declined, it was more than that and we had another coup, military coup. Again political and social and economic disaster. In these two the common points were Turkish lira appreciated in value and interest rates declined. Then in 1980 we started our liberalization process, we liberalized our economy, and very successfully. When we reached 1989 Turkey was an example for the IMF and the World Bank to show all the world that in a short time without losing from your national income. In fact were under growing national income. There's another case for Turkey like China and India.

Well growth is very good in Turkey its about 5 or 6% average since the foundation of the republic. Well, we liberalized in 1989 we set a very good example for all of the countries, but at that time in 1989 we liberalized the capital accounts also. Free movement of capital to and from Turkey. At that time the same time two prices, the value of Turkish money and the interest rate, the exchange rates and the interest rates assumed the same of kind of changing role. Again increasing value of Turkish lira was a major problem, but now not the negative interest rates but very high interest rates became a problem. Because when we liberalized our capital account and when the Turkish lira was appreciating and interest rates were high fund investments earned very good returns in Turkey. They average between 89 and 92 was about 42% in dollar terms. Its impossible no country, no institution can pay 42% return on anything, so its not sustainable.

What happened was we had inflow since Turkey lira appreciated they start having greater deficits in our trade account. Foreign trade account deficit was something around 14 billion dollars, which used to be three million dollars that's a couple years ago. That foreign trade account but current account was caused by the capital inflows. That is Turkey was able to import much more than it was exporting because of the inflow of foreign capital into Turkey and at the same time banks in Turkey, the banking system has a different role there in Turkey. Banks borrow from abroad and give loans in Turkish denominations, so the short position increased to 5 billion dollars by 1993. That is because of disparities - appreciating Turkish lira and higher interest rates foreign money (mostly short-term) was coming in to Turkey financing trade deficits and at the same time increasing the risk. The risk element is a very important element here of course the foreign short-term capital realizes that it is not possible to earn such a sweet return for a long-time. Anxiety increases in the economy and devaluation expectations increase and when we reach 1994 or at the end of 1993 devaluation expectations in the economy were about 30%.

The 1994 crisis came so well that you could watch it coming. In fact I knew it was coming because at that time I was chief advisor to Prime Minister of Turkey. While it was obvious the crisis was coming when we tried to take some measures to protect it. Well the price was going to be a very simple currency crisis because of bank short position and hesitant short-term capital. That was going to be just coming but not bad in the other sense because deficit in balance of payments was not high. Still, you could see it coming. Well, I resigned December 15th. Well, the government said next March we are going to have elections we can not take the measures now. We said the crisis may not wait until the elections. Of course we had the crisis just among ?doctors?. In January 15 we had the currency rush. Now the second thing was the expectation was about 30% devaluation. When we had currency rush on dollars the government tried to stop it by 10% devaluation. It was much less than what the economy expected. So, it was just the other way the exchange rates increased by 300%. 300% instead of 30%, which was expected.

In fact, the program we had prepared with the central bank at that time was in order to eliminate the crisis we could have had 30% devaluation and put in effect some of the policy reforms. Reforms lets say about the banking system, the financial system not only banking system. Tax system, social security system and we had a package about that. Well another lesson we learned was if you have a currency crisis. Rush on currency, you should try to contain it there. Turkey got excited about that. Excited about the crisis, and took very strong measures, which aggravated the crisis and the currency crisis was converted to an economic crisis. Some measures, most of them agreed by the IMF, but that panic was not necessary at all.

But anyway taxes were increased, temporary taxes were levied and wages were decreased. That is wage were held much below the level of inflation. Purchasing power was decreased and this converted the currency crisis into an economic crisis. Turkey for the first time in its history lost 6% of its national income in 1994. The interest rates, again because of the panic, interest rates increased to 408% in dollar terms. For a short period, but they were panic recommendations. That was not necessary for Turkey what we needed was time to lead to the economy to its parities in the pricing system. That's is exchange rates, interest rates, and inflation. That's 1994 crisis.

Now some more words at the more recent crisis. Well, when the crisis started in East Asia, Turkey was trying to make the necessary reforms in its economy. The reforms were somewhat delayed for political reasons. We didn't have political stability in Turkey. Our prime minister changed ever 6 or 8 months, so we didn't have political stability and couldn't pass the reforms. We were just about passing the reforms when the crisis started in East Asia. But Turkey did not respond to it, in fact the dimension was if the short-term money was leaving East Asia they'll be seeking a safe haven with high returns. Again, Turkey was paying on average about 43% return for foreign capital in the Istanbul stock exchange. And 30% in dollar terms for government securities on foreign capital. 30% real return. Many people believed that Turkey could be a candidate for the money leaving East Asia. We did not have much of a lack of foreign capital from Turkey in 1997. If you look at the changes in reserves. Just a year after the Asian crisis we have a sharp decline in reserves. That is capital outflow from Turkey.

The Turkish case is quite interesting. Its not pure contagion. The foreign capital did put us in the same basket, its not pure contagion. But contagion work in a different way. One way was that the devaluations in East Asian countries, we who did not devalue our currency (in fact we kept a purchasing power of Turkish lira constant in terms of dollar and Deutsche mark basket), they were our markets. America and European Union is our market they're a member of European Common market... customs union, I don't remember. That is our trade with out any customs. They're our very good partners. We had three partners. One is Europe, one is America, the other is Russia. The currency was kept constant in terms of dollar and mark. Part of our market, but our competitors in some areas were southern and south-eastern Asian countries. That is in Turkey the textile industry is very important in our exports. 40% percent of our exports are textile products, and 21% of our labor force works in the textile industry. When the crisis dropped, Turkish garment manufacturers purchased their textiles products, raw materials from this part of the world and that was a huge very important slow-down in the textile sector in Turkey.

What we learned was, its very difficult to talk about the value of money. Are you talking about customers, suppliers, or competitors? Different calculations are needed here. What we did was keep our purchasing power constant in terms of our customers, but didn't work very well in our case. The other reason for the sharp outflow of capital in 1998 was the Russian crisis. Russia is a very important partner for Turkey in trade relations. We have two kinds of exports one is formal exports the other is suitcase exports. Even the suitcase exports would amount to more than 5 billion dollars a year. Used to, now its gone almost completely. We have other relations with Russia also. In the consumption sector, and many other sectors we have very strong economic relations with Russia. When Russia had the crisis we were hit very hard also and now we did realize the decrease in reserves and total capital outflows, but still that's not the main problem. The main problem Turkey entered the session of the decision help of 1998??. That is important.

Now in terms of capital flows, we should not put too much emphasis there. I'd like to show one slide about foreign portfolio investment in Istanbul securities exchange. Well, the things is until May 1998 the returns, monthly investment returns, and the amount of money coming and going out is not correlated at all. After that we see a very high correlation between the returns and entries and exits. When you have exits from the market returns increase or the crisis decreases, you start to see the index decrease. Well then foreigners come in starting here on top. In 1996 40% of the stocks were owned by foreigners, now in 1999 its about 60%. We saw increasing volatility, that is entries and exits increased, but total escape from Turkey was not possible. That's something else we learned. If foreign investment was so important in the exchange they cannot leave the country easily. As they attempt to leave prices fall as well, in essence losing their fortune. So, they have to maneuver it some how. Therefore, we did not see a very hot escape but they saw increasing volatility. Foreign money came to the Istanbul market and left, and in the meantime they tried to manage their reserves of course. The average return for the last three years is 43%. But monthly volatility, that is monthly standard deviation of returns, is about 2.8%.

OK these are some of the conclusions of our experience with the crises. That is what I believe that the crises are caused mainly by the price system. Private economy or liberal economy is guided by prices, that's Adam Smith, but if you can't manage the prices or lead the prices somehow. You can't avoid the prices. In order to avoid the crisis we should manage the price system in a better way. That is exchange rates, inflation rate, and interest rates. We should try to move toward the parities. Another conclusion is that economic policies would have to have a global objective and sub-objectives in-line with the global objective. Of course, the global objective should be growth and better distribution of income. The sub-objective should agree with that. Therefore when we think about policies we should be very careful to calculate the price [Tape break] …the recommended policy measures. Two, who are going to pay that, how are you going share it among the different sectors in the economy.

Unfortunately, I noticed myself that most of the policy recommendations are one-sided in this case. Increase interest rates, reduce wages. But this requires a major redistribution of income in the country and that may create another problem. That, at one time I said that, if it's a currency you should keep it, contain as a currency crisis, but if it converts itself to an economic crisis, then you should be careful to contain it there, otherwise it may convert itself to a social crisis and that's worst of all, any country can withstand a currency crisis. Many countries can manage an economic crisis, but if this is a social crisis, then we don't have very good measures to take care of that. In general, recommendations were eliminating crisis in economies, I feel very strongly that we should calculate the risks and crisis very well and understand who are going to pay the price of the policy measures, otherwise, as we've already seen inn some countries can convert them into social crisis and no one knows where a social crisis may lead.

Another lesson we have learned in Turkey is that these crisis are very much related to your strategic position also, And also developing countries are making a mistake by following cheap labor cost strategy. Cheap costs or lower labor cost strategy and that strategy fails. Especially during crisis. When it comes to devalue a currency, labor costs are dramatically lowered in terms of foreign currency and for a very short time, that country gains a competitive advantage, but for a short time until someone else devalues. It may work as a spiral from then on. We noticed that in Turkey, with the textile sector, was hit from the recent crisis, but only those countries that relied on cheap labor what hit, not the others that been developing brans names and designs and images, they were able to pass to a stronger position in competition, were not hit as hard. Now it;'s very important, we have observed in Turkey that one-half of a sector was pulling down , which had a cheap labor strategy and the other sector was gaining because they followed better strategies more suitable to recent developments in the global markets, that had brand names and designs and image creation, gained a lot during the crisis. Thank you very much.

GV: Do we have any questions to clarify.

CM: If I could ask my neighbor, the deputy governor a few questions. I was struck by his first comment that Australia wasn't affected because it didn't have a fragile financial system and sort of shouldn't we, when we talk about capital controls, distinguish far clearer between capital controls which are put at the border and capital controls in the form of prudent banking supervision, limits on the maturity mismatch, especially for foreign currency exposure, possibly even standards for company surveillance, I was wondering what his views were and experience form Australia in that regard. Second point, on the hedge funds, obviously the problems with the regulation of the hedge funds is the can move from one place to another, they can be located in offshore centers which are not regulated and so it's very hard to get at them except through their sources of funding., Mow one can approach it. Limitations on hedge funds, through the sources funding, one can also take a different tack and see to the extent which hedge funds operate in a destabilizing way. One could, as a countermeasure, increase the international liquidity of bodies, not necessarily the IMF, but possibly the IMF, to offset their working. I would be interested in Mr. Grenville's views. Thank you.

SG: Thank you, they are both interesting questions. I want to call you Mulder, I suppose everyone calls you Mulder, we all watch the X-Files. On the question of fragile financial systems, I think it's clear that countries need to put in better prudential controls, but it's so hard to do. We really had one crisis to help us do it and it may be that you need a crisis to do it. It's all very well to write them down, I went to Indonesia myself in the mid-1980s and said yes you need a control on the open foreign exchange position of banks and the control was indeed put on, but of course that just shifted the problem somewhere else. It was the private sector then that took the foreign exchange exposure and when that foreign exchange exposure sent the private sector company broke, it then also had debts to the Indonesian banking system, so we don't yet know how to put on good prudential rules. They're very tricky businesses and they take a long while. Dennis Detray (?), who ran the World Bank in Indonesia on his departure, he said that the funds move with electronic speed, but building institutions takes decades, and it may be that you can't build them without a crisis and what we may need is a series of little crises to help build the prudential systems. But there's no doubt that we need better, that everyone wants to put in better prudential systems. The question is how to do it.

On the question of hedge funds. You've sensed that this is an issue where, certainly when we first started to talk about it, we felt that we were the only ones shouting about the hedge funds and lots of people why, you can't do anything about them and I think opinion has changed to some extent on this. First of all there was the recognition that you could get them indirectly by attacking their high degree of leverage and perhaps there's not full recognition, but certainly some of us believe that you can also get at them, even the ones in the Bahamas, by rules that say if you sell your product in America, you are subject to certain rules, wherever you are based, if your product is sold here then you must have certain rules. It'' done in other areas. I think that, where there's will there's a way.

Hal: Yeah, Steve, two questions if I may on why we've come through, so far OK. First, it may be a semantic point, at the very beginning when you said "Why have we escaped so far, you mentioned the 2 factors, the banking system not being so fragile compared to the region and capital flows not being so volatile. Wouldn't one also want to give top billing to the fact that we learned to manage a really, genuinely floating exchange rate and that distinguishes very sharply from the crisis economies. You mentioned it later, like I say it may by a semantic distinction, but I wonder why you didn't put it up front. And the second point, I wondered what you think about the argument that the trade liberalization did make us a much more efficient, outward-oriented economy. It's clear, of course, that the crisis was much more about financial, macro issues, but if you've got that much more efficient outward looking real sector, that also helps in the crisis, doesn't it? Like I say, small points, but I'd be interested in your reaction. Thanks.

SG: I'll give a very short answer: yes, you're right. Maybe I should do something more. You're certainly right on the exchange rate, but these are still quite nervous, or delicate processes. I mean the exchange rate did come under downward pressure, and as I say, I think we were ultimately saved by crisis elsewhere which took the pressure off us. I should have said when I was talking about Canada was that one of the reasons we were able to resist some of the pressures to do something, do something in the form of putting up interest rates, we were able to do something else in the form of intervention. We did, you know, very substantial intervention in the middle of last year, more than $2.5 billion, intervention to support the exchange rate. So even when you've got an exchange rate which had been operating quite well since 1983, it still comes under great pressure. I suppose I may sound a bit perverse, certainly to Ross, Ross McLeod, that I don't think a freely floating exchange rate is the answer to everyone's problems. It may be the road you've got to go down, certainly more flexibility is very important, but the idea that that was going to solve all your problems, it seems to me is not right. Even with long experience, good financial institutions, we've had as good fundamentals as you can get. As Hal sells, in terms of a well functioning economy, the exchange rate still moves much more than the textbooks say it should. Now it's so much harder for the countries that didn't have that established history and the institutional background. I think it's very, clearly more flexibility would have been a good idea, but I thinkthat to say, that if only they'd floated then they'd be all right, our experience wouldn't really support that view.

DD: Sorry I'm going to ask you a couple of questions also. Two intriguing points you had talked about and I wonder if you'd make some remarks on those. First was that you had a suggestion that Australia was different from, and the indutrial countries, are different from developing countries or emerging markets because capital flows are less volatile and more scaled. What exactly is the difference between emerging markets and more mature economies like Australia, that would lead you to believe that flows tewnd to be more volatile and less stable in em,erging markets. Just tell us a little about that, because I'm intrigued by that. The other one is capital controls. I've been trying to get an answer or understanding in a longer historical setting how the institutions have eveolved. How has Australia's capital controls and how do you see that historical process evolving and does it have any lessons for developing countries?

SG: Thanks very much, again good and interesting questions. On the question of volatility, in the paper I really just observe it as a fact, really. Whereas these countries went, say, Thailand in 1996 went from capital inflows equal to 13% of GDP to capital outflows, if we can judge those by the size of the current account surpluses of 6 and 10% of GDP. So just a huge change. And in our own exchange rate crisis in the mid-1980s, the so-called Banana Republic crisis, the turnaround in capital flows was relatively small, less than 2% of GDP. Now why was that so? I don't know is the short answer, but let me try a couple of things. A fair bit of FDI, about a third of the inflow was FDI, and that tends to be stable, at least as recorded, although we don't know what foreign investors are doing with the rest of their balance sheets, not much private bank to bank capital inflow. Now that in Asia turned out to be extremely volatile and it's not surprising. This is the capital that could retreat because it had government guarantees and there was every reason it shouyld retreat it was essentially a bank situtaion. Why wouldn't you go and take your money out? And so they all did. And so in the three quarters following the crisis $75 billion of bank to bank capital flowed out. Much more than any of the aid packages, much more than had come in a single year and we don't have very much that, as far as you can tell. I suppose the big thing was just a longer experience of confidence. I glanced at Peter Warr's paper and he talks about the importance, in a sense the credibility of governments. I think the real issue was the credibility of governments and that gets me back to Hal's point that since the mid-1980s things have been done to put in place reasonable macroeconomic policies. Now our capital controls, we haven't essentially had capital controls since 1983 so no one can really remember all that well the changeover. I think the other point is the world has changed so much since then so the things we had in place in 1983 wouldn't be relevant to crises. I think it's worth recording that Singapore and I understand Taiwan have restrictions which really should be called capital controls, but they're very carefully aimed at one specific issue and that is hedge funds of people shorting your currency. Singapore doesn't allow its banks to lend large amounts of Singapore dollars to offshore people. That's a capital control, if you like. People might use other terminology and that is extremely effective. I wanted to come into the debate earlier on Malaysia to say that my understanding is that, one reason Malaysia moved when it did is that it heard on good intelligence that people were taking short positions in the ringgit to the tune of $5 billion from Singapore banks. Now if you allow that sort of things to happen, then you make it easy for hedge funds to speculate against you. You can put on controls which would be quite different from the controls we had prior to 1983 and maybe Thailand had before 1991, which would be more relevant to the particular cases at hand. So for my part, I don't rule capital controls out, I think they may be things that can be done.

GV: I wonder if I could ask Prof. Ertuna. In Turkey, the high rate of inflation has been there for some time. How in your thinking did that affect the whole experience of both the flexibility, the options you had for policy decisions and so on.

OE: OK. If you have predictable high inflation, it doesn't create any problem because you can make your calculations, you could manage your exchange rate and interest rates. Predictable high inflation is just a dynamic system instead of static in terms of prices, so it doesn't create any problems. But the uncertainties in the future inflation does and one of the reasons for the recent recession we are having is that temporarily, inflation has been going down for the last 8 months and it has gone down to 91% to 48%, but temporarily. The reason I say temporarily is many people don't believe in that and that was the reason for the interest rates not to follow, interest rates did not go down. They remained at 115% for government bonds. 115% interest rate and 48% inflation would give you more than 45% real return in government bonds. That a country cannot stand. The government now is paying its obligations and interest on obligations by borrowing from the market. Then your internal debt of the government increases, but the economy is not growing that fast, of course. So that's a very good reason for a financial crisis in Turkey. So it's not inflation, but uncertainty about future inflation is a very important problem and we have not found, we were not able to find any solution to that. Now although inflation has gone down to 48%, although we had promised IMF that we would cut it to 20% within a year, now 2 year government bonds have interest rates of 115% again. 2 year maturity. Now in 2 years the expected inflation or the promised inflation, the newly elected government had promised the people that inflation would go down to one digit levels and that would mean 115% interest rates for 2 years and the 5% inflation means you cannot pay back. So of course this increases the currency, the risks for the foreign investors also. That was the reason we had about $8 billion of short term money escaping from government bonds recently. $8 billion escaped from the government bonds. Of course devaluation risk, not only devaluation risk, we are suffering all the other kinds of risk are increasing because of the expected inflation and interest rates that now exist. It is a very major problem in Turkey.

GV: Thank you. Ross.

RM: A question also for Steve in relation to floating exchange rates. You've said a couple of times that the exchange rate seems to overshoot in Australia. I don't have any argument with that, there's no disputing there's overshooting. I guess my question is: why does this disturb you so greatly. Let's suppose that under a floating exchange rate, the exchange rate would indeed bounce around quite a little bit. Why do you regard that as such a problem? It seems to me that if that became the way it was, then the private sector would learn to accommodate that and the obvious way of doing so is through building a deeper forward market for foreign exchange and it seems to me that when that is built up, then the bouncing itself of the exchange rate would decrease. If I can switch the conversation to Indonesia rather than Australia, since you know both countries well and I only know one of them well, it seems to me that Indonesia has always been fascinated with having a fixed exchange rate against the dollar or a fixed rate of depreciation against the dollar and yet its major trading partner is Japan, it's a far bigger trading partner than the US and the implication of that is that Indonesia has had very much a floating rate against the yen. That doesn't seem to be a problem to me. So if I could just get you to expand on why you are so concerned about bouncing exchange rates and a response to the idea that the private sector would learn to live with them if it had to do so.

SG: I knew I couldn't say anything critical of floating exchange rates without provoking a response from Ross. Well part of the answer is, I'm a bit schizoid on this, I've said in the paper and I feel that the fluctuations that we've experienced in Australia have been things we can handle and the market has got used to it and I don't think they do any serious damage. Having said that, we do intervene so we must think that when it gets to a certain stage there's a danger of doing some harm and I think the point in Australia is harm to confidence. I think there is a feeling in the public that if your exchange rate is going down and every day you have a headline in the newspapers about how bad a fall in the exchange rate is, then that damages confidence. No everyone has the view that an exchange rate going down is fine. We've got all the wrong terminology on exchange rates, with a very heavy feeling that when your exchange rate is going down that is a very serious thing and I think with that goes damage to confidence. So that's why at some stage we come in and buy Australian dollars, now no one can prove whether that holds the Australian dollar up, but it has been a profitable exercise. Obviously if you buy cheap and sell dear, which is what we do, and the move is about 25-30% over the course of a cycle, then that's a profitable operation. We've done some more formal analytical work to show that's so. We've also done some work to show that these fluctuations over the course of the cycle don't seem to be rational, but the short answer to that is that Friedmanite speculators to do what we're doing. When we were in the market in the middle of last year, there was only us and the hedge funds, there was no one else there at all. There were no Friedmanite speculators saying hey, 55 cents that's good buying for the Australian dollar and no one knew at the time that that would be the case, but it has turned out to be the case. So maybe if I could draw it together a bit more coherently, I think after a while floating exchange rates do work fine and have been very beneficial for Australia, but the time it takes to build up experience with them, the market experience and also the empirical experience so people can say, oh yes the Australian dollar is fluctuating on cycles on an average of around 70 cents, until you've had time to build that up, you still get very big changes. Here we are, 1983 til now. Very clear cyclical swings, which we had written about 10 years ago and have constantly written about since then, but the Friedmanite speculators have not arrived to help us out in that process of smoothing out the cycle. So last year, we were the only ones. Now why is that so? I think I got some of that answer when I was at an exchange rate conference earlier this year and at that stage, the exchange rate was 66 cents and the people running this conference, a big financial house, were saying with great confidence that it would go up, it was the strongest bet you could take, short the yen, go long on Aussie they said and they were talking about 82 cents and then you say to them, 'why weren't you making this recommendation at 55 cents, why are you making it now at 66, for which there was no answer, but the more substantive question, which I think contains the answer is, 'why are you making this prediction now?' And the answer was the 55 day moving average had crossed over the 200 day moving average and when you think about that, not only is it kind of mechanical, technical analysis, but if most people are thinking like that exchange rates never turn up again. It's only the Friedmanite speculators who are anchored by the fundamentals who can come in at the trough because their pink line is still below the blue line, the 55-day moving average is still below the 200-day moving average, so there's a lot of people out there and Frankel and Fr? Did some work on this in the early 1990s of the importance of technical analysis. Now while that's in the market, the Friedmanite speculators don't seem to strong enough to come in and do what you suggest they will do, smoothing out exchange rates. It's so much harder in all of these Asian countries. No history, fast changing production functions, no great confidence in governments because you're taking a bet on a nominal exchange rate, not on a real exchange rate, no long empirical history to let you look at what the fundamentals are. I'm not arguing against more flexibility, I'm just saying that this floating exchange rate system, while it may be where we've all got to go, it's still pretty hard work. Thank you.

VP: This is a question for Prof. Ertuna. Would you say the Turkish case is pretty similar to the Indian case. A lot of people can find the data on the short term indebtedness of the corporate sector and the banking sector and of the government as compared to GDP, but it seems like it's pretty low.

OE: It's around 27% if I remember it correctly, but recently, private sector debt is increasing, especially in the short term. While I don't know how similar it is to India. Total foreign debt is about 50% of GNP, but short term debt is about 27%. Most of the short term. Most of the short term debt is private short term debt, not government and in terms of our reserves, our reserves are only 108% of the short term foreign liabilities. It used to be 135% of short term liabilities, but due to recent reduction in the reserves, it has gone down to almost par. Currently, we are not in a very safe position in terms of short term, but it's improving.

VP: Capital controls, yes.

OE: We have no capital controls in Turkey. Fully liberalized capital account. Stock exchange and Turkish government bonds and companies can borrow in foreign markets as much as they want to. Many of the stronger ones use bonds, especially, it's very tempting for them because of the exchange rate, the value from foreign markets is much more cheaper, because of very high interest rates in Turkey, borrowings from foreign markets is much cheaper than borrowing at home, so many companies can borrow in foreign, European markets. The rates are very good for them compared to interest rates in Turkey. So all capital transactions are completely liberalized in Turkey.

VP: Since when?

OE: Since 1989.

VP: And the debt levels are still low?

OE: Yes , comparatively.

DW: I just had a quick question for Stephen Grenville. In contrast to some experiences, Australia has just recently had a pretty sizable currency depreciation, with very little pass through into the domestic price level or into broader price and wage setting. Given that in developing countries a large part of the concern about devaluations and depreciation of the currency tends to be centered around the prospects of inflation and an inflationary spiral. And given that you're the only person that seems to be giving a paper from a developed country, I wondered whether you could say why you think that happened in such a stark way in Australia and also I guess perhaps whether that's significant to what happened following the Banana Republic depreciation episode, which is something I don't know about.

SG: It's one of those things where we've changed our minds over time. I think with the Banana Republic episode there was quite a big pass through. Inflation went to nearly 10% after the depreciation there. So when the exchange rate depreciated in the early 1990s, we thought we were going to get another episode of that and we didn't. Now what was it that the economy had more slack in it at the time, had a lot of slack in it at the time, was that enough slack to stop that from being passed through. It was certainly a very painful experience, but looking back on it, it may be the episode which has moved us into a new world in which people don't expect an exchange rate fall to be passed through and that seems to be the world we're in now. And it may be because of the 1990s experience or it may be there's enough history for people to notice that the exchange rate is going up and down and retailers are trimming their, retailers and the distribution network, are trimming their margins, which they will fatten up again when the exchange rate goes up. That looks like the experience of the early 1990s, they did fatten up their margins again afterwards. So that's probably the world we're in and it's much more comfortable world, because you're much more in Ross McLeod's world where you're not fretted about the exchange rate moving down 25% because it doesn't trigger a shift in inflation expectations, it may trigger these confidence effects, but we're not as worried as we were in the 1980s or even early 1990s about triggering inflation. That's the Australian experience and maybe the developed world experience, but it's the same experience in Asia and that maybe a puzzle and maybe not, maybe in Asia it says if you crunch the economies enough, you don't get very much pass through and if you can get your exchange rates back in nominal terms to somewhere near their starting point, as has happened in Korea and Thailand, then you get through these sort of experiences with minimal inflation. I think the thing to emphasize there is the degree of crunch which the economies went through. I think it wasn't that inflation expectations were well anchored, it was that the economies were so crunched that the pass through didn't take place.

PW: I'll try to be quick. There's an element to Stephen's account that really goes against the grain to a neo-classical economist. In other areas of economics, we've found in example after example that market participants are better at predicting market trends than bureaucrats are. Industry policy for example, boy have we learned that one. Now, Stephen's account seems to be saying that as far as the Reserve Bank of Australia is concerned the opposite is true. It's hard to believe that these geniuses at the reserve bank, who could make a fortune by moving to the private sector and displacing all these idiots doing this moving average stuff, actually stay with you. It may be because of the wonderful management at the reserve bank, but they do that. Please help make it credible, I'm finding it hard to believe.

SG: I don't know how to handle this one to tell you the truth, maybe I'll just take it straight. Ross passed me a note saying he had changed some dollars at 55 cents. So we had the Garnaut portfolio on our side too.

RM: He probably changed it into rupiah too.

SG: I don't think it's a matter of us being smarter, certainly not geniuses, it's more a matter of the institutional setup that makes it very hard for anyone to be a Friedmanits speculator, except us. You've got to ask yourself, who are they? Now the Garnaut portfolio was acting on the Friedman side, but there were a lot of others who were bigger forces than the Garnaut portfolio. You've got to say, why don't the big people come in? Well the banks certainly aren't going to take an open position in foreign currency because we've just said that good prudential rules will greatly constrain them, will stop them from doing that. So you've got to ask who is it? Now these people will take positions in foreign currency over a short period of time, but anyone who is working for a big institution has someone looking over their shoulder who, if their position is under water for any length of time is going to be told to cut the position and if they don't they're going to lose their job. So there really aren't a lot of people out there who are in a position to do what we can do and that is go long on the Australian dollar and hold that position for maybe three or four years before it's profitable. Now that's not that we're smarter than others, it's just that we don't work in an institutional world where somebody who comes along, let me be specific, we did most of our intervention at 60 cents, nor for the next month that was under water and no one came along and said to our head dealer, you'll' have to cut that position, it looked like a good idea that time, but you'll' have to cut it. In fact, we went in again at 55. Now as it turned out, both of those interventions have turned out to be profitable, but at least at first, the first one didn't seem to be and I would guess that any financial institution that took that position would have cut it before it turned out to be profitable.

GV: Thank you very much to our presenters.

RG: I raised my hand to make a brief comment. Following from Dipak's question and Steve's response on the old exchange controls, they were very extensive and getting rid of them in December 1983 had large efficiency gains because they were so extensive. There were a whole lot of economically valuable transactions that weren't possible under the old exchange controls that became possible. Including a lot of normal forward protection against exchange risk, which existed in the pre-1983. Including forward sales of minerals and those efficiency gains were very substantial. Thank you.

RG: Our speaker Ken Henry is Secretary of the Australian Treasury, he is acting in that role from his normal position of executive director of the Economics Group. Amongst his many responsibilities in that area is responsibility for Australia's international financial management. Including links with the Fund and the Bank and that's become a much larger role in the last couple of years than it's been before, including the institutionalization of some of the regional discussion of the financial crisis. Ken's happy to answer a few questions afterwards, he hasn't got a paper to put out now, but we'll put the paper on the website after his return to the Treasury. Ken.

KH: Thank you very much Ross. I note from the agenda that, and unfortunately I wasn't able to get here earlier to listen to the things Stephen Grenville might have said to you and I must confess we haven't compared notes, there is a risk in that, there's at least two risks actually. There's a risk of repetition and if that occurs then for that I apologize. There's a more exciting risk, which is the one of contradiction and if that is to occur, I hope you will be charitable and treat it as nothing more that an illustration of the independence of our central bank. My thanks to the committee for the invitation to speak here today on the Australian government's contribution or efforts to reshape the global financial architecture. It's particularly pleasing for Australia to see so many distinguished conference participants from Latin America

My thanks to the 'Reinventing Bretton Woods' Committee for the invitation to speak to you today on the Australian Government's contribution to efforts to reshape the global financial architecture. It is pleasing to see so many distinguished conference participants from Latin America, Eastern Europe and Russia, and Asia. All three regions have important contributions to make to the international economic debate. All three have grappled with the key modern questions in the emergent or rapidly-industrializing economies of how to build new economic institutions, how to reform policies, and how to cope with periods of high capital inflow and the risks of reversal into sudden outflow. Improvements to the international financial architecture must meet the test of relevance to all three areas. In the decision-making processes of the international financial institutions, and in other international fora, the emergent or fast-industrializing economies have been under-represented. It is very likely that this under-representation contributed to an over-estimation, in these fora, of the ease with which the benefits of greater international capital mobility can be achieved, and an under-estimation of the amount of work and time it takes to establish the right national institutional and policy foundations for transparent, stable and productive international investment.

There is, at this juncture, an additional, but related, risk that without sufficient involvement of emerging market economies in the consideration of measures to strengthen the international financial architecture, without their perspective on the sources of instability and vulnerability, we may find ourselves no better prepared for the next crisis (assuming there is one) than we were for the events of 1997 and 1998.

Reinventing Bretton Woods?

As we evaluate the international financial architecture, it is worth remembering that the deliberations at Bretton Woods in 1944 led to the establishment of a trio of institutions: not just the IMF, but also the World Bank and (with a lag from the original 1944 conception of an 'International Trade Organization') the creation in 1947 of the GATT. That package of institutions addressed:
- the international payments system and policy adjustments to economic shocks;
- economic development; and
- trade liberalization.

The Bretton Woods founders had learnt their lessons from the catastrophes of the first half of the 20th century - two World Wars bracketing the Great Depression.
They applied those lessons well in establishing the key qualities of the international economic framework that has characterized the second half of the 20th century: outward looking; based on multilateral rules; and designed to ameliorate economic shocks while avoiding the 'beggar thy neighbor' protectionism and competitive devaluations that had converted earlier shocks into global stagnation.
That framework helped achieve unprecedented real per capita income growth, poverty alleviation, and growth in life expectancy, and was consistent with the spread of democratic freedoms throughout the world.

As we consider challenges for the new millennium, the Australian Government believes we should look not just to the international financial architecture narrowly defined, but more broadly to the economic development and trade liberalizing elements of the original Bretton Woods vision. From the 1950s to the 1990s, economic development was conceived mainly in terms of physical investments, such as those in roads, dams, steel plants and schools. These days, perhaps we should look increasingly to the importance of less tangible investments in national institution building and policy frameworks, and to mechanisms for preserving free trade and investment flows. The Australian Government does not believe we need new international financial institutions, or large scale change to existing ones.

By and large, the work of the international financial institutions has evolved to meet global challenges. Yet it is very likely that the industrialized world has underestimated the challenges to domestic economic institutions and policies in emergent and industrializing economies posed by the rapid of the financial system over the last quarter century. There is a question whether the evolution of our thinking since 1944 has reflected fully the significance for domestic institutional arrangements of: the breakdown, in the early 1970s, of fixed exchange rate regimes; the more recent removal of the last of the capital controls associated with the fixed exchange rate era; and the technological innovations that have greatly reduced the costs of computing and telecommunications.

The need to do better

International capital mobility makes it easier to tap the world's supply of savings and to invest and grow more rapidly. But our communities are interested not just in maximizing growth in income, but also in achieving some tolerable stability in that growth. The trade offs are difficult, and we should accept that some volatility is intrinsic in markets. It would be naïve to seek to eliminate growth fluctuations at any cost: that would only kill market dynamism, without necessarily achieving the stability objective anyway.

Rapid growth – without necessary institutional and prudential strengths – can equally rapidly give way to a period of serious income contraction after a financial or banking crisis. It may be better, with steady institution building and policy reform, to grow at a slower but reasonably steady rate. There is no evidence of a rising trend, over the last 25 years, in the numbers of financial or banking crises, but they are now grouped more than in the past. Their spread by contagion is now more of a threat. The Australian Government does not believe it is possible, or desirable, to try to turn back the clock through a generalized application of capital controls. Financial has produced too many net benefits, and proceeded too far, to contemplate that.

That is not to say, however, that we should rule out entirely the case for a limited resort, *in extremis*, to price-based capital controls in select cases, and for short periods, while the national policy reforms and institution-building necessary to handle modern international capital flows, transparently and with stability, are accelerated. But recognizing this only serves to underline the point that our focus should be on building the national institutions and polices, and the international frameworks, to reduce the frequency of economic downturns and mitigate their severity.

The role of stronger institutions and policies

There have been huge international challenges in the last quarter-century to established economic policy approaches and economic institutions: the floating of exchange rates; the end of capital controls; the end of communism (with large economic consequences for trade and investment flows); and the very rapid growth in international capital flows as foreign direct investment, portfolio equity investment, bank lending and financial derivatives have all surged. The national institutional and policy developments necessary to permit these new capital flows to be allocated in an efficient, stable and transparent manner have evolved in the industrial economies over decades of trial and error, and are still evolving. Indeed, they are still rapidly evolving. It was perhaps natural, if unrealistic, to imagine that the appropriate institutions and policy frameworks would spring up quickly in the emerging market and rapidly industrializing economies.

But they have not emerged rapidly, and we have perhaps been remiss in not investing sufficiently heavily in promoting better understanding of the social and policy institutions necessary to ensure all can share – and can enjoy stability – in the gains made possible by these new international capital flows. The international financial institutions have a key role in building these capacities, through explaining their importance and facilitating the understanding and adoption of international best practices in fiscal, monetary and financial policies, in transparency, in basic commercial behavior (such as accounting, auditing and disclosure), and in prudential supervision.

The required improvements are a mixture of fiscal and monetary issues traditionally the responsibility of the IMF, and financial and structural issues traditionally the responsibility of the World Bank and the regional development banks. The Australian Government has a strong interest in there being a better definition of the roles of these international institutions, and better cooperative work among them, to accelerate the building of stronger national institutions.

Transparency as a key

The Australian Government's input to modernizing the international financial architecture has been built around enhanced transparency.
Transparency is not an end in itself, but is a key element of building better national institutions, better accountability in the marketplace, better economic surveillance, smoother adjustment to unforeseen shocks, and faster reform of unsustainable policies. Better transparency and accountability have implications for the operations of private enterprise (both in the financial sector and the 'real economy'), of governments, and of the international financial institutions themselves.

I will turn briefly to the Australian Government's view of some major elements of improved transparency required for each of these important aspects of the global economy. While time does not permit a full outline of these topics, an attachment to the printed version of my address lists the key Australian Government policy documents in which the underlying analysis is developed at greater length. The Australian Government has sought to carry forward its views, and win support for them, through the Manila Framework Group, APEC Finance Ministers and Economic Leaders meetings, and our participation in the governing boards of the international financial institutions.

Transparency for firms

Well-functioning markets rest on the foundation of credible and timely information. In the 'real' economy, managers need credible accounting and other information to estimate how to price and where to invest. In the financial sector, good credit analysis and stable investment and credit flows also rest ultimately on sound underlying commercial practices in the 'real' economy. Moreover good government prudential supervision of key parts of the financial sector itself rests on that same foundation. Requirements include:

- good contract laws, insolvency laws and corporations laws, and the independent institutions to enforce them without fear or favor;
- good accounting, auditing and corporate governance practices (eg of continuous disclosure), and active and independent professional groups such as accountants and company directors to help maintain them. Strong professional associations capable of supporting professional standards with integrity are of course not directly within the gift of either governments or international financial institutions, but rather emerge from a strong civil society.

Good commercial practice has been codified over recent years. Emergent economies and rapidly industrializing economies do not need to re-invent the wheel:

- For example, international standards or guiding principles have been created for accounting, auditing, cross-border insolvency, and corporate governance. These international standards can be studied and applied to improve national practice.
- At the level of technical assistance, the World Bank and regional development banks can help emergent economies to apply these standards in their own circumstances.
- And regional political groups can prepare the political ground for those improvements, and can facilitate the private-sector-to-private-sector contact that can strengthen the commercial and professional elements of civil society.
  - In our region, the Australian Government has been active in APEC Finance Ministers Meetings and the South Pacific Forum Economic Ministers Meetings in raising awareness of, and interest in improvements to, corporate governance and insolvency law.
  - The Government has also been keen to draw on Australia's private sector and regulatory strengths to help build similar strengths in the region.

Transparency for governments

Financial and banking crises can't be forecast in any precise sense. No matter how long it takes them to build up, when they break they usually appear surprising, sudden, disproportionate reactions to rather small changes in external conditions.

But vulnerability to crises can be identified, and the sooner the vulnerability can be signaled, the better: policy corrections can then be smooth, continuous, and without the need to recover from protracted resource misallocation from longstanding inappropriate policy settings. The problems that can ultimately arise with fixed or heavily regulated exchange rate regimes illustrate this issue. In most (if not all) the major crises of the 90s, real effective exchange rates drifted to unsustainable levels under controlled exchange rate arrangements of one sort or another.

We have seen in the 1990s the fundamental and often explosive incompatibility between inconsistent settings of fiscal and monetary policies, fixed exchange rates and the of capital markets. In a number of economies, as exports lost competitiveness and imports boomed, foreign exchange reserves ebbed. Tensions arose between fiscal, monetary and exchange rate policies, leading at some point to a crisis of confidence (often domestic as much as international) in the sustainability of the policy mix, followed by a rapid swing from high capital inflows to high outflows.

Often the very presence of allegedly fixed exchange rates led businesses and banks operating in weakly supervised markets to enter international transactions without properly pricing for, or insuring against, the actual risk of significant exchange rate adjustment. So the actual reversal of sentiment, when it arose, caused devastation to the financial sector and the real economy.

One currently popular, partial acknowledgment of these recurrent problems is to suggest the exchange rate should be pegged not to a single currency, but to a basket of currencies. Indeed this may help to a degree, by somewhat diluting national vulnerability to unforeseen movements in the real value of any one key foreign currency in the chosen basket. Australia briefly used such a system in its transition from fixed to floating rates in the late 1970s and early 1980s. But that system had to be abandoned. Pegging to a basket of currencies does not ultimately solve the fundamental challenge: emerging or rapidly industrializing economies are almost by definition experiencing rapid and un-forecastable changes in the composition of their trade and capital flows. They may also be at different stages of an economic cycle, in need of policy settings for domestic stabilization which are markedly out of line with those being pursued by economies in the basket.

Ultimately, it is hard to see any resolution of these challenges except by:

- clearly assigning fiscal and monetary policies in a transparent way to clear objectives in a medium term framework;
- pursuing national economic flexibility by structural reform;
- providing as much information as possible through good data and transparency mechanisms, so that emergent tensions in policy settings are more likely to be identified early and corrected in a smooth and timely manner; and
- allowing the exchange rate to be set in the market.

Again, recently developed international standards help governments, and help market participants, in this process.

- The IMF's improved Special and General Data Dissemination Standards and improved BIS statistics will help transparency.
- The IMF has also developed (or is well advanced in developing) transparency guidelines for fiscal policies, and for monetary and financial policies. And other specialist international groups have developed guidelines on effective supervision of banking, securities and insurance markets.

The Australian Government actively supports these developments, both by its support in the relevant international agencies, and by ensuring its domestic policies conform with or lead best practice.

- For example under the Charter of Budget Honesty Act, Australia now has accrual fiscal accounting with clear treatment of contingent liabilities and good transparency disciplines on the fiscal consequences of political parties' new policy promises made during election campaigns. The Charter also requires that governments release annual fiscal strategy statements based on the principles of sound fiscal management.
- Following recommendations of the Wallis Inquiry into the Australian financial system, Australia has also moved to a modern, 'product-based', prudential supervisory regime not compartmentalised by the traditional distinctions between different forms of fast-evolving financial intermediaries.

'Transparency reports' on government policies can also help improve policy practice, and the smooth evolution of policies towards global best practice.

- Earlier this year, the Australian Treasurer released an Australian 'self assessment' report which provides one model of how this might be achieved.
- Equally, the Australia Government supports further countries participating in the preparation of country transparency reports, including through the important work of the IMF in this area.

Better data and better transparency about policies help voters, investors, bankers and businesses reach their own conclusions about policy sustainability and necessary policy reform. But in addition to these spontaneous processes, better information also assists better formal surveillance by international organizations and peer review of policies and performance.

- Here, too, we are seeing steady progress: the IMF's issue of Public Information Notices on the outcomes of Article IV deliberations; and the steady maturing of regional surveillance discussions in the Manila Framework Group and APEC. The Australian Government is active in support of all these explorations.

Transparency for the financial sector

Transparency is not just something governments owe their citizens or 'the market'. It is equally something 'the market' owes the communities which define the rules which underpin it. Common law countries (which are of course particularly influential in setting *de facto* commercial standards in the modern economy) generally hold managers to high standards of public disclosure, especially of bad news.[1] And the virtues of transparency are also embodied in legislation promoting consumer rights, truth in labeling, and so on.

But is not only spreading the expectation of higher commercial standards of transparency. It also occasionally permits opaque developments outside the direct reach of any single jurisdiction. The issues raised by Highly Leveraged Institutions (HLIs), including but not limited to hedge funds, show the problems that can arise even in sophisticated, well-regulated, large national markets when there is insufficient information on, or prudential supervision of, such institutions.
The Australian Government believes such problems need to be solved not just for the security of major capital markets, but also if we are to assure those whose local markets are less liquid that they are not

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1 Ray Ball, *Disclosure, Corporate Governance and Wealth Creation*, 1998 Bert Kelly Lecture, summarised in Précis, Vol 8 No 2, December 1998, p 6, Centre for Independent Studies.

threatened by market-rigging practices. Continued widespread political support for open global capital markets depends on it.

- The Australian Government is contributing to the study of these issues through the work of the Reserve Bank of Australia on the relevant sub-committees of the Basle Committee on Global Financial Markets, and also in the work of the G7-initiated Financial Stability Forum.

The Government also believes it is important to carry forward work on 'bailing in' the private sector in the event of crisis. Public support for IMF crisis programs the Supplemental Reserve Facility and the Contingent Credit Line depends upon it. There is concern that, without matching private sector obligations, these programs will contribute to moral hazard, casting the Fund in the role of 'lender of first resort'.

Some experience has been gained with bailing in the private sector in cases such as Korea's. The Australian Government welcomes the G7 call for a broad framework for involving the private sector in crisis resolution, which sets out in advance principles, considerations and a broad range of tools for action. We believe it is a priority to press forward with this work.

Transparency for the international financial institutions

This brings me to transparency for the international financial institutions. In national insolvency regimes and prudential supervision arrangements, courts or supervisory authorities have strong powers that are publicly supported because of transparency of process and the democratic accountability of those responsible for decision-making. Support for international 'bailing in' arrangements will require similar transparency in the relevant institutions to ensure international public support. There are many means to improving transparency and accountability of the international financial institutions, and the Australian Government supports further work to develop them and test them.

One key need is to improve representation of the emergent economies of this region in deliberations over the international financial architecture. In some areas this has already taken place - for example the IMF's New Arrangements to Borrow, which Australia played a role in shaping, can be interpreted in this light. As too can the recent decision by G7 Leaders to broaden representation in the Financial Stability Forum to include significant financial centers (Hong Kong-SAR, Singapore, the Netherlands and Australia). It will now be necessary to push ahead with an informal mechanism for dialogue among systemically important countries within the framework of the Bretton Woods institutional system - as agreed among the G7 recently in Cologne.

Less dramatically, but very importantly, the international financial institutions will need to work together better. The crises of the 90s have emphasized the importance of ensuring that the 18th street division between the Fund and the Bank should not become a fissure in which important work on structural reform and institution building is lost, or left behind in an excessively fast push to capital account liberalization.

Conclusion

In conclusion, let me underline three themes in the lessons of the late 1990s:

- First, independent institutions and strong civil society count in making markets work transparently, securely, stably and fairly. We need to devote more work, including work through the international financial institutions, and involving emerging and rapidly industrializing market economies, to helping build and protect these fundamental strengths in all economies.
- Second, reforms under the general rubric of better transparency offer good prospects of better market performance, better prudential supervision of capital markets, better surveillance of economic vulnerability to crisis or contagion, better government policies and smoother correction to unforeseen shocks.
- Third, capital account liberalization should not run ahead of these foundations in better institutions and better transparency, but it should remain an unequivocal objective.

These views are not ideologically based. Rather, they reflect a pragmatic appreciation in Australia’s case, developed over decades of what works and what doesn’t; views supported by the performance, over recent years, of the Australian economy itself. Good policies, transparently explained, have raised domestic performance and been properly recognized in international capital markets; a remarkable performance in the face of one of the most profound challenges to confront the Australian economy in the post-war period. Thank you.

RG: Thanks Ken. The acting secretary has agreed to take questions or comments, so I open the meeting. Yoshitomi-san

MY: Talking about sequencing, capital account convertibility and better institutions. What are the sort of indicators you have in mind to measure the better institution, bad institution, to what extent institution building advanced or not. Can you give me any concrete ideas how to measure them?

KH: There is a good deal already available in the way of generally accepted standards. The IMF, as you know, has quite a program in standard building underway. It's, at least in the IMF's case, focusing on fiscal policy, on monetary and financial policies, so basically macroeconomic policy settings, but outside of that there are standards being developed in relation to corporate governance practices, accounting standards, insolvency and bankruptcy standards. These institutional developments, or at least standards which allow institutional settings to be assessed will help in establishing the vulnerability of an economy to an adverse market shock. And the lesson, as we see it, is that one has to be careful that the pace of capital account liberalization does not outrun the pace at which an economy, through these means is protecting itself from that vulnerability.

RM: Just building on that point, the problem from Indonesia's point of view is that it doesn't have good prudential regulation, it has a very weak legal system, bankruptcy laws are not effective, the accountancy profession is not very well regarded and so on and so on. It has all those problems, unfortunately it has had an open capital account since about 1970, so can we turn your recommendations around and say that Indonesia should now close its capital account.

KH: Well, I think I addressed that issue in my prepared remarks and I don't think anything I've said should be taken to suggest that indeed is what Indonesia should be doing. Rather it's a question of getting an appropriate balance in the degree of capital account liberalization and what it is that's going on elsewhere in the economy. There are vulnerabilities, one has to be careful, that's not to say one should be erecting barriers, I think I addressed that point. There may be cases, in the extreme, where, for a short period of time, it makes sense for some degree of capital controls being reimposed, but those cases are not likely to be many and I certainly not be offering such a prescription in the case of Indonesia. Bear in mind too, this is I think an important point, that, and probably, it may heavily qualify, some of the remarks, or at least interpretation of some of the remarks I have made about appropriate sequencing. One could argue that Australia's sequencing of reforms from the early 1980s was not appropriate. We have had our own set of crises in this country. One only has to recall the events of 1985 and 1986 in terms of substantial fluctuations in exchange rates, that may not have amounted to a crisis, but I do think had an influence on confidence, there's no doubt about that, and one could also consider the difficulties confronted by our domestic banking institutions in the late 1980s and early 1990s. Perhaps, though, the lesson that may be drawn in Australia's case is that it was the very discipline of the liberalization of capital markets that produced an enormous amount of economic reform of the structural setting of macroeconomic policy. And particularly in the development of medium term frameworks for fiscal policy and for monetary policy. So I wouldn't want to say that you have to get your policy frameworks right before you venture at all down the path of capital account liberalization, but it's clear and, I think, unambiguous that if you get your policies right first then you can enjoy the benefits of capital account liberalization much quicker and with greater confidence.

DV: Just pursuing this question one step further, for countries who have not been through the catharsis of the last few years, for whom there is really no choice, do we know where in the sequence of opening the capital account, floating the exchange rate, should it be early on, at the beginning of the opening or should it be at the end when reform has deepened and markets are in place.

KH: I'd be hard pressed to answer that question in the abstract, I think we would need to be talking about a specific country in order to come to that judgment. Fundamentally, the concern here is of insuring capital markets have sufficient confidence in an economy, that the economy is not subject to the risk of a sudden reversal of sentiment and what it is that will achieve that level of confidence is going to depend on the particular country. I don't think one can prescribe hard and fast rules that would apply across all countries. Now the standards I referred to earlier do have reasonably general application, I would say. But if you looked at those standards in any detail, you see that they are not overly prescriptive, certainly not to the sense that every country that has practices consistent with those standards is going to appear like peas out of the same pod, certainly not. There's scope for a considerable divergence of institutional experience, but nevertheless, as I said earlier, the standards do provide substantial guidance, but I can't answer your question in the abstract, we would have to know the particular country we were talking about.

DD: Picking up on the weight of risk bearing capacity, if you'd like to comment, one of the other issues countries which one of the elements is their ability to withstand large macroeconomic shocks without significant effects to people, not necessarily those who benefit from an open capital account, if you'd like to comment on how long that takes in terms of standard setting process.

KH: The institutional frameworks that I talked about don't stop with the financial sector, don't stop with issues we might typically think of as economic. Indeed they do go to issues which are typically regarded as social and I think that has been one of the lessons of the recent period. That strong social infrastructures will be required to underpin domestic confidence in economies. And without that domestic confidence in an economies ability to benefit from an open capital market, we are not going to see economies benefit from and open capital market. Domestic political support is fundamental and that's been a key lesson in the various IMF programs in the crisis country of the region and the appropriate social infrastructure to underpin domestic political support for sound macroeconomic and structural policies elsewhere cannot be overstated.

CM: I have a question relating to moral hazard. Moral hazard pertains to the issue that the incentive structure for a country and the markets is not correct, but, and that induces a higher risk for crisis. Wouldn't you agree that, given the amount of suffering, pain, output loss that countries, especially in the region have undergone, that it is not as much an issue of putting in the right incentives to adopt correct policies, but it's more an issue that we should work towards providing the correct advice and so that it's not only providing correct advice but also that we should not be so hesitant about increasing international liquidity. I mean increases of quotas for the Fund for example because it is not as much a matter of incentives as pursuing the right policies and having sufficient liquidity available. Thanks.

KH: I'm not quite sure that I understand the question, let me see and you can correct me if it's obvious that I've misunderstood what you're saying, but it's not clear to me how lecturing people, I don't know if you're intending to say this, but lecturing people about policy requirements in particular countries and even having those views known publicly and accessible to the international financial markets, how that on its own deals with the possibility of moral hazard. The concern in that respect is that there is a risk that those who are investing in economies in their own investment decisions are not pricing risk appropriately and pointing out policy requirements in a particular country may have some impact on that, but the question is does it have sufficient impact on that. When there is a risk of a deception that there is a bucket of money standing behind a country, that's I think, is really the risk and I think the policy requirement is to have some system, and in our view this needs to be an ex ante set of principles, which is recognized, is known to investors such that investors price risk appropriately.

RG: Last intervention, Yoshitomi.

MY: What is your view on the once proposed Asian monetary fund.

KH: I'm sorry, no comment.

RG: We'll soon have Sakakibara-san here as an adjunct professor so you can come again and ask him. Just a footnote on the little exchange about sequencing in Australia, I was fairly close to that at the time and certainly the financial deregulation wasn't out of the theoretical textbooks, it wasn't what would be recommended, but I think that during the financial deregulation, the abolition of exchange controls and floating the dollar in 1983, the banking deregulation in the couple of years after that was actually helpful to the overall reform process. It was a very strong signal that the government of the day was a reformist government and for reform you need leaders, you need people through the community taking risks, sticking their heads above the trenches and that was an encouragement to them, saying well stick your head above the trenches and at least there will be some people not trying to blow it off and, in addition, it was important that, this was a fairly technical area that developed a lot of enthusiasm among the financial community, the people most directly affected by it and wasn't deeply worrying to the rest of the community because they didn't understand much about it. So politically it helped build a feeling that reform was a positive thing. it showed there were people supporting reform and there wasn't great popular resistance and a third area, probably pretty specific to the Australian case, but the fact that the floating dollar was able to depreciate so readily and even that it was able to overshoot in the mid-1980s was strongly supportive of the trade liberalization which the government wanted to do, but with an undervalued exchange rate, or certainly not having to carry the burdens of an overvalued exchange rate, which under the old system it had to do from time to time, supported trade liberalization. So whatever the theoretical arguments for deregulating the goods markets before financial markets, the particular sequence in Australia was politically feasible and other sequences might have been more difficult. Thanks Ken.

KH: I'll just add one footnote to your footnote. Just very quickly, I don't disagree with any of that. My footnote is that what is important in looking at the Australian history is that you had the political system and the other institutional structures in the decision-making centers in Australia that, when confronted with challenge, I could use the word crisis, but when confronted with challenge, were able to respond quickly and to implement change quickly and you had an electorate which was receptive of both the need for radical change, or at least substantial change, and was prepared to participate in the process of large and rapid change. I think that was important in the Australian case and I wouldn't want to suggest that same ingredient would be present in all other economies. Certainly, I would suggest that it was present in the New Zealand case, but is it a global characteristic? I doubt it.

RG: Thanks Ken for sharing with us important perspectives on issues that are very important to Australia at the moment and we're glad you're there in the Treasury taking the arguments forward and we'd like to extend our thanks for sharing that with us. I'll hand the chair back to George.

GV: OK. We'll have to watch the time. We're now moving into our concluding session with papers covering policy recommendations for emerging markets. We'll start with Chris Mulder, we deeply appreciate his presence here of overcoming obstacle after obstacle, thanks so much for persisting.

CONCLUDING SESSION

CM: Basically the outline of how I will proceed is as follows. First, I'll go briefly into our estimation methodology, so that we're all on the same speed. Secondly, I present some estimation results and the results of some special tests. Then I'll try to characterize the three crisis episodes that countries have undergone the last 4 or 5 years. Then turn to policy implications. Just to give you a little bit more justification, I think we found a number of interesting results in our paper. Including interesting results that the early warning system that is being used in the IMF that those variables are actually fairly good predictors. Some of these results, we were acutely looking for quite different results, we were actually trying to test for the significance of political indicators of vulnerability for the 1998 crisis. Because we found those indicators to be significant in 1994 and 1997. However, in 98 it didn't work out because the main crisis were not captured by election processes as in 94 and 97.

A little bit about our methodology. What we've done is basically extend the methodology of Sachs, Tornell, and Velasco (STV) to try to explain the contagion effect of the Mexico crisis into the so called tequila crisis in 1994. The spread of the Mexican crisis to a number of Latin American countries and other countries around the world. To do so they estimate, and we also estimate, the crisis index which is basically the weighted average of the loss in reserves and a change in real exchange rate over the crisis period. The weight is equal to the precision, which is one over the variance, in other worlds if the reserves were stable then you weigh the loss in reserves pretty heavily. If the exchange rate regime was fixed then you weigh a change in exchange rate pretty heavy over the crisis period. So, we estimate this crisis index as a function of the number of underlying variables. The crisis period are the three five months periods basically following the major outbreak of a major crisis. I.e. the standard 94 Mexico crisis, July 1997 the Asian Crisis, July 1998 the start of the Russian crisis and its spread throughout most emerging markets soon after.

The sample of countries used is basically the same as those used by STV. Many of them, the main larger emerging market economies, this is really ..??.. the sample as you'll see I think we've got all countries discussed here in the seminar except for China if I am correct. So, main countries Korea, Thailand, Malaysia, Turkey, Russia, India, etc. are included. Let me first show you some basic results for 94-97. Because what we did in our paper is extend the STV framework to 97 and then to try to predict out of sample the 1998 crisis as pretty strong test of robustness. The variables used by STV report [the variables from any of the following two] (?) lending boom, ie credit to the private sector over the preceding 48 months, second the real effective exchange rate also measures as increase over the past 48 months. Besides we use a bunch of dummy variables which indicate high reserve levels or low appreciation.

I don't want to bother you with the details of these estimation results. Mainly I would like to show you the results of using these equations to predict the 1998 crisis out of sample. Now what we see is if we had bet our money on STV then we would have ranked Russia as the most robust country, and on the other hand the Philippines as the most vulnerable country. Generally if you go down the line what you will basically will see is that the correlation between the prediction and the outcome is negative. Not a very promising result. To do a proper out of sample test, rather than picking our own variables and sort of data mining we offered to test another pre-determined set of variables. The set of variables that has been used in the early warning system of the IMF. The five variables that have been used in this early warning model are real effective exchange rate, INS means that its our internal system, the current account deficit as a percentage of GDP, short-term debt over reserves, the change in export growth and the change in reserves.

What is immediately apparent from the estimation results is only three of the five variables are significant. Now, mind you that the early warning system of the fund is estimated in a different methodology than what we do. They estimate it in what may be the more standard methodology is where you have a very specific crisis threshold. You only measure crisis if it passes a certain threshold and you give it a weight basically of one. Secondly it is a continued measurement so those variables were derived in a different methodology than we did, and their methodology is more focused on prediction. Whereas ours is more focused on explanation and specific crisis periods. In any case what you see is the current account deficit is significant variable a result you don't find in any of the rest of the literature.

If we use this to explain out of sample then we get pretty good results. The rank correlation coefficient is significant at the 1% level. I think a good part of it is the peak crisis in ?Bulba? and Russia were estimated pretty well. Brazil is in the three of the top most probable countries. Three of the five most vulnerable countries were correctly identified. And also the lower end most of the less vulnerable countries were correctly identified. Korea, India, Malaysia mind that you in 98 according to the crisis index many of the countries in Asia performed relatively well because their exchange rates appreciated and their reserve levels recovered.

So, the core set of variables performs out of sample reasonably well the 98 crisis.

EC: How are you defining a crisis?

CM: The weighted average of reserve loss and exchange rate depreciation, change.

Unknown: During how long?

CM: The crisis index we measure and explain is a five month window during say the peak of the crisis. So, Dec. 94 - Apr. 95. The weights for the reserve loss and exchange rate loss we derive over the 10 year period before the start of the crisis. So, weather we weigh the exchange rate loss or reserve loss heavy depends on the precision during the 10 year period before.

OK, having derived a fairly robust result. Robust in the sense of predicting out of sample and confirming variables that were proven valid in another methodology. We did a number of tests. First, is we tried a Fund program dummy. We did it last because I didn't expect it to be significant because our sample includes two prominent crisis countries in 98. However, as you can see it is quite significant, and it contributes negatively to the crisis. If you look at more detail what you see is the following: countries with Fund programs in our sample have on average less liquidity, ie they have more short-term debt compared to reserves. They have less liquidity. However there are other fundamentals, as I refer to them, real effective exchange rate and current account variables are slightly better. So, in that sense the Fund is performing its traditional function of providing liquidity to countries, which have relatively sounder fundamentals. But obviously the fact that the Fund program has dummy that's effective means that Fund program takes up something in addition to those three variables. So, possibly the structural programs followed by those countries were better. Obviously, it can also be just a sample result. But yet the fact that the sample was basically the sample selected by Sachs, and I doubt he for sure he selected it to give us this result. In that sense its a blind sample.

More interestingly perhaps, is the test for alternative reserve variables. Indicators for reserve adequacy. What we see is that alternative indicators, monetary base indicators, are not significant or barely significant. Not even at a 5% level, at the 10% level for M2 over reserves if short-term debt over reserves is included. Also the traditional indicator, imports over reserves, is not significant. Now, one important thing to bear in mind looking at the various papers I've seen here is that short-term debt is by remaining maturity. So, when you look at short-term debt analytically, one should look at short-term debt by remaining maturity because it does make a difference of whether the original contract had a duration of one year or its a medium or long-term bond, which falls due over the first year.

Secondly, the source is uniformly BIS. So, its basically only debt to banks. OK, the next result I want to briefly share with you is the following: in our ultimate result we also tested credit variables. As you noted STV had significant results for their lending boom variable. If we did some alternative specifications for it, which you'll find in the paper, there's basically LDRPC, which is I think a sort of more sophisticated formulation than what they had. What you do see and what explains their negative result is that 94, 97 you see private sector credit growth to be significant. For 98 you see it to have the wrong sign. So from 98 credit to the private sector functioned as a contra indicator. On the other hand if you look at credit to the government for the first two crises it had a negative sign and for the last crisis it has a positive sign and very significantly so. So, what you can deduce from this, at least from our sample and using the techniques we used, is that credit is an important variable. However, in certain crises its more one type of credit and another its another. You cannot substitute this by using total trend.

I do not want to bore you with robustness tests. They basically show that the parameters are pretty stable if you eliminate the main countries. Let me just summarize the three crisis periods in terms of our results. First, the liquidity related element - the short-term debt over reserves. Even though it only started to feature prominently in the 97 crisis period, was also quite significant in 94. So, the short-term debt element is something that explains all these three crises, and not just the Asia or Russia crisis. The real effective exchange rate was particularly significant in the 1998 crisis. Most people that have looked at Russia and countries like Brazil will agree. It was also important in 94. In 97 you see pretty strong correlation between the real effective exchange rate and the current account deficit. It was as a result that those variables are not very significant in the 97 crisis. In 97 crisis when you look at some of the results that Ivan presented you'll also see that the regional spill over effects, if you test for a regional dummy, you'll see that its pretty significant. Indicating that the countries were competitors or that the regional contagion ?equilibrated? the situation.

OK, policy implications. Our core estimation basically looks like this: the crisis index is .35 times appreciation plus .17 times current account deficit. Basically this ratio is 1 to 5 indicating that an appreciation of 5% if that's bad in these estimation results as a current account deficit of 1%. Moreover, an appreciation of 1% can be offset by higher reserves compared to short-term debt if the ratio is about 1 of 1%. More generally you can solve this equation for a zero crisis index and you'll get this type of result: You'll get the result that you can with higher reserves over short-term you can to some extent offset bad fundamentals. To some extent you can offset a current account deficit. To some extent (in a three dimensional picture you would see) that it can also offset real effective exchange rate. To some extent because the higher the more negative the fundamentals would get the more extreme your offset becomes. Indicating that your off the chart and you shouldn't be, not realistic. It also indicates that this point here, that zero crisis index coincides broadly with reserves over short-term debt ratio of 1. If you translate the BIS short-term data into total short-term debt data. Now this rule that reserves should be maintained to the level of short-term debt has been suggested by Greenspan in a number of speeches, lately. So, I think that is a kind of significant result that you get broad support for such a level. Plus, that there is some indication of a trade-off.

OK, one point that is significant for the conference is of course all this talk about capital controls. Empirically it makes no difference whether you reduce short-term debt or increase reserves. That's a sort of simple empirical outcome, but its nevertheless is something you may want to think about. I mean you can try to control capital inflows, but you could also try to offset it. Regardless of how you do it and how successful your controls of short-term debt are you can measure the level of short-term debt.

EC: There's a big difference in cost.

CM: Well, there's a big difference in cost. I'm not entirely sure that...

EC: Think of what you make on reserves and what you pay on short-term debt. That makes enough of a difference.

CM: Well, I have not seen proper studies that show that increase in reserves to which extent they reduce your borrowing cost. I mean at face value the effect is big but indirectly the effect is definitely not as big.

EC: (Laughing) Let's be honest.

MY: Garbled ... that's the difference in cost? (question about transparency)

CM: I think before the crisis they borrowed at a hundred basis points over US T-bills, so that's not that high an estimate. I mean your absolutely right. It is an issue of costs. Its also an issue of distribution. If you hold high reserves and it lowers your borrowing costs in general it also lowers the borrowing costs of the private sector. So, its the public sector that bears the cost for the private sector, which to some extent then its from. The question is should one also pursue strategies regarding debt. Obviously if you want to bail in the private sector the easiest solution is to have a maturity structure of debt that is relatively long.

That's kind of the motivation behind another proposal by Greenspan to have the average maturity of debt over three years. Now there are a lot of drawbacks to such a rule. In any case if you focus closely on the level of short-term debt you also have a clear incentive to try to avoid humps in your debt profile. As a central bank it would be costly and complex if short-term debt falling due in 2 you or 3 years would be a lot higher than the standard level.

Let me leave it at this. Basically the result we get is that liquidity is important. Whether it is liquidity held by the country itself or international liquidity there presumably is a tradeoff. Presumably there is some sense in why there is an IMF, which is that is cheaper to pool your liquidity than for each and every country to hold its own liquidity. The origin, on the plane I was reading to much about the inter-war period and the motivation for Bretton Woods, and why the US Treasury wanted to pool its exchange stabilization fund and obviously fundamentally it makes a lot of sense. Secondly, debt management is an important, but how to pursue it in detail, what the balance is between managing it at the macro level and managing it at the micro level through appropriate institutional arrangement. That of course is something that is extremely important and no doubt on top of people's agendas.

GV: Thank you very much Chris. Should we go to David and Ross?

DV: I hope that everybody's got a copy of my paper. It would make it easier to present if I knew that you had one nearby. A year ago, having lunch together in Katarina's Bar here at ANU Ross and I decided it would be nice to do some work together on understanding the extent to which the IMF programs in Asia had been wise programs. This work continued over a series of telephone calls and conversations, but the actual writing down of this has been fairly recent and that's why it looks a bit like one of those airport autobiographies in which the text is written by one person in consultation with another person. Its up to you to judge which of the people is doing the ghost writing for which of the other people.

The paper has an attempt to draw out an interim assessment of what is now known about the advise that was given and should have been given about the Asian crisis. There is an extraordinarily useful, sometimes frank sometimes less than frank, paper by Timothy Lane which Ross and I've made considerable use of in writing this paper. That concentrates on Thailand, Indonesia, and Korea and we will do the same. The presentation will have a number of parts, quick discussion about what we feel about causes and lessons of crisis prevention. The issue of short-term vs. long-term components of the packages so discussions of the anatomy of the crisis, which provides a back drop for learning the lessons from the monetary and fiscal experiences. Some subsequent notes about the import lessons about financial restructuring and some brief concluding remarks. At the end of the paper there is what's ?? and I have come to call our own private spaghetti diagram. This is taken from a paper ?? and I wrote last year about the onset of the crisis.

The argument about causes of the crisis are very much in tune with the kind of reasoning that has been at the core of discussion over the last two days. That the crisis was as a result of vulnerabilities caused by both inadequately developed and regulated financial systems and inadequate macro policies. Leading to risks in financial and currency crises. But as Peter said, with his metaphor, and let me add one about a road traffic accident. It requires a trigger to turn a vulnerability into a crisis. You can think of driving very fast at 90mph down a motorway, much to close to the traffic in front of you. You may or may not arrive alive and something, a stone on the windshield, is the kind of negative shock that produces the crisis. Later on negative export shocks as the critical core shock imposed on this vulnerability, and then we argue that the severity of the crisis resulted from the interaction of currency crisis and financial crisis, which had not been anticipated and which was not understood at the time.

This resulted from the particular feature to which fixed exchange rate regime had contributed very large scale unhedged borrowing in foreign currency. Devaluation far from easing the position of the troubled countries, as it did for example in the ERM crisis, increased the financial stress of companies that had borrowed abroad unhedged and worsened the downturn. The first major lesson from the crisis is the ignoring the vulnerabilities described involves taking big risks. Policy advice by the IMF in the early to mid-1990s did, I think its fair to say, fail to draw attention to vulnerabilities sufficiently strongly and can be faulted on those grounds. There is an external evaluation by a group of three ??? which is about to report on the IMF's advice to the Asian crisis countries. Not after, but in the run up to the crisis. There are lessons to be learned in financial regulation and the design of macro economic policy.

Nevertheless the discussion over the last day and half has suggested that there do remain uncertainties in the appropriate advice about sequencing and also about policy to capital inflow. One can stand on the fence on that issue, and I would like to. And to say that there are unanswered questions. There is some but not complete agreement that FDI inflows are less vulnerable to reversal and outflow than portfolio and other short-term flows. Pretty wide agreement on that. There is also wide agreement can change the composition of capital inflows. There is less agreement whether those controls will change total inflows or merely cause portfolio and short-term flows to turn up measured as FDI by repackaging. And there is very little agreement about whether short-term capital controls will cause a country to be less vulnerable to capital withdraws because of the smaller stock of liquid footloose foreign funds. Or whether such controls will make little difference because of the stock of liquid or liquifiable, to make Eliana's point, domestic funds. May be sufficient to facilitate outflows in such circumstances.

Being more provocative I think it is important to and possible to take a first strong conclusion. This is what I have just labeled, don't confuse long-term causes with the short-term crisis. To continue the traffic accident metaphor, which ultimately comes from Stephen Grenville. We'd be rather surprised to see the ambulance crew spending time fixing the breaks on the car that had crashed rather than on trying to get injured passengers on to life support systems. According to Feldstein this is exactly what was a feature of a lot of the IMF's approach. I've quoted in some detail the IMF's justification for this Christmas tree approach of mixing up long-term recommendations with short-term crisis management. But, I think the key analytical point one can make in being somewhat critical of this is as follows: everyone can applaud the desire to promote policies that foster long-term progress, but the Fund to become heavily involved in such policies it means confusing responsibilities and time scales. Ever since the Keynesian revolution, fifty years now, that we've had a rather clear distinction between short-term stabilization of output, prices, and the external balance. And that's been understood as separable from structural policies which promote longer-term growth. And we would add would lower vulnerability to crises in the future.

The crisis was we think the kind of coordination failure crisis, which requires macroeconomic policies. Its our view that the Fund should focus on the policy appropriate in that circumstance. We will now focus on that short-term life support sort of issues. Its necessary in order to discuss monetary and fiscal policies to have some sort of anatomy of the crisis. Its possible to argue that the proximate cause was a large downturn in export growth. Indonesia may be the outlier for this claim, but certainly for Thailand and Korea growth rates of around 20% in exports skidded essentially to zero within a year. There's quite a bit of text on page 6 of our possible reasons for this, but let's take this as the trigger for the crisis in the face of the vulnerabilities we've already described. The Funds initial approach to this was an application of financial programming with two elements. A monetary policy designed to be consistent with a modest depreciation of the exchange, so as to promote adjustment through the promotion of net exports. With some tightening of fiscal policy. I should've have said another major element ... let me get these categories right... two elements: firstly the adjustment of monetary and fiscal policy and secondly the provision of large financing packages both directly from the Fund and with bilateral support. The packages were designed to boost confidence and give time for the economies to make adjustments to the changes in policy of a monetary and fiscal kind.

However, as we know instead of the modest exchange rate adjustment envisaged coupled with the restoration of confidence which had been hoped for, currencies in the region went into free fall. We've had the privilege of listening to Soedradjad first-hand account of what it felt like to be in the driving seat in the free-fall of this experience, but let us try and draw some headline descriptions of what was going on across the three countries. When calling(?) I think the Fund's fundamental approach was a stabilization one, interpreting the collapse as a fear of monetary collapse. In the report done by Lane and Alvers talk of a lack of resolution in the application of monetary policies to staunch the fear of monetary collapse. Here is a sketch of how it might have appeared of a rather schematic kind . Suppose the might have said that markets have no idea whether authorities in a country are trying to stabilize prices around the level which would involve little or no ultimate slippage of the price level, or whether instead the authorities are really people who are prepared to let prices go. Markets it then might be said have no idea whether the long-term equilibrium is consistent with no slippage or huge slippage. Without that guidance they might have said that markets are taking the reasonable view that what their being offered is on average mainly large slippage. That's why we have a large currency depreciation an outcome somewhere between no depreciation and huge depreciation and to counter this large interest rate increases are needed. There's little numerical example on page 8 of this kind of argument.

This is an interpretation of the Fund's interest rate policy which we're about to discuss. As a result of a perceived problem of a break-down in monetary discipline. We interpret the Fund's concerns as designed to prevent a cumulative collapse in the currency. A circumstance Eliana was talking about just yesterday, where a currency falls because of fears of future monetization and inflation. Fears that can be justified if the fall in the currency does provoke future monetization and inflation. Its important to note that ex-post what happened was not at all the collapse of monetary discipline. Even we might some say with some hiccups and a big long glitch in Indonesia. One way of making this point is to note ex-post inflation of non-traded goods prices in all three economies certainly in Korea and Thailand was negligible and Indonesia was still low. Normally you'd expect CPI inflation after lags had washed out to be roughly equal to the exchange rate depreciation times the import content of output and expenditures plus any domestic demand effects. CPI inflation was actually much less than this rapidly rising import costs combined and rapidly rising import components of the consumption basket were combined with a CPI going up less than you might have expected that to induce. Implying low or even negative increase in the domestically produced component of the consumption basket.

In fact the reason for this was that what was going on was not a collapse in monetary discipline, but a collapse in output. It was this that become entangled in the currency collapse, so that there was an output fall/devaluation spiral. The proximate reason for this was the collapse in investment, the collapse of a boom of the kind Peter has talked about. The fact that some project has been unsound in the way Krugman has talked about and growing excess capacity. But what was worse falls in the exchange rate became entangled with this investment collapse in a cumulative downward spiral. As the exchange rate fell output not recovered but fell further. Principally because it damaged the credit worthiness of domestic firms. Led to bankruptcies and led not to a recovery of net demand through the export sector but a fall in net demand in that the collapse in investment in that of consumption actually counterweighted those net trade effects. So a spiral indeed, but not the inflation spiral that the fund was fearing, but the output collapse spiral.

Now in the face of this what did the Fund do? Higher interest rates were, as we know, the policy response. Compensating we argue for the fear of monetization, and I've got again a numerical example on page 11 of the kinds of rises in interest rates necessary for the kinds of hypothetical fall ... [tape break] ... they were in fact serious simply had to show that they could take the kind of pain that others couldn't in order to indicate that were prepared to stay the course. What this view suggests is an understanding were higher interest rates were the means to prevent the currency from depreciating, which of course have problems but the tradeoff argument, as I read the Fund's view was that any move further along the tradeoff towards lower interest rates as a way of preventing the costs to the domestic economy of high interest rates would lead to exchange rate falls, which on balance was a welfare reducing result. There is a long quote on pages 11 and 12 and a short quote from ??? very bluntly and unsophisticatedly saying the possibility of operating with lower interest rates and a larger devaluation is just not a useful option. DeLane(?) and others report talks about tradeoffs and a choice.

The alternative position put forward by Stiglitz and others is that the interest rates were pushed to a level at which the benefit through defending the exchange rate was less than the cost of the higher interest rates. In partial support of this view is that non-traded goods price inflation, remark that we made earlier. Although the report from the Fund makes much play of the idea that real interest rates were highly negative in Korea, Indonesia, and for significant periods negative in Thailand and Korea, that's as measured by CPI inflation. If measured by non-traded goods price inflation the real interest increases were to use their words, were not only high but egregious. This is an inconclusive debate and what we would like to suggest as a way of cutting through this debate is interpreting the monetary policy possibilities. Might it have been that there's a way of actually shifting this trade-off between interest rate increases and currency depreciation. Is there, to put the point another way, is there a way of achieving a given degree of stabilization of the exchange rate at lower interest rate cost. I think we both believe there may well have been as discussed on pages 13 and 14 of the papers.

Starting to think about this, I was prompted to begin to think about this by thinking about the UK's exit from the ERM in which quite quickly as the exchange rate collapsed there was a new monetary policy framework put in place of inflation targeting, which reassured the markets that there was a stable projected policy strategy for inflation control and as and when this became credible it was possible to very rapidly to cut interest rates. So within a mater of months the UK was out of the ERM with a credible monetary policy and much lower interest rates. Now, the more quickly something approximating to such a nominal income strategy can be put in place the more quickly can interest rates can be cut to low levels without endangering the exchange rate. The government has less need to do that kind of signaling that I talked about earlier than(?) inflating away. There's a helpful by Eichengreen, Masson (?) and others examining the preconditions for such a strategy and drawing the quite correct conclusion that those preconditions were institutionally and technocratically far from present in the crisis countries, so inching towards a nominal income strategy inflation control in the face of crisis is something very difficult to do. Nevertheless, the question remains whether the interest rate defense as operated could have had some better reorientation, which involved elements of this.

As it was in the absence of anything of this kind the authority with Fund advice cast a strategy in terms of defending the exchange rate as it fell, rather than in terms of stabilizing the price level. However, since they were unwilling to give any precise hostages to fortune about the exchange this gave market participants very little to base their forecasts on, and in the presence of this there was a long period in which markets, to again use my central argument, had no very clear idea of whether they were dealing with resolute authorities or with slippage authorities. We believe there would have been a significant gain in instead revealing the authorities intentions to achieve low and stable inflation after the crisis and in describing in broad terms how interest rate policy would be constructed to achieve this objective. Had they done say they would have been in the position of being able to move more in the direction of the kind of responses that Ross and others have talked about were made in very different circumstances in Australia in which it was possible to let the currency fall and yet have confidence that this was not free fall. That's the central analytical point that I think I would want to make about forming a critique of the policies as pursued.

Having to some extent sustained that critique it then would enable one to go and draw lessons about the fiscal policy experience. But I think these fiscal lessons to be drawable are subsequent to the monetary lessons. The rationale for original fiscal stance of the Fund programs was modest fiscal adjustment to make room for the required improvement in the external position particularly in Thailand and for the bank restructure in all countries. Forms of arguments that essentially are presupposing nearly full utilization of resources and the redeployment of resources from one kind of activity to another. As the crisis developed this way of thinking about fiscal policy turned out to be completely wrong because resource utilization was collapsing. Nevertheless, given the fear of an inflation/devaluation spiral one can see why the Fund continued to push for fiscal stringency, coupled with the reasons they were pushing for monetary stringency - to send a signal that these were not lax policy authorities.

As we know this turned out to be a quite inappropriate fiscal stance and it was eventually abandoned. But the critical discussion here is timing. The case of Indonesia, which we discuss rather carefully in a page and a half of the paper, makes the point that in the process of continuing to cause fiscal restraint called for and trying to cause fiscal restraint the authorities if anything worsened the crisis in January 98. Because it was not until later in 98 that fiscal policy moved into the position of supporting the economy against an output fall rather than being an instrument of discipline. Very similar mistakes were made elsewhere, so that fiscal lesson about reenginering fiscal policy into a supporting role rather than a discipline role is an important lesson, but I just repeat your not free to make that lesson unless you've already understood how your going to keep the discipline through monetary policy.

Let me accelerate quickly to the end now. There are also lessons about financial restructuring. I don't think we've got anything particularly new to say in this section of the paper indeed I recommend you to read Stephen Grenville's section on this for some wise remarks about the sort of detailed things you can say on these two bullet points. It suggests, just to draw out the lessons, that fiscal restructuring is long, painful, and arduous process. And the early hopes embodied in the early programs that this could be primarily market based and could be quick turned out to be illusory. To conclude what can we learn about the lessons for the rapid resumption of growth by looking at this policy experience. I think the central one is the quick creation of the post-crisis framework in which its safe to ease monetary policy and then also safe fiscal policy. And this is the central part of the argument of what we've said and coupled with is the need to move quicker than was done in the reconstruction of financial systems and the corporate sector. Having said that let's just close with two questions: When short-term recovery has been achieved, as it now has been in Korea and is in the process, more slowly, being in Thailand - two questions remain: How much reform is required for the resumption of long-term growth? The Korean example suggests less than you might imagine, certainly for the resumption of growth although the question of whether long-term trend growth will require significant reform is the one we were discussing in detail yesterday. Secondly, connected with that: What's the minimum reform required to remove serious vulnerability, so that this might not happen again. Its not clear in Korea that the minimum has been done or is in the process of being done. Indeed one might end up paradoxically with answers to these supplementary two questions pointing in opposite directions. The resumption of growth yes, but still in circumstances were there is significant vulnerability.

GV: [Announces break, followed by Lei Zhang, discussion, and conclusion]

LZ: Everyone's very tired, so I'll try and keep my presentation as short as possible. Here we have a little Mickey Mouse model to try and show the logic of capital account liberalization sequencing. What we try to look at is the condition for the capital liberalization, the prudential supervision on the domestic banking sector. I'll first present to you the last bit of the paper, namely the sequencing. And then just try those straight on later on. At least we have a consensus on two things that are imperative one is to improve the prudential regulation on the banking sector and the other is to liberalize both the trade and financial sector. In 1988 there was a ?? principal for effective banking supervision produced by BIS, namely outlined the best practice for banking supervision. In particular there is a bar of codes outlining the measures for effective risk management for the banks. I'll come back to that point later.

Also, in the early 90s policy towards the emerging market economies has been dominated by the Washington consensus, which viewed most financial and trade liberalization as a way to growth. There is no emphasis on the sequencing of capital account liberalization. So effectively those emerging economies were encouraged to liberalize the capital account as soon as possible. A similar view was held by the IMF, I don't want to blame them right now. At least in early 97 the interim committee came out in favor of amending the article making the capital account liberalization one of the purposes of the Fund. The tone towards that position has very much changed now. So, in view of that I just give you our version of the trade-off in terms of the degree of capital account liberalization and the quality of bank regulation.

In this figure here, the horizontal axis indicates the degree of capital account liberalization. So, if you move to the right that means high degree of capital account liberalization. If you move upward that means high quality of prudential supervision for banks. Coming up from the Washington consensus the trade-off looks like this. And these are iso-loss contours for the welfare. If your moving in this direction that means cost increases. So, all the points on this line indicate equal cost. Since improving the prudential regulation is very costly and takes some time, while opening the capital account is less costly. So, the logical step for given the level of quality of bank regulation is to move straight away to the right. That gives you the lowest cost. And then over time you move upward when the quality of bank regulation improves. So, this is the sequencing view proffered by the Washington consensus.

But the East Asian crisis taught us a very good lesson in the sequencing of the capital account liberalization. Namely, that the cost is not like this at all. This comes up to the second picture. This is figure 5 in the paper. As in the first pictures the axis indicate the same things, and this point F here seems to indicate the first best solution. With high degree of capital account liberalization and high quality of prudential supervision. If your moving downwards for any degree of capital account liberalization then cost increases. And we will justify this cost by [coughing] in the banking sector. For any given level of prudential regulation if you move to the right then first you have some improvement on welfare. And suppose that's when your open to FDI and namely those sorts of effects on the real sector are positive. As you increase the degree of capital account liberalization then your running into a dangerous water. Namely, those very volatile short-run capital inflows will come in and generate a crisis. That's what the East Asian crisis taught us. So, this is a black hole here which is namely caused by extreme crisis of both banking crisis and currency crisis. This indicated by substantial losses in output.

Moving this way you have increases in cost. So given this shape of indifference curve and provided that improving the quality of bank regulation is very costly. While, liberalizing the capital account is less costly, so the logical step is to condition liberalization on the given degree of prudential regulation. Suppose if their current quality of bank regulation is here then you simply draw a horizontal line that is tangent to the indifference curve. That gives you the lowest possible losses and then as you improve the quality of bank regulation then you simply draw another point, which gives you the point here. So, as you move, as you improve the quality of bank regulation, you move along this dotted line. So, this is our sort of outline for the logic for the sequencing of capital account liberalization.

Now I'm just going to spend some time justifying these costs. We'll first look at a closed capital account and we look at the domestic banking sector. In the paper that's figure 2. We have a little discussion on the role played by the bank in the economy. That's in section 2. Let's first look at figure 1 and in figure 1 we have two circles not here, and a circle on the right indicating both liabilities and these things inside the circle indicating liquid liabilities like deposits. On the left circle that's liquid assets, say the bank invests in a firm, etc. And the intersection part is the role played by the bank. The part of A is simply the normal corporate firm. In part C liquid liability is matched by liquid asset, so its the role played by narrow bank. Now lets look at the middle part of a regular bank. The horizontal line indicating different liability settings, above the horizontal line indicate unlimited liability of those institutions and below that indicate by limited liability. And in the paper we show given that those banks are insured by some deposit insurance scheme while also given limited liability then there will be a tremendous incentive for the bank to gamble for resurrection when its net worth is very low. So, that's going to generate some moral hazard problems for the middle part under the horizontal line.

So, the answer to that is to regulate these banks either by specifying [coughing] rules when net assets go to zero then you close these banks. Or by some other regulatory responses and one of the responses we talk about in the paper is imposing capital adequacy ratios in line with the Basle Accord. Then introducing these regulations you remove the limited liability clause to those banks so they will behave in a manner that is consistent with socially efficient way. I'll explain that later on. Now let's first explain the moral hazard problem generated in this setting and here we assume that the bank has a choice of either investing deposits in the safe assets or investing its deposits in risky assets. And the bank is insured by deposit insurance so the depositors have no incentive to make a bank run. And these two assets indicating, where the safe assets indicating efficient assets and risky assets will have an average return lower than safe assets, but more risky, just indicating one portfolio which is inefficient. So if banks behave in a good way then it should be the case that the bank should always choose the riskless assets instead of the riskier assets. But that won't be the case if the bank is protected by deposit insurance together with the limited liability. Now let's look at this point xl here, this horizontal line indicating the return on the loans and the vertical line indicating the net asset value. So these 2 lines simply indicate the net asset value to the bank investing in different assets. Now let's look at the point xl here. Since this asset is risky, suppose we have a 50% probability next period that the return goes up and 50% probability that the return goes down and since the bank is guaranteed, by exit at point xl, which is the point where net assets is zero is not possible because the bank can defer exit to the next period. Because next period if there is a negative shock, the bank can quit, so the return is zero to the bank, but when there is a positive shock, then the net gain to the bank is positive. So by deferring exit at point xl, the bank will enjoy positive returns, so deferring returns is always optimal in that case and this gives rise to the so-called option value so a bank with limited liability and deposit insurance is as if they have an option on their assets and that is going to increase the asset value for this risky investment. Provided that this volatility is high enough, then there will be some point that the banks investing in the risky assets will enjoy high net value than investing in the safe assets. The reason for that is here, while the bank's net worth is low, when the bank gambles then the bank can realize any upward prospects, the profits, so the bank can return the profits. But if there is a downside risk, such that there is a fall in the profitability then the bank has shifted this liability to the insuring

agency. So this value is essentially the value that is guaranteed by the insuring agency and that has to be paid by the taxpayer. So this shows the incentive for the bank to gamble if there is no prudential regulation. There are several ways you can eliminate such a possibility. On e is, as I discussed in the paper, so-called early closure rules. Say close the bank when the net-worth falls to zero. If the bank investing its safe assets, then close the bank at this point here then the net value to the bank is simply the line above this horizontal line here. If the bank is choosing the risky assets. If they know that they're going to be closed when net worth is zero, then this is going to be there net equity value. So the, provided that this early closure rule is specified ex ante, then the bank will never choose to invest in the risky assets. So that eliminates the adverse incentives for the bank to gamble. Another way of eliminating such an incentive is to impose the capital adequacy ratio, provided that the bank doesn't recapitalize when its net assets fall to a certain level, then there will be some regulatory action, then that will give banks some incentive to inject cash whenever it is necessary. The Basle rule specified is that the net assets of the bank over the total risk-weighted assets should be above a certain percentage level. If a bank investing in the safe assets, then the risk weight on the safe assets is simply zero. Provided that the bank is investing safe assets, so this is the net value of the bank, and since the weight of the safe assets are zero then the Basle ratio simply require that the net value of the bank should always be above zero. So what it does is that the bank will recapitalize at point xb, so point xb is like a reflecting barrier, which bonds the value of the bank at zero. So this is going to be the value if the ? is implemented credibly. And if the bank chooses the risky assets then the ratio of borrow is simply net assets divided by risk weighted total assets, which is this net value plus the total deposits and that means the net value of the bank should be above 30 positive points and since the bank has to recapitalize at this point and the bank has to recapitalize using its own fund, so the option value will be eliminated. We remember that the put option will only exist when somebody else is going to pay the losses. Here since the bank is going to have to pay the recapitalization itself so there is no gain by doing that. So this is going to be the value when the bank invests in the risky assets. So by imposing this regulatory framework, the bank will now choose the risky assets. So that is going to improve welfare. That justifies the cost structure we just discussed for the early case.
Given the degree of capital account liberalization, if you move down that cost decreases.

Now let's look at the effect of liberalized capital account. The story, I think, we have a lot of discussion in this meeting and I quite like David's story on this same crisis. The story here we try to tell is much simpler. It's in line with the story told by McKinnon and (Pew?) in their 1997 paper. What it says is that if the investment is guaranteed by the government then that is going to generate excess borrowing from abroad when the capital account is liberalized and that's going to drive down the return so the growth rate may be slowed. So in terms of this picture here, let's assume that before the liberalization there is no moral hazard problem for the bank. The bank is simply investing in the safe assets and with the capital liberalization, suppose the capital inflow is large enough, then the return is driven down and the bank will have substantial incentive to invest in more risky assets, so this is the average return when there is a capital inflow. Then the story is the same as before, with capital inflow then you have this option value attached to the bank when bank's are guaranteed and with limited liability without supervision. So that gives rise to incentives to gamble for resurrection when net worth is small. So this just shows how opening the capital account without improvement in prudential regulation can exacerbate the problem for domestic banking sector. So that justifies the cost up here. Here I didn't put into the benefit of opening capital account, but you can easily do that. This story simply tells the costs if you move in this direction.

So that's the story we wanted to tell and for the concrete measure of condition, the capital account liberalization, the degree of prudential regulation on the banks, we've heard a lot of discussion along that line, I don't want to repeat that.

GV: Thank you. OK we have about a good 40 minutes for discussion for questions on the 3 papers. Dipak and Yoshitomi-san, will you preside please.

DD: I think all 3 papers were quite excellent. I'll start in the order in which it was presented. I'll start with the one by Chris on the crisis prediction and the identification of short term as indicator. It seems to be a fairly robust indicator of crisis. I think it's generally fairly heroic: that prediction of crisis using simple macroeconomic indicators generally has not evinced a great deal of credibility in the literature, so in that respect the paper that we heard is quite interesting. But still let me talk about some of problems in the predictive model. One is by their very nature they tend to replicate very well things that have happened in the past, but they're not very good at predicting things that happen in the future. And there's also a lot of false signals...

CM: What is out-of-sample prediction for...

DD: I'm not talking about your paper generally, but I'm saying generally the pitfalls that you have. The problems that in your, I think that you point out, is probably illustrated when you try and replicate the results of the Sachs, ? and Velasco results, because the SVD model, with its emphasis on credit booms and liquidity as you well say, does well in predicting the Mexican crisis in 1994, but does a very poor job later on. Now the EWS model that you have seems to do a better job in the 1998 out-of-sample, but historically, just looking at the results in the paper itself, for example, it gets Indonesia pretty hopelessly wrong in 1994, it tends to suggest that Indonesia has a very high predicted crisis, so even historically you can see that there are some problems with false signals, let me put it that way. As it does Korea and Thailand in 1994, so some questions about, and in 1997 it would have wrongly predicted a crisis in Zimbabwe, Brazil, Colombia, Pakistan and Russia. So false signals are part of the problem. In out-of-sample 1998 it finally gets Russia, Zimbabwe and Pakistan well, but predicts wrongly this time one in Argentina. So generally false signals are about as bad in this business as right ones. We need to recognize that.

CM: I mean, sorry, but you have to get a little more sophisticated in your critique.

DD: How would you like me to get a little more sophisticated?

CM: Because then look at the rank correlation coefficient. To give an example of this country or that country was not well explained. I mean that is simply not very sophisticated. That is not what you expect.

DD: This is standard literature according to Reinhart's paper the question of...

CM: This is, the standard literature has a zero-one crisis index and therefore you get the two types of errors, over-prediction and under-prediction. This is a continuous crisis index for one, so that is quite different. Secondly, the emphasis in this model is clearly not on prediction, but explanation, right? Because it assumes that there is a major crisis, so, given that there is a major crisis, it says can we roughly say, given what we know, where the crisis will be. In Indonesia or in Russia? Can we get roughly reasonable results. If you can do it better than the financial markets or whatever, then you can...or what does it imply for preventive policy.

DD: Good point Chris. I am just pointing out some of the things that people will point out to you, if not here, somewhere else. The currency interpretation that I get from your paper. Even from the, the more parsimonious representation that you have, it's really that, the intriguing part is the short term debt that seems to be the fairly robust indicator. I have some problems in the construction, which is that real exchange rates have, presumably, have some effects on the current account deficit and the current account deficit has something to do with the short term debt, but still I think what you are finding is interesting.

So let me turn very quickly to does having a fund program help. The problem, I think you arrive at some heroic answers to that too and part of the problem is that I don't know from the way you prevent the story is whether the effect that is being captured, is it because the country, once it runs into a crisis, almost always ends up going to the fund or is it because the fund program actually helps you avert a crisis. So I think you need to distinguish between the two, because the way you testing is constructed, a lot of the cases have a lot of countries which ran into crisis and then opted, of course if you run into a crisis then you have all the characteristics that seem to suggest that having a fund program helps you avert a crisis. When it actually is not testing that result at all. I'll stop there and let the audience talk a little more. I did want very quickly to comment on David Vines' paper. I think there's been a lot more work done in the literature that would merit looking into, beyond the Lake and other papers. We wrote an extensive, in the Bank, an extensive chapter on handling the crisis, in Global Economic Prospects, and that has a huge volume of literature review under-lying it. And it has much more careful testing of when is it and what circumstances would you expect interest rate defenses to succeed and when and in what circumstances would you not expect interest rate defenses. I would suggest you look at that. I'm not convinced about the idea that, I mean, there's a tension in your paper about how do you prove credibility, how do governments prove credibility and do you want to see blood on the street to prove it versus another idea that you throw out about, also having to do with showing credibility by targeting differently. So I think there's a lot more to this than meets the eye. It's worth looking at it and I think you're going to get a lot of debate on these issues and I think some of the answers are not fully in, so it's good the research is going on.

On the last piece, on Lei Zhang's paper. Intuitively, I can't see, I tend to agree, especially because you quoted us extensively in the last bit of the paper, so it's hard for me to disagree with you. I think an important missing element in your paper that it's worth taking a look at is that you don't talk about franchise value competition and deregulation and I think it makes a big difference in the way you want to think about sequencing of financial and capital account liberalization. The standard argument about financial deregulation would be...in the normal circumstances...(Tape end)...franchise values down and that immediately will mean they will be taking a lot of risky positions. Exactly analogous to the argument that you have, but I think it's a slightly forced argument that you have: that if you open the capital account you get a lowering of returns and therefore banks undertake risky activities. I think it's forced because I'm not sure that's the way it works. I think the way it much rather works is that you get domestic bank deregulation and you get a rundown in franchise values of banks and you're forcing those guys to be undertaking more risky activities, but they're limited by the scale and extent of risky activities that they can undertake within a closed capital account, when you open the capital account up, then there's a huge spiraling of the risky activities like we saw. For example, that the Korean banks undertook. So my suggestion would be work in the question of deregulation, when domestic financial banking deregulation is combined with capital account liberalization, what the consequences might be and what's the correct speed and sequencing of policy reforms. Thanks.

GV: Yoshitomi-san?

MY: At random, because the 3 papers are interrelated. First of all on crisis indicators and related analyses, I think it is rather useful to produce simulations based on indices, but at the same time we have a deeper analysis on nature of crisis. Tequila shock is different from Asian shock of 1997 and also Russian shock and Brazilian shock are different. If you go together with those qualitative on the different nature of crises, that would be very helpful to understand what you have produced in this paper. This is related to the Fund program dummy in your equations, you just mentioned in context structural reforms, but you didn't mention what kind of structural reforms, because, in the case of Korea, BIS Basle ration was imposed, so that banking situation was aggravated in the 1997 and also in the case on Indonesia we probably discussed yesterday, November 1 1997, 16 Indonesian banks were closed because they're simply insolvent, but that really triggered the nation-wide banking crisis and aggravated the situation in Indonesia. Those are also structural reforms, but they are apparently not so helpful. Also, particularly important, interest rate policies. To what extent, under this kind of twin crises, currency and domestic banking crises, the nominal interest rate and real would be endogenized by such crises. On top of that, say, autonomous monetary policy, some extent suggested by the IMF, contributed to higher interest rate or not, I'm not so sure, but higher interest rates was really the culprit for the program of worsening banking problems in those economies. So I, this is depending upon the nature of crisis, if we have 2 problems. That is associated deeply with the international liquidity crisis of those economies on the one hand and also banking crisis associated with the balance sheet problems, this comes from the so-called double mismatches, currency mismatches, maturity mismatches on the balance sheets of local institutions, then we have 2 instruments. One is probably provision of international liquidity to take care of the currency crisis or to prevent freefall, and at the same time interest rate policy could be assigned to domestic banking problems and so on. So long as we don't analyze this nature, we couldn't find what policy prescription would be more appropriate for this kind of, new type of crisis. New crisis requires new policy prescription. If conventional policy prescriptions are applied to new disease, probably the condition of the patients will get worse. That is high interest rate policy as well. And also fiscal consolidation we talked about. Looking at the mechanisms of this Asian crisis, if we talk about the domestic banking problems, balance sheet deterioration due to double mismatches and so on, then it is quite natural to observe serious credit crunches. It is already difficult to estimate whether this is demand effect, supply effect or bank run or not, but yet according to the analysis of the mechanisms of the new crisis, sort of currency crisis cum credit crunch is easy to observe, that affects, most importantly business investment and inventory investment, because of the collapse of the interfirm trade linkages and so on./ So from their, collapse of domestic demand, declining by 25% in the case of Korea and so on and thereby collapse of domestic production, which lead to the collapse of imports contributing the recovery of the expansion of net exports, nothing to do with the expansion of exports per se, but simply because of the collapse of imports due to these mechanisms, so IES balance in that sense "automatically" recovers because of the decline imports, hence fiscal consolidation is not required for recovering external imbalances and so on. So once we analyze the mechanisms of the new crisis, those conventional policy prescriptions may have gotten the situation of those economies worse, so we need both quantitative and qualitative analyses. Coming back to this liquidity crisis. In the case of Tequila shock, US Treasury worked very quickly after the shock, without any imposition of conditionality. IMF conditionality came only a few months later, but that was not the case of the Asian crisis, that was why Asian monetary fund was proposed after the Thai shock, but this was neglected or decried by the US authorities and the IMF, not because of the proposal by particular countries, but because of the lack of analysis. That is, for this new crisis we may need new types of conditionality. That is totally lacking even in the mind of countries that proposed this kind of idea. By now we should know better prescription so whether Asian monetary fund kind of idea is productive or not, we should very openly discuss rather than just saying 'no comments.' That's already indicated around the time of the birth of the Bretton Woods system, whether Keynes' ideas or US Treasury's ideas are better, so this AMF idea is along the lines of the US Treasury idea in 1944.

Another issue is the triggering mechanisms. This is often difficult to understand for me. Supposedly crisis in Thailand was the triggering mechanism for entire Asian crisis. Maybe so, but how about the large deficit on the current account, of 8% of GDP, equivalent to that of the Tequila shock and I don't know the relation between the 2. And at the same time international investors clearly saw the beginning of the deterioration of the balance sheet already towards the end of 1996 and 1997, by seeing some collapse of the chaebol and Thai banks and so on, so by seeing the deterioration of the balance sheet of local institution under double mismatches international investors began to, not to withdraw, but to throw down the tempo of capital export into those host economies, so that given the already large current account deficit, accounting for 8% of GDP, goods and services market have slow adjustment, but capital inflow slowed down, thereby balance of payments on the whole ? large deficits, that is pressure on exchange rate as well as on external reserves and external reserves drained because of fixed regime and external reserves drain then currency began to float then the liability in local currencies went up rapidly in the balance sheet of local institutions, then we had this downward spiral between currency crisis and domestic banking crisis and so on. So that this sudden and massive reversal of short term capital flow is very much related to domestic excess in the case of Korea, which was the investment in manufacturing done by chaebol, in the case of Thailand, busting of the bubble particularly in the real estate market, so when we talk about the triggering mechanisms we have to be a bit more open-minded, not just talking about export decline or 8% deficit and so on, or domestic excess, also should be taken into account.

About the final paper, Basle accord, yes, but so far risk assessment is so rough, you know. So that key program of the banking industry is how to assess bank credits. That is distribution of the probability of default is most difficult to assess such kind of distribution. In the future, that's the reason it's very difficult to categorize discounted present value of bank credits, so given such fundamental inherently difficulties associated with bank credits, I don't know Basle accord as such could work in an effective way or not. Since that didn't work in that way, we are now talking about market based, so called economic capital, instead of regulatory chapter ratios, so that this is easy to say but since risk assessment is so difficult, I'm a bit skeptical about this kind of analysis in terms of concrete policy measures. And also you talk about the prudential supervision and the vertical axis, you put there. And this I asked to the undersecretary of Australia, how do you produce indicators to measure to what extent prudential supervision has improved or not. This is not just prudential supervision, but all kinds of institutional building ups: bankruptcy codes, in one word, rule of law, but rule of law is not enough, how to enforce, and to enforce we need very independent accountants, independent lawyers, independent judges and so on. That is very difficult to nurture all those foundations over time. So then question arises, should we wait quite a long time to see the building of such good financial institutional foundations? So the more important question, therefore, to me, how can we actually the building up of such institutional foundations? Without which, it can be used as excuse for postponing liberalization, but instead we should really talk about 1st quantitative indicators and how to accelerate or expedite such foundation building. Thank you so much, sorry I spoke too long.

GV: Could I just add one thing. I'd like thing to Yoshitomi's comments and this is in the banking system, the asset position and it's more or less an empirical comment, but I think it bears on your characterization of riskless assets versus risky assets. I'm not so sure how you define that, but I'll accept that theoretically. But in the banking crises that we've had, in Asia in particular, obviously there's a sense that the banking system has to be upgraded, but the function there that's decisive is what is the realizable value of the assets on their books? The practicality of it is that in each country the regulators are in charge of the rules of solvency, so the formula for defining non-performing loans or mandated right-downs or something like that, you find empirically in these countries, changes over time as the authorities manage the banks out of a difficult situation, because for the most part, the authorities want the system to survive with a positive net worth, liquidate the marginal ones, but the essence of it is managing the core savable system and that's fundamental dependent on the valuation of the assets. we should remember that most of the assets are illiquid and embedded, so whatever losses are deeply embedded are unrecognized , for the most part, by the banks. So that's the wild card, what unrecognized losses are really embedded there and what does it take to get out of that position and that usually means some form of liquefaction at market values. In other words, at market value I would define as: a value at which some external investor would be prepared to take the asset off the bank's hands, and that of course involves, typically, a substantial discount from historical cost. So, I think your paper is great, but it needs to be supplemented by the empirical experience and the point about the credit crunch that you made is equally real. I've, I was interested, it wasn't mentioned too often in the papers, but the credit crunch dried up extensions of credit and it held back significantly the recovery. I mean you couldn't get corporations in these markets couldn't get trade finance, they couldn't get anything for a period of time and it just locked up the system. Thank you. Any other comments?

CA: My comment is on Mulder's paper and compared to many economic exercises, I like that you have included some of the economic studies listed here, which include virtually everything on the right hand side. Here you have to be a little bit more careful. However, I have 3 main concerns. Firstly, sample you choice. You have countries ranging from Jordan to Russia to Zimbabwe. Now there are 2 problems here. !st, one of the most well-established finding in the financial crisis literature, according to ? Kindleberger's book, is that by very nature, crises turn out to be regionalized, crises happen on a regional basis. Now you cannot allow for this regionalization simply by putting a dummy. Dummy is simply a dummy. It cannot take into account this fundamental factor. Then to second point is that when you try to pull together so many countries, you tend to mix up balance of payment crises with speculative attacks. Peter and I, initially attempted to follow this route, but then we discovered this problem. At least 2 examples 1991-1993 ? crisis and 1991 Indian crisis, both are balance of payments crisis created by domestic problems, not speculative attacks, there are so many cases like that in Sachs and other samples. If you followed that, you cannot generalize from this.

Second point relates to variable measurements. M2 reserve ratio, first suggested by Guillermo Calvo as a measure of vulnerability, he himself has discarded it, simply because transaction demand for money is a very big component in developing countries, small households do not have the ability of shifting their money overseas. You need a narrow measure, that's the one we use in our paper. If you use a narrow, well-focused measure, I think the results are going to be different. Again, the real exchange rate measurement, for a long time IMF has been measuring real exchange rate using domestic consumer price and world consumer price, this measurement is alright for developed countries, but not for developing countries, mainly because non-tradable prices tend to diverge vastly. So you need a better indicator. We tested three indicators and found IMF indicator to be very vague.

Third point, capital controls. Again a dummy cannot do the job. There's no dummy in the analysis, say by looking at themselves and other things, you cannot tell the effect of capital controls on this. I would suggest looking at Williams and ? recent survey about financial liberalization. They have a nice inventory of different regimes and on that basis you can do classification and undertake an analysis, otherwise I do not think create much meaning into the effect of capital controls by looking at the regression like this.

HP: Yes, I was expecting, because this is kind of cross-country session, I was expecting to come up with some kind of fruitful policy recommendations for emerging markets and throughout these three papers, except for the Vines paper, which is basically posterior examination of what happened. I do not find any alternative explanations of what happened. Unfortunately. Even though I find the index construction by Mulder very interesting and very useful indicator. I would like to raise 2 questions, not necessarily addressed to each specific paper, but to organizers as well. I think what we are missing here is that if there was no Thai crisis at all, suppose there was no sudden floating of exchange rate and so forth, what would have happened to these economies? Asian economies. My prediction is that, I was predicting Asian economies would slow down substantially, well before, in ADB conference I predicted and I did not agree with ADB officials at that moment. Because of the export slowdown, rate of return slowdown and so forth. So the economies under crisis were already I the downfall and then crisis hit. So the policy design, as I showed in my paper, reserve money was already in the -10% preceding the crisis, which means the economies in question, Indonesia, Thailand, Malaysia, everything, were already in sharp decline, following the pattern of Japan's stagnation. So now we have to come up with, what would have been optimal policy design by IMF and policy authorities for those crisis-affected economies which were already downsliding. I think this point was not really well addressed to any analysis.

Secondly, I think that what Mr. Yoshitomi argues is, as I sense it, which has some valid point, is it really banking crisis? After crisis, everybody is going after moral hazard and cronyism and all these things, but these banks had been there for 40 years, these companies have been there for 40 years, doing fantastic job. Now, I'm not denting that there corruption or cronyism or moral hazard, there has been. But is this the issue that we need to take care of within one quarter. How can we impose crisis-inflicted economies 8% BIS rule. It's like killing the patient who's already in the emergency unit. I mean what is the logic of it? How can you reform institutions within 3 months. I don't want to be a critical of what IMF and World Bank have done, they have done a marvelous job and they have done the right things, but in retrospect, was that the optimal design? To my judgment, at least in Korea, and I think it applies to Indonesia and Thailand, it was a purely foreign currency crisis, mismatch of short term capital with reserves, pretty much there has been some kind of fixed exchange rate regime and it has been overvalued or sliding with the yen, but the yen depreciation was not reflected. But the real question is, was this really banking crisis? I was hoping to get some kind of analytical framework on that interpretation. Why, all of the sudden, everyone saying that this is terrible banking crisis combined with foreign liquidity crisis. The way I see it, it is purely foreign liquidity crisis, banking elements were already there, it might have aggravated the crisis, but it was not the immediate real cause of the crisis.

The second question that I would like to pose is that, the way I see it is that it has something to do with capital market opening and we have to pay attention to why did they attempt to open capital market to begin with? Why did all these Asian countries, to begin with, want to open their capital market to some extent? Of course the programs were somewhat different, with time lags and all these things, I've looked at some of the World Bank papers in retrospect, but the endogenous factors, why these economies pursues capital market liberalization were neglected in my judgment. It is not because, necessarily it was pressured by bilateral trade dispute with the US and European Union, of course these elements were there. My proposition is that it was endogenously pursue because of the interest rate differential. In other words, domestic banks were heavily repressed, therefore domestic interest rate was just too high. Therefore all the corporations, as long as they are permitted wanted to induce foreign capital through the window of the commercial banks. And the commercial banks were operating on the moral hazard, so therefore one policy implication that I could come up with, you don't want to pursue capital market liberalization when there is a great deal of interest rate differential. So the policy recommendation that should be followed by IMF or World Bank is to advise developing countries, 'you may want to go to capital market opening, if and only if you r domestic interest rate reasonably converges to world market rate,' with maybe some small risk premium. But if you look at Indonesia data and Thailand data and Korea data, domestic interest rate was way above international interest rate, above risk margin and above, at times, 100 points. What I am saying is that there is lucrative and very attractive incentive for domestic firms to go after foreign capital and of course from supplier side, creditor side, there is a attractive opportunity to put their money into these emerging markets just because the yield itself is so high, covering up all the risk, so in other words, we have to look back, because this is after the crisis, what triggered these economies to go through with very rapid capital market opening measures, which I think contributed to this mismatch, short term mismatch. The reason is basically endogenous, they did not deregulate enough domestic market. They did not eliminate repressedness, they did not improve on retardedness of domestic banking and then hurriedly went to capital market liberalization. So I think these 2 questions, either in theoretical or empirical context, we should address ourselves. otherwise we seem are repeating what we have done in the past 6 months or 1 year.

GV: Ross.

RM: My question is for Chris Mulder. With the heavy emphasis on the ration of short term debt to reserves, I'm not going to get into a discussion about the econometrics, but rather a discussion about the policy implications. In other words, if the government observes that particular ratio and sees it rising, eventually getting to a ratio that seems like it's dangerous, what then? Is that the time we impose capital controls or taxes on capital flows or what? The problem I see is the following. It's a ratio, so we can think in terms of working on the numerator or the denominator. If it's the numerator, in Indonesia at least, we would have been talking about something that involved private sector behavior. The short term debt was predominantly in the private sector and that doesn't seem to be susceptible to change unless you want to impose controls or taxes or something. If you want to work on the denominator, then you're talking about something the government does have control over and this is precisely what Indonesia did in fact, prior to the crisis. If you want to increase the denominator, the central bank has to get into the foreign exchange market as a buyer, that's what Bank Indonesia was doing. That has a monetary impact which you then have to sterilize, that tends to keep interest rates high and so the interest rate differential that Hak Pyo was just talking about remains there and the capital keeps on coming in. So it's not obvious to me that you can keep that ratio down in any obvious manner other than by controls or taxes on capital flows. Moreover, if you adopt that policy, which Indonesia did, of the central bank buying up the foreign exchange, then issuing its own debt domestically to sterilize the monetary impact, the central bank itself is getting long in foreign currency, the private sector is getting short in foreign currency, long in the domestic currency by the same amount and it seems to me that is unsustainable and that was one of the factors that caused Indonesia to have its crisis because people, the private sector was borrowing offshore and not bothering to hedge their foreign exchange rate risk. So I'd just like you to tell us what you see as the policy implications of focusing on that particular ratio.

CM: First the remark by Chandra about what's all not included and bottom line what can you do in cross country studies? You can't do everything and you can't do country by country, so what you have to look at is what variables are significant and do you get a reasonable degree of explanation. I mean we get a degree of explanation of 75%, so that leaves 25% to be desired. Now, obviously there also errors, etc. in there, but that's the way you've got to look at it. Not that there is nothing else to explain these things. And obviously when you go to the real world this is just... I think sort of our basic attempt here or the outcome the way I would read it is that normally you look at countries in terms of solvency and liquidity. In a way a solvent country should not have liquidity problems, in an ideal neoclassical world because it borrows its way out of any solvency crisis. However, is what this result clearly shows is that there is not such an ideal world. There seems to be a kind of trade-off between the solvency and the liquidity issues. So, Korea in 1997 if it would not have had all its reserves with illiquid banks, but had a cover of reserves of 60 billion dollars or 80 billion would that have been able to prevent a run on its banks? I mean, obviously, if Korea would not have done anything about restructuring banks, etc. sooner or later the problem would have occurred. But having more reserves would have bought them the time to improve its debt statistics to restructure the banks, etc. I think that's the question and empirically the results are fairly robust give and take all the problems you have in the measurement of short-term debt and reserves. That's one point.

The other point, yes obviously if ... the point about short-term debt over reserves how can target it at a specific level? If you increase your reserves your interest rates will go up and you will get more inflows of short-term debt. Obviously, in reality there is how you pursue your policies how you pursue your reserve targets depend on an individual countries case. In some countries a small increase in interest rates creates sufficient inflows of capital, which you can sterilize and you can build up your reserves. But to me there are limits to which extent you do these type things. Its an indicator you should follow, but when this results in too high a reserve build-up it also should also be a signal to the policy makers that maybe they have to look at the prudential environment for their corporate sector. Can corporations borrow extensively abroad without having a reasonable foreign currency cash flow? Do corporations when they're listed at a stock exchange are they forced to publish their data on the foreign currency cash flows, so that their stockholders can judge whether they're speculating. Whether they're taking a huge foreign currency risk. In terms of the banking sector, maturity mismatch in foreign currency has been mentioned several times. Those are underlying measures, I mean the overall structure of external debt, the maturity of debt has to be looked at. So, I don't thinks it a panacea, its a solution for all worlds. But, in terms of macro economics it is a broad indicator of where you may want to be.

GV: Thank you. Let's come up the line, and then we'll have the three comments here. Then we'll flip over to Ross and Dipak for concluding sentiments. Go ahead...

Hal: A couple of quick comments to David if he can hear me. A couple of quick points. One was a question of emphasis, but I wonder if you might want to give a little more attention to the overload thesis or the Christmas tree approach. It does seem to me critical. I'm not an IMF critic, but it does seem to me the IMF to the opportunity to think of every conceivable thing they ever wanted to get done in Indonesia and shoved it in the program. I think ... environmental laws all that sort of stuff ... I would argue that was even more important than the fiscal policy although you could argue that was mistaken. But there were lags anyway in getting fiscal policy impacts through. Second point, I guess this is where we don't really know the story at least the outsiders, the insiders do. It'd be good to know more about pre-crisis policy advice. The three or four years preceding because I think that is really important. As I say we don't know, but my suspicion just looking outside is the Fund and the Bank actually may have been a bit more concerned with egregious things admittedly like Tommy Suharto's clove monopoly and Tommy Suharto's national car program. But in the big picture of things I think they probably weren't as important as helping to get a well regulated banking system. I suspect the Fund was too concerned with the former and not the latter.

VP: I have question for Mulder. Perhaps it is in the paper and I just can not find it. Do you evaluate what was the impact of different factors that contributed in different countries that experienced a currency crisis. What was the contribution of the current account deficit, real exchange rate, short term debt to reserves, and are there clusters of countries. Can you identify particular groups of countries were the single most important factor was such and such. Or were the increase say the increase in the exchange rate was counterweighted by the decrease in the short-term debt to reserves ratio. You exclude the credit extension variable, which ... the one that was in the STV model because it is insignificant right?

GK: I would like not to refer specifically to three papers, but rather I'm provoked by the title of the panel, "Concluding session with policy recommendations for emerging markets." There is also my paper circulated, which is already published by the World Bank. The last section there are 12 policy conclusions. Namely, how I do I see the implications for the emerging, if there is such a process, of the post-Washington consensus from the experience from this post-Communist transition. I'm not pointing very strongly to the meaning of institutional arrangements. Through which process I'm trying to evaluate the effectiveness or lack of, of monetary and fiscal policy. I think that we must remember that there are different emerging markets. I remember the debate 10 years ago and I remember all when all these gurus were coming from the Western part of the world and Eastern part of course they knew everything and we didn't know nothing. How to manage the things. They were coming to preach and teach and they were not able to listen that things change.

But actually all this exercise towards post-communist transition was based on early Washington consensus, which was nicely developed but addressed completely different reality. Neither Hungary or Poland of 1990 was another Brazil or another Argentina, but now yes they are in a sense. The specific features must be taken into consideration, and one of my conclusions is that the IMF and especially the IMF and I wouldn't confuse the IMF with the World Bank. For me these are two very different institutions. IMF should not insist on impossible political measures, and we can go from country to country that they did insist or they are still insisting on something that is not feasible from the political view point. So in economics nothing that is impossible because of politics can be considered as a realistic proposal. I didn't listen to the Fund's view and I think this is part of the reason why I succeeded in 94-97 in such a remarkable way. The IMF was often wrong because of an oversimplification which I may understand. Everything is a new exciting case ... [tape break] ...

These emerging market countries are different. Only at the surface, it is really oversimplification we have these resemblance's. Therefore I'm coming to the conclusion, and one may say this the naive conclusion, but we have very strict IMF performance criteria. There are quantifiable criteria we may measure, is it money supply, or is it foreign reserves, or whatsoever. But we don't have and that is for the very deep purpose we don't have the World Bank criteria. IMF is aiming at fiscal prudence, currency convertibility, free flow of capital, etc., etc. Therefore, the lack of fiscal deficit or low inflation these are the means which provide for to the end. But the World Bank is aiming for fighting poverty, sustainable development, protection of national environment, investment in human capital, and this is a very weak part of the Bretton Woods organization if we are also talking about the international financial architecture. How to close the gap between these two approaches. I would be happy to see another G7 of emerging markets. Is it not a coincidence that there is not one constituency in which the emerging markets of the post-communist countries have a word to say. It is organized in such a way that they are dispersed and there is not at all any coordination. Not even an intellectual debate.

Look at the title of the conference, there is the flaw. Because of international capital mobility is simply a function of, or depends, or is preying, on domestic instabilities. International capital mobility is not a means to facilitate domestic economic stability it is a means of simply making the profits. Economic situations in particular countries or regions of the world in part of this exercise is taking advantage of economic instability, which must be seen through the conflict of interest as much as through technical perfections vis a vis exchange rate mechanism or interest rate policy. Thank you...

SD: I would like two points. One is a more general thing that's what ?? said, maybe David can enlighten us. On the fact that when you look at this policy package in the end I'm afraid with the agenda of the new architecture etc., etc. We will still be using the format of what we are having right now. That means we are dealing with certain problems like exchange rate, financial problem, but in the end the package is the whole package. That is encompassing adjustments in real sectors, monetary sectors, and monetary sectors have so many avenues for that. Financial sector and real sector also everything and then it may even involve politics. Because all of this are the problems these respective countries really see it very well in the process. So we can't say no to any specific which actually representing part of the problem in the structure. Practice of you know the malpractice of crony capitalism, and then you try to identify this whole thing. So, the package I'm afraid has always been encompassing all the financial sector, all the real sector, plus the classical things of exchange rate, interest rate, what have you. We do have that kind of problem partly because you try to put everything in two weeks negotiation of macro problems and micro problems, long-term and short-term, you talk about financial soundness, which means quite a lot aside from institutional, financial institutions, the health of financial institutions. Your talking about very micro management. Its not just capitalization's of a weak bank, but the management of the bank, the whole restructuring is there. Also, behind it the legal base, the bankruptcy law, and everything under the sun is included over there. We can not say no because all these things we understand are the problem, but after we understand the whole problem later on how to deal with it. Then you maybe you come into priority or sequencing or what have you. Maybe we should enlighten this kind of issue because I'm afraid the whole package is always like that.

Secondly, a little bit more specific on the sequencing. My problem with the sequencing is always that it is for something that if you wanted to start from a clean sheet, but the problem is what if you already did something, but it was not right in accordance with the so-called theory of sequencing. Like the Indonesian case I used to call it, we put a lot of things upside down, like capital liberalization we did it in the 1970s, when people were only talking about it in the late 1980s or even 1990s. Banking liberalization they did in 1988 and now everybody said we should do like strengthening the prudential measures and everything before you can liberalize that now. Once you already did that, what is the therapy for the country that already did something on a particular area, but they sort of overlook the condition they have to fulfill before you do it. Like you already very open, but you cannot now go back and to close, so maybe that is part of the problem of sequencing, how you could deal with that later on in practice, as well as the whole package while you deal with something and you negotiate in 2 weeks time.

GV: Hak Pyo...Oh.

IA: Yes, sequencing and political considerations are very important but they are elementary too. I am about to make a blanket statement, namely that capital liberalization without exchange rate flexibility makes no sense. So there is no compromise over which one should come first and that...? with your statement that if there is a differential between the domestic and foreign interest rate then we have to face special dangers, but there will always be a difference because there is a country risk. So that's why it is even more important to liberalize capital markets at the same time preserve or restore exchange rate flexibility, or install or whatever.

RG: Thanks George. In the time that's left we'll have to think about conclusions from the meeting as a whole and some of us will have to turn our minds to writing down the conclusions and distilling them and getting a book as a permanent record as a wisdom that emerges. At the beginning of our meeting, we heard seven questions from Dipak and 4 questions from Dominic and I think it's helpful for us to go back to some of those. In preparing final versions of papers for publications, I suggest that the organizers come up with some tightening of those and come up with a number of headings that we need each paper to touch upon, but our starting point can be those questions. I think that the papers as a whole cover the required ground and our discussion seemed to make some issues a bit less important, but really came to focus our attention on some others and so a note from the editors as a guide to issues we'd look each of the country papers, in particular to pick up, I think will be helpful there. In the beginning of our discussion of the conclusion, I'd just like to pick up a few of Dipak's questions and Dominic's tended to coalesce around a single theme of capital account liberalization and capital account volatility what's necessary to make that work and so I'll make a comment on that. I'd like to underline another issue that turned out to be more important than the other seven plus four questions suggested. On Dipak's question 3, which related to policy responses to crisis, we ended up focusing a lot on the role of monetary policy in the crisis and, particularly, the role of tight money in stabilizing the exchange rate and the external accounts. I think we might be edging towards a conclusion that, whatever good moderately firm monetary policy might do, there is some point beyond which the further tightening of monetary policy is counterproductive, even for the objective of holding up the exchange rate and strengthening the external account. We've learned as we've discussed the issues in the last 2 days, that the answer to that question, especially the question of where is that point and was it exceeded, is going to depend on the particular institutional and economic circumstances of each country and I hope the country papers will focus a bit more on that. But the question was first raised in Nancy's discussion of Poland, but it's come up a lot in other papers including a couple of the east Asian papers. I don't think, Eliana, that any of us would want to say that the answer is to loosen monetary policy, as for the sake of the argument you were suggesting yesterday morning. The question is to identify the point at which further tightening becomes counterproductive. There were a few cases where there was a suggestion that we'd gone beyond that point in the recent experience. David's paper, and I haven't, so I'll add a couple of points on that since I didn't get to earlier to raise these issues. It noted one important mechanism, which has been noted by others, through which the tightening of money beyond some point can be counterproductive. That is if you are damaging asset values domestically beyond some point you're reducing the creditworthiness of domestic entities. That in itself discourages capital flow. The damage to domestic entities affects more generally the climate for investment and has its own effect on capital flows, this is a subtle question, but one that I think we need to take into account. One interesting feature of a capital response to the east Asian crisis has been how, once confidence in recovery has been established, there have been very strong direct foreign investment. I think some of us have been a little bit surprised about how strong, but that didn't start to happen until there was some confidence at least that the bottom had been reached, because no matter how cheap are equities or real assets, you don't get capital inflow to pick them up if people think that maybe they'll go further down. So that's an issue that I think country papers should really come to grips with because the insight from individual countries are going to be very important in any conclusions we're able to draw about that. In retrospect, we can say that there was clearly excessive tightening in, at least, in a number of the east Asian countries and if I rely a little bit too much on those cases in what I'm saying now is partly because I am adding my thoughts to David, but also because these are the cases that I feel most confident about. It seems to me that we need to face up to the fact of false assessment. The reason both fiscal and monetary tightening went too far in Indonesia, and clearly it did, and in varying degrees in a couple of other countries was that there was incorrect assessment about how big the problem was. Later in the first half of 1998 there was explicit recognition of that and quite explicit variation of the requirements of fiscal tightening. I don't think there's been the same recognition on the monetary side. Perhaps if in the country papers we dig more deeply into that, we'll have a basis for forming judgments.

One reason, I think, for misjudgment about the depth of the crises in individual east Asian countries was that it was most unexpected and the international agencies aren't much different from the other international observers in that respect. When growth has been averaging 7,8,9% per annum for quite a long time and then all of the countries end up in crisis. In some of them, quite extraordinarily stable growth. In Malaysia and Thailand there wasn't a single year below about 8% between the mid-1980s and the onset of crisis. So when people were thinking of a downturn, they were thinking of a dip below trend and not a huge reversal. We were all tricked by the long experience of strong and steady growth. Another reason was that I think we underestimated, we being the economics profession, the international community and the countries concerned, the power of the international transmission through real economic effects. We all know from that splendid book by Kindleberger on the Great Depression and the power of the international transmission of contraction in the Great Depression, through one after another country's reduction in activity, sometimes exchange rate depreciation, increase in protection, reducing trade and that contraction in trade in one country after another reduced trade opportunity for others and world trade spiraled down, that wonderful cobweb of Kindleberger's of world trade contracting month after month for three years and deepening the recession. We had an element of that in east Asia and I think that the effects of that were underestimated. By the onset of crisis, by 1997, a majority of the exports of east Asian countries, all of east Asia were to other east Asian countries. A very different story from the mid-1980s, but that was the reality by 1996. And a large majority of the growth in exports in the previous decade had been intra-regional trade, growth of one to another east Asian country and you can draw a nice Kindleberger cobweb for east Asian, an awful Kindleberger cobweb, for the contraction of intra-east Asian trade and to understand how deep the recession was going to be in Malaysia, you had to understand the feedback of the deepening recession in Thailand, Indonesia and Hong Kong and Japan and Korea and so on. We underestimated that. Now of curse, it was precisely to limit this international transmission of contraction that the Bretton Woods institutions were established and some of the officials of the IMF very much had this in mind early on in the crisis, to their credit. You'll see in volume that Ross McLeod and I put out last year, papers that were discussed at a meeting in May and published in October. There is one paper there by David Miller (?), who is a deputy head of the IMF office in Tokyo. In the discussion that led to that book, David was drawing attention to the origins of the IMF and saying one of the IMF roles was to stop excessive currency depreciation because excessive currency depreciation will lead to pressures on others, it will lead to transmission of to others. Just like competitive devaluation did in the 1930s. So there was some awareness of that but, nevertheless, it wasn't sufficiently taken into account in assessment of how deep the recession or depression in some countries would go. I think at least in a couple of the overview papers for the book, we need to dig more deeply into this question and I think as we do, there's one important qualification about any negative views about the role of the IMF in some of these things and that is the international community, including the Washington institutions, was pretty right in what it was advocating for Japan and China in an attempt to reduce somewhat the transmission of instability. For a country in crisis, attempting to hold up the exchange rate so you reduce the transmission onto others, attempting to do that by jacking up interest rates and sending the economy deeper into recession, a lot of countries in crisis that strategy was counter productive. But for countries that weren't in crisis, although under some stress as a result of the Asian economic crisis and I put Japan and China into that category, the strategy of fiscal expansion and holding up the exchange rate, which was applied in both, in different ways, but applied in both, was a good strategy for the region as a whole. I think the fact that the downward spiral didn't keep going on was partly the result of these policies in 2 big countries that weren't actually in crisis, whatever the stress they were under. In Japan's case you had all of that international pressure, especially coming from the bilateral US-Japan discussions, but you had Stan Fischer playing in those, culminating in the high profile interventions in August of last year, when the yen was down to 150 and heading lower and the high profile interventions accompanied by further commitments to fiscal expansion did seem to be helpful and I feel that was an important holding point in the downward spiral of the transmission of contractionary influence. And I think it's one reason that one month later we saw a more general turnaround in financial markets and later in the year, some stabilization of the regional trade. In China, the strategy was different. The strategy was just to encourage China to hold the exchange rate and to expand the budget. As we heard in this morning's paper, that hasn't been bad for China, although there are questions about how long the exchange rate part of it will be sustainable. But for the countries in crisis, advising them to tighten and tighten money to hold up the exchange rate, beyond some point wasn't even helpful to the international transmission through the trade mechanism and Yoshitomi touched upon one of the reasons why in his very important remarks in response to the papers in the last session. The level of imports of any one individual country is determined not only relative prices, the depression factors of exchange rate depreciation and protection which, mercifully, we didn't have much of in this episode in east Asia, but it's also determined by the level of domestic absorption and if you push an economy deeper into recession and hold the exchange rate a bit higher than otherwise it would have been, just knowing those 2 facts doesn't tell you whether imports would have been higher or lower than they would have been through doing nothing. So the strategy of holding up exchange rates with very high interest rates sending activity through the floor, in my judgment, was unhelpful the international transmission of instability...

CM: I don't know how firm that conclusion is, but the basic statement that too much tightening is very bad, I mean everyone will agree with, but I don't think, at least from the discussions today, I don't think it has been shown that the tightening was too much. It may have been too much, but looking ahead at that time, when you are dealing with forward looking variables like confidence, I mean confidence which you cannot measure, I haven't seen statistics in the papers bearing it out, it's a very tall judgment that you're making.

RG: Fair point, Christian. I began these remarks saying these are issues which we should dig deeper into in the country papers before publication, to make sure that we focus more on them. I thought Yoshitomi's presentation of two instruments for two goals was helpful and helped us to focus on one variable we haven't discussed enough the past 2 days and that's the role of international liquidity. When the international packages have come in there have been a set of advice and some money and we haven't discussed the role of the money and I think it would be useful to go a bit further into that. And I think Yoshitomi's framework is an interesting one, thinking of the tightening of money and the availability of international liquidity, well the stance of monetary policy and availability of international liquidity being two instruments to attack the 2 objectives. I spent too long on that one question three in Dipak's...

DD: It was a long question 3...

RG: It was a long question but in some ways the most important on the list...

DD: It probably is.

RG: More briefly, now just before I leave Yoshitomi I think it is a pity that Ken Henry didn't give us a bigger answer on the Asian monetary fund, because liquidity issue is an important one. The question we should be asking is how much wider would the options have been if the countries that went into deep crisis had had available more international liquidity at a crucial stage. You ask the question, you're aware of the complications in the answer, but we did have the rather unusual situation of the Japanese Ministry of Finance putting on the table a rather large sum of money and other people saying please take it away. There's no time to discuss it in detail, but since Ken wouldn't answer I think I will. I think that was a huge error of the international community, to reject it rather than to say, thanks, now let's talk about a sensible way of using it. Well we got it back, a bit of it, through the Miyazawa fund...

MY: That was post-crisis, the timing is important. Timing.

RG: The Miyazawa fund has still been helpful, but yeah. What we think about the lost opportunity of the Asian monetary fund depends a bit on our views on how helpful additional international liquidity would have been.

On Dipak's 5th question, which brought us into the question of exchange rate regimes, that links to one of Dominic's questions as well, there's fairly strong support from the cases that have been discussed around this table for, certainly flexible exchange rates, but floating rates, not much interest in the thoughts of half-way houses, managed pegs tending towards firm pegs that we had in most of the countries we've been talking about at the onset of crisis. But some qualifications about pure floating. I think that Steve Grenville's points about the, as Peter Warr's question brings out, are pretty challenging. How come the Reserve Bank of Australia can make money out of that. The answer might be, and this is an area Steve didn't go into, that the private sector, like any other part of humanity, takes time to learn new things and in each country it takes time for the institutions of a floating rate to settle down. The private sector has to develop new institutions, new ways of looking at things to take advantage of the stabilizing speculative opportunity that the wide fluctuation of floating rates generate. Steve drew attention to the fact that the people on the screens and pushing the buttons will soon get the sack if their bets are out of the money for 6-months and to win money on the Australian exchange rate, sometimes you've been out of the money for years. The Reserve Bank of Australia was able to sit that out. But if, nevertheless there are clear opportunities being lost, the private sector, some people in the private sector, will begin to learn that and begin to make some money out of that and that's the sort of institutional development in the private sector that will make floating rates less unstable over time I would expect. One thing we didn't much discuss in the emerging consensus about the advantage of floating rates was the success of a couple of non-floating rates: the China case, China case has at least avoided the crisis. Yiping this morning said that the exchange controls may have played some role, but he didn't push that very hard. And there's another case alongside Chine and that's the Hong Kong case, which has had a fixed exchange rate since 1983, it's got no exchange controls, it doesn't even have mechanisms for measuring capital controls so it never will be able to apply a Tobin tax without a major institutional change and, well we haven't discussed it so we can't draw on this discussion, draw a conclusion, but I think that we do have to recognize there are some conditions under which the fixed exchange rate can at least be consistent with avoidance of deep problems and David Vines noted a couple of those. The necessary condition is that expenditure policy must be fully consistent with them and that's a pretty hard condition to meet in Hong Kong, with some lags that they're able to meet it.

The role of the private sector, Dipak's question 7, that's been Hamlet's ghost in this discussion, we haven't focused on it explicitly, but it's been there in the behavior of the private markets, been there in private capital flows. In the revision of these papers we might think a little more explicitly about it. What might think, Dipak, about how to sharpen up the questions. But one question is, about the issue I've already raised in relation to floating exchange rates, what has been the learning trajectory of the private sector as institutional arrangements have changed. Is that learning best left to itself? It probably is. What determines how quick that learning process is? Is that a factor in policy advice on the timing of liberalization? If we sharpen up the focus on the private sector, there are some of the questions we may want to ask.

Dominic's four questions were mostly built around the question of open capital accounts and that became a very interesting topic of discussion over the last two days and I must say I've learned a lot from that part of our discussion. I start with the same prejudices as Eliana on this question, I don't like capital controls, but I must say that you can't sit through the discussion we've had for 2 days and say that they're bad in all circumstances, in all countries. One caution is that, which was emphasized by Lei Zhang in the last session, you do have to line up the capital account liberalization alongside development of domestic institutions. One important caution that came up in a couple of papers was that, because of confidence effects, it's usually not very smart if you think that some capital control might be helpful, to do it in a crisis situation. I think the only time a government is going to be thinking about these things is probably in a non-crisis situation, not going to be thinking about them when there's no crisis around. Probably this is a point about the pace of liberalization, that if you might want a bit of help from exchange controls in some circumstances, let that affect the pace of liberalization and there are some lessons there both for India and for China. The Indian paper told a story of such hugely elaborate controls that it reminded me of Australia a long time ago and I think that we got very large efficiency gains from getting rid of those, so whatever macroeconomic benefits India is getting from the highly extensive controls, I would think would be at large efficiency costs. One very interesting part of the two days of discussion is the way we came to focus, not on the question of undifferentiated exchange controls, and we came to more particular types of intervention. I thought that Steve Grenville's points on the Singaporean controls on bank lending in Singapore dollars to foreign entities to try to limit short-selling of the currency was something to think about. And if I could draw a general conclusion that's not too far away from my prejudices, suspect on that account, I think that generally we've got reasons to be cautious about the value of exchange controls, that one has to be careful about the pace of liberalization when you start from controls and the importance of lining up domestic financial reforms alongside the liberalization and that there are a couple of very specific types of intervention that are worth a closer look. I wouldn't put it more closely than that. I think it was Istvan in the last comment that we should forget about open capital accounts without floating exchange rates. He made a very strong statement like that. I wonder. That would rule out the Hong Kong system, and although Honk Kong went through one hell of a crunch a year and a half ago, taking the whole picture together, I don't call Hong Kong a failure and it rules out 30 years of economic growth with pegged exchange rates and open capital account in Indonesia. That's always been a challenge to us. In the stabilization programs at the end of the 1960s, Indonesia wiped its exchange controls, it's had a very open capital account ever since then and it had a crisis in 1997. Well what's the story of the 28 years in the middle? Through that 28 years, Indonesia got a lot of growth out of the open capital account. Remember it was...

MY: Domestic banking deregulation did matter.

RG: Well, yeah. That really makes the point Yoshitomi. I think we've got to be careful about the generalization. So long as there are qualifications to it, I can go along with the generalization, but there are qualifications to it and I think we need to think pretty hard about the exceptional cases and the lessons from them.

And finally, my new issue which wasn't in Dipak's or Dominic's list and which got quite a bit of attention, especially today, was the problem of overloading policy reform packages. I think the discussion and Soedradjad's last comment I think underlines the early discussion. It does point to this having been a significant problem, that if the patient is bleeding on the streets, the problem is best addressed through the blood transfusion rather than the long-term exercise program.

DD: I don't think I'm going to try to attempt...I think you've done all the conclusions that we ... [end tape] ... small group and decide how we go from there to the published papers, and we get a view of that. At the World Bank ourselves what we're going to do because we're part of the co-sponsors of this is that we have a definite game plan. Which is, I felt very comfortable hearing the country views because its a cross-check. Sometimes we sit in Washington and develop our ideas in fair isolation, and one of the purposes of this is to be able to hear you and not be kind have all relevant knowledge enshrined in post or pre-Washington consensus. So that was purpose. What we do from here, the Bank anyway, we go through what is called a Global Development Finance report and there are elements there that we'll be focusing on very strongly. There are elements of ... we'll be focusing on short-term capital flows. I think that deserves a fair look at and we're doing some work on that and is it in indicator of crisis? We'll be looking at Chris Mulder's stuff a little bit more in detail. We are very glad that you do find it as a good predictor of crisis. Then we're going to talk about what kind of capital account openness regime makes sense. Underlying all of this of course there are two opinions about international architecture. I don't think we can avoid the international architecture question. Part of the puzzle, the reason why I guess we call this International Capital Mobility and Domestic Stability or policy goals is that one lesson we draw when we look at the history of international architecture improvements is that it takes such a long time to happen. You can never get coordination done very easily around the table when we looked at last years report. So in some sense one lesson is that countries need to look after their own interests and therefore the domestic entity kind of thing makes differences between institutions between countries its terribly important to recognize that's some countries will do well others won't. And there'll be different stages of development and different kind of things. We're gearing up to kind of provide a slightly more differentiated kind of lesson and things as we heard around this table. Some of you may not be here, so I would like to use this occasion to first of all thank Marc Uzan and his team...