



***The Shadow G8 2009***  
**May 6 and 7, 2009**  
**LUISS University, Rome, Italy**

***Wednesday, May 6***

**Morning Session**

**Massimo Egidi:** This initiative follows the first meeting at Columbia University, held three months ago. As Director of LUISS, I am personally honoured to have the distinguished floor here. This long-term initiative greatly helps to strengthen relations between the various fields that professors, intellectuals, and politicians occupy. One of the most important issues is that, at the end of the conference, some important recommendations will be provided by the group in order to provide a starting point for the G8 meeting that will take place in two months.

I would like to say a few words about LUISS. LUISS was created by Guido Carlo, the former governor of the Bank of Italy and president of Confindustria. The idea of LUISS was to create an elite class for Italy, and we have been involved in developing this long-term goal since the creation of LUISS thirty years ago. For this reason, we believe that our students (including those students attending the meeting today) will gain a larger understanding of the world.

LUISS has seven thousand students, which is relatively small with respect to other universities worldwide, but we believe that we are able to select among the best students in Italy.

To conclude, as far as I understand, among the recommendations that you will prepare over the course of this conference, some of them will be related to the monetary order which is one of the most critical points for politicians.

Now I give the floor to Jean Paul Fitoussi and Joseph Stiglitz for their introductory remarks. I want to thank these two esteemed people for the successful outcome of the first part of the initiative at Columbia University. This second part of the meeting is strictly due to their effort and hard work in between the meetings.

Thank you, and I give the floor to Joseph.

**Joseph Stiglitz:** Let me begin the introductory section by having a brief round to introduce ourselves.

In the first meeting at Columbia University in February, we discussed a broad range of general issues, the notion of 'Shadow GN', what leaders should be discussing when they come together in the next meeting in Italy this July, and what should be included in their agenda. We are not shy about telling them not only what they should be talking about but also what they should include. There is a notion that a group of experts unconstrained by the political process may be able to come up with some ideas that can be more forward-looking than the constraints imposed by the political

process. If any of you have been involved in a G8 meeting in previous years, you know that it is a very constraining process; it is very much a matter of the political process and therefore is very difficult for the government to come out with anything broad. The problems that we are facing, both terms of global warming and in the financial crisis, require a broader reaction than the least common denominator. Given the magnitude of the two crises, the climate crisis and the economic crisis, it is particularly relevant for a group such as this to put forward ideas.

There are a number of people that were not present in the first meeting. Let us go around, introduce yourself and maybe say few sentences about the area you have been engaged in so that people will know what prospective you bring to the discussion.

**Fitoussi:** Thank you for coming. LUISS is a very smart university, proof being that it appointed me...

We are working here at a crucial moment. Heads of state are meeting frequently, but most of these meetings are rhetorical. They are all saying what they want. They want to coordinate actions, but they are all bringing back certain measures of quasi-protectionism, the opposite of coordination.

We have here an important duty which consists of recommending what needs to be done. In the future we will probably become the real G8.

**Nelson Barbosa:** My name is Nelson Barbosa. I am professor at the Federal University of Rio de Janeiro and I am currently the Secretariat of Economic Policy for the Lula administration in Brazil.

**Amar Bhattacharya:** My name is Amar Bhattacharya, I am responsible for the G24. The best way to describe it is to present it as the anti-G7 since it includes many developing countries. I have been working on these sets of issues for a long time. Before the G24, I was working at the World Bank where I worked with Joe and other colleagues on issues related to the reform of the international system.

**Francois Bourguignon:** My name is Francois Bourguignon, presently I am the Director of the Paris School of Economics. I went back to academia after a few years at the World Bank where I could do some work on the global economy with a strong focus on developing and low-income countries. I am very happy to participate in this meeting.

**Ping Chen:** My name is Ping Chen. I work in the Peking University. My main project is to develop a new perspective on complexity and an evolutionary theory of economics, in particular, the business cycle.

**Meghnad Desai:** My name is Meghnad Desai. I am a Professor Emeritus at the London School of Economics. My current interest is the financial crisis and the recycling of global surpluses.

**Giorgio Di Giorgio:** My name is Giorgio Di Giorgio. I teach macroeconomics and monetary economics at LUISS. I deal with monetary policy, regulation and theories of financial intermediation.

**John Evans:** My name is John Evans. I currently work as the Secretary of the Trade Union Advisory Committee of the OECD. I have been working with the trade union movement during the G8, G20 meetings. You have a couple of statements from us included in the background document prepared for the G8, G20 meetings. During the last two days of the civil society consultation we discussed some of the issues that Jean Paul Fitoussi just raised and I am looking forward to this two-day discussion.

**Valpy Fitzgerald:** My name is Valpy Fitzgerald, Professor of International Development Finance at Oxford University. I am currently working on the issues of international taxation and international investment regulation as they affect emerging markets.

**Heiner Flassbeck:** My name is Heiner Flassbeck, Director of the Division of Globalization and Development Strategies at UNCTAD in Geneva. I mostly focus on macroeconomics and I am very much hoping to come up with a very critical assessment for the coming G8.

**Stanislaw Kluza:** My name is Stanislaw Kluza. I am a Professor at Wharton School of Economics in the area of Monetary Economics, Statistics and Econometrics. I am also Chairman of the Polish Financial Supervision Authority and I am very interested in all the regulatory reforms that can improve the current situation.

**Thandika Mkandawire:** My name is Thandika Mkandawire. Until last week I was the Director of the UN Research Institute for Social Development. I will move to the London School of Economics in September where I hope to be involved in the macroeconomic issues of recent decades.

**Rakesh Mohan:** My name is Rakesh Mohan, Deputy of the Reserve Bank of India since 2002. I have been a G20 deputy for the Reserve Bank and also a representative of the Financial Ministry. I co-chaired the G20 working group on financial market regulation and transparency. For the past twenty years I have been very deeply involved in all general issues in India, fiscal policy and industrial policy. Next month I will change jobs and relocate to Stanford University for six months where I hope to be involved with the same kinds of issues.

**Richard Moss:** My name is Richard Moss. I am Vice-President of the Climate Change Forum at the World Wildlife Fund. I did my doctoral degree at Princeton's School of Public Policy and I have been working for most of my career on issues related to climate change. I am particularly interested in the potential effect of this economic crisis on regulation and climate change. The economic crisis can be an opportunity for us to make some investments that would be environmentally sustainable in the long-term. I am particularly interested in working with this group on this issue.

**Akbar Noman:** My name is Akbar Noman. I work for the Initiative for Policy Dialogue at Columbia University.

**Alberto Petrucci:** My name is Alberto Petrucci. I am a Professor of macroeconomics at LUISS. My research areas concern macroeconomics, economic growth and public economics. I am currently working on dynamic fiscal policy.

**Stein:** My name is Howard Stein, Professor at the Center for Afro-American and African Studies at the University of Michigan. I am mostly interested in the roles of the IMF and World Bank. I certainly hope that this magnificent room will bring us out of the shadow.

**Naoyuki Yoshino:** My name is Naoyuki Yoshino from Japan. I am teaching at Keio University. I have also been a member of the FDIC for the past ten years where I have been involved in the study of the financial crisis in Japan after the bubble burst in 1999. I am also Director of Financial Research at Tokyo University. I am mostly interested in financial flows within Asia and in the development of financial systems in Asia.

**Ernst Stetter:** My name is Ernst Stetter. I am heading the Foundation for European Progressive Studies. We are giving advice to the labour movement and social democratic party in the European Parliament. I mostly focus on regulation.

**Marc Uzan:** My name is Marc Uzan, Director of the Reinventing Bretton Woods Committee. This is a place for discussions among policy makers, academic and market participants. I am mostly focused on international finance.

**Rob Vos:** My name is Rob Vos, Director of the UN Department of Economic and Policy Analysis where we report on the global economy and on the current global situation.

**Stephany Griffith-Jones:** I was Professor of IDS and now I am delighted to run the financial markets program at the IPD with Joe Stiglitz and Jose Antonio Ocampo. My focus has been on capital flows to developing countries and the financial crisis. I have been working a lot on global financial architecture, particularly on regulatory aspects and policy responses to the crisis. I would like to make a general comment on the document coming from the G20. The document is quite encouraging because it is actually incorporating a lot of the ideas we have been working on. However, there is a fear that with this economic crisis, the actions presented in the document will actually not happen. It is very important for this group to push things so that they will happen.

## **Session I: The Stimulus**

**Stiglitz:** Many of the past issues discussed during the last meeting should be taken into account in this meeting as well. The first question is: how to make it work in order to improve the economy in the short- and long-run. Before we get into the agenda, people may want spend just a few minutes on two main questions that we will come back to, just to have a preliminary view. The two issues are the stimulus and for how long we will need it, and the second is the G20. One of the aims of this meeting is to understand whether this meeting was a success, was disappointing, where they went not far enough, and where are their gaps. Before starting the meeting, anyone who wants to say something on these two topics can intervene.

**Flassbeck:** Let me start with the G20 and then I will spend two words on the 'spring shoots'. I have a very critical assessment of the G20. I was Deputy Finance Minister in Germany during the wrapping up of the Asian crisis. The Financial Stability Forum was created to discuss a lot of things but not the critical ones. It was created to detract the attention away from the critical issues. They never consider the real question that after the Asian crisis, there was clearly the need of a new monetary system. Now, the same has happened with the G20. In the final document, you find that they have to solve the crisis, they have to solve everything. They did not create a new Financial Stability Forum, but now it is called the Financial Stability Board and it is exactly the same. It is exactly the same institution that will work for the next 20 years without any clear results. I have been reading the Financial Stability Forum communiqués about the state of the world and up to April 2008 the world was in perfect shape, there was no problem anywhere. They did not plan to discuss the main issues of the economic crisis. And this is exactly the same kind of exercise that was performed after the Asian crisis. In the G20 document, neither the commodity speculation is mentioned, nor the currency speculation, nor an attempt to address the real question. We should be much more concrete. We should discuss the fact that people created a big casino that provoked the collapse of the economy. Now the system is endogenously unstable. This problem has not been discussed at all in the G20.

Now, a few words on the stimulus in Europe. I do not see any sprouts. What I see in Europe is a deceleration or a less accelerated downswing. The fiscal counter-cyclical programs are not working yet in Europe. Monetary policy has not done enough. The big danger now for Europe is that we will go into deflation. In Germany we have already seen signs that the deflation began. They cut wages and working time, for instance.

**Desai:** Just briefly about the green shoots. We have at the same time a financial stability crisis and a real economy in recession. We should worry about the non-affordability of the financial stimulus.

**Stiglitz:** For those who were involved in the G20 process, was there any question about whether the Financial Stability Forum failed? It is a curious remedy to say that this institution that we created ten years ago before the crisis failed and therefore the right policy response is to give more responsibility to it, change the name, and call some more people to sit on the table (those who do not talk).

It is difficult to see how two financial stability forums, that changed the name, invited some more people, as long as they do not talk, can bring us out of the crisis.

**Desai :** My prime minister Gordon Brown does not believe in failure or admitted failure, ever.

**Fitoussi:** To join the discussion, after the G20 meeting the media was really positive. They were sure about the fact that something would happen soon, but nothing happened. I read the communiqué and there was nothing about the fiscal stimulus, nothing about new global architecture and there was just a summing up of what has been already done. Even the supplementary money given to the IMF was already declared in November.

There is big uncertainty about the current situation. Are the banks in a better situation than they were before the G20? Why did they not cope with the necessity for transparency? Why did they not deal with the real problems related to the economic system? The G20 was really disappointing.

**Stetter:** I will try to come back to the green shoots and to Europe. This year there is the worst disaster forecast we have had in the European Union. This year is forecasted at minus 4% for economic growth, which means that we will have unemployment rates at about 11%. Are we right in saying that the situation is getting better because there are sprouts coming over from the U.S.?

**Fitoussi:** Let me say something related to this point. The politicians lost confidence in any forecasting exercise. They will not believe the forecast of the Commission, they will not believe any prediction.

**Stetter:** We should consider that in Europe we are now in an election campaign. In the next month we will hold the election for the European Parliament and also an election in Germany in September. We should not only focus on the real economic issues because the policy (politics?) must also go on.

**Yoshino:** I would like to say a few words about the fiscal stimulus in Japan after the bubble burst. Japan implemented a huge fiscal stimulus, but much of the money was spent on bridges and infrastructure.

In the Asian region we are discussing how to make an efficient fiscal stimulus packages, rather than simply fiscal packages. One way is to introduce public-private partnerships rather than allow us to do everything. This was the first issue. Second, Asia has not been affected by the financial crisis. All the problems came from the decline in exports. The financial system in Asia is relatively more stable than in other regions. We need a stimulus package that is likely to compensate the export decline.

**Bhattacharya:** Let us focus on the issues that were put on the table. First, regarding the stimulus, there are two issues. One involves the adequate magnitude of the stimulus and the second, the duration of the stimulus. There is another issue related to the fiscal stimulus in developing countries; there is no agreement on how to deal with distressed banks. There is a lot of rhetoric and

there is quite a lot of confusion. The last item was very little discussion on the Global Reserve System. It was put on the agenda of the G20, but there was nothing really taken up by the G20. Finally, the G20 did discuss the reform of the international system in terms of governance.

**Barbosa:** I was involved in the discussion of the G20. I was the Brazilian representative. I did not consider the G20 a big failure, maybe because I had very low expectations.

The first meeting was called by George Bush at the end of his administration. At that time most of the focus was still on regulatory reform. That is why the first communiqué was really detailed on what has been done. But then in the second meeting they thought that they discussed too much regulation without discussing how to get the economy out of the recession. They stressed the importance of a fiscal stimulus, monetary system and regulation. They did not discuss enough how to improve regulation. Changing regulation needs to be gradual, it will not change rapidly. More transparency was called for. Many countries agreed that we need more transparency and more standardized derivative contracts. So, there has been some progress. Also, there was an agreement on the issue of uneven representation within the IMF system. With respect to Brazil, what we have is the end of the beginning, not the beginning of the end. The economy fell really sharply in the last quarter of 2008, the largest fall since the 1990s. It fell 13.6%, and I think that Brazil was the hardest hit country in that quarter. Brazil was not hit before that. It will take a long period, a year and a half to two years, to reach the level prior to the shock. There is still a long way to go and I believe that in the rest of Latin America it will likely be a similar picture.

**Evans:** I would like to say something about the political economy of the G20. The first communiqué was released one week before. We had a series of meetings in London with Lula, Kgalema Motlanthe, Gordon Brown, and others. Between the first communiqué and the second communiqué there was a big improvement. Unemployment was mentioned in paragraph 22 in the first communiqué and was mentioned in paragraph two in the main communiqué. The substantial change was that the ILO was not invited to the G20. I think that at least there was some improvement. At least unemployment was considered an issue.

Just a few more points related to forecasting, or maybe projection is a more appropriate term. OECD, IMF and the EU provide their own forecasts. One interesting fact is that when comparing their estimations with the IMF figures, the forecast of a 4% drop in GDP by the OECD, was scaled down to 2.8% by the IMF. We should discuss this difference. In my opinion, the stimulus package is judged to have had an effect.

There were a couple of other points that were discussed during the G20, for example, the tax system. I am sure we will go back to this issue in the main discussion. Some notions of transparency were also discussed in the G20.

**Fitoussi:** There are some movements in the right direction, but I think that we also have to understand that we have homeopathic movements. What we need are bold measures.

**Griffith-Jones:** Regarding the fiscal stimulus, I had the chance to talk with several policymakers. I cannot understand the position of Germany in terms of not wanting to do more fiscal stimulus because they have a large debt. Being the largest economy in Europe, this may actually have some effect on the other economies.

Regarding the Financial Stability Forum, I feel quite positive. I think that the fact that the Financial Stability Forum was created was actually a good thing. The problem is that it has no power, or it is assumed to have no power. I think that an interesting question is whether it will have more power. We have to acknowledge the fact that they enlarged the membership.

Related to the problem of compensation, I think that the G20 has been a bit weak but they did raise the possibility of linking capital requirements to banks having proper compensation.

**Vos:** I would like to be a bit positive about the outcome of the G20 meeting. The first point is that the G20 is becoming the most important meeting to discuss broad policy measures. The second important point was to increase the resources available to the IMF. Also, I think that the reform of the monetary system is back on the agenda. For example the SDA allocation is already on the agenda. Increasing the resources available to the IMF is the problem of the global reserve system. The role of governance was in the agenda. So I think that the issue of the international monetary system is back on the agenda. Looking at the G20 communiqué, I think that there is a clear change of governance. I think that it would be interesting to know what will be discussed in September, and what will be in the agenda for the next meeting.

**Mohan:** I think that the discussion relates to what has been discussed in the G20, what has not been discussed is whether it is enough or not, and this really depends on what the expectations were. What is really striking me is the fact that there was, in general, very little discussion of the macro issues, the monetary issues and the fiscal policy.

The academic capture of the financial market in the last fifteen years has been stronger. The macroeconomic issues were not properly discussed. I think that there is a lack of interest not only in the G20 but also in the academic world. There is a need of a new interest in macroeconomic related problems. I was concerned about the fact that everyone was agreeing that there is a need for more general regulation. There was also agreement on financial responsibility. The issue is how the proposal will be put into practice and how to quickly reach an agreement on how to deal with these problems. Should it be the IMF's responsibility? Should it be the global reserve system's? I think a lot of practical issues will be difficult to be put in practice.

**Stein:** In my opinion, the G20 process has been extremely disappointing. I would like to point out a few issues. First, in a lot of the discussions during the G20, they forgot the poorest part of the world. They did not discuss at all the standard of living in Africa, and there are not really other funds allocated from the G20 meeting. It was more about how to allocate money for stabilization in the medium-high income countries. The second issue was the failure to cope with the issue of IMF governance in a serious manner. There is a process of forgetting the reasons why we are in crisis. There is a massive contraction in the financial system. The final point I want to make is regarding the lack of interest around fiscal stimulus. There is a kind of resurrection of the already existing global system.

**Baldassari:** I would like to come back to the point raised by Jean Paul. We need to clear the floor of an important trap.

Each area is facing the crisis, waiting for somebody else's decisions and waiting for the recovery of the US. This is a completely wrong approach because we are in crisis because of these same reasons. We need to define the subjects that need to be discussed around the table. The subjects need to be defined with respect to targets and instruments.

**Stiglitz:** There are three people coming in late. Please, introduce yourself.

**Damon Silvers:** No recording available [Damon Silvers is Associate General Counsel for the AFL-CIO. His responsibilities include capital markets, corporate governance and general business law issues. He is also the Deputy Chair of the Congressional Oversight Panel for TARP. Mr. Silvers is

also a member of the Public Company Accounting Oversight Board Standing Advisory Group and the Financial Accounting Standards Board User Advisory Council]

**Marian Williams:** No recording available [Governor of the Central Bank of Barbado]

**Jose Antonio O'Campo:** No recording available. [He is Professor in the School of International and Public Affairs and Fellow of the Committee on Global Thought at Columbia University. Prior to his appointment at Columbia, Professor Ocampo served as the United Nations Under-Secretary-General for Economic and Social Affairs, and head of UN Department of Economic and Social Affairs (DESA), as Executive Secretary of the UN Economic Commission for Latin America and the Caribbean (ECLAC), and has held a number of high-level posts in the Government of Colombia, including Minister of Finance and Public Credit, Director of the National Planning Department, and Minister of Agriculture]

**Stiglitz:** Welcome back to the topic of fiscal stimulus. We asked four people to make an intervention. Please, feel free to do your intervention.

There are two main questions, I think, that you might want to talk about. One of the main points is the attempt to have public-private partnership. What is the potential effect on governance? One of the main requirements for an effective public-private partnership is the administrator's capacity in extending their expenditure and the capacity of the governments in extending the stimulus.

**Fitoussi:** I will be very short. I want to focus on two points. First, the measure of the stimulus. In the U.S. we do not know how to measure the net stimulus, because of the procyclical policies of the States. Second, what do we mean by coordinated fiscal stimulus? Should we enter other criteria such as GDP per capita? Defined, for example 2% of the GDP? How do we introduce a mechanism of coordination? Should we take into account the openness of a country? I do not know the answers.

Ideally, I think there should be a coordinated stimulus that mainly works through quantity, not through prices. It should not have a destabilizing effect on the exchange rate. Nor should it have destabilizing effects on the interest rate, national or global. We should try to find some metrics to define a coordinated stimulus. The present figures are saying two things. Globally, Europe is free riding. Inside Europe, Germany is free riding. The other European countries are in the way of the free ride. Japan is doing a lot in terms of stimulus. China is doing a lot. What would be most preferable is to define some metrics that try to define what a coordinated stimulus means.

**Barbosa:** Regarding the question of how to measure the stimulus, the general metric is the trend in GDP. But we should consider critically this measure because especially in the developing countries, the trend in GDP might change really fast. In Brazil, we already discussed with the IMF problems related to how the crisis will affect the economy in Brazil. In my opinion, the best way to define the 'quality' of a stimulus is the unemployment rate.

In terms of how long the stimulus should last, there was a special session in the G20 meeting addressing this. They (the G20) think that the stimulus should be temporary. It is difficult to define how temporary the stimulus should be. The crisis might last for 10 years, in which case, the stimulus is not temporary. There are many models of what should be the ideal fiscal policy. For example, increase investments in green energy and environment. Useful criteria would be based on sustainability, stable balances in the public sector and in the private sector as well. Also, it is important to increase the social safety nets especially in the developing countries. So, the stimulus will be temporary, but it will be a long stimulus.

**Evans:** Regarding the stimulus, I would like to bring up the issue of coordination. If you take the OECD figures, they estimated 2% of GDP, but it will be spread out over three years. So if you look at the actual size of the GDP, the stimulus is still under 1% of the GDP. Even if the target was 2%, in reality the stimulus has been 1%.

The other issue to be discussed is the question of what really goes into the fiscal stimulus packages. Related to the job issue, for example, given the timing of some of the public expenditure measures, it is important to define a target in terms of unemployment. The OECD did some work looking at the composition of the stimulus in terms of the labour market in the different countries. It is a very tiny proportion of the whole stimulus package. I think that we will witness a doubling of unemployment rates, at least in the next twelve months. An alternative to the immediate lay-offs is the possibility of utilizing temporary workers. Also, given that we have very flexible labour markets, there is no room to try to put a brake on the company that easily lays-off workers and tries to move into some sort of "job pack" where there is an agreement that redundancy should be the last option. This will also lead to deflation very soon.

Last point involves long-term issues. Discussing this issue in a trade union setting has shown another important perspective. There is a fundamental shift coming out of this crisis. It is unsustainable from a political economy point of view. When people talk about exit strategies, which basically means in OECD language, 'let us privatize banks again because everybody wants to get out of the crisis, let us get back to fiscal sustainability which means you cannot afford to spend on health, education and other objectives because of such a large deficit.'

**Stiglitz:** In terms of the forecast of the IMF, OECD, EU, what assumptions did they make to repair the banking system? To what extent have they actually underestimated the downside? This is just one question, some of you might know more about the technical issues.

**Yoshino:** I would like to talk about public-private partnership in more detail. After the G20 meeting, many Asian politicians started fiscal stimuli because they wanted to spend on infrastructure. This is true in all of Asia - Indonesia, Thailand and Japan. The transparency and efficiency of the public sector is very important and if private sector investment introduces public works, the infrastructures abound. I think that a public-private partnership is necessary for a sustainable and long-term fiscal stimulus in Asia.

Lastly, central and local relations are also very important in terms of fiscal stimulus. Each country has a different scheme, it is difficult to find the best strategy, but local and central governments relations are very important.

## **COFFEE BREAK**

**Flassbeck:** An important issue is how to measure the effect of a fiscal stimulus, because each country has a different institution and you should know the exact functioning of these institutions in order to judge the stimulus. The best measures allow for comparability and allow for a cooperative approach. The first is probably the change in budget deficit. For most countries, we have a rather reliable idea about the change in budget deficit. We can know, for example, the change of the budget deficit between 2008 and 2009 and say, for example, that was 5% in Germany, 7-8% in the U.S.

**Fitoussi:** For the United States, maybe you can tell us something. It is a Federal deficit. You do not have a consolidated budget deficit?

**Stiglitz:** The States have a consolidated budget framework. In terms of GDP, the assessment would be around 10% of GDP, or probably more now.

**Flassbeck:** And the change?

**Stiglitz:** The change is 7%.

**Flassbeck:** Yes, 7%. You can put into relation the change in budget deficit and the change in GDP growth. This gives you an idea of the countercyclical measure and with this kind of ranking we have an idea of which countries have not done enough and which countries have done quite a lot. My second main remark is related to the lay-offs and the wage drop that we had in Germany. The approach that is considered now official and is suggested also by the ILO, is to avoid lay-offs at all costs. I think that this is wrong. Avoiding lay-offs, lets say at the price of wage cuts, would be counterproductive for the overall economy since will lead to a drop in demand. In most cases it would be better that people are laid-off and compensated. In Germany, they cut wages and this will certainly lead to a drop in demand.

**Bourguignon:** A few remarks related to the difficulty of measuring the effect of fiscal stimulus. The change in budget deficit, that has already been suggested, it maybe fine but there are some corrections that we need to take into account, for example, the drop in taxes that affect the change in the budget deficit. In line with the issue of coordination, it might be interesting for this group to promote a global view not only at a national level, but also at global level.

In the G20 final communiqué Jean-Paul was saying that there was no mention of the fiscal stimulus. This is not true. Rather early in the communiqué, there are some figures related to the fiscal stimulus. However, I do not know where these figures are coming from.

**Fitoussi:** But I think that they just consolidated what has already been done. There is nothing new.

**Bourguignon:** No, I think that this document is forward-looking. First, transferring income to low-income countries is part of the fiscal stimulus. This is something that is not really considered at the national level. Increasing the transfers to low-income countries can be good from a development point of view, but can also be good from an effectiveness point of view for the stimulus. I think it is important to also push the global stimulus. The second point is related to how long the stimulus should be. In economic terms, we should probably think that we will need the fiscal stimulus for quite some time and it is important to convince the politicians that we still need the stimulus and this is not the time to suppose that we are out of the crisis.

**Fitoussi:** If I understood correctly, firstly, we should have an idea of what should be a global fiscal stimulus and then we should promote it.

**Bourguignon:** If you already have an idea of what a global fiscal stimulus is, you already solved a part of the coordination problem.

**Fitoussi:** Ok, I take your point.

**Silvers:** I would like to talk about some of the issues in measuring the U.S. fiscal stimulus. It is important to specify that local state spending in the U.S. is not consolidated in the Federal spending. Also, it is not funded by debts with the exception of capital projects. States access the bond markets to find capital projects. However, in the past year, access to those markets have been very limited so that to the extent that there has been truncated in the local spending it does not really detract much from the overall effect of the federal stimulus package because shrinking local spending is only a

reflection of a reduction in demand. I think that this is important to partially answer the question that has been raised related to the sustainability of a comprehensive policy response within OECD countries to the economic crisis. I think it is important for an international audience to understand the degree to which this kind of political unsustainability issue drives decision of many actors to make a run trade issue. This is absolutely central; both perception of whether people are free-riding on fiscal stimulus and also the perception of whether a policy intervention to an economic crisis is a fair one. People who feel that they have been treated unfairly are not very interested in whether they have treated other people fairly or not.

**Chen:** I have one observation. I think that the current economic crisis and the policy dealing with the crisis is still dominated by the experience of the Great Depression. People are talking about monetary policy and about Keynesian ideas, about fiscal stimulus. What is interesting is the fact that China became a testing ground. China actually slowed down before the U.S. financial crisis, which was driven by mainstream economic ideas that the problem is saving too much. People do not have safety nets and therefore they are not spending enough. The number one problem for China was inflation. In attempting to contain inflation they preferred to try anything.

China is more decentralized than the U.S. and Europe in decision-making. The central common policy was facing strong resistance from the local governments and therefore they had to stop. The results of the monetary and fiscal policies in China are mixed and not as optimistic as external observers may think. Fiscal policy only benefited large companies, not small and medium companies. Now China is in big trouble because of this policy because China has much to spend in infrastructure. However, investing in infrastructure will have its outcome only in the middle/long-term. Also, with this investment in infrastructure, you create jobs only for rural workers and not for urban workers. Another big issue in China is related to the effort to extend the social system. This attempt faces strong resistance from the small and medium-sized companies because it will increase the labour cost by a certain amount. Many Chinese companies survive at the margin and if you raise the minimum wage cost, you simply create job losses instead of creating new jobs. So far the locals have found a better way to create jobs by training rural workers in order to create skilled workers. Local governments are becoming smarter and in this way we can hope to create a sustainable system.

**Desai:** First, I would like to mention one of our publications on what the stimulus is for many European countries. Second, what the discussion shows is that what we thought was well-defined is not well-defined.

I think that it is important to rethink macroeconomics on two levels. In many situations, fiscal stimulus is not calculated in terms of employment. The fiscal stimulus can have different effects on employment depending on what kind of employment policy you adopt. It is not a one-to-one relation.

Some people were discussing what the vision of the G20 is. I think that the answer is very simple. The vision of the G20 is that the global situation before the crisis was perfectly healthy and therefore we should go back to how it was before the crisis as soon as possible. At a national level, they are all talking about restructuring, regulation and so on, while at the global level the idea is that the world before was not unhealthy, was perfectly well.

**Fitoussi:** What does it mean? All the money should be spent to rebuild the macroeconomic theories?

**Bhattacharya:** I generally agree with what has been discussed so far. I would like to focus on three additional points. First, global coordination. There is huge asymmetry in the local models. There are

four main countries that are highlighted for their potential role: the U.S., Germany, Switzerland and China. The problem of asymmetry is really important to keep in mind since many countries think that there is not room for the fiscal stimulus.

The second point is that there is very poor attention paid to the effect of the crisis in developing countries. You should keep in mind that 75% of the global growth before the crisis came from developing countries. Because of the decline in commodity prices, the effect of the crisis in developing countries is massive and this will affect developed countries, as well. The amount that has been put on the table for developing countries is zero. Low-income countries should be taken into higher consideration.

The third point is related to the IMF's role in dealing with the crisis. The IMF package is not really going to finance investment, even though the investment has been the most important determinant of the economic growth before the crisis. There is a need for a long-term system of financing. What came out from the G20 is not really relevant.

**Vos:** First, I would like to make a point about the problem of assessing whether the stimulus is good enough. In the G20 final communiqué, the present figure is 5 trillion dollars for the fiscal stimulus, to be used over the next few years. Whether we will really be able to use 5 trillion is not clear. A big problem related to the stimulus is the lack of balance. 80% of the stimulus is for developed countries and only 20% is for less developed countries.

Second, I would like to answer one of Joe's questions related to whether the forecasts include the effect of the stimulus. Yes, they do. The IMF's forecast assumes two things: first, that the fiscal stimulus will continue in the U.S. and elsewhere and second, that the financial problems will be solved in some way.

Finally, we should discuss the problem of coordination in the fiscal stimulus. What has been completely lacking in the G20 discussion is a complete sense of coordination. The problem of coordination should be discussed with particular attention during our meeting.

**Ocampo:** I would like briefly to discuss what the implications of the bank system are. At the beginning of the year, the most pessimistic forecast was the UN's: minus 3%. Now the IMF forecast is minus 11%. Commodity prices are about half what they used to be. The shock for the countries that depend most on international trade is massive. I think that for Latin America, the shock due to the reduction in exports is more relevant than the financial shock. There has been such an underestimation of this effect of the crisis that now the estimation is reduced by 5 percentage points. For Latin America, the real problem is not the financial crisis, but is the reduction in exports due to the reduction of foreign demand.

**Petrucci:** I have a couple of comments. The first is regarding the long-term effects of fiscal stimulus in terms of long-term financing and of intergenerational effects. The way we finance a fiscal stimulus is relevant in terms of intergenerational consequences, and also, depending on the type of stimulus, the outcomes will differ. For example, many people today advocate the reduction of taxation. Capital taxation is more distortionary than labour taxation.

My second comment concerns the optimality of the fiscal stimulus. The fiscal stimulus is optimal if it is sustainable and not distortionary. Related to that, before the crisis there was a strong debate in Europe that is very interesting. The debate was concerning the shrinking of the welfare state. There were two interesting proposals by Atkinson and Blanchard. They proposed to maintain a given level of financing for welfare state reform and to reduce the distortions due to market power. This is a

serious problem in Europe. When we look at fiscal stimulus, maybe we need a certain amount of tax revenues, but we can reduce distortion by fighting against monopolistic power.

**Williams:** An important assumption in our discussion related to the fiscal stimulus concern is the fact that countries all have a 'fiscal space'. However, the real problem is that many countries do not have a fiscal space because they have very high debt. For example, the Caribbean countries have the highest debt ratio in the world and they have very little space for fiscal stimulus. Nevertheless, they have been very badly affected by the reduction in trade due to the reduction in foreign demand. No remedies have been proposed to solve the problem of lack of space for fiscal stimulus. What needs to be done in countries that do not have fiscal space is, for example, invest in infrastructure.

**Fitoussi:** The real challenge is to create fiscal space in developing countries that have a very high level of debt. The problem is to define how developed countries should devote part of their fiscal stimulus to developing countries.

**Ocampo:** Ok, this is for the low-income countries. But what would happen in the medium-income countries?

**Fitoussi:** Ok, we will come back to that.

**Moss:** I would take the discussion to a slightly different point. Let's shift to climate change. I am afraid that some people think that we cannot think about the issues related to climate change in this period of crisis. There is a reduction in investment in activities related to the environment because they think that we cannot afford it. I think that in the long-term, there are very important underlying issues, such as efficiency regulation. If you look at the fiscal stimulus packages in different countries, there is a relatively small percentage of the stimulus that is actually directed to deal with energy efficiency, for example, sustainable transportation systems. I think there is room for investment in environment. One of the recommendations that should be proposed at the end of these two days is to increase the percentage of the fiscal stimulus directed toward the environment.

**Fitzgerald:** I would like to go back to one of the problems that was previously raised related to the labour market. I have in mind three main points. First, only a small percentage of the labour force in the private sector is unionized because of the massive use of outsourcing, not only at the international level but especially at the national level. This means that when there is a reduction in demand, there is a subsequent and direct reduction of layoffs in the private sector.

The second issue concerns fiscal sustainability which is going to be a long-term problem. We might to return to think about progressive taxation.

The last point concerns what would be the future of manufacturing and agriculture in Europe and the U.S. after the crisis. This is a labour market problem because the demand for unskilled labour tends to be less and the demand for unskilled workers is probably going to be near zero. The implication of the crisis on the labour market can be very dangerous.

**Kluza:** I would like to discuss two main points. I think that international trade could be the ice-breaker for the current crisis. But I also think that there could be a kind of conflict between international trade and fiscal stimulus, because, if we go back to the Great Depression during the thirties, to stimulate demand and for expansive fiscal policy, countries chose the means of protectionism. So, one of the problems that we find in the current crisis consists of the fact that many of countries are creating an incentive to fiscal stimulus might also adopt protective measures. The second issue is related to the pro-cyclical and counter-cyclical measures. The problem is that most of the pro-cyclical fiscal policies can be dangerous for a number of reasons. First, we do not

know whether the crisis is only at the beginning, or if it is about to end. And second, how can you decide to stop, and what are consequences for the decision to stop?

**Noman:** I would like to briefly draw the attention towards the excessive worries about inflation. I think that the G8 should not worry about inflation at this point. I think that the real problem now is deflation.

**Fitoussi:** We are talking about intergenerational changes and therefore it is also important to take into account the problem of future inflation.

**Stein:** I would like to raise a few quick points. A big problem that has not been really mentioned in this discussion is related to the massive reduction of transfers in developing countries. Another huge problem that affects the lower income countries is the reduction of the FDI. I think we need to find a way to allocate money to developing countries, but also we should find mechanisms to put in place that provide elements to encourage the manufacturing sector in African countries. They already had a collapse of the manufacturing sector after GOA. Now there is a new collapse of the very small manufacturing sector.

**Griffith-Jones:** The problem with what the G20 has done for the developing countries was that they discussed very few issues and they did not focus on the real effect. What, for example, are the effects of the crisis in terms of MDGs?

**Fitoussi:** Let us move to the second session about the effective regulatory system.

**Williams:** It is important and urgent to improve the regulatory system and to ensure that the measures are appropriate and implementable. Issues such as the large size of financial institutions and adequate capitalization in the financial industry remain matters which need to be addressed as a matter of urgency. Actually, corrective measures have not been put in place with a long-term perspective, but have been mostly short-term measures. Investment banks have been the most significant players in the international credit markets, but the issue of lender of last resort facilities to the non-banks and insurance companies in post-crisis situations also needs to be addressed.

Perverse incentive systems in the industry have been identified as areas that need to be reviewed. There has been much debate about the size of compensation and incentive systems but no sufficient analysis of the manner in which this can be reconfigured to reduce risk assumption over the medium-term by originating firms.

The role of a single regulator and the separation of the regulation of the banking system from central banking has always been a point of difference among central banks. It would be useful to review the stability of the financial systems in various countries in order to evaluate which system has had fewer regulatory problems. A very important response of the G20 was the establishment of the Financial Stability Board. There is a question of the scope of the Board. It is not clear how the Financial Stability Board will move from problem identification to implementation of recommendations without greater authority.

An additional point is related to the fact that the emphasis in the regulatory world has been on high-income countries. However, developing countries should have a bigger voice in setting supervisory standards, because developing countries are seriously affected by the collapses in the developed world. They should have greater representation in the G20 meetings.

I have a question about the role of the BIS. Where is the BIS, and what is its role in the current crisis?

Final point, I think there is strong resistance towards reforming the regulatory system from several governments and of course from private institutions. The problem is that they do not want to give up sovereignty. But is it not better to share sovereignty, so you have more control of the financial markets, rather than a situation in which you cannot effectively regulate?

**Kluza:** The first issue that I would recommend would be a split of power - supervision power, fiscal power, monetary power. We observe a kind of tendency to use supervision within the central bank. In this way it is important to contain inflation, but you can incur other problems. There is not strong supervision at the local level. The crisis in the U.K. also showed that this was a big issue. The branches of the big banks in the U.K. were not supervised in terms of solvency and they collapsed. A similar situation occurred in Poland.

Another important issue is related to supervision. Let us create a supervisor that also monitors banks at the local level. There is usually a strong link between responsibility and power. If the power is high and responsibility low, of course there is no incentive to behave properly. This crisis transpired because there was a decline of confidence. The confidence is also important because it supports demand. Confidence is important, for example how to build the confidence between consumers and producers, banks and savers.

The final point is related to the credit rating agencies. Credit rating agencies assigned high ratings to complex structured subprime debt based on inadequate historical data or flawed methodology. There is no doubt that the credit rating agencies should improve the quality of the ratings process and manage conflicts of interest. Appropriate measures should be taken to improve internal governance and provide transparency around rating processes and methodologies.

An additional point relates to the number of countries that should be invited into the G20. Poland is not a member of the G20 even though Poland is greater than any other European country. The problem is that its voice is not in any G.

**Williams:** I would like to say something about the regulatory coordination. There is a general tendency to highlight the role of central banks. The central banks are able to provide support at the same time they provide direction. There is also a lot of emphasis on the need for a stronger collaboration between central banks. With greater collaboration, these banks could collect data, exchange information and improve coordination strategies.

An additional point I would like to make is related to the Basil II recommendations. The Basil II recommendations need to be revisited. Liquidity standards should also be looked at because those standards were developed principally on the basis of balance sheets, and scenario testing was not really done in order to come out with some view on liquidity requirements. There was no evaluation of the effect of the liquidity requirements on the survival of the entity and the stability of the system.

An additional point is related to what the role of the central bank should be and what the role of government should be, and whether there is a conflict of interest in bailouts. There was a period in which central banks did most of the regulatory activity. The central bank and the regulator were one. In the mid-eighties there was a separation between central banks and the regulators. Now, there is a great need for the intervention of the central bank in regulatory activities. In my opinion, the central bank should be the main participant on the regulatory board.

Another important point is related to the risk mitigation. I think there is an understanding that risk mitigation techniques need to be improved. Risk mitigation techniques should not necessarily mean transferring risk, but expanded to the possibility increasing capital.

An additional issue is related to the mega banks and mega financial institutions. How can you define a large institution? How large is too large? We have been constantly talking about the idea 'too big to fail'. If you are too big to fail, maybe you are too big. This is something that needs to be addressed. One way of dealing with it is to increase progressive capitalization, and this introduces the idea of antitrust legislation.

Regarding developing countries, they have been strongly affected by the deregulatory process in the developed countries. I think that the fact that the Financial Stability Board has been expanded from what was the Financial Stability Forum in order to include more emerging markets means that we should be able to do more to include less-developed countries.

**Stiglitz:** Let me say something important about regulation. Traditional regulation focused on micro regulation, looking at individual institutions. There has always been recognition of the importance of the macro perspective and the macro regulation. We need a distinction between micro and macro regulation. A second point is that traditional regulation focused on micro level. There is a need for regulation at macro level as well.

Regulation should also give a scope to developing countries in order to protect themselves from the status of other countries, and that means a much stronger view on the acceptance of capital markets and financial market restrictions. The presumption of capital markets and financial markets liberalization should be reversed.

Final point: most people are questioning the need for a new regulatory authority, focusing in particular on globally systemic problems.

## **LUNCH BREAK**

**Mohan:** I would like to discuss a few points. First, there is general consensus on the need of financial regulation. All the financial entities that are systemically important need to be regulated adequately, whether they are hedge funds or special investment vehicles. The practical issue that the regulator needs to resolve is how to identify which financial institutions are systemically important. How can you identify them? The problem is also that you do not want to over-regulate. This is a danger that needs to be kept in mind.

Second, there is the issue of macro potential regulation. There is now recognition that it is possible to have proper regulation of each micro entity but that the collective actions could generate problems. One of the recommendations is therefore to also do macro prudential regulation. This is something that came out from the Reserve Bank three years ago. In this report it is clear that we did not find any difficulty in terms of bank supervision, but on a collective basis we did find that certain sectors of credit were growing, and some of them, were growing really fast. Since the credit was growing extremely fast, we did impose macro prudential constraints to slow down the growth of this sector, even though there was not particular indication that the institution was particularly risky at that time.

Third, there is recognition that you need a financial stability authority. However, whether to establish this authority and responsibility on a collective basis or through the central bank is still debated. There is an emerging consensus that authority and responsibility should be instilled in the central bank. Irrespective of where authority and responsibility should be, it is important to create a financial stability authority. In India, for example, we already announced to the reserve bank that

we will establish a Financial Stability Unit. I think that many countries should think about creating the same kind of unit.

Fourth, is the issue of the capital adequacy. There are three issues involved: first, raise the minimum capital adequacy requirements; second, the need for contra-cyclical capital adequacy requirements, and third, and still debated, a particular capital requirement depending on the size of the company. There is still deliberation on this last point, because if you increase the minimum capital requirement for banks, adopt contra-cyclical adequacy requirements and adopt particular requirements depending on the size, you will reduce the return on capital and reduce the profitability of these institutions and presumably you will build the incentive to find some shadow mechanisms. Some of these issues need to be tackled.

**Stetter:** Two short comments on what has been discussed. Last week the European Commission proposed a regulation concerning private funds and hedge funds. My impression is that there is still a long way to go in defining a proper regulatory system. There is nothing concerning regulatory information, there is nothing on the general operational conditions, and there is nothing concerning public entities. There is also nothing about leverage or relating to employees rights, and I think that this is really important. Also short-selling is not regulated at all. There is still a long way to go and a long way to come regarding a proper regulatory system.

**Silvers:** I would like to respond to several questions. First, relating to the fact that there is no regulation or consumer protection. It is clear that in the U.S., the failure to have consumer protection in the mortgage market precipitated this crisis. This suggests that indeed that these two functions are strictly related. However, at least in the U.S. context - I cannot say anything about elsewhere - the combination of weak consumer protection and fragmented bank regulation appears to reduce consumer protection. One of the recommendations is that consumer protection and regulation should be consolidated.

My second point is related to whether we should regulate systemically important institutions only. There are two main issues related to this. Are we going to leave a part of the shadow market in the shadow? The position of our report is very strong on this: we should not do that. There should be routine regulation of shadow market forms.

Third point: what we recommended in our report are capital requirements and bank insurance. It is never clear which institution is systemically important, but you can rank different institutions considering their importance.

A final point, related to the danger of over-regulation that was mentioned before, I think that instead of worrying about over-regulation, we should just make sure that there is no shadow system.

**Yoshino:** I have four comments. First, the basic cause of this liquidity crisis comes from a too-lenient monetary policy. Once we change the monetary policy, the liquidity problem will be solved. So we need to think about this. Second, how are we to separate fiscal policy, monetary policy and bank regulation? In 1998, Japan created a duality system in which the regulatory power is in the hands of the central bank. We also created a consumer protection agency that year. This will define a balance between the supply side and demand side.

Third, I think that the banking system in Japan has been over-regulated over the past ten years after the bubble burst. This is why Japanese banks are very safe today. On the other hand, there is no technological progress in the financial system. There is always a trade-off between regulation and technological progress.

Lastly, we need to watch the need development of the financial activities. What kinds of products are different from what we were expecting? How can we effectively watch these activities? Lastly, if we watch these activities, and we understand that there is something wrong in micro, can we stop it before it spreads to the macro? It is very important in my opinion to watch activities at the micro level to avoid the spread of something wrong at the macro level.

**Baselli:** I am not a member of the panel but I have a few comments about the questions raised so far. Regarding the issue of regulation, I think that we need an organized framework. In my view, an organized framework should work in line with the open currency area theory. The currency area theory says that on one hand you have those who propose a floating exchange rate, with each country with its own currency, and of course, on the other hand you have those who propose a fixed exchange rate. The analogy here consists of the fact that there are people who believe that the regulatory authority should be national, and others who believe that the regulatory authority should be international. As for the open currency area theory, in the context of this meeting, we should identify an area of optimal regulation, an area of optimal surveillance. Otherwise, as for the flexible versus fixed exchange rate debate, we will find no solution.

I think that for organizing our discussion, we need some criteria to identify what is an optimal regulatory area, what is an optimal surveillance area and finally, what is an optimal fiscal authority area.

**Barbosa:** I would like to make a few brief comments. First, I would like to focus on the fact that there is no consensus on the G20 meeting. One aspect that has not been stressed is the need for standardized contracts. The problem of non-standardized contracts was huge in the U.S., but also in Brazil. Only with standardized contracts, will we be able to adopt an effective regulatory system. Also, I think that we should worry about over-regulating.

Another issue that came out from previous discussions is the need to keep track and evaluate systemic risk. No private entity, no private sector, would be able to evaluate systemic risk. There is well-developed literature on how to evaluate systemic risk, but systemic risk has never been included in the macroeconomic policy that has so far mainly focused on inflation targeting and fiscal stability.

**Mikandiwire:** This is really a question more than a real comment. There has been a lot of talk about the need of optimal regulation. If you read something on the financial conditions in Africa in the last year, what you read is that maybe regulation is going too far and that banks suffer excess liquidity. There was no competition and the stock market was too complex.

The question I would like to ask you is: regulation for what? You can have regulation but it is not developmental. Regulation for what...to facilitate development? We really need to think about what optimal regulation means for developing countries.

**Ocampo:** First, in the EU commission, we extensively discussed the issue of over-the-counter versus market transactions. There is this general view that over-the-counter can be more tailor-made; that is true. On the other hand, the market equivalent is always imperfect. One of the examples that I know really well is related to the coffee contracts. Most of the derivative operations are in one quality of coffee but we cover ourselves with those contracts. And this is part of the New York futures market. Putting a certain price on the over-the-counter, will incentivize the development of standardized contracts. I think that the standardization of contracts is the best solution, and I also think that over-the-counter should be forbidden.

Second, I would like to underscore the issue of the exchange rate risk. Most of the discussions internationally do not mention the exchange rate risk. Usually, in developing countries, financial crisis involves immediately also the exchange rate. I think we need explicit regulation. It is necessary to forbid the possibility of getting a loan in a foreign currency or, for example, putting higher risk rating. We need prudential regulation and capital account regulation. The problem of capital account regulation is extremely important for developing countries, and again it was not put on the agenda.

**Flassbeck:** Very briefly, I would like to express my discomfort about the discussion we are having on the regulatory system. It is too general. We are discussing the fact that before the crisis threw some sand under the wheels of the international financial markets, and now, after the crisis again we are throwing some sand under the wheels of the financial system. Is this enough? Regarding the derivatives market, there is a question of the correlation of the events of failure. Are the events of default correlated? In reality, they are creating the correlation. Well, in reality, these markets are creating the correlation. People engage in these activities, people engage in this kind of speculation; the crash was possible because they are creating correlation. We need something like ‘accelerating regulation’’. We need a kind of regulation that gets stronger when the trend grows quicker. We are not discussing at all the need for this kind of regulation.

**Fitoussi:** Before the monetary session, I would like to say that I have some discontentment. We are talking about regulation as if it were a static process, while in fact it is a dynamic one. The actors of regulation will learn how to regulate, if we consider this as a dynamic process.

Let us start the monetary session.

**Di Giorgio:** I would like to make two points about monetary policy during the financial crisis and what we should expect in the future. The first point is somehow technical and is related to what I think could be defined as a process of convergence in the use of the monetary instruments at least by the FED and the ECB. The second point, more political, looks at the weight of the policy targets.

Let me start with a technical remark on convergence. The operative system of the Fed and the ECB were very different in terms of the number of counterparts that were admitted to open market operations, in terms of the quality of the collateral, and also in terms of the level of the official interest rates used in these operations. What we observed during this period of massive interventions was that there was a convergence in the quality of the instruments used. The Fed looks more like the ECB now, than before summer 2007. For example, the Fed established, at the end of 2007, a floor rate to remunerate excessive reserves of banks. The Fed moved toward the logic of managing interest rates, via the use of a corridor of official interest rates. This is something that was not done before. Now in terms of policy instruments there is a parallel that we can apply to the two institutions. This parallel does not exist on the policy target. The policy targets are still very different.

In terms of debt, I would like to make a few comments about the fact that the massive interventions over the past two years in the two central banks in Europe and in the U.S. could lead to some sort of risk in terms of inflation in the future. It is untrue that we have not seen inflation in the past three years. We did not see commodity inflation, but we did see housing price inflation, and this was the problem of a lot of liquidity. We avoided an inflation of consumer prices because of competition. But then we saw inflation. There are two forces. We are having now a period of deflation, but this massive intervention can lead to future inflation. And also, the fiscal stimulus that is still less than three percent, but we still do not know the result of the fiscal policy. I think that inflation is not going to be an issue for the next two quarters, but if some more confidence is restored in the private sector, the policy will be effective. Then in the recovery stage we should worry about inflation. I

think that in the EU, nobody is really concerned about this. However, in the U.S., since I think that the chairman of the Fed has to be appointed in a few months, I think that if we are going toward the risk of having inflation, having a person like Bernanke might help to keep inflation low.

**Flassbeck:** I disagree with a number of points just made. Comparing what we had before from a financial point of view with what we have now, we had a system that created an unlimited demand for financial assets, on its own, without needing the central bank. No money, no central bank money, but financial assets. This has nothing to do with the question of whether the central bank rate was 1%, 1.5% or 2.5%, but has to do with the deregulation of the financial market we have seen in the past twenty years which has allowed people and allowed for investment banks without any capital requirement.

I disagree also with the point related to inflation. To have overall, across-the-board inflation, we should have wage inflation and this we had nowhere in this world in the last ten to fifteen years, with the exception of bankers wages, of course. Only in very specific sectors did we have wage inflation.

Let me go quickly to the question of whether inflation can jump out of this depressed system just because there is liquidity. Well, I disagree with this kind of exogenous money theory. I think we need to define whether we think that we support the theory of endogenous or exogenous money side theory. I think that monetarism died and it never came back.

Inflation is not a problem we should worry about now. The real problem concerns the increase of unemployment. We will have wage deflation and price deflation. This is the main danger, not inflation. As long as we have wage deflation, the negative effect on demand of wage deflation is so strong no one in the world can overcome it. The amount of money one would need in one big push in order to turn the deflation back to a growing economy is politically not feasible and this is the real danger.

Lastly, related to debt deflation, I think this is a very important way to understand what is happening. If we have private debt deflation, this can only be counted as public debt inflation. This means that when we have private debt deflation, public debt increases. We need to take an extremely aggressive measure in order to avoid wage deflation.

**Fitoussi:** I tend to agree with the fact the structural factors behind the possibility of deflation are much more powerful than the threat of inflation. We have had a prior reverse redistribution of income in the past twenty years. The progressivity of the tax system is decreasing. We have reserve problems or developing currency. We have wage deflation. After all, would inflation be so bad?

**Di Giorgio:** I would like to make clear my position. The fact that I study monetary policy does not mean that I am a monetarist. I was speaking about the risk of inflation and not about the certainty of inflation. However, given the number that we have seen in the central bank assets, I think that we should not totally disregard this risk. It is true that the central bank will be able to reserve the assets, but it is also true that somebody will be willing to buy the assets, and the quality of these assets matter, so it is not clear that there will be a market for the assets that the central banks bought so far. And, regarding the question raised by Jean-Paul about whether inflation will be a bad thing, well, I think that inflation is extremely bad, because it strikes the poorest, so inflation is bad.

**Stiglitz:** I think that one of the main problems with talking about monetary policy is that standard theories of monetary policy do not have a theory of banking. But you have to have a theory of banking. This is important because, in part, we capitalize the banks, maybe this is an important condition for inducing banks to lend, but is not a sufficient condition. The way I think about this is a

kind of new Keynesian liquidity trap. When you think about other factors that may affect the willingness to lend, obviously the riskiness of the portfolio is an important factor; if they have less risk in their portfolio then they are more willing to take a new risk. But, the banks right now could resolve their risk if they want to. For a very large fraction of the toxic assets there is a market and they can dispose their toxic assets but they do not want to and the reason why they do not want to is because they would be then forced to realize a loss.

You have an asset, it might go up or it might go down in price but the real question is who is going to bear the risk. The banks might want the U.S. to bear the risk. This might not be the best or most efficient way for the U.S. to transfer resources to the banks. For instance, it might not be the best way to reduce the risk. In terms of reducing risk one of the things that they could usually do is to leave out the derivative positions. So far, they chose not to do that. Another way to reduce risk is if you bear some of the risk of new lending instead of reducing the risk of old ones. If we say that the is going to bear the risk, why do we not say that the will bear the risk only for the new loans? I think that this is strictly linked to what we will discuss in the next session. The banks want a bailout.

**Chen:** I just would like to make a few points. I think that a fundamental debate in macroeconomics is related to the nature of the business cycle. There are two competing forces. This crisis is providing evidence to support the endogenous growth of the business cycle. What do I mean by this? I'll show you my results. They are analytical results from the stock market beta. What I found is that only about 30% can be explained by white noise, and the remaining 70% can be explained by deterministic frequencies. You have well-defined frequencies, and there is a very high cross-correlation. This is what we observe. You can very easily see that frequency stabilizes (shows a side). However, if you take an equilibrium score, you can see just white noise. It is a trick. High frequencies amplify noises, thus, efficient markets are only defined by tricks and not by reality. What do I mean by that? If the nature of policy is endogenous, the fiscal policy should be subject to constraints. You cannot do whatever you want, as Friedman thinks. Also, if the normal period is about 45 years, if you go too slowly or too fast, you will cause trouble. So far people have focused on the level of the price. However it is the frequency domain that is very stabilized. Structural adjustments are key to manage a changing economy.

**Fitoussi:** What do you mean by structural adjustments?

**Chen:** The changes of the frequencies are driven by the changes in the structures, mainly by technology or innovation. I think that a very important lesson that we learn from Heisenberg, the founder of quantum-mechanics, who showed how biological systems can be stable and also subject to variations in the environment. He proposed the idea of the "principle of large numbers": if you have more numbers you have fewer aggregate fluctuations. Lucas ignored the "principle of large numbers", according to which the driving force of business cycles comes mainly from financial intermediaries and industrial organization, not from households and firms. We have a large number of households and their fluctuations would neutralize each other. But we have a great many fewer giant firms, and their decision will generate much larger macro fluctuations than households or small firms. This means that the financial crisis was caused by failures of major firms in the financial sector. In dealing with failed giant financial firms, you have a tough choice to make: either you break them up into smaller entities, and encourage competition, or you merge them into even bigger ones, and create even more concentration. Therefore, competition policy is extremely important.

**Evans:** I just would like to come back to the inflation risk. The forecast by the OECD is quite interesting. The OECD is an institution that is generally pro-liberalization, pro-inflation, but the figures they produced three weeks ago are really striking. At the end of the forecast period, that is 2010, they are forecasting an inflation of 0% in the US, less than half percent in the Euro Zone and

2% in Japan. The policy recommendation they are providing is that at a certain point the Fed should raise the interest rate again, the ECB should try to cut the interest rate and the UK should try to maintain the interest rate close to zero for a substantial period of time.

Going back to Joe's question about what is included in the forecast, they included the assumption that banks start returning, with some sporadic changes in shocks, to the normal level of lending. So, they included the recovery into the forecast.

Just two other thoughts. One is the wage deflation issue, which is a real problem. Given the trade-off, the question of the market labour policy is how to try to maintain purchasing power in the short period that keeps people in work if there is a trade-off. The problem is how you can support purchasing power through active policy that ensures people working for a temporary period of time when the purchasing power is sustained by the State in exchange for using working time for training and retraining. These are kinds of measures that stop workers from being detached from the work force and actually stop a reverse of conclusions. The policy question is really how in a stimulus package you can include measures that keep the labour force together instead of automatic lay-offs.

The only other point I would like to make is related to the lack of monetary policy behind the crisis. They used to say that the monetary policy has to drive the real economy into a wall every time there was asset inflation. Or do we need more focused policies that do not actually have to do with the asset price bubble? The question of deregulation, the question of more targeted measures to try to deal with asset price inflations seems to be a key question to get a more balanced policy in the long-term.

**Stiglitz:** Since we would like to finish by 5-5.30pm, it would be good to divide the discussion into two main topics. One is this issue of inflation and the other issue is monetary policy.

Related to inflation, obviously the situation in different countries is varied. You cannot look at this problem in a blank way. Particularly for the U.S., if it is the case that China continues to manage and sustain its rates and continues to have the kind of excess supply structure, then China is really going to put a limit on the commodity price's inflation. This might lead to worries about asset price inflation, but for the U.S., until the unemployment rate goes down, it is very difficult to see a serious inflationary problem.

**Barbosa:** First, I will start with a question. How can the central banks drain liquidity given the kind of assets they have been buying recently? With the example of many Latin American crises, this is usually not a problem, as far as the Treasury is willing to pay the price and clean the balance sheet. We have many examples in which the central bank buys a lot of bad assets and there were no problems when they had to drain liquidity because they just had to substitute that. We do that at high cost for the taxpayers. I think that the problem in the U.S. is more in the asymmetric incentive that is given to private investors and how these things are paid by the tax payers if things go badly.

Lastly, how worried should we be about inflation? As most of the people here, I think that deflation is the real threat. I cannot see inflation accelerating given the output gap we are observing, given the high unemployment rates. The only possible scenario that I can think of as a cause of inflation is a run on the U.S. dollar. Whether this will happen or not will mostly depend on the Chinese now. Other than that, I do not see other possibilities other than stagflation. But we are still a long way from an excessive demand to create a danger of inflation.

**Fitoussi:** Could you please explain the potential reasons for a run on the U.S. dollar?

**Barbosa:** Think, for example, of an extreme confidence in the Obama administration and then you have a run on the U.S. dollar. There would be no problems for Europe or for Japan, but this can create some instability on the commodity prices that are still in U.S. dollars. The price of commodities is still in U.S. dollars, so this could create instability, especially for the Latin American countries that are in the dollar area.

Finally, related to the point of when inflation becomes dangerous, well, I come from a country that had a long period of very high inflation and now has the most conservative central bank in history. From our experience, when inflation will come out, it will be very difficult to get it down. If inflation comes out and stays for a long time, that gives rise to a lot of indexation and that makes it rigid downwards. A long time means more than one year, or more than two years, it is not a figure that changes rapidly. We want fiscal stimulus but not too much otherwise you will have fiscal crisis. We want regulation but not too much otherwise we will have over-regulation. Working with politicians, I realized that there is always a trade-off of risks. Now I think that the risk of deflation and recession is much higher than the other alternatives.

**Williams:** I would like to just go back to the problem of the impact of wage reduction and the process of trying to keep employment open. I think that the best solution really depends on the support system that is in place in each country. If, for example, in a country the unemployment benefits are protracted, a wage-cut might not be useful because the benefits that an employee can earn during that period are less than what he could earn with unemployment benefits. On the other hand, in a number of other countries, there are not these kinds of support systems. Cutting wages in order to keep employment is a very viable option and it not only helps the individuals, the employees, but it also helps the economy because it helps spending and keeps businesses open. In the Caribbean, wage-cuts have been advocated as a good temporary solution in the short-term. I agree that in the long-term, maybe it is better to let the company collapse because its system may be updated, or maybe it needs to go down in order to modernize. I think that in many countries that do not have support systems, lay-offs are a valuable solution.

**Desai:** I just would like to say something related to wage inflation. It is not true that there has not been inflation in the past 25 years. The wage inflation was created when the manufacturing industry left the West and went to the East. I do not think that, if inflation occurs, it will come from wages. Asset price inflation is not really a possibility, but politically it is very popular. Generally, asset price inflation is more welcome. The tricky problem is determining just how much asset price inflation is manageable.

One last thing about oil price speculation. Just before the oil bubble collapsed, I proposed that they should have different margin requirements for the financial players in the oil markets. I proposed that the margin requirements be set at 15% for the financial players in the oil markets, instead of the general margin of 8%. My question is whether it is possible to impede pure speculation in the commodity markets by commodity price regulators in such a way that pure commodity price speculation would become costly.

**Yoshino:** I have three main comments about asset price inflation process and ordinary inflation. If the central banks do not control these two targets, they need two instruments. But what instrument controls asset price? In Japan, we tried to have two instruments: banks' lending control to the real estate and the housing sector. It did not work. So, my question is, what is an appropriate second instrument?

Secondly, if stock market prices peak, everyone is happy. Consumption goes up and investment goes up. The problem is that land prices have an impact on the banking sector, especially because Japanese banks are using land as collateral. Furthermore, these prices have fallen about 30%

compared with their peak. This has created a huge drop in lending over the past 15 years. Our lending market dropped about 20% compared to the peak. And that applies to the money supply side. This means that money multiplier has dropped and lending did not go well. So, base money growth was more than 10%-15%, but money supply, as an aggregate, did not grow very much. So the question is, should the central bank pump much more money in? More than 15%-20%?

**Stiglitz:** One other instrument that central banks have, at least in some countries, is margin requirements. During the technological bubble, the Fed discussed using them for about fifteen minutes. The point was that Greenspan did not believe that the bubble could exist, so there is nothing that then should be done about bubbles. Many people could not even remember that we discussed the margin requirements.

**Stein:** I would to make a quick point in response to what has been discussed on monetarism and regulation. It seems to me that the tail has been chasing the dog for too long. A lot of the discussion is only reactive. There is not enough of a proactive approach. The proactive approach that Joe was suggesting consists of sharing the risk for future investments, rather than building a new financial system. Even within developing countries, there are questions of monetary system, regulatory system, for what? We kind of lost the picture of what we are trying to achieve. Within developing countries, you have a situation in which the World Bank pushed financial liberalization, then in the 1990's, it said, "you know, maybe we should not discontinue this notion of financial liberalization." Let us bring out this notion of deregulation. This becomes the new model, in some way pushed by the banks, and we are discovering now the consequences in Central and Eastern European countries. And now we have this massive crisis that was perfectly predictable when you have a devaluation of these currencies.

**Flassbeck:** A brief comment on the financial system in Africa. In Africa you had a fully-liberalized financial system, but the criteria for the liberalization of the system was to not deliver good services for investment and fix the capital. Instead it was to have private banks and to have a deregulated system. Whether this determined low lending rates for reasonable investments nobody cared, because whatever the system produced was private and liberalized, and nobody cared about whether it produced something. In most of the African countries, there is no competition in the financial sector, you have private Western banks but they are not competing at all, they are making easy profits, they do not need sophisticated products because they squeezed out people and if you squeeze out the people, you do not need to go into sophisticated products. This was the main thing.

My other remark is on the wage cut. Wage cutting can work well in a single country. I am coming from Germany's perspective. Germany is the best country in terms of wage cutting. But it only works through one aspect, namely, if you beg your neighbour. If you beg your neighbour, wage cutting can work perfectly well. But this is not the recipe for the world and certainly not for developing countries.

**Stiglitz:** We need to switch to the next session because we have only about one hour. The session is on bailouts.

**Silvers:** I will present my own opinions and not the opinions of the oversight panel. This intervention is about bailouts and about the bailout rights. The congressional oversight panel did a large investigation on bailout rights and I will try to explain what we learned up until now. First, what is meant about the rights. At least, in the U.S. context, my view is that there are certain goals that you are trying to accomplish in the context of the bank crisis, through public policy measures. And by public policy measures, I mean the combination of direct Treasury intervention embodied by the emergency of the economic stabilization, but also the whole range of the more or less visible activity of the Federal Reserve, Central Bank, and the FDIC. So the goal is to bring the banks back

to life quickly despite the fact that it has been a reallocation of credit from institutions to markets, and to securitized markets in the U.S. The same banks are intermediaries in these securitized markets, and in addition they continue to provide direct lending, and this is particularly true in the small-medium business lending, which is one of the main components of the U.S. economy. So, bringing the banks back to life quickly is the goal.

There are two constraints. You have to do this at a cost that is viable for the nation. What do I mean by viable? It is going to be financed without destabilizing the ability of the central government to do its other public functions. This is particularly the case in a context in which the central government attempts to stimulate demand in the economy and, in the U.S. at least, where there is a profound sort of public good deficit this has to be addressed in terms of infrastructure, energy and education. The second constraint is the fact that there is a need for fairness related to compensation for forced bailouts (for example in developing countries). There is a need to make proper decisions related to this.

The oversight panel met in Washington on March 19<sup>th</sup>. You can watch the meeting, if you wish, on the website [www.dpc.senate.gov](http://www.dpc.senate.gov). We managed the bank crisis. We did a rather controversial thing in the U.S. of bringing a Swede to America to testify. We had a nice interchange where I established for the record that he was in fact a Swedish conservative who believed in capitalism.

We instructed our staff to look into a number of other lessons of experiences of failure in the middle of 1998 in the U.S. And the comparative approach is undertaken for the European countries for the current banking crisis.

Our conclusion was that successful efforts in dealing with the banking crisis have three main components; three things in common and one key variable. The three things that they have in common are a three-step process, in which the order of the steps is very important.

The first step of the process is to get the bank under the control of management that can be trusted. And trusted in a very specific way. They must be trusted to be able to give an accurate accounting of the financial state of the bank's balance sheet. Things are made worse by such circumstances in which individuals are compensated by equity, because, obviously, if you are compensated by equity, the bigger the hole is in the bank capital structure, the less your equity is going to be worth. Therefore, there is a huge incentive to lie about it. And this is not an issue of retribution; it is an issue of management.

Secondly, you need to create an honest accounting system. It can do that in two ways. You can either do it on a one-to-one market basis or you can use a central administrator market. Market to market evaluations tend to overestimate the hole, but they are useful and they can be done very quickly. You would choose a market-to-market evaluation only when you really think that there is no market you can trust. You really need to have a lot of confidence in your evaluation team.

Step three is that capitalization involves a specific mix of floating haircuts on investors and putting new public money. The key variable is to what extent your haircut fixes obligatory tools. In these times, this is never the case of haircut in depositors.

With liability, what do you do with long-term creditors? There are a number of different models here. In the U.S., prior to this crisis, we generally left the long-term creditors to defend themselves. And actually we did the opposite in this crisis, with the exception of Lehman Brothers.

So, these are the three steps. Now, what we are doing in the U.S with relation to this paradigm? Well, what we are doing right now is that we have three programs. Program one is the program that

has received a lot of attention this week, it is the stress test. The stress tests are not actually evaluations, but they blur the lines. These tests are an effort to make some distinctions between banks in terms of their health. Then there are the public-private investment partnerships, which are designed to purchase the so-called toxic assets. I do not like the term toxic assets. These are only assets that are not performing well, they are bad assets, but they are not toxic assets. There is nothing particularly exotic about them.

Then we have a program to infuse banks with more preferred stocks. Again the order of the three processes is not so clear. We are trying to get the results of these tests by this week and there are some concerns about those tests in terms of where they have been designed. My three concerns are related to the criteria for a successful bank risk:

First, it does not appear that any effort has been made to wall off people with equity compensated by analysis that has been done by the firm itself. Second, it does not seem to be a clear explanation as to what kind of learning has occurred. Third, the real wall has placed against the macroeconomic assumptions. There are two scenarios - a base scenario and an adverse scenario on the stress test. The adverse scenario is more or less in line with the base case the IMF is projecting for the U.S. economy in terms of unemployment. In defence of the stress test, the housing price numbers are pretty aggressive in terms of estimating a continuous decline in housing market prices.

Now, I think there are some questions. How we can get people we trust doing the evaluation? How exactly capitalization will look like?

The last thing I am going to say about this is that in about two hours, our committee is going to vote on a report on small business and consumer lending and the effect of the financial bailout on those markets. The data we have tends to support the fact that there is no money for consumers or for small businesses. What our report is going to show is the fact that the various types of more exotic efforts by the Fed and Treasury did not have effect on enterprise lending, and there is a reason why there has not been any effect. They cannot have any effect. The only way to have an effect on enterprise lending is to have strong banks.

Now we are in a situation in which it is difficult not to look at the current policy that has been pursued in the U.S. and this is based on the assumption that the U.S. stimulus package will revive our economy and will revive the banking sector. The historical examples we examined tend to suggest that when you have a significant banking crisis and an economic contraction, along with concentration of banks, as we have now in the U.S., it is very difficult to use macroeconomic policies to lift up a banking system that is fundamentally under-capitalized. These issues, I believe, are going to be fundamentally contested by the Obama administration over the next few weeks and months.

I do believe that a careful examination of the bank crisis across time will help teach a very specific lessons on what works and what does not.

**Desai:** Luckily I am not involved in any policy matters actively. I believe sufficiently in the free market to consider that the first rule is bailout no banks. If your deposits are insured, I do not see any point in saving any banks because they failed the market test. When a bank fails the market does not fail. The market has succeeded and the market finds another bank that does not work. Now, we are going to bailout banks. So, more or less as Demond said, protect depositors, then shareholders, or change shareholders, and give a massive haircut to management. This would be my ideal bailout.

The U.K. experience is much better than the U.S. experience. Our first bank failed in September 2007, a small bank, Northern Rock. In six months time it was nationalized. Since then, the bank has sufficiently stabilized enough to be able to repay the money given to it, and it looks like that at the end of this year it will be healthy again. Three more banks were bailed out in 2008. One mistake was made: to allow Lloyds bank, a bank that was in trouble to take over a failing bank H- plus. If a bank is too big to fail, why should you make another bank too big to fail? Another bank, the Royal Bank of Scotland has to be saved. Two other banks, Barclays and HSBC decided not to help and they expected private equity to be able to stabilize. Lloyds, H-plus and RBS are coming out from the crisis, shares are rising and income is rising as well. Although we have a high concentration of banking, two large banks did not fail, and two or three banks failed. Credit has not been hit as badly as it has been in the U.S.

The lesson we have learned is to never allow a failing bank to takeover a failing bank. This does not actually help to make a healthy bank.

To conclude, if there is systemic failure than in the short-run you should minimize the effect on the economy and can initiate a bailout. But in the medium-term, I think there are other instruments available to incompetent managers and in the future it is important not to revert back to bailouts. When there is no more moral hazard, the bank takes on its own risk.

**Stiglitz:** Let me just make a few comments. First, a common approximation is that what is involved in the bailouts is the zero sum game. It is a purely distributive game that has been played. Second observation, if the players play well, it becomes a negative sum game. And the way the U.S. has been doing it makes it particularly likely that it will be a negative sum game. This is particularly evident in the Citibank bailout, where they insured the losses and the P-PIP program with which basically incentivized banks not to work out the bad mortgages because if they worked out a bad mortgage, they would need to realize a loss and there remained a small probability that they would be able to recover. So, you totally distort the incentive structure and the results of this is that you get negative return activities.

The third observation is that part of the strategy I think the administration is counting on, is a strong reduction in competition. The result is that they have more monopolistic power, the spreads get larger, and this leads to recapitalization, but at a very high cost to the whole economy. In many communities in the U.S. there are only two banks and now, with the mergers, very often only one. So, there is a kind of irony that in some countries, for example in Botswana, banks are entering into the small villages while in the U.S. they have trouble entering into medium sized towns.

One of the reasons why the U.K. has been more successful in small business lending is that they put a very high a priori. When they put money into the banks, they intervene in the operations of the banks. And they did that in a very interesting way, because they did not tell them, "you have to lend", because otherwise you get bad lending and they wanted to encourage the lending. The way they did it was by using the organization incentive within the bank. For example, they asked to allocate a certain amount of money to encourage the lending. They took advantage of how bureaucracy works to lend without saying they were lending. They also determined how to score and how to change the scoring mechanisms.

The suggestion is that they bear some of the risk. One way of doing this is through the GDP bounds. You could imagine the issues a security that would bear more risk of lending when certain indicators point towards a down turn. So, what we are basically doing is saying, we want to make a great assessment but you cannot predict the business cycle. If it is a down turn you are subsidized more, and if you lose money in a good economy, you need to bear the cost. This mechanism is an attempt to encourage a separation of credit assessment from risk assessment.

**Bhattacharya:** I have only a quick question. Demond, your principles are really striking. But they are not striking in terms of learning lessons, but in a way, they were ignored in the U.S. experience. Trusted control, honest account and haircut, fiscal obligator.

There is something that you did not mention but that came out in the discussion, and that is the importance of incentives. There are three aspects of incentives: incentive for prevention, incentive in the bailout process in the maximization of value, and the incentive for lending. So, I think it is important to keep considering incentives. The last question I have is: has the window possibility for political actions closed in the U.S.? So, is the indirect capitalization rule on the table?

**Silvers:** In terms of indirect capitalization, I did not go directly into the larger details of indirect capitalization.

A large part of the policies that have been circulated within the Treasury so far seems to be about taking on risks on the balance sheet. It is a very important feature of the U.S. budget law. Loan guarantees have to be valuable and accountable in the federal budget if they are made by the Treasury department. There are no such requirements for the FDIC or the Federal Reserve. Both of these institutions can take on obligations and not be reflected in the actual account of the U.S.. They are theoretically independent institutions. Now, as a result, you have the phenomenon of the Federal Reserve having a two trillion dollar balance sheet with four billion dollars of equity.

**Williams:** Only a couple of quick points. Normally, after supervision, the results are not publicly released. I am wondering whether the results of the stress test would be released to the public, and also whether the effect of the results of the stress test has already been taken into account.

The second issue is related to the point that Lord Desai made about the fact that in the U.K. bailout funds have been repaid. Is it possible that this could happen in the U.S.? This would solve some of the negative effect of the bailout idea.

The third point has to do with dealing with the problem of the four mega-banks. I think that this is a very serious issue that should be addressed before one of them goes down. This can come out when the stress test is performed.

**Griffith-Jones:** I just would like to ask a quick question to Meghnad. I understood from the press that actually the that pushed Lloyds bank to take over H-plus.

**Desai:** The Prime Minister persuaded them to do that.

**Griffith-Jones:** Another point I would like to make is related to direct credit. I think it is very central. I am just wondering whether we should present it as something that comes from the past or as something new that we invented. It sounds frivolous but language might have some importance here.

**O'Campo:** The point I would like to make related to the bailout is the fact that this decision was made with terrible information and a very short notice, everywhere. The business of bailout is a business of minimizing costs. That is why I disagree with the point that it is pure redistribution. There must be some advantages, for the alternative would be the collapse of the financial system. So, there must be some advantages and that is why you decide to intervene in the end. You want to minimize losses, and this is what you are doing with bailouts.

I think that when you initiate a bailout, something that you should make clear to banks that are saved, and this happened in Colombia for instance, is that they lost everything and they own nothing. It is total nationalization or nothing. I think that this is the only clear rule. Otherwise you enter into the business in which the U.S. has been deeply involved, a redistributive game.

Now, when you are fully nationalized, you must be careful what it is you are nationalizing. You cannot accept all the liabilities of the institutions because then the redistribution game can be terrible. As far as I can see, in the U.S., the worst case was actually a case of an institution that was fully nationalized, AIG. Once nationalized, it is necessary to cleanup these institutions. I think that from my experience, I learned most that it is important to fully take control of the bank that you saved.

**Fitoussi:** I just would like to make two points, two clear solutions to the problem of bailouts. First, transitory nationalization, which avoids many of the drawbacks of a bailout. Second, and I do not know whether this is feasible, would be to make the bailouts a private activity in constraining the banks with a kind of tax and a fund for insurance against the danger of the failure of the bank. I also think that it would take 10 years, a long period, to eliminate the non-toxic assets but very contagious assets. So if you have a flow of income coming from the banking system itself, the fund could be able to buy toxic assets after ten years.

**Evans:** I have a very simple question related to why the G20 did not discuss the issue of the bailout. Certainly, there were not any meaningful statements in the G20 communiqué about the bailout. It would be interesting to know whether there were some interesting conversations during the G20 meeting.

**Fitoussi:** We will try to answer this question tonight.

**Evans:** The second question is whether the political economy of the bailout is open at all to transaction taxes as a means of getting the banks to pay for their mess.

**Stiglitz:** Yes, the broad issue about whether the banks should pay for their own cleanup is a very important one. And it is quite interesting that the guidelines are already saying that the banks should not pay for their own mess. So, they are trying to close the door on the possibility of taxes to pay for the mess.

**Chen:** I would like to make two points. The first point is related to why this crisis is different from the great crisis in 1929. In that period the U.S. economy was dominated by the industrial sector, while in this current crisis the U.S. economy is dominated by the financial sector. If the U.S. does not solve the problems within the financial sector, they will be in big trouble.

My second point is there are many theoretical studies that show that if you have a network without boundaries, you will follow the power rule. You have a very high frequency of crisis. In this situation, you have to setup boundaries or you need to disentangle the network, otherwise you will be in trouble.

**Fitoussi:** Ok, we have to leave the room in order to have it ready for the dinner.

**Thursday, May 7**

**Stiglitz:** The schedule of the discussion will be as follows: issues related to developing countries, global resources and global risk mitigation, global economic governance and environmental issues. Stiglitz anticipates the need for a final summary on the issues that require stronger action than what has been taken so far.

**Vos:** The two main things to consider when discussing the reform of the IMF lending facilities are: more resources for the IMF and what the IMF calls a major overhaul of its lending framework. The G20 confirmed the basic tripling of resources through the SDR as part of the temporary agreements to extend loans to the IMF. The second change, which was already initiated at the end of last year, is the modified external shocks facilities for low-income countries. These introduce a rapid access component so that countries can access up to 25% of their quota for each external shock they are witnessing and a high access component, to access up to 75% of their quota. Both of these new parts of the facilities will be accessible at a low cost. At the end of March, a new flexible credit line was introduced. It replaced the short-term liquidity facility that was introduced in November, which was not actually used. This new flexible credit line seems more successful. Mexico, Poland and one or two other countries have already made use of it. This is also part of a new facility by which countries have to face strong upfront qualifications and criteria to access these funds. Fourthly, underway is a reform that has been announced for concessional lending instruments for low-income countries which should lead to doubling of the IMF concessional lending for low-income countries and a doubling of the access limit. However, this is still not fully sourced, it still needs resources that lead to an increase of 23 billion dollars. These resources can come from donors, or also from gold sales by the IMF, which would yield an increase of not more than 6 billion dollars. Fifthly, is what is called the overhaul of the IMF lending conditions. The IMF calls it the modernizing of the IMF conditionality for all borrowers, and it entails increasing flexibility, doubling access limits on non-concessional resources, and simplifying cost to maturity structures. This entails a shift toward what they call more ex-ante conditionality. In the case of external shock facilities, several countries would no longer have to comply with ex-post performance criteria, but they will still need to show that they have an active policy in place to address these shocks. Otherwise, they would be dealt with on a case by case basis. In the instance of the flexible credit line, the pre-qualification replaces ex-post conditionality. However, in the wording of the IMF, you must be a very strong performer and have strong political institutions by IMF standards before you can sign-up for these loans.

I think what looks really new are the increased resources, the increase in flexibility and the modernized conditionality. But is this really new? The general increase in IMF resources probably gives too few resources to the developing countries. Moreover, these are temporary measures, although the IMF announced they should become more permanent. The actual situation allows only for insufficient resources for developing countries, especially in the case of big shocks. However, they recognize that as it happened in the past, the IMF agreement would serve as a catalyst for more donors' money, so not much has changed here.

I think one initial policy line should call for an ex-post reallocation of SDR to allow for more equitable resource allocation to developing countries and for reforms that would give more appropriate lender of last resort functions to the IMF. However, since the resources for low-income countries and the external shock facilities will have to come from donors, at the IMF meeting it was clear that it is not possible to use this leverage to keep a part of their voting shares. Using the basis of the principle of no taxation without representation, Sweden, Holland and Belgium made clear that if they had to give resources to the IMF they must be allowed to keep their influence unchanged. This created some problems for reforming the voting powers within the IMF. Another problem is that there are too few resources available for developing countries. A doubling of resources does not seem to do the job and moreover the new facilities are still under-funded. The IMF announced that

they will double them even if they have to finance it themselves, but I am not sure whether this will happen.

In general, the major problem is the issue of conditionality. The main point here is the shift to more ex-ante conditions and whether it is a big change. For the external shock facility, the rapid access requires countries only to commit to appropriate policies that address the shock. Of course, the question here is what these appropriate policies mean in practice. Particularly for the high access component of the revised ESF, it is still the case that the economic program has to comply with the same standards as in other programs, so it seems we are getting pretty much the same thing with a different name. From past experience, it is clear that all conditionality clauses are essentially pro-cyclical. I think, for example, of El Salvador, Ukraine, Serbia, Hungary, Georgia, and Pakistan. In all these cases, fiscal tightening and policy adjustments were in place even though the shocks to these countries were inflicted because of policy failures. This casts doubt on the effectiveness of the changes. This may also apply to the new facility, the flexible credit loans (as you need to comply with pre-qualification criteria such as very strong economic fundamentals and institutional policy framework), a commitment to maintaining such policies in the future, and a sustainable external position. This may sound like to get a loan you are not in trouble. Moreover, you have to have sound public financing and this may be another issue for countries hit by a shock with a worsened debt position. We need further discussion on conditionality. The overhaul seems like a big change but there is no mention of the problem of pro-cyclicality. We have to doubt how that works without a change in government. The bigger question is whether this is enough to move into a new system where the IMF can have a proper role of lender of last resort and where there is a better pooling of international reserves so that countries can draw on that as if they were their own reserves.

**Fitzgerald:** In effect, what I have to say does not fit entirely in this section as it is really about international tax coordination. The current global crisis has revealed major gaps in the system of international prudential supervision. Many systemic players conducted their business beyond the reach of home regulators. The fiscal burden of bank recapitalizing has raised questions as to both distributive fairness and the macroeconomic sustainability of the debt generated thereby. It is not surprising that the role of financial services overseas in both the areas of taxation and regulation were on the agenda of the G20 and possibly the G8.

Before starting it is worth pointing out that two of the largest overseas tax havens are not in the Caribbean but in London and New York, followed by Luxemburg, Lichtenstein, Jersey and so on. Even in the Caribbean, they are the product of the legislation in the U.S. and the E.U., because that legislation permits off-shore holding companies and provides strong *de facto* tax incentives to book transactions through off-shore financial centers. I think the topic is relevant to the issue of development finance because the middle-income and the major high-income countries are ill served by the current international financial institutions and are also very weary to continually rely upon short-term capital flows. The agenda and the discussion should prioritize how to strengthen the fiscal base in terms of both sustainable macroeconomic policies and social equality. I really believe that what we are really interested in is macroeconomic stability on the one hand and social equity on the other. Most emerging market countries have reached the limit on indirect taxation, in the sense that they switched toward VAT and their rates and revenues, as percentage of GDP, are similar to industrialized market economies. I think that any further changes would relate to efficiency of collection and particularly to the shift towards green taxation, which is by definition indirect taxation.

Direct personal taxation in emerging market countries is extremely difficult because of the international mobility of assets. At the same time, corporate taxation faces similar problems of competition between countries. So developing countries have as much to gain as developed countries by an international system of tax coordination. Moreover, to the extent that developing

countries have to enter the global debt market for longer term infrastructure and education, it must be on the basis of long-term tax revenues and this in turn must be progressive if it is to be consistent with poverty reduction. In fact, we find that personal income tax is *de fact*, far less progressive in developing countries than it is in developed countries, and the basic reason for that is the difficulty in collecting taxes on overseas assets. More generally, we know that even the IMF agrees the macroeconomic multiplier for an expenditure increase is much more than the multiplier for tax cuts and so if anything, a balanced budget expansion will have a net macroeconomic expansionary effect. Much more importantly, looking at emerging markets, what they face is not only the volume of capital but also the cost of capital, in the sense that their risk ratings are what determines the enormously high risk spreads, and those partially reflect the increased risk aversion in Northern investors but also long-term worries about fiscal sustainability.

Now, our own work on the progressivity of tax systems around the world, even taking into account welfare, shows that there are very large disparities between regions. In general, tax systems are much less progressive in developing countries and worrying long-term trends toward regressive tax systems as well. There is little evidence that this trend has promoted growth or real investment. What it has promoted is capital flows and the booking of trans-border income. Indeed, it is difficult to argue that increases in personal income taxation at high levels can have an enormous effect on growth. Moreover, to the extent that personal income taxation could be more effective by capturing overseas assets, the need for distorting corporate taxation would be diminished.

Now the problem is that the existing network of bilateral tax treaties are not effective in tackling this problem, which the OECD recognizes. The bilateral tax treaties do not even provide for effective information exchange with tax authorities in developing countries, which is to say tax treaties between OECD countries allow for information exchange while treaties between the North and South generally do not, so Southern tax authorities cannot use these treaties to get information about their residents' assets in the other countries. This is a huge asymmetry. Additionally, they find it difficult to get information about income generated by non-residents, that is multinational companies operating in their jurisdiction, again because of a lack of information exchanged. This has long been a concern for the OECD and more recently the Financial Task Force, and I hope it will be a concern for the new Financial Stability Board.

Looking solely at the tax side is to misunderstand the problem. Effective regulatory evasion is as important as tax evasion. Ever since the LTCM disaster it has become increasingly clear that one of the reasons why companies moved to off-shore financial centers is not just to reduce their tax liabilities, but also to escape regulatory dispositions. Then came the Enron scandal, and I think that after we unraveled the details pertaining to the most recent debacle you will again find that much of the problem has stemmed from regulatory escape. Recently measures have been taken to ensure more transparency in information exchange between tax authorities and regulators. Indeed the recognized jurisdictions by the OECD have complied remarkably. What actually is the case is that *de facto* exchange of information is not happening, partly because of court orders, or specific transactions must be identified before information is given, rather than an automatic information exchange. If you look at U.S. Treasury data on bond holdings by non-residents, the largest single investing country is West India, not China. It is very difficult even for the U.S. to know who owns their bonds. We also know that the enormous size of the financial exports recorded by off-shore financial services is quite disproportionate to the real level of economic activity. The problem is that the disclosure of information is not generally automatic and often relies on identifying a particular range of transactions and then obtaining court orders, which is a slow process that allows people to escape.

One central point I want to make is that there are large microeconomic incentives for secrecy regarding off-shore assets holdings, and no disincentives for secrecy or incentives to disclose. The

macroeconomic consequences, in terms of both prudential regulation and fiscal sustainability, are very serious. Indeed, as the off-shore centers' authorities often pointed out, the problem is not the low tax rate as such, but the failure of asset holders to declare their holdings to the tax authorities. And the reason they can do this is effective non-disclosure. This is why the E.U. has worked toward presumptive taxation of transactions overseas in the Savings Directive. We have been working on it on two dimensions. One is to construct an index of tax progressivity in developing countries and around the world. The other dimension we are working on is the construction of a Financial Transparency index, to be published in the fall by Transparency International, which will record the effective degree of access by regulators. This is a classic collective action problem. We have to be clear that this is not a win-win game. A large number of very rich people are going to suffer from any progress on this front. I think there is a clear connection between regulatory avoidance and tax avoidance. Both thrive on secrecy. As long as there is a lack of tax incentives to move transactions back on-shore, we will have little progress in macro financial stability.

**Mikandawire:** The new view that countries that behaved well in the past will be given funding suggests that following the IMF in the past was a good thing. Actually, before this crisis there was growing literature, and also someone from within the IMF itself, arguing that the model that Africans were implementing was not meeting the development need of those countries. It was clear that the model was not particularly good at mobilizing savings except for the countries that are oil producers. It was clear that the model was not attracting foreign investments, and in fact in the latest report by the IMF on the crisis, it is reported that Africa was not affected by the financial crisis and almost by itself it says that this is because the model was not good in attracting foreign investments. There is an admission that the model did not attract foreign investments, that it left liquidity in the banking system and that it was fundamentally short-termist, relying heavily on government bonds and investments in consumer booms and real estate. Markets were not competitive. Banks in Africa had the highest profits of all banks in developing countries and the operating cost was much higher than anywhere in the world, so they were in fact too efficient. Policies were pro-cyclical. However, there was debate, even within the IMF and the World Bank, that questioned some of these models, so it is very strange that what this crisis does is to end that debate and continue from where we once were. I think for developing countries, this is the most important thing. If the model was seen as non-developmental, it is weird that we would go back to say that countries should be judged by a model that did not do well in the past. And at the same time apply the notion of the stimulus package for developing countries. We have had certain types of stimulus packages in the past, which involved the debt relief, and I think it very important to see what happened there. Some 40% of the money had not been used. In the current model, there are some features that are likely to be replicated, and one should look at what happened with that package. It was very consumption driven, you see in Africa massive increases in imported second-hand cars, in shopping malls and so forth. It is not clear to me how to avoid the same type of consumption-driven package. It would be a pity if the current crisis freezes the debate back to where we were before, and we forget some of the discontents we had expressed about the model that is used to channel funds to poor countries.

**Bourguignon:** Let me make a few footnotes on what has been said and then say a few words on what is going on at the IMF and Multilateral Developing Banks. We are witnessing a revival of the IMF after several years of concern. Despite my long-lasting friendship with Dominique Strauss-Kahn and Olivier Blanchard, I am not sure that what we heard at the IMFC meeting is really up to expectations. As Rob said, the major innovation is this flexible credit line which allows you to allocate huge loans very quickly to the countries which are described explicitly as strong performing countries. Rob gave a list of criteria and it is clear that there are not many countries that can meet all of them. Although the point has been made that not all criteria should be met, it is not clear how many of them have to be met. This new facility, as well as the enhanced stand-by arrangements, are maybe less pro-cyclical than other instruments because they are meant to provide

liquidity and resources to countries that have strong institutions but for some reason are unable to raise the money they need on the market.

The example today is Mexico, and I think that this is really going in the right direction from that point of view. The Fund is, in this case, really a substitute for capital market imperfections caused by the crisis. The problem is, what will happen with other countries which are not as strong performers as Mexico? From that point of view, I agree that there are limited opportunities; there is the same emphasis on conditionality and on structural reforms. We still have the pro-cyclicality bias that has been criticized so many times. All of this will apply to more middle-income countries. I found the low-income country side to be very disappointing. There is little reform. There is the doubling of concessional lending capacity, which comes with caveats on debt sustainability and an increased scope for conditionality. And when you get to the details, there is not much money that will be made available at below market interest rates. Estimates say that it will not be possible to free up more than four billions dollars, to which they will add the six billion dollars from gold sales. This is not very much. Today's needs for low-income countries, because of falling commodity prices and remittances, will easily reach five to ten percent of GDP. In absolute terms, this means something between 60 and 100 billions dollars. This means that hope for these countries may have to come from donors. We may look at the World Bank and the system of Multilateral Developing Banks and they have been promised some additional resources. There was the idea, at the World Bank at least, to front-load the payments to be made under the IDA programs. This is very new and so very difficult to predict. Some people at the Bank told me that for the moment this front-loading operation was not very successful, probably because they were not completely sure if and how the additional promised money would come in. Conditionality is still the same, with little said about the share of grants and the share of loans.

We would like to transfer more money under the form of grants. Because of this global shock, I am not sure I see many reasons for restricted conditionality when you have such an exogenous shock. We see that there is fiscal space in foreign currency terms. In this kind of situation, those institutions should change their policies. I am also surprised to see that it was not very clear that the World Bank would gain more encouragement in helping low-income countries. This is also the time to re-open the discussion about what kind of insurance can be given to those countries. I am not saying we should re-open the discussion on issues like fixing a price for commodities and giving money to countries whenever prices fall below the limit or vice versa. At the French Development Authority they are experimenting with something new, they look at the revenues from commodities and when these revenues drop, they transfer the difference between the current revenues and the moving average over the last five years. If the change is structural, countries will have eventually to adjust, but it is mostly smooth. I think we should put this suggestion on the table.

**Battacharya:** I want to put some ideas on the table to help shape the recommendations. I would like to give a little political context on why Dominique Strauss-Khan might have won less than he could have won. Some voices in the G7, from continental Europe and the U.S., have seen a relaxation in the Fund's lending standards. The vision Strauss-Khan has is that the Fund should be a proper insurance body if there is to be no excessive self-insurance. Therefore, I would not put too much blame on Dominique, instead more on the shareholders. In a sense, the Obama administration has not quite made up its mind on various issues.

What has then come to be is a bottom line from not only the new flexible credit line but also the new high access stand-by facility and also a reform of the exceptional access framework. The Fund has become relevant for the very virtuous and the very desperate. There will be few countries at the top, like Mexico, Poland, and Colombia, which maybe are not those who need the most. Then there are the most desperate, particularly from Eastern Europe. The reason the Fund is getting support for it is because they are bailing out Western Europe. Let us be clear on that, this is to deal to bad

lending by Western European banks. But what about the majority of countries that have been hit by this external shock? They are not being taken care of because the Fund is largely a precautionary instrument or an instrument for supporting the most desperate. I often say that now the Fund is going to be an institution for the top five or the bottom five.

But you can push to make the Fund more appropriate. One recommendation is that the instruments that have been put in place must be applied in an even-handed manner and to the broad base membership of the Fund. We should say that not all the conditions Rob read out are really needed if the shock is exogenous. Actually, the facilities should be made available much more automatically. On conditionality reform, the proof is in the pudding, and we should be stressing that we would like to see a commitment to significantly reduce conditionality.

The other thing I would like to turn to is that, because the IMF is largely about providing this particular variety which is a precautionary and liquidity type of financing, it will not provide actual financing to deal with the developmental, fiscal and bank recapitalization needs that developing countries have always had. So the other side is actually the MDB system. The approach here was quite asymmetric: as a whole, there was one trillion dollars put on the table for the IMF, and a hundred billion for incremental financing for the MDB. There is huge imbalance with actual financial needs. The issue remains whether the MDB system can increase the support required due to this crisis.

Even more importantly, the financial system will be very different from what it was before the crisis and the balance between public and private finance needs to be fundamentally changed. The MDB system is a beautiful way of providing risk-free financing to the developing world. So why are we not looking for a significant increase in capital, not just when you think about development needs, but climate change as well? Secondly, the U.S. has a particular structural problem when dealing with capital increases of the MDB system, which is called the U.S. Congress. Everything has to go to the U.S. Congress in terms of the approval of the capital increases for the MDB system and there is a long wish list for the kind of conditions that would have to be met before capital increases can be approved. So at the moment, the status on this is the EDB capital increase has been approved but Latin America, which requires a massive capital increase, is not so blessed. Therefore, we should push very hard that the EDB requires a significant increase in capital, both to be able to respond to the crisis and to be able to respond to infrastructures and other needs after the crisis.

As for the low-income countries agendas, I agree with Francois that this was the most disappointing part of the G20. Let me give some numbers, to see what is at stake. We are talking about an incremental minimum of 60 billion in terms of financial needs. Here the IMF is the incorrect place to start off. Put this in perspective, for low-income countries the proposal is to double the access limit, but this will still remain a small number. There is a sense in which this access is relatively small. Moreover, I personally do not agree with the gold sale. However, I am pleased by the SDR allocation, also because I pushed for it very hard, which produces 15 billion dollars for low-income countries.

But there are two issues. First, who is going to subsidize the interest rates, especially when interest rates will go back to normal levels? Second, you can reallocate the SDR allocation. It is very easy for countries to take their SDR allocation and give it to the low-income countries. Another thing we should push for, which is an anathema in some circles, is a debt moratorium for a three year period. Each low-income country is facing a huge fiscal hole. With the moratorium, you efficiently provide money without conditionality and it will not break the bank, so to say. There are talks about front-loading about two billion dollars and taking the money back next year. We know that the crisis is going to be longer lasting for low-income countries, so first of all the magnitude of the front-loading is ridiculous and taking it back next year does not make sense. So we should be pushing for

real increases in concessional resources. There is 37 billion dollars of un-dispersed [...]. There is no reason why you cannot increase the World Bank's share of financing to disperse 6 to 8 billion right away, and there is no reason why you cannot increase front-loading by 6 to 8 billion and say we accelerate the replenishment of [...]. The G20 made a commitment to bring forward the replenishment of [...]. This is something I think you can push forward in a very concrete way.

Let me make a final point. Both institutions are going to get new power at a scale that has not been seen before. So it is going to be an extremely important struggle to ensure that there are indeed new models, and that we are not going to allow this to go into conditionality after conditionality. What one finds is that every program that comes up for discussion now tends to say, 'what else can we ask for instead of asking how you can get the money out the fastest so that you can get the quickest response for the country.' This calls for a framework that says, 'this is an exogenous shock and requires this and that.' Countries are quite mature now. In reality it is the issue of conditionality that should be addressed.

**Stiglitz:** Let me make a few comments. About the tax issue, which got highlighted after Obama proposed a new tax framework, I think it actually raises a very deep issue in the context of globalization. The way I think about it is that it would have been impossible for the U.S. to have used the kind of framework that we have in place internationally for taxes, which is basically a transfer price system where you decide prices at the border. The ability to manipulate that when you have most trade intra-firm, and therefore do not have prices, is just too great. So what we do in the U.S. is to have the states levy corporate income taxes on the basis of a formula that allocates economic activity to the different jurisdictions on the basis of employment, sales, and capital. So if you are operating in a particular state, there is a formula that says which fraction of your global profits is attributed to that state. Obviously there is some manipulation of where you locate the result of that, which is inevitable, but the other system would have been impossible in the U.S.

To the extent you think globalization is creating a global economy, we really have to think about abandoning the transfer price system and moving toward what is called a unitary formula approach. Moving on to the IMF issue, one problem is that they claim they do not have the administrative capacity to disperse more money. I cannot evaluate that, but they say it.

A second interesting idea that has been put forward by David is related to the long-term view of the issue of vulnerability, namely that countries ought to be encouraged to have good safety nets and social protection. The question is: poor countries may not be able to fully fund that social protection system ex-ante or even in the long run, ex-post. So should the World Bank, or Multilateral Developing Bank or Regional Developing Bank, work with developing countries to create, sort of like a precondition, appropriate social protection networks? But then when a crisis arises, you say that, in effect, you can draw upon funds in the international community to support them. So you have a framework setup, and if you need more money in a crisis you could do it.

As for the IMF, there are two issues. One has to do with SDR, maybe we can come back on this when talking about global reserves, but evidently the largest allocation of the SDR goes to the U.S. I do not know if this is true but I have been told that for the U.S. to reallocate SDR [you have to go to Congress] and it would be difficult, even when money is so-called free, it would be hard to deal with it. So the concern is that if this is the case, one has to change the rules or create a new kind of facility.

As for the second observation, when I talked to Dominique Strauss-Kahn and the people at the IMF about the issue of pro-cyclicality, they claim when you benchmark, it maybe less countercyclical than wanted, but it is more pro-cyclical than it would have been without the money. But the issue

here is how to enable countries to be as countercyclical as they could be. We look at the programs that came out of Hungary, Iceland, and the Baltics, and they have all been very pro-cyclical.

Two more questions. The IMF has evidently changed its view regarding global imbalances, the benchmark view being that there are no more global imbalances and that they were never an important problem. [Ken Rogoff]'s view is that they continue to be the central issue. What inferences does one make from the new IMF view on this issue? One interpretation is that China and the U.S. decided that they wanted to get along better and the best way to avoid the problems discussing global imbalances was simply to say that this issue does not exist.

As for the final point, one of the aspects of the U.N. commission had a great deal of skepticism about the use of the IMF in general for dispersal. Developing countries have told us that they would not go to the IMF unless it was its last resort. They would first go to China. And if you think about this, that undermines the multilateral system. From the multilateral perspective, you would have thought that this current arrangement is really undermining the multilateral positions. And it is not only that developing countries do not want to borrow; countries that have a good amount of money do not want to lend money to the IMF. And this suggests the creation of new facilities outside the IMF, or inside the World Bank and the IMF, with a different voting structure, like the Global Environmental Fund, which is administered by the World Bank but with a different governing structure. Many people think this does not solve any of the problems, but it is a move in the right direction. It may be setting a pattern by getting a good quality governance structure that would eventually lead to a reform of the Bretton Woods institution.

**Fitoussi:** Just two very quick remarks. I understand that the existence of a Congress in the U.S. is a problem, but I prefer that it exists rather than not. Second, I am becoming more and more depressed if I link this session with the stimulus centered one of yesterday, where if I am right we said that for the stimulus to be efficient more should be done for the low-income and developing countries. What we are told today is that we have to regretfully admit that the stimulus will not be as efficient as we hoped.

**Stiglitz:** The disparity between the one trillion dollars announced at G20 and the actual numbers that are going to get into the developing is terrible, and it undermines confidence in the whole process.

**Ocampo:** I will offer a slightly pro-IMF stance. [Stiglitz: I said Antonio was becoming an academic, so... Ocampo: well, this actually a Minister of Finance bias]. There is a problem in interpreting IMF programs. If a country has been running a pro-cyclical policy during the boom, for example the U.S. has the great advantage of having run a pro-cyclical policy during the boom, it then has the luxury of running a countercyclical policy during the crisis. Of course the result of that will be forty or fifty percent additional debt and public sector to the GDP. But most countries do not have that luxury. So, for example, a country in Central or Eastern Europe that ran extremely pro-cyclical policies in previous years cannot have a completely countercyclical policy in the crisis. So in a sense the IMF is partially correct. What is the difference now? In the past you could say the countries that run pro-cyclical policies now have adjusted. But there is a way out of the crisis - exports. This was done during the Latin American debt crisis and the Asian crisis. Now this is not available in the same way and this is an additional problem. In analyzing the IMF programs, I always find it very hard, except for some economic logic, to force very countercyclical policies on countries that have been running pro-cyclical policies before. Unfortunately, I think they have to do adjustments. This is my Minister of Finance bias. In some cases, the only real solution is transfers. That is why for the low-income countries the only way to do countercyclical policies is to increase the aid, there is no other way because of the debt.

**Griffith-Jones:** One thing that struck me and seems to have been forgotten is the moral dimension of MDGs in the Bretton Woods institutions by being bias against low-income countries that Francois explained so clearly. They are pushing the countries to adjust as a result of external shocks and they are pushing them to adjust in a way that will just increase poverty. You have to push the NGOs to use this kind of moral dimension. Developing countries are going to suffer because this lack of resources both at the IMF and the World Bank. And just a small defense of the IMF: I think the short-term lending facility is interesting because it does have the conditionality ex-ante instead of ex-post and this might help to make it less pro-cyclical in the future. My final point, which complements what Joe said about the issues of new facility and new governance, is that the thing is coming back to regional institutions [...] The all issue of regional institutions by developing countries about short-term finance but also developing fund lending needs to be kept alive to the extent IMF and World Bank have not given a response.

**Stiglitz:** (Skip the break because of lack of time)

**Mohan:** It was surprising to me that Zoellick did not use the opportunity to press for a capital expansion for the World Bank and nor did the member countries of the G20. In a more medium to long-term perspective, from some of the work I have done on globalization, the accretion to urban population in Asia and Africa over the next thirty years is actually larger than it was in the previous thirty years. That really implies a very large need for infrastructure investment, particularly in Africa and Asia. The maintained paradigm over the past ten to fifteen years on infrastructure investment has really been to tap private capital markets for medium and longer-term infrastructure investment, both in the domestic as well as the international capital markets, and particularly in middle-income countries. Hence the World Bank has almost shut down infrastructure lending in middle-income countries. My guess is that given what happened in the financial sector, the availability of large amounts of international capital for infrastructure may become more risky in terms of expected returns. It would become scarcer not only next year but for the next five years. Therefore, we need a real estimate of the necessary amount of capital required and then for the World Bank and the Multilaterals to really resume their role. I have been intrigued by the fact that the EIB, which basically funds industrial infrastructure in Europe, actually does far greater lending on an annual basis than the World Bank. And to the point Joe was making about Zoellick saying that he would not have the staff or the capacity, it is actually surprising that EIB has, I think, less than a third of the staff of the World Bank. This is an issue that has been looked at adequately; we need to make better estimations of the capital requirement by low, middle and upper-middle income countries. The World Bank should not fall shy in lending to low-income countries. If there is justification for EIB to do this for high-income countries, there is no reason why this should not be done for low-income countries. If one gets reasonable numbers, there is a point there to expand the capital of the World Bank.

Another point is that the leverage is huge, and given the low interest rates one would imagine that the World Bank would be able to raise money easily as compared to the previous years. Actually, it seems that the World Bank has been having some difficulties in selling its bonds, but I am not sure this is the case. As for the very large expansion of the IMF that everybody seems happy with, from some of the staff work from the IMF that I have seen in the last few years, I would be leery of the IMF having that much more power in the next few years. I am troubled by really technical work I have seen from India.

**Stiglitz:** Going back to the 1997/1998 crisis, there was a discussion about the fact that infrastructure lending is always very pro-cyclical. There really was a need for the World Bank to step in, recognizing the pro-cyclical nature of the private markets. The second observation is that the way private markets often provide the capital for infrastructure imposes a huge amount of risk on developing countries, and some of the terms have been very bad. The failures of the financial

market with respect to developing countries have been visible for a long time, but I think they are now more pervasive.

**Flassbeck:** I would like to comment on what Jose Antonio said about cyclicity. I think his analysis is a bit too simple, although I have sympathy for defending the IMF in some cases. We have to make a much deeper diagnosis of what happened in these countries. We need a clearer analysis of what happened in these countries. Some countries in Eastern and Central Europe had overvalued currency, but they have not systematically had pro-cyclical policies. They had good growth, but not pro-cyclical policies. Most of these countries need a depreciation to correct the currency mismatch and the households and companies balance sheets. But they do not need devaluation plus restrictive policies for the next five years. The Fund wants to convince the markets that these countries are sound now and that they will stabilize their currency at some point in time. But notice the paradox that those markets that have revalued the currencies of these countries in the last few years have now been convinced that these currencies should not drop like a stone into nowhere by means of policies that destroy the economies of these countries. This cannot be the logic.

**Ocampo:** I do not understand your point. Pro-cyclical policies can be fiscal or monetary and can be allowing for income flows and exchange rate appreciation. I think Central and Eastern European countries run very pro-cyclical policies, in fact the most pro-cyclical policies you can see around. Latin American countries in the past have run very pro-cyclical policies. One of the reasons Latin America has been able to have not been as impacted by the crisis is that policies were not as pro-cyclical as in the past, or even countercyclical. Allowing households to get into debt in foreign currencies, what can be more pro-cyclical than that?

**Flassbeck:** But they went to Switzerland because the internal rate was so high. Is that pro-cyclical to go outside if the internal interest rate is so high? It is a currency problem; it cannot be described by pro-cyclicity. Appreciation of the currency is not *per se* pro-cyclical, appreciation is countercyclical.

**Kluza:** From the perspective of transition economies, there are a few issues to comment on. For example, the issue that there are no global imbalances. If there are no global imbalances, I would say that there are no crises, only shifting powers. Getting closer to transition economies, in the era of de-leveraging and crisis, I would say that we can observe a process where the fat is getting thin and the thin dies. It is a very specific macroeconomic situation where all the usually negative pass-through effects cumulate in the developing and transition economies.

Moving to the IMF issue, I would support the idea of the FCLs. We do see an increase in the role of the IMF in crisis management, especially in transitional and developing economies. The crisis did not start in transitional economies, but we cannot say that there is no crisis in the transition economies, and this is in spite of very strong fundamentals. I would say that generally, as a rule, transitional economies were rather countercyclical or neutral. The strong fiscal stimulus had an effect in Baltic countries. I would also agree that these kinds of instruments were overused in Hungary, but not so much in other countries. Indicators show that Poland has the lowest inflation of all of Europe for a very long period of time. Is this countercyclical or pro-cyclical? I would say it is countercyclical. Despite very strong fundamentals, we can observe less access to financing, increases in cost of money, and increases in risk spreads. This from my point of view creates a very vicious circle because increased risk spreads increases in the volatility of foreign exchange, but also it causes the depreciation, which is usually quite fast and strong. Depreciation and volatility are the effect of increases in risk spreads.

Coming back to these FCL instruments of the IMF, which I think they were quite successful, it is possible to comment in brief not only from the global or IMF point of view, but also from the Polish government point of view. It would be something like two minutes of shame and two years of safety and stability, because we say everything is going well in the economy, the fundamentals are fine, and we did not have a big decrease in the GDP growth. From the government's point of view, it would be two minutes of shame because we say everything is fine and good but we had to ask for support. The government lost some support, it was really difficult to decide whether to ask for the money they did not need or not to ask for the money at all. But if they do not ask for the money, they cannot say we have money on the side and if there would be a lot of speculation on the foreign exchange that we have resources solely to defend the currency. If they do not have money, then volatility increases. They do not need the money, but it is necessary to stabilize emotions and the speculation.

It is also important to say something about the ownership structure in Central and Eastern Europe. In the financial sector, 80% of assets are in the hands of international players. This is pro-cyclical I would say, because if something goes wrong in the mother country they would say we should stop the credit activity in the host country. This is legally prohibited, but it is true. If we could find any letter of that we would strongly punish them, but we need to find that letter. The FCL line is important just to break through some psychology of the market [...].

**Fitzgerald:** I am glad we have come back to the issue of capital markets. Besides the problem of pro-cyclicality of capital flows, I think the point of sovereign risk spreads is well-taken. These are multiple of the probability of default multiplies by the risk aversion. And risk aversion has gone up enormously due to the crisis. This increases the risk spreads, which in turn increases the probability of default. It is a circular process. This was at all addressed by the G20: the huge externality imposed on emerging market countries by the increase in the risk aversion in the U.S. It does seem to me that this is something that Multilateral Development Banks should or can tackle. I am very worried that they see their only role as getting more money and employing more bureaucrats. I think what the MDB should be doing is acting as market makers in sovereign bonds, supporting the sovereign bond market of the countries. They could do this perfectly well with their existing capital basis but they seem unwilling to do this. The duty of a similar bank at a national level is to support long-term infrastructure bonds. That could be a major proposal. Also by entering the market, they would increase the liquidity, which would reduce the risk premium, since it is one thing to buy bonds and another thing is to sell them, or to find anybody to sell them to. The fact that MDB was willing to act as purchasers of last resort [...]. Because international capital markets are completely dead, the market game does not matter. But I think Mexico and Poland's attitude to this would be quite different if capital markets have been working. I do not think this is a long-term proposal, but it could be helpful in the short-term. Another point, that I think Stanley Fisher and Rogoff already made in the past is that it is good to have prior conditions, but it should always be on a case-by-case basis. Of course, they bailed out Mexico and Poland because of the enormous political pressure to do so, whatever the fundamentals were.

**Evans:** We had three meetings with Strauss-Khan in the last four months. During the first one in November, it was absolutely explicit in saying that the crises we have right now is not due to bad policies, it is due to the fact that markets dried out, so there is no market there, and conditionality is completely changed. Back in the second meeting in January, trade unionists from different countries complained asking for wage and pensions cuts because of conditionality. But then again, where are those countries to which the IMF says we give you unconditional support because their markets dried up? In reality, the old conditionality is still in place. Despite the very clear statement in the G20 communiqué that the extra money would be designed to encourage developing and emerging economies to play countercyclical policies. But, in fact, this is not happening. So, in addition to the amount of money being so small, the conditionality has not been revised in any way. As for Joe's

suggestion regarding longer term views on the social safety net fund, operationally how do we get it? I think three years ago the ILO came out with some figures that it would only cost 3% of world GDP to put some basic safety net protections in place. Now it seems to be the time, given the amount of money on the table for other things, to try to implement this idea and perhaps engage the ILO in some sense. Another point is the intensive lobbying from employers groups at the moment to get both expansion and removal of a lot of conditionality on export credit systems. The argument is that the collapse of foreign trade is due to that fact that there is no export credit available and thus governments should step. I think the collapse in trade is much more likely due to a collapse in demand and it does seem, if you are worried about protectionism, that if you are getting into a bidding war of supporting or financing export credit by removing some conditionality attached to it, this would be dangerous.

**Desai:** I think banks are always willing to give money to people who do not need it, that is the nature of banks. They ultimately do it, and forward conditionality. So I think the distinction we made between transfers and conditional loans is really very important. We really ought to say that the real need now is for transfers.

One more thing, what is happening right now is a different kind of pro-cyclicality. The middle-income countries are needing much more support from the IMF than normally has been the case in previous years. This crisis has taken much more money for Poland, Hungary, Estonia and so on. I do not know if the IMF has the capacity to do two things, help middle-income countries from the bank failure and also help developing countries with their needs. I wonder whether there is a calling out of the IMF to help countries properly. What is much more worth thinking about, as Joe was saying, is how should we look beyond tomorrow and think of social networking, health, and so on.. If this money stays with the IMF, very soon it will not be needed and this bank bail-out money will come back. At that stage we ought to be ready with a set of demands to look after health, infrastructure and social network support.

**Bourguignon:** I think that all of what has been said about the relation between capital markets, the IMF and MDBs is really very important. I would like to remind everyone about the view of the previous U.S. administration on what the World Bank should be. The Metzler [...] report which said that there was absolutely no need for the World Bank and its activity because the market would do it very well. Now it is a very good moment to remind people that presumably the market is not doing things so well, and, as mentioned, that in this crisis the market dried up even though there was, at least in the beginning, nothing work with emerging countries. This really makes a very strong case for those institutions to continue lending to emerging countries.

In connection with the point made by Joe on the limited capacity to manage additional loans, everything depends on what there is to manage. One of the problems in the World Bank, maybe much less, as it was said in the EIB and certainly much less in IDB and the Asian Development Bank, is the issue that managing loans must be managing a program that the loan is supporting. But if the World Bank is lending money without a specific program, there is no need to have very strict management. I completely agree on the issue of social protection. One of the problems in low- and middle-income countries which try to build up social protection is that when there is a crisis you have to dismantle the whole thing. The point I was making about grants playing the role of insurance in case of an external shock would be a remedy for that.

**Barbosa:** I first would like to go back to the role of regional banks and regional credit facilities and give some information about what has been happening in Latin America and what the position of Brazilian government is. Sometimes we work with the assumptions that the interests of all less developed countries are the same, and this is not the case, there are a lot of differences of approaches in the region. There is an idea to create a Bank of the South going back and forth mainly

between Brazil, Argentina and Venezuela. And there are major differences about what the function of this bank should be.

Brazil wants it to be by and large a developing bank financing infrastructures in the region, while there was a demand from the other regions to be like a reserve bank. This crisis put something new on the table. There was a sharp contraction in regional trade, especially between Brazil and Argentina, with a lot of restrictions to imports by Argentina. Brazil offered Argentina some kind of credit line to support the regional trade and this was very politely rejected because of the political business cycle in Argentina. Recently a swap line agreement of 10 billion dollars between China and Argentina was announced. This created a lot of criticism within Argentina from the industrial sector, and the Argentinean government had to come out publicly and say they would not use a swap line to finance trade, but only [...] international reserves.

I, of course, think it is natural to have these differences in the region. One possible way to proceed is to organize a redistribution regime, where there are some economies like Brazil that can have access to credit lines from the U.S. and redistribute them assuming some part of the risk for the region. Obviously this would entail some agreements and, as José Antonio said, there are some inevitable adjustment costs to extend those credit lines, specifically because a lot of countries in the region have been using the good times of high commodity prices to adopt redistribution programs in the region which are very pro-cyclical. They cannot be sustained at the same level as in the boom period. As for aid to implement or construct social safety nets or social protection nets, I agree this is the time to push for it, not only because its social merits but also because it addresses indirectly the issue of global imbalances in some parts of the world. Politically, given the orientation of the current administrations in U.S., Brazil and other countries, it would be a very good initiative. On the technicalities of it, I believe social safety nets in the long-run are countercyclical measures, so they should be sustained by their own economies. There are some fixed costs of implementing which should be financed by aid and not debt, and most of the aid should be directed to poverty reduction.

The third issue has to do with pro-cyclicality of high interest rates. I agree with José Antonio that there is a paradox, I do not know much about the dynamics in Eastern Europe but I suspect it followed the same Latin American pattern where you want to have a convergence to a strong currency, you start with a very high real interest rate which has the paradoxical effect of reducing inflation and increasing real wage in the short run. This has a very pro-cyclical response in the short run. In the medium run, you end up with a current account problem that will induce you to have countercyclical policies. That has been the pattern in Latin America, Argentina, Mexico, Brazil, with short cycles of appreciation, a boom pulled by domestic demand, then a balance of payment problem and then a countercyclical policy. This has puzzled many economists in Brazil and I believe has misdirected some interpretations. This is one explanation why the Lula administration accepts such a high real interest rate in certain periods, because they were very popular and very expansionist especially in the first years.

**Battaacharia:** Just to point out the conundrum of banks not having enough staff to provide money. One very simple way to do that is for the World Bank to increase its share of financing of all projects from 60% to 75%. It is an automatic budget support mechanism and releases the money for countries to use for whatever they choose. I do not disagree with the sentiment that having social protection is very important, but in the MDG context and Africa I would like to stress it is extremely important not to lose the growth momentum in Africa. And this means sustaining investment not just social protection. For that investment you need to have money that is funneled through the budget for investment projects. This is not what Western donors like to do, it is what China, Brazil and India do well, but not Western donors.

**Mikandawire:** One should remember that there are at least four sides of social policy. There is the protection, the distributive, the production and the reproduction side. What we see is focused only on the protection side. If you think of social policies as involving also production, especially of human capital, one of the things you could do now is massive investment in education and skills formation. That would address both the protection and the production sides. Unfortunately, the focus has not been on the distributive and reproduction sides.

**Stiglitz:** Due to lack of time, I arbitrarily move to the next session. Those who could not make comments now can make them in the next session. The debate over the reform of the global reserve system is one of the more interesting aspects of recent events. It was one of the things highlighted by the U.N. commission; the traction was given very strongly by China's concerns about the dollar. Those who own dollars are at risk of getting no returns, so these concerns seem very natural. We have now four very brief introductions.

**Barbosa:** On the issue of the imbalance and the crisis, I believe this crisis has to do more with the regulation and low interest rates than excess savings from the rest of the world. I think these were a natural and rational response to a system that imposed a high liquidity constraint on those countries that do not issue reserve currencies. The problem is more that of explosive, rather than large, imbalances. I think we should make that distinction. I do not expect, given the different stages of development across countries, that there would be no large imbalances between them for a long period. Therefore, we have to manage these imbalances so that they do not explode and not to reduce them to close to zero.

In the last ten years, the Asian model of export-led growth became more disseminated in other parts of the world, especially in Latin America. This model also creates an apparent paradox, as you can see capital flows from most advanced regions to less developed regions, whereas mainstream theory suggests exactly the opposite. If you think outside the box, it is not very difficult to justify why such a model or such strategic exchange rate policy is beneficial for countries that adopt them. Depreciated exchange rates and an accumulation of international reserves are rational responses to an international monetary system that penalized debtors with pro-cyclical adjustments during the balance of payment crisis.

After the Asian crisis this became a common conclusion around the world. It was the Latin American region that believed most in the Washington consensus on the virtuosity of having a large current accounts imbalance. But after the East Asian crisis this was completely excluded as a rational policy option. There is the issue of the short run, that if you have large reserves you are able to cope with a crisis like this one. But there is also a long run issue, which I think is more important and has to be addressed by any monetary arrangement, which is the positive link between export growth and productivity growth. It is not a new thing that one of the instruments used to expedite the catching up process is to use a strategic exchange rate to boost your productivity growth until you have enough competitiveness to align your currencies.

From these two considerations I think that, given the liquidity constraint and the fact that there is still a lot of catching up to be done around the world, we can only move to a new global reserve system if developing countries are assured of financing in cases of distress, if you alleviate the liquidity constraint, and also if you provide a substitute for the instrument of the strategic exchange rate being it finances foreign investment or some trade agreements that promote productivity growth in less-developed countries. In absence of that, we will continue to see what I call the asymmetric [...] floating; a system where you have a flexible exchange rate which is asymmetric in the sense that you create a floor so that your currency does not appreciate too much, but you do not create a ceiling. This is a policy that has been adopted in Asia for a long time and more recently has been proposed for Latin America by [...] This ends up being a rational response to a system that we

had in the last twenty years, which allows countries to have liquidity to face international crisis and also to obtain a high level of competitiveness.

As for the third point, in theory a monetary system where liquidity is created through new SDRs again reduces the liquidity constraint. It can be a new way to issue international currency and it is more beneficial than the traditional way because it is automatically allocated to developing countries. As Omar was saying, 50 billion of these new issues of SDRs were allocated to developing countries. But this has to follow the current composition of IMF quotas so the counterpart is that most of it went to developed countries. Unless we have a way to recycle these new SDRs to countries that need them, I think we are going to face the same problems that we had with IMF lending. In many countries this has to pass through Congress. In Brazil it is not so, but there is a lot of political resistance against allocating any reserves to other countries unless they have a clear agreement on what will be done with those reserves.

**Ocampo:** I have some similar and some complementary points. My analysis of the global reserve system emphasizes three different problems that refer to the different ages of the reserve system. The first and the oldest is the one that was emphasized by Keynes, which is the asymmetry in the adjustment between debt and surplus countries, which is very evident during crisis.

The second is the Triffin dilemma in a broad sense, the fact that when you use a national currency as a global currency you enter into several problems, in particular if the country that is the source of the global reserve currency does not internalize the global implications of its monetary policy. Although Triffin made his point in the Bretton Woods system, you can have a modified Triffin dilemma, which is the fact that we have been living through very strong and increasingly sharp cycles of the current account and the balance of payment and the dollar exchange rate.

The third problem, along the lines that Nelson was mentioning, is the fact that developing countries have found out through crises that the only defense they have against a volatile international financial system is to accumulate reserves. This is self-insurance and self-protection. This is associated with another point: in a system in which developing countries had a demand for reserves similar to industrial countries, 3% or 4% of GDP, now developing countries without China have about 24% of GDP and this is a phenomenon of the last two decades and it is due to self-protection. This generates growing inequity in the system because these reserves are essentially invested in the U.S. Treasury at a very low interest rates and it also generates an inflationary bias if the counterparts have current account surpluses.

The design of a new system can try to solve some of these problems. The essential proposal I've been working on in close contact with the work by Joe and others at the U.N. commission is to have a fully SDR based IMF. This means essentially that the IMF should stop using national currencies at all and just operate in SDRs. You can think of a system in which countries are contributing their own currency to a reserve bank and they are given the global currency in exchange, but this generates the same problem the IMF always had, which is having a lot of useless currencies in the hands. Only 30% of quotas can be actually lent by the IMF. In the end, the best thing would be to completely eliminate all that paraphernalia and move to a system which is fully based on SDRs. This has one important problem that Nelson mentioned: the allocation of SDRs is based on quotas that are very different from the demands of reserves. So for example, developing countries receive 40% of issues but they need 90% of the additional demand for reserves. So either you change the allocation system making it dependent of the actual needs, or you move to a system to recycle the SDRs allocations, which is probably the most likely solution.

In my way of thinking, the IMF should have two instruments, a countercyclical issue of SDRs and a recycling of SDRs. We can also have an additional countercyclical credit instrument, which actually was suggested by Pollack about thirty years ago. In the first case, you would allocate the SDRs, even to many countries that do not need them as reserve and then you recycle them possibly by a change in the agreement that says that SDRs that are not used will be considered deposits in IMF can be lent.

**Desai:** That requires that the U.S. Congress agrees to change the regulation.

**Ocampo:** Any change in this area would require a change in [...].

**Desai:** If you can avoid that, it would be better.

**Ocampo:** That does not seem to be possible. So this would be the system in which, putting the two accounts together, SDRs that are not used will be considered to be deposits and the IMF can lend them to countries that need them. That is one way of doing it. The other way, which Pollack suggested thirty years ago, is simply to give additional credit during a crisis, up to a ceiling in SDRs, which have the virtue of being really countercyclical since when paid back the loans are extinguished.

**Desai:** How will you use them? Who will accept them?

**Ocampo:** You have to continue with the current rule that countries have to accept SDRs, otherwise the system will collapse.

**Desai:** But if they are not backed by anything, why would I accept them?

**Ocampo:** It is like a national currency, which is only backed by the fact that other people accept payments in that currency. Any central bank in the world has to accept payment in SDRs, that is the rule today.

**Desai:** But a fully SDRs-based system may still run into problems of acceptability.

**Ocampo:** These are the two possible mechanisms. The only additional point I want to make is whether you want to make additional use of SDRs, for instance to be used by commercial banks. I take the view that they should be limited to central banks. This will allow the dollar to be used as the main instrument of payment and therefore the cost of transition for the U.S. will be much lower than in the case if a broader use of SDRs were allowed. For that reason, the first step is to make SDRs a system for holding reserves and only in the second step could they be used as means of payment.

**Uzan:** Concerning the international monetary system, we have to define a new Bretton Woods. How can we restore the global monetary standards? Looking back at the history of the International Monetary System, there were currencies linked to commodities like silver or gold. With the collapsing of the BW system in 1971, there was a political link since currencies were anchoring to political power which implied that we nationalized money. What was not resolved was the international aspect of it. This is why the international monetary order is coming back into the discussion. Inflation is less domestic and much more international.

At the global level, we have one part of the world that is floating and another who is pegging. Before the G20 summit, there were some interesting discussions about that. The governor of Central Bank of China made speeches about reforming the international monetary system. He was concerned about the dollar being the main world's reserve asset, as the world depends on U.S. monetary emissions. We saw a re-emergence of the weaknesses of the international monetary system. Maybe the long-term answer is a super-sovereign reserve currency. That is how the SDRs can come into play. In fact, the G20 endorsed the issue of 250 billions of SDRs by the IMF. However, in the communiqué there was no arrangement for transferring from rich countries to poor countries. The SDRs cannot be used directly as a means of payment to buy goods and services. They have an interest cost attached to them. The IMF has an SDR account for every country that has an allocation and countries that are in surplus with respect to the allocation can earn interest, and those who are in deficit pay a very low interest rate.

As for a system for transferring SDRs, the U.N. and U.K. may have a problem with that because a transfer of SDRs counts as an expenditure. But can SDR be a reserve currency? Can we have SDR-denominated deposits or bonds? In the G20 communiqué there was the proposal to have the IMF issue bonds in SDRs. [...] China has been doing swap agreements with Argentina, Indonesia, and Belarus. China is getting very worried about accumulating dollar reserves, so if nothing is happening in a multilateral basis, China will be thinking with a more bilateral approach. We already saw countries that were net creditors and lenders becoming reserve countries. For example, the U.K. and the U.S. We also see that recently China is no longer accumulating reserves. We see a bit of credit expansion in China.

**Stiglitz:** On the topic of the global reserve system, it could serve multiple purposes and these should be all kept in mind. The current dollar reserve system, or any single currency reserve system, has the problem that the country issuing the reserve currency has to effectively borrow from abroad and this leads to a potential instability as their liabilities build up. That is called the Triffin problem.

The second one, which I think is more important in the current context, is that building up reserves reduces global aggregate demand. If you had other ways of mitigating risk, you may not need reserves as a way to insure. We could think of other ways of insurance. And the consequence is that countries are burying in the ground 500 billion to one trillion dollars in purchasing power and that is a negative in global aggregate demand.

Another aspect is the instability of any system where we view deficits as a problem asymmetrically with surpluses because the basic identity is that the sum of surpluses has to be equal to the sum of deficits. If there are countries that persistently have surpluses, there will be other countries that have deficits. The deficit is like a hot potato, if it disappears at one point of the system, it will reappear in another point unless the surplus also disappears. And the incentives for countries to have surpluses are totally different. Now we had a system where the U.S. is the deficit of last resort, but that system is also broken.

The other problem is the inequity of the system as the developing countries are lending to the U.S. at a close to zero interest rate, while they often [...] the U.S. at a high interest rate. So there is a net transfer going on there. These are some of the main reasons why there is a need for a change. I think the system is already changing. The U.S. is taking on such high levels of debt and the FED is having high levels of balance sheet expansion. There is discussion about the ability of the FED to manage that and there will continue to be a widespread perception that it may not be able to do that. Anyone looking at the FED over the last ten years would not have reason for confidence in their ability to manage anything, let alone a problem of this magnitude. If that is the case, then a country holding a couple of trillion dollars is realizing that it is not getting any compensation for bearing a lot of risk and it would be very natural to start asking how to get out of this mess. So which kind of system are we going to? If we do not organize it collectively, we will go to a multiplicity of systems. We would go to a bi-metallic silver-gold system, a Euro-Dollar-Yen system which leads to some diversification from the point of view of the holders of the assets, but it would not address the issues of negative impact on global aggregate demand and of the systemic instability I talked about.

The other thing that will happen is to have regional initiatives which can be viewed as for of insurance. This is one of the ideas behind the Bank of the South. There could also be other cooperative arrangements. Conceptually, the global reserve system is a version of the cooperative insurance because you are sitting on these SDRs that can be used in times of emergency. It is of course a limited insurance, because you can only use the reserves, but if built up it gives you a buffer.

The next issue is then the institutional arrangement for doing that. I continue to be mystified why so many people want to give a larger role to the IMF, an institution that failed so miserably and whose

governance structure has not been reformed and is likely not to be reformed for obvious reasons, which says we will give money without conditionality, but – by the way – we have some conditions. I understand it is easy to explain, because SDRs are in the IMF and what we could do is just change it a little bit in order to solve the problem of recycling and to do it on an annual basis. However, if we have to go back to the U.S. Congress and to [...], let's do it seriously and from first principles of what we want.

What we really want does not need a very complicated institution, particularly if you take the view that we are not going to have conditionality and people going around and saying whether you are doing the right thing or not. A metaphor I use is that it is like if we find a mine in 19<sup>th</sup> Street, Washington DC, but not a traditional mine where you have jobs created but also a lot of danger. Here you simply have a paper gold mine, where you just go down and take 500 billion dollars a year. Then the question becomes how you allocate them. Once you realize that gold should not go to the country where the mine was, because it is actually global property, we have to decide how to distribute it. It is a difficult question, maybe impossible to answer, but there are some criteria that can be used. One is that we can realize that we are in great need of global public goods, including global warming and global developments, and we could then finance them. The countries getting the money would then put the global gold back in their reserves. So this may be done by different institutions with the understanding that it would be converted in local currency and put into reserves. Undoubtedly this is going to be contentious, but I think it is worth discussing it.

Finally, the problem of how much to issue will have the same complexity. You may have a rule-based system, where you fix the percentage in terms of global GDP or trade volume. Or you may have a more complex system, which I think is worthwhile, that works in a countercyclical way. When the GDP is below the trend, we would issue more to help the economy. Once you realize that one of the main problems is the insufficiency in global aggregate demand, and that problem is not going to be fixed by almost anything we talked about, you will see that this is the only proposal that is likely to address this problem in the short- and medium-term.

**Fitoussi:** I have an answer to your question of why we are giving more power to an institution that fails. One of the reasons is that it may be easier to control an institution that fails instead of one which is successful. A second reason is that the process of multilateral decision-making is very complex. If you have to enter a new architecture, you could encounter many oppositions. The best thing is not to decide.

**Stiglitz:** If you have a simple rule-based process, you may need more people than the FSF, who are seven, and that is an example where you can get a lot of publicity out of seven people, but you do not need so many more people.

**Ocampo:** No Joe, you do not need only that, you need a recycling mechanism. This is why you need an institution that can lend.

**Stiglitz:** Well actually, there are two more points I want to make. In Keynes' original proposal, he tried to address the problem of surplus countries. In one version of the proposal, one of the rules for allocation is that surplus countries would loose some of the share they would have had, as an incentive for them not to have surplus. However countries can trade. If a country happens to have more SDRs than it needs, it will go to a country that has less of them. You do not need to have redistribution. This is simply just money that is convertible.

**Flassbach:** But what is the value of this money, what is the exchange rate?

**Stiglitz:** It is very simple, that is why I used the word 'paper gold'. It has a convertible price into dollars. Now it is the IMF that fixes the prices every morning. As part of the international agreement, all would agree on that. As you do not want arbitrage to go on, you set the price relative to the dollar and then the market sets the prices relative to the other currencies. Just think of it as a new fiat money everybody agrees to accept. And the only attribute you want is not to use it as a medium of exchange. It will be understood that countries will simply put it in a vault.

**Desai:** You are saying that it is going to have value, but value is not set by agreements.

**Stiglitz:** Money is accepted because people have agreed to accept money.

**Desai:** If I have a dollar, why would I exchange it with an SDR? What will I do with that? Why should I give it to Botswana, if I do not want Botswana's currency?

**Stiglitz:** But central banks have to agree to accept it. At the moment, Botswana is exporting more than importing and accumulates reserves in dollars, the value of which depends on the President of the United States and all kinds of things. Now, it would exchange the dollars for the SDRs, which is exactly what China would be doing. People would accumulate reserves exactly as they do now and then convert some of these reserves in the SDRs.

**Desai:** A fiat currency must have some sound basis for value behind it. You are thinking that simply because surplus countries will be willing to exchange SDRs, they will have value. People buy dollars because they are very liquid, and you can always buy something with dollars.

**Stiglitz:** But you can always convert it into another currency, and use that to buy things.

[...]: At which price are you going to convert it?

**Stiglitz:** It is the same way it is done today. Right now, IMF sets the prices of SDRs every morning because it is effectively a basket of countries.

[...]:

**Stiglitz:** Look, this is no different from the current system, except that it does not allocate SDRs on the basis of quotas. Once you accept that it can be allocated by any other principle and that there is no conditionality attached to them, [...]

**Ocampo:** Well, the IMF does not attach any conditionality to the SDRs. However, what is missing in your scheme, Joe, is that if you do not give exactly according to needs, there has to be a mechanism to redistribute excess allocations. It has to be attached to a lending mechanism, and either you use the existing IMF or you create a new IMF. Recycling is not only about central banks willing to hold SDRs. It is a means of payment among central banks. And even if any central bank is willing to accept an unlimited amount of SDRs, the problem is still that if you do not allocate them exactly to the needs of the country, you need a lending mechanism.

**Williams:** It seems to me that we have to separate the problem of issuing from the problem of allocation and distribution. At point of allocation, you have to have claims on central banks who have hard currencies. In the initial stages of issuing, one should operate like a currency board system where you are able to distribute against the claims that you have against the hard currency countries. As confidence in SDRs increases, you might be able to issue beyond that. In the end, the market will set the value for these SDRs, which will reflect the faith in the backers of this currency,

which are essentially the hard currency countries. Like the ECU which in the end became a tradable currency.

**Mohan:** I am not sure what problems we are trying to solve with this complex mechanism. Is this the kind of problem that China has raised, mainly a very short-term problem? Have a look at the data. It was only in the last five years that Chinese surpluses and U.S. current account deficits exploded, before that the situation was much more balanced. This is similar for other countries. To me, this has a lot to do with the expansion of the U.S. monetary policy, and the fact that many countries followed it. But then this problem might be resolved by itself. Given what is happening to trades, the current account deficit in the U.S. is likely to go down and similarly, given what is happening to commodity and oil prices and China export, surpluses may also go down. Of course, you still have the stock of reserves, which is very important. For me, it is important to understand what was going on with monetary policy in the world in the last fifteen to twenty years, with inflation targeting, what kind of inflation central banks have been looking at, how they have been misled. That is in my opinion the question that needs to be addressed, particularly in academia. As well as the consequences of the kind of monetary policy that has been followed, except for India I should say, and the consequences on financial markets that we discussed yesterday, particularly excess liquidity.

Another point is that net capital flows in emerging market economies were never more than 200 billions dollars per year before 2005, at least to my knowledge, and only after 2005 did they shoot up. This is again is a recent problem which maybe gone by the time the new mechanisms are agreed upon. Moreover, people like John Taylor asserted that the increase in oil and commodity prices can also be a consequence of monetary policy of the U.S. in particular. Finally, when you have high growth like the one we have experienced in significant countries, you do need a corresponding expansion in monetary aggregates, including base money and a comparable expansion of balance sheets. To do that, either you accumulate foreign assets or domestic assets. To get these domestic assets, if you do not want to dilute their quality, you need a certain degree of fiscal deficit. If you are fiscally responsible, it may be that you cannot acquire enough domestic assets and then you turn to foreign assets. So far I think the demand of foreign assets in the last years is partly explained by the strong growth in some significant countries. And only if it goes in excess of what you need, is there some kind of a role for sterilization. As for the SDRs, I do think that it is not clear what will back them.

**Stiglitz:** Going back to your first question, on what this system is trying to solve, the problem has been a long and persisting one in Keynes. While the magnitude has increased enormously in the last decade, the general problem of insufficiency of aggregate demand coming from those countries that have to have reserve is a long lasting problem. The various market reforms may have increased instability and therefore increased the demand for these reserves. We do not know whether this is over or not. My response to that is that even if it is only a 2% of world GDP, this is still a big number. And if it turns out that the world is becoming more stable and we will not need so many reserves, than this program will be diminished in size. The main focus, in my mind, is however the deficiency in global aggregate demand, combined with this property that the sum of the surpluses is equal to the sum of deficits as well as the asymmetries created by the particular one country reserve system.

**Silvers:** It seems to me, Joe, that you are suggesting an incremental [...] to move away from the dollar as a reserve currency toward a truly global reserve currency. The implicit corollary to that is that the IMF, who issues such global currency, will be a global central bank. Of course, the details of the discussion around this table are on how far you want to go in that direction. I can tell you that this will be resisted to the death in Washington, and not without reason. Of course, this does not mean that it is a bad idea. In light of the conversation that has been held earlier about the U.S.

Congress, and I speak as the only part-time employee of the U.S. Congress in the room, that any attempt to try to achieve something of this nature will have to be sold to the U.S. Congress. How would you possibly do that? Well, I have a suggestion for you. We, as United States, are in part financing our current level of consumption because of our ability to access the global reserves. On the other hand, a fair number of insightful people in the U.S. government are concerned with the structural imbalance that we have and its sustainability in the long-run. Certainly it is true that the data shows that those imbalances have grown rapidly recently, but that does not mean that some kind of ephemerality around them are a shift of productive capacity that it is unlikely to come back to the U.S. and is likely to accelerate. Now, people in the US are worried about this. Someone said that U.S. and China are no longer discussing imbalances, this may or may not be true, but key to this discussion is that the U.S. and China are locked in a dysfunctional balance that is not good for either of us. [...]

We used this cycle to create jobs to the real estate bubble. That bubble has now burst and effort is under way to restart it. That effort may not be successful. The picture you have to make is that what you are proposing is part of a set of solutions to the imbalance problem. This problem is recognized in the U.S. as a real problem. Moreover, you have to have a story about what will happen if you move in this direction, and this brings up the question of the reform of the Bretton Woods institutions. You have to have a story about how moving in this direction would essentially lead to the deployment of global savings and global reserves, and through this type new quasi-central bank type of arrangement with the IMF in a way that will generate aggregate demand that actually produces jobs in the U.S. I think you could sell a kind of global infrastructure revolution oriented towards basic human needs and you would move to something far more sustainable within the U.S. economy than you have today. I propose this argument without any data to support it, as the real point I am making is that if you do not make an argument of this type, then all propositions look like pulling the financial legs out from under the U.S. economy as it is.

**Stiglitz:** If people are buying dollars for their reserves, it is contributing to our trade deficit. And anything contributing to our trade deficit is undermining domestic aggregate demand and creating a problem. You have to look at this from a global perspective and if they demand U.S. dollars to put in their vaults, we will have a trade deficit. The current system is going to change. The U.S. is going to be able to finance the way it has. In my mind the question is whether we are going to have a more chaotic system.

**Mohan:** Let me make a small comment. Looking at the Euro, some of our reserves are in Euros but we distinguish the credit quality of each member country. This goes back to the general question that if you want to issue SDRs, what is the backing? If the SDRs have a composition of a fixed amount of currencies, then they have to be back in that proportion. This is something I can see.

**Ocampo:** In my version, which is actually different from Joe's, what is the backing of SDRs? The deposits of SDRs in the IMF have to be invested by IMF. You can use them for lending during crises but in normal times they will be used to buy the Treasury bonds of member countries. There will always be a backing in that sense; it is like any central bank, where liabilities – SDRs in this case – are invested in bonds of some sort. Aside from the generation of liquidity in a way that is non-contractionary and does not give excessive privileges to the U.S., my scheme also solves the problem of how to finance IMF lending during crises, because that this is the problem I am trying to solve.

**Flassbeck:** Sometimes American ignorance concerning things that happened in Europe for thirty years is incredible, it is really impressive. We have gone through all these processes, we had the ECU, we have the Euro, it is all done. But the most and only important thing you are not talking about at all is that you have to fix the exchange rate and have a mechanism to change it. That was

the condition in Bretton Woods too. Without that, you are talk about nothing, it is an idea totally empty.

**Fitoussi:** I can't understand: if it is a basket, it has an exchange rate.

**Flassbeck:** But you have to fix it, you cannot leave it to the market. You cannot force a central bank to accept a currency that [...]

**Stein:** I want to go back in history a little bit, to the original debate between Dexter White and Keynes. There were three main issues: first, Keynes said it was crazy to keep the IMF and World Bank in Washington, as they would be completely politicized. Second, if you have a gold exchange relative to the dollar, basically making the dollar the reserve system, you will be subject to the tyranny of the U.S. dollar. Indeed the U.S. abused that, went from a ratio 1 to 4 of gold reserves to a ration of 4 to 1, flooding the world with dollars, which was part of the breakdown of Bretton Woods.

The final point, on which there was a huge debate, was the issue of conditionality. Keynes said we need to have a revolving credit mechanism, and in reaction to that we had Dexter White screaming that we have to be able to block the lending process. So you see that all this about the hegemony of the U.S. So in some sense we are going back to the original notion that governments, in periods of crises, have to have access to something. The other problem is that when you issue SDRs how you get access to the other SDRs? What you can see is the mechanism put in place by China with Africa. They set up this conditional aid mechanism which says we give you Chinese credit if you build infrastructure using Chinese employment and Chinese capital and in return you can pay back with resources. You can think of starting to lend the SDRs on a similar basis. In a sense, everything that Keynes was worried about has happened and we have to go back to the original debate, but we are faced, as Damon said, with the enormous intransigence of the U.S. government, which was originally there and still is.

**Fitoussi:** Two more observations and then we move to the next session. The issue is indeed essential and I support the proposal. There are some technical issues to be solved, for example, if the weights in the basket should be determined and then the exchange rate should fluctuate or the opposite.

**Desai:** Let me anticipate something that Inge Kaul was going to propose in her session. She was proposing issue-based global commissions, one international finance, one global warming and so on, and then have a global-global commission. That is in her paper that I am reading for you. Right now SDRs are coupons not money, and have values because poor countries do not get many coupons. If you had poor countries get a lot of coupons, then what will be their value? Which is why the value of SDRs becomes important once you make unconditionally available and they become money. At that point central banks will ask why they should hold this junk money. Therefore, you have to address the question of the basis on which these SDRs were created. Joe's desire to repair aggregate demand will not work because people will treat this money like confetti.

**Griffith-Jones:** For Joe's proposal, you would really need a strong institutional anchor because you need an ally, and so you may actually need the IMF or my favorite institution would be [...], where actually lots of the reserves of the world are held. You need an ally, like the Euro needs the ECB.

**Fitoussi:** Well, this is not what I would call an ally.

**Griffith-Jones:** Ok, it has a terrible deflationary problem. The other point is that it is politically powerful to link this idea to environment and development, but then the problem is how to use currency, which is liquidity, for long-term investments. The scheme of José Antonio is interesting

but there you have loans from the IMF and then we think about conditionality and things we do not like. If these could be loans without conditionality, then you could merge both ideas.

**Chen:** You will excuse me as I am not a professional economist. From my observations, money is not an instrument to solve problems in reality, and maybe we are having too many expectations from the monetary instrument. I think the real issue here is geo-politics. You may find two countries, like China and Japan, that have huge foreign reserves. Why is it so? They do not like that. China and Japan have similar situations, very high population density, very modest resources, so they want to buy enough resources and generate enough jobs in the domestic markets so as to export products. But China now found out what it needs, that is better technology, so that you better use your own resources. However, China right now is at the lower end of the international division of labor. China has huge exports but very low margins because international markets were controlled by multinational companies. They do not have direct access to American or European markets. China's savings are mainly in companies' hands not governments' hands, because the profit margins are so thin that they cannot get external financing, their growth or survival mainly depend on self-accumulation of profits. However, when Chinese companies try to buy technology or resources on international markets, they are always blocked by American or European authorities in the name of national security. So China found out that the more surpluses they were holding the more trouble they had in international politics.

If you look at the scale of China's trade surplus, you see that it is almost balanced because China has a persistent trade deficit with East Asian countries like Japan, Korea, Singapore, Malaysia and Taiwan. And because America has an asymmetric trade policy. They can export high technology products to these countries because they are former anti-communist allies. China can only buy second-hand technology from these countries. However, China gains politically from a bad American policy, because these countries have a persistent trade surplus with China so they switched from being rivals to be China's partners. They solved China's big political problem with neighbor countries. China gets all these paper Treasury bills and can buy nothing except more Treasury bills. This is a dilemma. The Chinese government has no incentive to increase their quota in the IMF, they want to get rid of the burden. China has been increasing investments in Africa and Latin America, as I think they learnt important lesson from Tibet and they found out that money is a necessary but not sufficient condition. In the past 60 years China subsidized Tibet with huge amounts of money with almost no return. I'll tell you a simple story. If you give money to these local people, since they live in an environment of subsistence levels due to very harsh environmental conditions, the majority of the local people donate this money to the temples, because they thought it was good for the next life, and then went begging.

Then China tried to build infrastructure, which mainly benefited outside, [...] people as they are good in commercial business. Then China found an incentive system to help these people without financial gains. They formed a sister partnership between provinces and counties in Tibet, and then provinces compete to create sustainable projects that help local people. Moreover, every province creates a high school and university for local people. This is changing their mentality and building social capital. I would suggest Joe has a very idealistic proposal, but we have a very dirty job in politics. I think it is very difficult to reform the IMF unless you create a competitive mechanism to challenge its authority.

There are several ways to do that, since competition is not always good, as the winner takes all. We can identify several potential models by testing them. Let's say, find places in Africa, Latin America and South Asia where help is needed. We have more than five models of market economy, the Anglo-Saxon, the European, the Japanese, the Scandinavian and possibly the Chinese model. Ask them to race, to create a system of partnerships to show the potential moral power of a sustainable business model, and let people choose which model they want to follow. I think

American and European people are very proud and they would do their best to help these local people without financial gains. At that point you create competition for the IMF and World Bank with other organizations to do a better job. Then in ten years we may have better situations to change the world. Otherwise, we have so much demand and so little power. The people with power do not care about developing countries, but we do care. So I think we can do something in this direction.

I have one more observation. I think the Chinese government raised the issue of SDRs because they realized they cannot replace the dollar, nor can the Euro. However, by raising the issue you impose some moral constraints on American policy makers. If we can create a competition, I think American Congressmen will be more sensitive to their national pride and they will do good things, just like after World War II. In this way, I think we may have a better chance.

**Fitoussi:** But what would be the prize for the winner of the race? A bond for a better life?

**Barbosa:** I think all the proposals here are too focused on how to create liquidity, but the problem is not only liquidity, it is also the exchange rate the other currencies will be tied to in the new unit of account. And the problem we are facing is not only the unfairness of the way we create liquidity today, but also of relative prices for the other currencies. That should be part of any proposal and this brings us to the problem of exchange rate coordination, which also should be included in any proposal.

**Fitzgerald:** Just two technical points. Any discussion about the basket is in effect a decision about the exchange rate and it could never be done as a technical issue. As for the second issue, I am not usually worried by José Antonio suggestions but this one did worry me. He suggested in some way that the value line behind the SDRs would be the loans the IMF makes. Now we know that the IMF and the Bank are extremely bad at that. The only reason why the Bank can sell its bonds on the U.S. market is because they are underwritten by the U.S. Treasury. At the end of the day, central banks are underpinned by the Treasuries. At the end of the day, bank bailouts are done by the Treasuries, not the central banks, and we have to face the fact that some Treasuries, it may be China, have to underpin this new [...], which must have a fiscal basis.

**Stiglitz:** I think we will not completely solve this issue now, it is too complex. Let's move to the next session on global economic governance, these issues may be a little bit easier than the global reserve system, or at least there we know what should be done and what will not be done.

**Stein:** Many of the discussions in the earlier sessions are reflected in my brief. There are a lot of similarities I agree with, but there are additional points, in reaction to the issues raised in the morning which I did not have a chance to react to.

The first thing I would like absolutely to stress is the extent to which and how close the IMF was on the [...]. This is a little bit extreme, but the IMF's general resources account in 2007 was down to the lending levels of the 1970s at 6 billion dollars. And the IMF of course makes its money and the general resources account. They were in an enormous crisis. If you look at the comments of Strauss-Khan at that point, he kept saying it is a crisis of identity, we are in bad shape, we are going to make hundreds of millions of dollars of cuts. It really was an extraordinary situation. And the reverse, how rapidly it has changed is absolutely astounding and frightening because the comment by Strauss-Khan after the G20 meeting was "Today is the proof the IMF is back". It was such an opposite and extreme case. [Amar?] is absolutely right about this whole notion of the huge amount of empowerment without any change. It really was amazing. And if you look at the statistics, I disagree slightly with who is actually getting access. It is not only the five richest and the five

poorest, there is a large number of middle-income and poor countries growing almost on a daily basis. I have a list here of about ten or eleven countries that have received loans last fall.

Joe, you had this question about conditionality in Mexico and I have actually read through - I have this really bad habit of late night reading of IMF programs which sometimes pisses me off but often gives me a good eight hours of sleep - and it is actually a repeat of the past. Just to give you some key quotes out of the agreement with Mexico, it is really quite amazing. Francois had this comment that maybe the Mexican situation is different, but it is not. The question of ex-ante versus ex-post conditionality I think is pretty nonsensical. If you actually look at the conditionality in the Mexico case, it says, and this is the typical stuff they talk about, that Mexico has strong fundamentals, low inflation, strong anti-inflationary bias, large reserves, cutbacks in government debt, balanced budget fiscal policy, and a flexible exchange rate. This is the perfect world of the liberalism and macroeconomic stabilization as perceived by the IMF. But it goes a bit further than that. Despite what was clearly a collapse in economic growth, with forecasts of at least 4% decline in 2009 and possibly higher after the flu, they say, I quote, "the public debt in Mexico will remain manageable under all scenarios and with [...] sector growth financing requirements set to continue their decline as a share of GDP." And so what we have here is pro-cyclicality on the downward side. So this ex-ante versus ex-post is really nonsensical. What you have here is ex-ante conditionality, with a whole series of expected trends that in a very short term will be back to ex-post conditionality. There is really no functional change embedded in all this.

I want to make a couple of quick points. In [Amar's] presentation there is in some sense a stress on more funds, but if you provide more funds to low-income countries with all the conditionality attached, the real question is whether the net effect will be beneficial. At the very top of the agenda has to be the reform of the issue of conditionality both from the Bank and the Fund. It is absolutely essential.

A final point I want to make is about the concept of pro-cyclicality as I really have problems with it. For developing countries, there is a huge difference between being pro-cyclical on the upside and pro-cyclical on the downside. There is an enormous asymmetry. On the upside, we are not really talking in many cases in Africa of overheating economies. The real problem, and this is part of the reserves system, is not only the aggregate demand opportunity cost, it is the enormous developmental consequences of countries. As I pointed out earlier, like Nigeria sitting on 65 billion dollars of reserves with 70% of the population living with under a dollar a day. This is not just a lack of aggregate demand. It is the whole transformative process and its reliance on oil exports. That has to be changed, it is not only the strategy in terms of the reforms, it is the notion of getting rid of all these extraordinarily poor countries doing not only the perverse process of lending money to Wall Street by [...] to finance the Iraqi War, but also this absolutely perverse process in which you have this massive developmental and poverty opportunity costs in countries like Nigeria sitting on 65 billion dollars of reserves, instead of using it.

It is absolutely necessary to change the nature of the reserve system, where these countries have to build up reserves because they are worried of financial crises instead of going back to the IMF because of conditionality. The system has to change at this point. I think at the very top of what comes out of this meeting should be a call for a change of the whole model embedded in this process. A last point on this, it has never been a U.S. model that forces the World Bank and the IMF, it has always been the neoclassical interpretation of the U.S. model which has been devastating for development. It is fundamentally anti-developmental.

**Battacharia:** Two overarching themes: reform of global governance and reform of the Bretton Woods institutions. On the first, I think it is important to set some goals for making the G192 operational more effective. I think a coordination council of some kind, anchored in the G192, must

be the ultimate goal. I also think it is important to reform the IMFC and Development Committees, which are a sub-arrangement, nearly universal, not 192 but 185. And those must remain the ultimate goals of global governance in an inclusive sense.

Having said that, I think in the short run we will be in the G20 world and therefore you have to make sure that the G20 is as inclusive as possible in the way it operates and allows for participation. The most glaring omission in the G20 is the representation of Sub-Saharan Africa. This can be relatively easily fixed by allowing Sub-Saharan Africa to have a head of state representing it other than South Africa. So that could be a simple reform right now.

On BWI reform, there has actually been quite a lot of good work done, in terms of assessing the governance deficiencies in the Bretton Woods system, the latest of which is the Manuel commission report. It did not play well amongst the developing world, but I actually believe it has some very good ideas. There has been a lot of thinking in many circles which brought out several things. One is that the IMF and the World Bank have too much power with management and too little power with the owners of the institution. Second, there is too much ambiguity of roles between the governors, the board, and the management. The fundamental problem of unbalanced representation in terms of voting power and decision rules, including the veto that is allowed for the U.S. and the selection of the heads of the institutions. There is a major problem of lack of transparency and throughout the system there is weak accountability.

All of this has manifested itself in terms of a lack of agreement on what these institutions are about, in terms of their lending role, not only in terms of conditionality but also of costs of doing business, on the lack of generation of sufficient income and the lack of agreement on the role, particularly of the World Bank, on global public goods. It is unfortunate that today we are debating the role of the World Bank and climate change whereas it could actually be a very powerful source of leverage.

Moreover, there are problems with the lack of progress on voice and governance and the lack of intellectual openness. What is the sequencing of changes that need to come about? In our view, and I am talking about developing countries, it has to start with a rebalancing of powers in the institutions, and therefore the voting power issue is central. What has the G20 committed to? It has committed to accelerating the process of quota reform in the IMF. We see the new arrangements of borrowing as an immediate expedient solution but a potentially dangerous avenue in terms of postponing and procrastinating reforms. So we do think that bringing forward the quota reform is central. And there has been a commitment to also bring forward the voting power reform in the World Bank.

In the IMF, the anomalies are twofold. One is the overrepresentation of Europe, and this is a fundamental issue whether you look at it in terms of the board or voting power. The second are the anomalies in terms of representation of borrowers. Let me give you one very striking number. In the calculated quotas of the IMF, all of Sub-Saharan Africa, including South-Africa, has the same quota share as that of Belgium. A second aspect of this is that if this does not make sense in the IMF, can you imagine how much less sense it makes in the World Bank, which is a development institution? There is no reason why in the 21<sup>st</sup> century, when you have 80% of the population, the source of income and business of development in developing countries, to have the U.S. playing the kind of role they are playing at the World Bank. I think the time has come for moving the boundaries very fundamentally on the governance issue and, while the leaders have set some timetables, they have not set any political benchmarks nor have they shown any political will to tackle this. So I think pushing very hard for meaningful changes towards making these institutions truly multilateral is something that requires a huge amount of outside pressure, and that is what I believe a group like this should push for.

**Rodriguez:** In my case I am going on with updating the paper on the Global New Deal, in connection with some top officials in the U.N. agencies but also in Europe with the advisors to the prime ministers, who are close to us. I would like to intervene on the agenda of the next G20 meeting in New York, and what we can expect from that and on how we can influence this agenda. It seems to me that we can expect a wider agenda than that of the London meeting, but we can also expect more political tension. My expectation is that it will be wider because the agenda will cover, very likely, recovery, regulation of financial markets, trade and climate change negotiations, as we are very close to the Copenhagen summit. We believe the Global New Deal should be able to combine these different themes. [...]

Europe is now in a very difficult internal discussion about internal recovery, this tension will increase in Europe and it is not likely to have a big stimulus until September, not only because of German elections in September. This means more tension about the size of the recovery in the G20 summit in New York. Regarding the regulation of financial markets, I will only identify a key point, the so-called common approach to deal with banks [...] and again the common approach is not clear at all. Indeed the problem is far from being solved and it will also be a central issue in September.

As for the situation in trade, there is a complete gap between the political discourse about that, with the commitment regarding Doha and so on, and what is happening on the ground with the protectionist reaction adopted by many of the G20 members. Overlapping with all these talks, we will have the negotiations for the Copenhagen summit, which should be extremely complex. Therefore, I think it is not difficult to foresee that we will have a much more difficult picture for the G20 summit in New York. There is a kind of a promise proposed by the German government, the idea of a charter for sustainable development, and here we have a choice: either this remains a symbolic initiative or it will be possible to turn the discussion over the charter in a real opportunity to reform global governance.

As for the implications for global governance, we have the discussion going on about the composition of the G20, the connection about the U.N. and the G20 system - and of course if the meeting takes place in the U.N. headquarters in symbolic terms this will deepen this discussion - and finally there is the discussion about who is supposed to steer the G20. As we are close to a G8 summit here in Italy, I would say that now there is a kind of foggy situation. Regarding the implication for the U.N. system, I think it is really timely to have a debate on a global coordination concept. It is not referred to in our draft conclusion, but we should come back to that.

Finally, the problem of sequencing of the discussion is crucial. As it was suggested by Amar just before me, I think the first step pertains to the rebalancing of power in global institutions, then something about financing for development and coordinating recovery in connection with the regulation of the financial markets. And finally something about trade, of course this issue about the sequencing is very controversial.

**Noman:** I will be very brief and it is made much easier by the fact that none of the concerns one has about developing countries, and low-income countries in particular, have been treated and the disappointment on the G20 has already been expressed. I want to focus on one thing, which is related on the sequencing issue. Particularly after talking to some of the African representatives at the G20 meeting and the African participants of the spring meeting of the IMF and the World Bank, there are concerns on what is happening right now. A lot of the reforms we are talking about, like the governance structure and the conditionality, are going to take time while in the meanwhile a lot of things will happen in the next few months. As the devil always lies in the details, part of the governance problem is who pays attention to those kinds of details in the international financial institutions.

For example, at the moment, one of the immediate concerns for some of the African countries has to do with the following issue: because of countercyclical policies they will have to depend very heavily on the debt sustainability analysis conducted by the Fund. So the African countries call for a review of the debt sustainability analysis and the framework used by the IMF and the World Bank. However, the G20 decided that the review should be done by the IMF, so African countries are concerned about who is going to review the reviewer and what the details will be, in particular if there will be enough space for countercyclical policies.

The other issue that immediately concerns the African countries, which was raised in the relevant working group of the G20, is the reform of the [CPI?] and the backdoor it represents for conditionality. They are worried about how the review will be conducted. The more general point is that there are a lot of things that are going to happen at a much quicker pace than the reforms we are calling for and there is the problem of what to do in the meantime. One proposal is for us to call for some mechanism to follow all the details of the action taken in response to the G20 and the G8 meetings and in the other meetings in the following months. The political leaders will most likely remain very vague and general, and leave to Sherpa and Deputy-Sherpa the details, where the devil will not be paid adequate attention to. On this point, you may want to propose some shadow committee for that.

**Stiglitz:** Two more issues to think about. A lot of the discussion here has been on the governance of the IFIs, but we probably want to have some broader discussions on the issue of global governance structure and how that fits into that reform.

### **Lunch break**

**Stiglitz:** We left with the discussion on global governance. John?

**Evans:** Just three quick points. First, Maria mentioned this [...] social charter idea that was at the conclusion of the G20. I would like to give a little bit more information as I understand the discussion. There are two ideas at the moment. One is coming from Tremonti, the Italian finance minister, which is to produce a sort of legal standard on transparency and integrity of cooperation in the private sector. That has been worked on a bit in the OECD, trying to bring together a number of the different OECD instruments, such as the corporate governance principles, the guidance for multinationals, the anti-bribery convention, the work on money laundering and tax heavens, into a broader legal instruments which would have a reinforced implementation mechanism attached to it.

At the moment, I understand the idea has a great deal of traction behind the Merkel idea, when she brought together the heads of the five international institutions in February in Berlin. The conclusion of that meeting called for a broader social charter which would bring in the five organizations including the ILO. The idea is that the OECD work on transparency and integrity of cooperation would be a chapter in an ultimate social charter, which would include several chapters. On the moment we are talking about one in macroeconomics, presumably with the IMF lead, one on trade, with the WTO, and one on labor and social issues, with the ILO. I think Tremonti has a group meeting here, with professors at the Italian level, and there will be an international meeting next week. This is what is going on and it is actually quite useful, especially in the OECD context, having those instruments reinforced, provided they are improved and modified, as well as bringing in the ILO in a stronger benchmark type of role with the IFIs. Therefore, the general attitude on the labor side has been quite positive.

Another point Maria raised was how the bank bailouts can be dealt with within the next G20 meeting. Just to repeat the question, it would be quite interesting to know from the colleagues involved in the previous G20 meeting more insights on why this was not discussed at all.

Lastly, on the broader governance issue which have been raised about the G20, I think one additional problem of the G20 compared with the G8 formula, is that, while it has of course greater legitimacy in terms of countries around the table, although clearly it does not have the same legitimacy of the UN, it is still driven by finance ministers perspective. The G8 process has at least some mechanisms of consultation of the civil society, like labor ministers meetings, development ministers meetings, environmental ministers meetings and so on and so forth, which allows more governments to approach to the global issues.

While I think what we have seen from the scaling up of the G20 meetings from the finance ministers to the leaders is that the culture of the finance ministers sort of sets the agenda initially for the leaders' meeting, and then a lot of work is done to put broader stuff into it. Now that the G20 is the main game in town, the question is how you are going to transpose some of the progress with the G8 institutions, even though they are still very feeble, in terms of consultations and openness, and also considering that there will be some countries like China, Saudi Arabia, and Turkey, which are not that comfortable with dealing with some of the broader issues.

**Stiglitz:** I think this is a very interesting point. One of the main criticisms of the G20 is the lack of legitimacy and inclusiveness. The lack of representation of Africa is a good example. But I think this broader process one is also very important. I suspect that as it gets institutionalized, there will be more pressure for that, but of course they may need to be reminded of this point. I think the move to have their next meeting at the U.N. is a potentially important one, as it would be better if the G20 could be integrated into the U.N. process. Think about the G20 as melting into the global economic coordinating council that somebody talked about.

**Desai:** Inge called, and she is not here, but she said perhaps there should be an international conference on global governance, and maybe a proposal for a global governance commission. We know of labor market failure, but at the international level countries behave as selfish individuals. Maybe more interesting theoretical thinking is needed on how to overcome countries behaving in a way that the global system fails to provide a proper allocation of resources.

**Vos:** I guess the idea of a global economic coordinating council is very important, given the sequence of events we had and the interconnectedness of all the themes. With the food crises, there was a sort of ad hoc response at the international level, the U.N., the World Bank and others, and it is not clear how effective this will turn out to be. At the summit on the MDGs more countries put forth more suggestions, without making clear the relations with those already proposed. And of course now a similar thing is happening with the financial crises. There is so much interconnectivity but there is no central organized framework within which to analyze these things and bring them properly together.

The next step is how you would do that in an effective way. First of all, legitimacy is very important, but also the capacity to have effective decision making. On the issue of coordination, yesterday we had a discussion on the importance of coordination, but we did not discuss how it should be done, where the coordination should take place and if decisions should be binding or voluntary. As for macroeconomic policy coordination, given the current surveillance functions of the IMF, that would be the place to think of, but given the governance reforms of the Bretton Woods institutions we discussed, reforms are necessary before they can properly take place. The question is whether the IMFC could be used to force policy coordination within the IMF, which could have replications in the broader coordination schemes in all the other themes. This is to say, we have a global economic coordination council like the IMFC, constitution-based, then in the U.N. could have a similar constitution-based representation in such a council to deal with all the coordination issues.

The next step would be to think how the functions of the council would be defined and how to coordinate with the other institutions. The other case would be the interconnectedness between trade and finance and therefore how we should reorganize the WTO. This could be one way to proceed, to embed the coordination process inter-governmentally into the U.N. and then to link it to the other institutions. The alternative would be to replicate the G8, where you have parallel processes. Ideally, I guess it would be better to embed it in the multilateral institutions.

**Williams:** I want to point out the role of U.N. in dealing with certain issues. In particular, I want to point out the problem of tax coordination. It could be useful to consider whether that could be dealt within the U.N. context because there is already an initiative there.

**Yoshimoto:** I distributed a table about to the Japanese experience. My concern is on the fiscal stimulus and the crisis. If it lasts longer, there can be a situation like the Japanese one. My experience in Japan in the 1990s was that people were convinced it was a short-term phenomenon. Then we had to do a fiscal stimulus that lasted more than a year and forward the zero interest rate policy.

In my table, column eight is the Nikkei index and column nine is the land price. If you look at the period 1985 to 1988, the first column is WPI and the second column is CPI. Our bubble started between 1985 and 1986. Stock prices boomed until 1989 and similarly for land prices. But in the period, the wholesale price index was negative, because the appreciation of the YEN, column seven, has created a very low price level and rate of inflation was stable. Central Bank of Japan was targeting inflation rates and therefore they thought their policy was correct. After that, the stock prices and land prices fell.

The Japanese situation and the world situations are different in one point. Capital injection was very quick, so the banking sector received capital much faster, but whether lending to corporate sector and small and medium sized firms could keep on going or not, this is another story. Suppose now the world economy keeps declining like in Japan, what could be the answer? I think it is only a matter of supply side, long-term growth, education, improvement of capital stock and so on.

**Stiglitz:** I would like to ask you just a couple of questions. If we end up with a maximum unemployment rate of 5%, I think people would not be very worried about the economic downturn. So what did you do to keep unemployment low? And also, is there a view in Japan that infrastructure investment was effective in stimulating aggregate demand?

**Yoshimoto:** Around 70s and 80s the effectiveness was very high, but we had already completed almost all major highways. After 1990s, many small roads and bridges were constructed. Temporarily there was an impact on demand, but in the long-run there was an accumulation of debt. Highways were not used all that much, so there was an accumulation of deficits for those constructions. So, there was a temporary effect, but the long-run negative impact was very large.

**Stetter:** Just a very short comment on the G20 and global coordination. Yesterday we did talk about the stimulus and unemployment, but we have not talked about the problem of migration. We should also have a look at that. At the moment, we have more than 200 million people which means about 3% of the world population is migrants. We can image that because of the crisis there will be an increase in this figure. On the other side, there will also be higher unemployment, so we have to think to include in the reform of the U.N. system a kind of institutional multitask to tackle this problem because at moment migration is often, if not only, seen at a domestic level.

**Stiglitz:** We should move to the environmental session.

**Rodrigues:** I have to apologize but I have to leave the meeting, as today is a special day in Europe. We are having a summit on the employment issue and I have to go back to Brussels. So let's just go back to global governance, to make a parallel between our discussion on global governance and the experience we had in the E.U. when we developed a governance framework to implement a comprehensive development agenda. Building on our own experience in Europe, one point is about the sequence to build this institutional framework and I think that at the international level the sequence should be different from the one we had in Europe. I indeed think that the most viable sequence to build global governance in the current situation is first to have the move we are having now in G20 summits, where prime ministers are taking the lead on finance ministers. I think this is a positive move.

The second point is to make sure that these top level summits committing prime ministers will be replicated by formations of ministers of the relevant areas, and these formations should be supported by the U.N. system. So, if possible, this system should find a way to connect with the U.N. agencies. At the moment we have a kind of hybrid situation, which is not stable for the future.

Finally, there is the problem of legitimacy and representativeness of the G20. Since sooner or later this problem will come out, we have to find a way to fix it. A second point I want to make is about the charter for sustainable development. I think this is an interesting initiative, provided that the final outcome is not just a list of priorities. Otherwise this will be a kind of wish list, which is not enough. Again coming back to our experience in Europe, unless we have a political real deal, the political commitment will not be effective. A lot will depend on the method for preparing this charter. If it is just adding priorities, it will not be effective. If, instead we have real negotiations, then we will have a trigger for policy. Now, I really apologize but I have to leave for *raisons de force major*.

**Stiglitz:** Thank you very much for coming. We should switch to the environmental issues.

**Moss:** Given the time constraint, I am going to skip what I thought I would say about science, other than to say that in the last couple of years, since the publication of the IPCC fourth assessment report, the research indicated that climate change is unfolding much more rapidly than we may have thought previously. There are a lot of disturbing signs about things like the breakup of summer sea ice in the Arctic, an increased rate of methane emissions again, which have been stable for a long time. Many of you may know that methane is twenty times more potent than the green house gas that carbon dioxide changes in slowing of the oceans' carbon dioxide sink, which is one of the main mechanisms that naturally removes what we put into the atmosphere.

All of these things indicate that there may be some feedback underway that may further accelerate the climate change. Before, we had no knowledge of this. Many scientists and governments had set a target of about 2° C increase in global average surface temperature over the pre-industrial level as a kind of threshold beyond which we did not want to cross, simply because that would truly be dangerous. I think since then, a number of scientists, including Jim Hansen [?], and government, principally the AOSIS group, which are these small island states, started saying that target is not safe at all and that there is nothing in the research indicating that it is safe.

Many of you may have seen a very interesting article by Martin Weitzman [?], which looks at the implications of the potential distributions of catastrophic events even at relatively low changes in temperature. What IPCC did in the fourth assessment report is to say that if you want to achieve the two degree Celsius limit, you have to see what is the atmosphere carbon budget, and I think this is around 200 gigatons of carbon between now and 2050. If you want to stay within that level with a 75% probability, and it maybe 300 gigatons if you want to achieve that with 50% probability. The

point however is that with 9 gigatons per year of emissions, which is the current level, we are going to reach that limit very rapidly.

The main point I want to make is that there is a huge amount of urgency to address this issue. Now, just a couple of words on where the negotiations stand in the UNFCCC process which is the main internationally comprehensive mechanism for these negotiations. I would say they are technically on track, and by that I mean that there is a movement underway to actually get a negotiated text to the June Intersessional. According to the procedures of the UNFCCC, this is something we need to do in order to agree on something at Copenhagen, as the material should be available six months in advance.

However, in terms of the spirit of the negotiations, things are not all that well off. There is a really deep divide between the developed and the developing countries, and it comes from a couple of different things. First, there is a concern that the developed countries are not taking seriously enough the signs that are emerging from the science and they are not committing to a sufficient level of ambition in terms of their own emission cuts. I think developing countries are pointing to the UNFCCC, included the mention of common but differentiated responsibilities, which means that since the present situation is the result of what developed countries have done, they should take the lead to solve the problem. Developing countries fear they are actually stepping forward with a emission reductions commitment on their own, so for example Mexico has agreed to a 50% emission reduction by 2050, South-Africa has committed to a peak-and-decline date to be determined, presumable in the 2020-2030 range, Brazil has talked about and committed to a 70% reduction in deforestation by 2020 and China has also made some very ambitious commitments within the UNFCCC contexts.

These are all things that they are not yet required to do, but they are doing them in good faith, on the basis of the seriousness of the problem, and I think it is very frustrating that developed countries are not acknowledging the [...] on their part. I think another key frustration, if you look at the details, is that developing countries have been preparing these things called National Adaptation Plans of Action, NAPAs, where what should be funded and done to start reducing the vulnerability of the most vulnerable countries is highlighted. However, the funding for that has not yet come forward and I think developing countries feel they are behaving in good faith but not receiving adequate response from the developed countries.

So one of the recommendations that I made in the paper we circulated was that a relatively small amount of money, about 2 billion, might be handled through the fifth replenishment of the GEF to specifically fund the projects highlighted in the NAPAs. That would begin to give a sign to the developing countries that they are being treated seriously.

And one quick point about the Obama administration. I think they are really breathing new life into these talks, but you have to realize the hole the U.S. has to dig out of. According to the Kyoto protocol commitments, which we never agreed to, we now would be about 7% below our 1990 emission, while in fact we are 16% above. So for us even to commit to get back to 1990 levels by 2020 is a huge percentage decline from where we are. One of the difficulties in the negotiations is to try to dance around this and come up with a some other metrics by which we can measure how committed the U.S. is in the process of getting emissions down. I do not think we will be able to make the 25% to 40% below 1990 which is the standard the other countries are up to unless we have a huge amount of emission reductions that comes through offsetting from other countries, and that of course is going to be difficult to sell to Congress.

Just a couple of quick points with respect to the questions that Joe raised. As for the question of what you can do through economic stimulus to promote the growth of a green and low carbon

economy, I think there is no doubt that you can do it. The problem is how to do it, and what sort of complementary measures you need to have in place. If you look at the stimulus spending, most countries have proposed something. In terms of what they identify as green stimulus, China has in fact the biggest stimulus, with about 221 billion dollars, and the U.S. is second with about 112 billion. Also, South Korea seems to have a very good package [...] These packages include a lot of things. We may be doing green stimulus on the one hand and building more roads on the other, and then what is the net effect of all that? One would like to see more coherence in the analysis of what we are actually trying to achieve.

Indeed, there are a lot of interesting research questions. When, at the WWF, we started to try to put together an advocacy campaign, trying to see what could be solidly said, based on existing research, about what can be achieved through the green stimulus, I was actually a little nervous as there was not that much in the literature. How quickly can you get these projects out? If the desired effect is to simulate the economy, you cannot be promising things that will not be ready to do for a number of years. I think you have to look at multiplier effects, the need for complementary measures, and to understand the countervailing price effects, as we may actually cause a reduction of fossil fuel prices through some of these measures.

It was also mentioned yesterday, and I think this is a very important point, that one should look at the employment effects, as even though we may be creating new jobs in some industries, we may also be eliminating jobs in others. Also, how are you going to get people to the new jobs, by training or what? Indeed, it is important that the political economy of all this is feasible. Obviously, fiscal measures will be like pushing on a string until you establish a price for carbon. We really need to do that in order for this to work.

In the U.S. we had a little bit of an academic debate, but I think that politically it is settled that this is not going to be a tax at this point. I think it is going to be cap and trade, and I also think it is counterproductive in the U.S. context to be debating that too much. I think we need to look at the lessons of the European trading system, and I think there have been some mistakes made there. In particular, giving away the permits was a mistake and I also think too many permits have been provided, so that the carbon price has been unstable over time.

I also think that there are some things that have been done right, including the connection to the international system. I have been monitoring the debate in the U.S. which has been really active even this week. The President met earlier this week with some of the key members of the House of Representatives over the issue of how our cap and trade should be set up. During the election campaign, he promised that all the permits would be auctioned, but I think he is beginning to move away from that, understanding that one of the only ways is going to get the politics of this to line up is to give away at least some of the permits, although I do not think we will go to 100% giveaway.

And then there is the all issue of what you do with the proceedings of the auction. Here I think there is a big divide between those who say that you have to preserve some of that funding to provide dedicated financing streams for some of the things that are going to be essential but difficult to get through Congress. I would include here funding for international adaptation and international technology cooperation. However, others, like for example Chris Van Hollen, a leading Congressman in the U.S., is pointing out that if you do not simply rebate the 100% of these proceedings you are mixing up issues. Actually, to overcome the Republican opposition that is becoming to call cap and trade *cap and tax*, and you would actually have to refund the whole thing.

The other thing to think about, and Joe you have written about this, is the fact that if you are trying to do this only through price effects you may have to see a huge increase in prices which may be politically unacceptable. Therefore, you really need to think through the complementary measures,

including things like energy efficiency standards, which can help the price effect. The paper I distributed yesterday included just four recommendations for the G8/Gn context. They are carefully worked out, in the sense of trying to distinguish what the G8 should do and what a broader group of countries can do.

The key principle here is that the G8 has a historical opportunity at a crucial moment in these negotiations to try to reset a little bit the political tone if they do just a few things. I think one of them has to do with the level of ambition. I think they should collectively unite behind a peak and decline for emissions before 2020 and recognize that most of the available atmosphere space that remains really needs to go to developing countries. There needs to be a pretty clear assignment of property rights to developing countries, and then we need to negotiate how that is going to be compensated for.

There is then the question of financial support, this little issue of immediate financing for the NAPAs, and then longer term commitment to financing for clean energy development. This is again something the G8 needs to take the initiative for, as they could send a signal that is very positive in the Copenhagen context. Finally, I think there is a real opportunity for technology action on a couple of key things, including energy efficiency. And I would also include in that black carbon, which is not really played into the negotiations at all but which is a very important forcing agent. There are indeed many important co-benefits associated with the limiting emissions of black carbon, particularly from a health perspective.

**Fitoussi:** What exactly is black carbon?

**Moss:** Black carbon essentially is soot. It goes up into the atmosphere as little particles and comes out in about two weeks. It comes from diesel exhausts, cooking with firewood, burning forests. Actually there are some fairly clearly identifiable strategies for reducing black carbon. There are estimates that it could be as significant as instantaneous [...] from carbon dioxide, and the advantage that it comes out so quickly is that it can serve as a break over the next couples of decades to help slow down the rate of change until we can get the carbon dioxide problem solved. So it is a really important mechanism. The Major Economies Forum, which is going to be meeting just after the G8 meeting, and which has been already reformed since it does now include some developing countries, is working on the identification of a few big technology wins. Black carbon is not among those, but energy efficiency, some of the renewables and carbon capture are included, so this could be an added one. So, I think this has been an interesting meeting, I wish we had more of an opportunity bring in some of the questions regarding environmental issues generally, and more specifically, carbon finance and the regulation of this new commodity market to avoid wild fluctuations in carbon price.

**Stiglitz:** Let me make just a couple of comments. The high volatility of carbon prices and the uncertainty of future prices is one of the criticisms to cap and trade and its ability to motivate long run investments and emissions reduction. This is one of the reasons why there is growing support for cap and trade with floor and ceiling, and of course, when floor and ceiling are the same, this is a carbon tax. So in a way we may be going toward a carbon tax with another name for it. There is discussion about one system or the other, but the reality may force a compromise with many similarities, except for the distribution of property rights.

Indeed, one of the criticisms of cap and trade is that it is more transparent on the fact that you were allocating property rights across countries. A few years ago the notion of equal per capita emission permits around the world sounded like it was too extreme and it would never be accepted. I now hear from some people in developing countries that this is totally unacceptable because it is not progressive enough, that you have created a large property right and there is no ethical principle that

says that you ought to distribute money equally to the rich and the poor. You created an asset, you created two trillion dollars and what you are proposing is to give an equal amount to the rich and the poor, and that seem [...]. There are movements that make it more difficult to reach an agreement in the cap and trade framework as opposed to common measure approaches where you agree on either carbon tax or regulatory standards, and so forth.

EcoEquity [?] is saying that you ought to have some progressive allocation of the rights, depending on your social welfare function. But no equalitarian with equal per capita, that is the starting point. Then there are the historical responsibilities. One final complexity is the picture they have in mind on the global commons of the atmosphere [...] While we are delaying reaching an agreement by the 2050, the U.S. is eating up a bigger share and when we come to the steady state in 2050 equity means that the U.S. should get an even smaller share. I do not know what they are saying in the developing countries.

**Moss:** I think that global NGOs have a role because we are doing a lot of work with developing countries delegations informing them about this. I do not know if you have seen the work by Paul Baer and others under the headings of the Greenhouse Development Rights framework. They analyze the effects of different allocation mechanisms. One of the interesting aspects of that is the ability to break away from a very country-driven perspective to look at the consuming classes around the world, which is a really interesting perspective. Because let's say in India the middle-class level that could afford international travel is in population terms greater than the population of Italy. So think about the fact that this is not just a country-driven phenomenon but that some classes of consumers in different countries are contributing to it and therefore you may want a more complex allocation of property rights that reflects this.

I do think one thing that is contributing in the negotiations to the sense that developed countries are not really serious is that they are not acknowledging their historical responsibility and thinking about a progressive allocation of property rights going forward for the allocation of the common resources.

**Desai:** The E.U. experience makes me very pessimistic about cap and trade, because twice Europe has messed up the carbon market. What happens is that when you give out permits, every country plays a beggar-my-neighbor thing, they go soft on the local polluting industry and they do not play a collective game. A carbon tax, if coordinated within the G8, would be a superior instrument, as it would be much more difficult to escape. Cap and trade can be manipulated, I really think we need a carbon tax.

**Moss:** One quick comment in response. If you look at how often we had failures of other commodity markets, one would give up soon. The question here is starting from scratch and how we would build a regulatory framework that works. The whole idea of having a better, science-based mechanism for figuring out how many permits you are going to offer for auction is really important. I agree that taxation would be better but politically, but at least in the US, it is non-starter.

**Stiglitz:** [...] supporting it, is it going to make you nervous?

**Moss:** Yes, and a whole bunch of these Congressmen and Senators who are supporting it for exactly that reason.

**Silvers:** This was a really helpful presentation. I would like to make a comment on how this issue interfaces with the larger agenda of this meeting in two respects. There have been a lot of discussions on cap and trade and market for carbon permits. A very hot debate in the U.S. is how to structure it and the labor movements' view is that we cannot have this kind of volatility, it is not

good economically either for what we are trying to achieve, and I think we have just seen a profound lesson in terms of energy price volatility in the last 24 months.

I would like to make two broader points about this. If you look at the state of capital markets, they do not seem positioned to play the role they must play if we want to handle this. Take the example of building rehabilitation. It is an area where technology is available and gains can be enormous, but it requires money, and money broadly deployed around the built environment. We have no commercial real estate financing in the U.S. for anything right now, let alone for something that is such a common good as energy, particularly as long as energy prices remain low. I think we are kidding ourselves that we are going to have any handle on the climate change situation unless we fix that. My belief is that the way to do this is not to try to take the real estate markets and make them function for this purpose. We should try to mobilize savings.

Secondly, I think there is a fallacy at work here. I do not see how we can get to 2020 targets with the current technology, not so much in building technology, but for example in transportation and power. The reason why I do not see it is that coal is just too cheap. So how do we get the technology fast enough to be able to cope with this? I think the model in play right now is incorrect. The idea that we use some kind of artificially generated market mechanism to kick off the incentives necessary to get capital to flow into this type of technology development is not going to work in time. Serious efforts to achieve in a short-term horizon major technological changes are done in a military base. Necessary resources are allocated to specific technological objective and they are over resourced.

**Stein:** I agree with Damon that it is difficult to talk about market mechanisms when we see them collapsing. The other issue I want to talk about is equity. There are three dimensions of it: the production, the consumers and then the issues of the impact on global warming. It is this latter issue in which there has to be some mechanism working. Every single model is saying Africa is going to be hit enormously. In the discussion there seems to be little said about reallocation of resources towards mechanisms for coping with the consequences of global warming and technological transformation to deal with those consequences. The other issue is how you are going to cope with the long-term transformations of the economies in developing regions. They do not have the resources to do that.

**Stiglitz:** We are running out of time, we need to discuss the final document. So we will have quick comments and then Moss responding.

**Vos:** The current emphasis on finding the right price for carbon is a little bit a developed countries' problem. Since we are facing a potentially catastrophic risk, I think just relying on price mechanisms is not the right approach. We really need an enormous energy push into renewable energies to achieve low carbon economies and at the same time ensure growth for developing countries so that they can meet their developmental goals. We face the challenge of scaling up public investment toward a greener economy. This should be the first approach. What should be the price of carbon is in a sense secondary. Actually, from what I said, the price of carbon should be infinite, or at least as high as possible, to create an appropriate incentive. In any case, I think the approach should face the investment challenge rather than the carbon market challenge.

**Ocampo:** Just two comments. I always saw that in the North-South negotiations, the position of the South is that they are willing to cooperate as long as this does not imply a constraint on development. One way to see this is as the counterpart for developing countries of an investment strategy of some sort. The other way is to focus on efficiency, in the sense that reductions should be relative to GDP, or some other measures of economic activity, and not just in absolute terms. The second point I want to make, having attended some of the climate change negotiations, is that any

successful strategy has to have a specific proposal for oil-exporting countries, as they are going to be one of the main obstacles in any negotiation. If they feel they are going to bear costs in terms of revenues or GDP growth, the negotiation is not going to have success. So one crucial point is what can be offered to them in exchange. This also applies to countries like China with a lot of coal.

**Fitoussi:** I am definitively in favor of carbon taxes. As for the political obstacles, we should stress that we are not talking about increasing the general level of taxes, but about restructuring taxes. We can imagine that some of the proceeds of carbon taxes can be used to finance social protection or to finance a global public fund for the development of green technology, which will be given for free to developing countries. This is why I see the carbon tax as a tax for the rich countries, not to be implemented on the poor countries, but having in mind the framework of sharing green technologies in developing countries for free.

**Moss:** I do not know if I can do justice to all comments. In theory, the idea of establishing a price for carbon is based on the fact that there is an externality. Until the price does not take this into account, it is going to be very difficult to achieve the socially optimal level of carbon, which of course is going to be very low. Anything else you are going to use is going to be more difficult, as you are not using one of the most powerful tools in our toolkit, which is price.

About the point that we should not think about this in terms of prices but investment, I do not see the two as separated, since part of the returns to investment depends on getting the price for carbon right. Maybe I am missing a key point, but it seems to me that it is essential to solve the price problem. On energy efficiency, I did a report two years ago, when I was still at the U.N. Foundation, which was done internationally and it turned out the opportunities vary by countries. Most people do not know that China has higher fuel efficiency standards for its automobiles than the U.S. At current rates, we will catch up in 2020. There is a lot of low hanging fruit that can be taken. Indeed, I think in Europe there is a lot to be done in industry efficiency. Disaster mitigation needs to be funded through an international insurance mechanism of some sort because the developing countries are more prone to disasters that will be increasingly serious as a result of climate change.

However, you cannot stop there, you must start building resilience through economic diversification, since a lot of developing countries are dependent on climate sensitive resources. As there are going to be additional costs for that, there has to be a sustainable financing mechanism. So the other point is where this financing comes from. People have talked about the Tobin tax, a tax on bunker fuel, and so on. There is indeed a variety of possible funding mechanisms. Certainly, if you have cap and trade and you auction permits, instead of giving them away, you can create a dedicated funding stream that can be used for these purposes. Moreover, as some of you may know, Resources for the Future has done some interesting work comparing cap and trade to carbon tax, and there are some things you can do to make them similar. Therefore, in a sense, the debate is more like an academic one than a practical one.

**Fitoussi:** And a complex one.

**Moss:** Although I would say that rewriting tax policies in the U.S. is not a simple thing either. So we say that a tax is simpler, but in actual implementation that might not be the case.

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