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"IN GOOD TIMES PREPARE FOR CRISIS":
LESSONS FROM THE HISTORY OF DEBT CRISES

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P R O C E E D I N G S

MR. LIEBERMAN: Good afternoon. I'm very pleased to be with all of you today, delighted to see a number of friends and colleagues who I've worked with around the world. Also, the distinguished panel that has been assembled for our discussion on crises. It's been suggested that I wave this. It's very weighty, so I'm warning you and we will be assigning later and you'll be able to purchase the book. And that's my only commercial announcement for today.

A quick word on the structure of my book in *Good Times Prepare for Crisis*. The book is a political economy, economic history of debt crises. It starts with a background chapter on the 19th Century when London became the financial capital or center of Europe, really, the world rivaled in the latter part of the century by France and Germany and the export of capital to the periphery. And it was that period when all the precedents for debt renegotiations and debt resolution, were started. The book then discusses the lead up to crises and their resolution in four sections from the Great Depression through the most recent global crisis, The Great Recession, including sections in the 1980 discussing sovereign crises, largely focused on Latin America and address through the Baker and Brady plans and negotiations with syndicates of banks throughout the world. And another section on the emerging market from 1994 to 2004 during which important emerging market countries in East Asia, Mexico, Turkey, and Argentina's examples, all experience crises. I worked in one way or another on all of these crises. So, that this section largely draws on my direct experience.

A brief word on crises based on lessons from my book. Justice to set the table for the discussion, which follows. The overriding thesis of this book is that debt crises recur. Policymakers and economic advisers are perhaps capable of mitigating the depth and the length of these crises, but they have shown little capacity to prevent them. Perhaps Charles Kindleberger who wrote on the Great Depression and on crises more broadly in his jewel of a book, *Manias Panics and Crashes*, put it best. Speculative excesses refer to concisely as a mania and revulsion from such excess in the form of a crisis or crash or a panic can be shown to be, if not inevitable, at least historically common.

During my putting this book together and the crises I have analyzed, almost all of them started with a buster or crash. The 1929 stock market crash preceding the Great Depression. Japan's 1991 stock market crash from real estate bust leading to leading to two decades of crisis or low to zero economic growth. Korea's 1998 corporate crisis focused on the complex conglomerates known as tribals, all of whom are heavily indebted and in trouble, and in the USA, the 2007-2008 real estate bust and the use of collateralized debt instruments, many of which were synthetic. And finally the European or the Eurozone, European real estate bust in Ireland, UK and Spain and tied or related banking and financial crises.

Two contemporary economists, Carmen Reinhart and Kenneth Rogoff, in their book, *This Time Is Different*, eight centuries of financial folly, note the lack of memory or understanding of prior crises leads policymakers to ignore a pending bubble or pending crisis. I would add two other issues. The first is, crisis of confidence and that would be my major concern today. If the political economy events that we see in front of us, any of the major ones were to materialize like trade frictions with China, were to perpetuate, David can tell us more about that. But once confidence erodes, investors may quickly withdraw their funds from a stock or real estate market from a country or region and what is known as a flight to quality, thus hastening or deepening of crisis.

The second item is contagion. Once a crisis begins, it can spread within a region or around the world through contagion. The East Asian crisis is an example began with the real estate bust in Thailand in 1997 and quickly moved to Indonesia, Malaysia and Korea and also, adversely affected the Philippines, Hong Kong and China. Crises are complex. While the focus of this book is largely on sovereign debt crises, in fact, crises are very complex. They might start as a real estate or a stock market bust as the outward manifestation of a crisis, but soon evolve as a financial or banking crisis, or a currency crisis eventually emerging as an economic crisis. And thereafter, many cases of sovereign crisis as the country lacks the foreign exchange reserves and financial resources to deal with the crisis on its own.

Frequently policymakers need to address all aspects of these crises at the same time with little real-time information to go on in the fog of war. Many crises have been deepened by a fixed pegged regime. During the Great Depressions countries remaining in the gold block experienced deeper crises than those outside the block. Argentina is an example, was forced to abandon its currency board and it's fixed peg to the dollar and forced into a steep devaluation three paces to the dollar when it devalued wiping out much of the capital of its banks and large corporations, several of which had recently been privatized and taken on a great deal of debt denominated in dollar. The Euro Zone crisis on the other hand, presented a totally different problem. The crisis countries, Greece, Ireland, Portugal, as examples were unable to use monetary policy. They cannot print money, they cannot lower interest rates or devalue their currencies. As a result, one of the major tools in crisis resolution was taken away from them.

In all these cases, we're discussing excessive debt, but how much is excessive? It is difficult to gauge and I think Jaylo will put up some slides to talk about these issues a bit later. But let me mention a couple of issues specific to crises. Short-term debt -- in many cases, short-term debt accumulation, excessive trade requirements, term floating debt in the 19th century is a signal of appending crisis. In the emerging market crises, all of the crises countries had short-term debt in excessive reserves, signaling potential distress. Debt hangovers -- crises are often resolve by palliative solutions kicking the can down the road, so to speak. So, there is a resulting debt hangover waiting for the next crisis to arrive. Witness the present situation in Greece, or the situation in Greece at the end of the third bailout. The US, Japan, China and several Eurozone countries representing more than 50 percent of world GDP are deeply indebted at the present moment. So, are many emerging market countries.

This does not necessarily signal a near term crisis, but in Japan's case, due to demographics, in the US case, due to large and growing deficits and unreformed entitlements, the public debt is unsustainable in the long-term. Hopefully David can enlighten us more on China, wherever due to quantitative reasoning, the Bank of Japan, the Federal Reserve Bank, and the European Central Bank all have loaded balance sheets. This limits their flexibility during the next downturn. I say during the next downturn, assuming we will have one.

Crises can do great damage to the population of the country experiencing another crisis and that damage can extend over years beyond the original crisis. For example, Indonesia saw 20 years of growth wiped out in the three or so years that the crisis was in process from 1997 to 2002, 2003. In the recent crisis, the Great Recession, not only did poverty increase in the United States, trillions of dollars in asset value wiped out, but inequality was exacerbating making the US the most unequal of the advanced economies.

Crisis resolution takes capacity. Many of emerge -- and I identify three types, financial resource, highly trained human resources, and institutional capacity. Many of the emerging market economies lack this capacity. Also, smaller debtors in Europe such as Greece, Portugal, Cyprus, Ireland and Iceland lack this capacity to resolve their crises on their own. And this brings us to my last point. The role of a lender of last resort. For all of the emerging market countries where government or national central banks were insufficient of as a lender of last resort, the IMF supported by the World Bank and at times, regional development banks topped up by the G7 has played a critical role -- have played a critical role.

Not only do these institutions provide balance of payments support, but they also provided technical assistance to assist in crisis resolution, to assist in bank restructuring, in designing corporate workout schemes and strengthening bankruptcies schemes and in retaining the external expertise that countries needed to resolve the crises. For example, Korea never -- didn't have any workout groups in the bank. So, we were able to retain expert workout advisors to set up workout groups with a bank. So, both the banks and their corporate clients in trouble, that is, non-performing loans could be addressed by the banks.

I will end now with another quote from Kindleberger. Is there a salutary role to be played by a lender of last resort who comes to the rescue and provides the public good of stability that the private market is unable to produce itself and if the service of a lender of last resort are provided nationally by a government or such official institutions as a central bank, what agency can furnish stability to the international system for which no government exists? To end, I want to thank the team from Brookings Press led by Bill Finn for all they've done to assist me in producing this book and through their efforts at promoting it. With respect today's forum, I'm indebted to Holman Cariss for agreeing to hold it to Merrill Tuck and David and her colleagues for arranging this forum and doing so, so impeccably. My thanks as well, to my fellow panelists and to Doug Rediker for making this time available for this panel. And will the panelists please come up now. (Applause)

MR. REDIKER: Thank you, Ira. Thank you all for coming. I'm Doug Rediker. I'm going to be moderating this, this morning -- this afternoon, sorry. We're going to do this and conversational fashion up here on the dais and then at about 2:00 o'clock, I'm going to turn it over to the audience for questions. So, hopefully, what we don't get to in the next 45 minutes or so, you'll be poised to throw out there for this great panel.

Let me start by trying to frame -- and Ira's book which again, I'm going to show for it as well, is terrific. It is something that if you, yeah, if you if you care about this issue, it's really worth having a on your desk and it's a great reference tool as well as a good read. So, let me just frame it. Ira just framed his book, the chapters. Let me frame it the way I see it and the way I think we're going to try and discuss it on this panel.

So, I'd say, what we're going to try and get to is how to debt crises begin? What causes them? What are the real-life impacts when they do happen? How do they get resolved? What, if anything, can we learn from past crises to prevent or resolve more painlessly future ones? So, yeah, how do they begin? Well, some cases debt crises are mainly due to excessive debt on balance sheets of governments. In other cases, the underlying problems with those of balance sheets are the banks whose liabilities migrate to the sovereigns' balance sheet. How do they spread? Well, in some cases they spread across regions. Sometimes they spread globally within asset classes, sometimes within financial systems, and those exposed to those financial systems. Sometimes within current currency unions, financial markets and systems have become increasingly interconnected.

So, concerns regarding the systemic implications of a crisis in a single country have become only more acute over time. And here's a question. Why do investors and financial markets and banks lend so irresponsibly to these countries? And why did the countries borrow so much? So, I would ask, wasn't there a point at which countries started borrowing and investors and creditors started lending not on the expectation of ever getting paid back, but simply on the expectation that that debt would be refinanced? Well, what does that mean over time to the basic thesis of lending to a country? And finally, what can institutions and policymakers do to prevent crises or resolve them with minimum pain once they happen?

So, in asking my fellow panelists here for some points they wanted to make, Ceyla sent me the following. I'm going to quote this year, "We experienced systemic crises about once every 10 years. The first one I worked on was the Nordic Bank and crisis in the late 1980s and then the Asian EM crisis in late '97, '98. The global financial crisis during 2007, 2008. Here's the kicker. We are overdue!" With that, Ceyla, you have a couple of slides, but I want to frame it by your comment to me. "We are overdue." Ceyla.

MS. PAZARBASIOGLU: Thanks, Doug. I didn't know you would quote it. You also showed my age. Thank you. Okay, so big good afternoon to everyone. It's great to be here. It's a topic very close to my heart because this, for one way or another, I've been working on crises since late 1980s. So, I want to talk about first I want to tell you that I think there are three types of crises and three types of debt. The good debt, bad debt, and the ugly debt. Seriously, the good debt because we need debt. Without debt, we're not going to grow, we're not going to develop, we're not going to reach the twin goals of the World Bank Group, which is to eradicate extreme poverty and to increase shared prosperity. We're not going to reach the sustainable development goals because there's just not enough domestic resources nor savings to be able to generate the public goods that are necessary for development.

So, we need good debt. Good debt is provision of public goods for the private sector with market discipline for investments or spending that has a return. And it could be a return over a longer term, so, social public goods, but it has a return. The bad debt is inefficient debt. So, white elephants, a bridge to nowhere and inefficient ineffective investments where some of it are private sector's landing because they think they are going to be refinanced, not necessarily because they're going to make the return from it.

And the ugly debt is the nontransparent hidden contingent claims, corrupt type of debt. Basically, materialization of contingent liabilities either by the public or private sector. So, what does that mean though? Because at the end of the day, if we have either bad or ugly debt, we end up with crises and the cost of crises can be very high. So, in this chart, we tried to put together some information on how crises have adverse effects, not in terms of fiscal costs, but also real economic costs. And we saw how many times when we ended up with crises, it affects the middle class and it really affects the poor, the poor get disproportionately more hurt with crises than others.

So, there are many recessions that, due to business cycles that we see, but the ones that coincide with financial crises are actually longer, much longer duration and much costs there. And they also mean that the increased public debt really limits the ability to deal with any recovery efforts. So, higher debt, government debt, which is the last slide, reduces the ability. So, the higher the debt, the less fiscal stimulus impact you see during times of recession. So, it really limits the capacity of governments to deal with a recession. And that's why we end up with much longer and costly recessions.

Where are we now? So, this is the second slide which I want to put up. And so you see that we have higher public and private debt levels in emerging markets and developing economies. We have it across the board for advanced economies as well because of the 2008 crisis. So, we now have 180 percent of GDP debt compared to 100 percent in 2008. And if we exclude China and I look forward to hearing more from David on China as well, that is still 20 percentage points higher debt compared to 10 years ago for emerging markets and developing economies.

We also see shifts in composition of debt both in terms of shorter-term debt, non-concessional debt or market in some circumstances. What that means is that we have vulnerabilities both in terms of tightening financial conditions, which is happening now, but also in terms of variable rate by the low-income countries, variable rate debt, which has the rollover or which has the refinancing risk component.

So, what does this mean for us as the World Bank Group? We have been working very hard actually, many times jointly with the IMF on increasing the debt management capacity of governments. So, this is a lot of technical assistance collecting and monitoring that debt data and better information because transparency is really critical and I hope we get a chance to discuss what that means for confidence and eventually resolving debt crises. And we are also reviewing our non-concessional and concessional borrowing policies to make sure that we strengthen the provision requirements, the other initiatives at the G20 level that we have been working very closely with is supporting creditor initiatives such as a self-assessment of sustainable financing principles as well as private sector lending disclosures, which is again, critical for transparency. So, it's a critical agenda and it's a key part of our work at the World Bank Group to address debt transparency, sustainability and to help countries to better manage debt. So, I look forward to the discussion, but I thought this could also help us to bring us to here.

MR. REDIKER: Thank you, Ceyla. Marcelo, I want to turn to you. I would argue that the assembled intellect on this panel in this room, certainly in the World Bank, IMF universe, could probably come up with a bunch of policy recommendations for every country. In fact, they do. And if only those political actors on the ground would simply listen to them, all would be well. So, let me throw it to you and ask for your views about the political economy; about how, how does, how does this go off the rails? How do we get where we are instead of where we ought to be?

MR. SELOWSKY: Okay, from my experience has been with --

SPEAKER: The microphone.

MR. SELOWSKY: -- Thanks. My experience has been with middle-income countries in Latin America. Actually, I was in the -- during the big crisis and then later on in during the transition countries. For these countries we -- they are takers of international stimuli, they faced terms of trade and liquidity. So, they basically, they have to react to that and that most of the time interacts with the political cycle, creating a significant amount of (inaudible), okay. So, there is an interaction between the political economy and the external stimuli, particularly when things are going well. Okay. So, when terms of trades go up liquidity goes down, the incentives for governments to particularly at the end of the cycle or when they are captured internally by elements of society could be different elements. Then, there is basically an incentive to expand and then when the terms of trade go down, many times scores to liquidity going down, then they have to contract. And then basically declining output and many of the developing countries, welfare has been dominated by those floatation more than by growth.

So, the issue is basically, how can you sort of put discipline many times during the good times so that you can contain the temptations to borrow in good times. Okay. I mean, it is here where the issue of fiscal rules and structure of fiscal deficit come in. I'm from Chile originally, Chile has done, I don't want to spend time here, but it's a very interesting example of success. You need the, in fact, the Chile rule was introduced by a central left president who tied himself his hands. He's Ricardo Lagos, it's a very interesting story and (inaudible) very well, documented into inventory into copper and then boom. Then he use it during the crisis to come.

So, but many countries in Latin America and many countries in Eastern Europe, I think they are moving to fiscal rules. I don't think many of them have introduced a structure of deficits which corrects for the cycle of the terms of trade. But that obviously, involves him a company many institutions, strong central bank, very strong executive, transparency, a fiscal council, et cetera. But that is sort of one way to go gradually over time. And the issue we can discuss later is well our institutions are supporting that because many times in good times you don't have the instruments.

MR. REDIKER: Thank you. Ira, going to throw one over to you. The IMF, Christine Lagarde has been repeating the following phrase for some time now. "Repair your roof when the sun is shining." Okay. Makes Sense, right. All right. So, question for you based on the work you've done in this book and other experience, do these preemptive warnings of the IMF, the World Bank, other policymaking institutions, multilateral banks, et cetera in a pre-crisis scenario, do they really matter? Do they have an impact or at the end of the day, are countries, as I think Marcelo just suggested and others, simply prone to pro-cyclical choices, the influence of politics being such as it is, that it really takes a conditions-based program from the IMF and other outside entities before countries start to realize maybe I've got a hole in my roof after it's already raining.

MR. LIEBERMAN: I'm very skeptical that with all the efforts post the recent crisis to improve the situation that we've come anywhere near close, that we've come anywhere close to reigning in the situation to a point where we could prevent countries, or in fact, the private sector because not just public debt, but private sector debt has increased dramatically. And I'll bet a lot of that is short-term because short term debt, well, it's not been so much more expensive -- cheaper now. But there's been lots of debt due to quantitative easing and interest rates are low so that, as Ceyla has indicated has grown.

So, I have a cheat sheet that I put together I'll just read quickly what's been done and what's not been done. Good things that have happened is, for example, increased capital requirements for systemically important banks. Those, they used to be called too big to fail. They're still too big to fail. Second, there are regular stress tests happening, plus comprehensive capital analysis. Third, there's been an effort to impose callable capital on the large banks. I'm not sure quite where that stands. They've been tightened regulations and we know in the US, at least, that Trump Administration's trying to roll them back. But there's been an effort to tighten regulations. There's a move towards macro-prudential regulations and Stanley Fischer's written a very interesting volume on that with other former central bank governors. There's been an effort to regulate how government would resolve systemically important firms in the US and there's been an effort to establish financial stability oversight council. But this doesn't get us anywhere far enough.

First, global debt, public and corporate are at an all-time high. Second, US fiscal deficits, a balloon in public debt is approaching 100 percent of GDP, the highest ever in peace time. This is the time actually to draw a debt down, not to increase it. Third, government will collect too little taxes due to the recent tax cut. They've not addressed entitlements, but I would worry most and then finally in the US, but in other places as well, banking has concentrated and there's not been enough work to impose tighter supervision, but there's still many banks that are too big to fail. And my bet, if you had a next crisis, we'd be jumping in and doing just what we did in the recent crisis, saving the banks.

But my biggest worry is the political economy. I think an issue like a hard Brexit could create economic turmoil in both Great Britain and in Europe and you could see a failure of the London stock exchange and London financial markets among the most important financial market internationally that exists. In the US, I don't believe you could ever get the kind of coming together under the present political situation that you had during the Bush, Obama years where both right and left, were against bailouts, but they came together and then you add a team capable of resolving the crisis and at a minimum they prevented it from being the next Great Depression. So, I think it conditions have not come anywhere near far enough in peacetime, so to speak, to resolve or prevent the next crisis from coming along.

MR. REDIKER: Thank you. David, I want to turn to you, China. So, as I said before we started, most of the discussion here will be about systemic structural policy issues. But you're on this panel, not only because you're a terrific guy and we love having you here, but because your expertise happens to be particularly relevant given the outsize role that China plays across the spectrum, whether it is institutionally, globally, bilaterally, domestically. So, where does China fit in? Are they good guys? Are they bad guys? Did they help us out of the financial crisis by stimulating or did they screw it up?

MR. DOLLAR: Okay. Thank you, Doug. Great questions. So, I think China is both the good guy and the bad guy in this story. Partly depends on which time period you're looking at. So, I really enjoy the book and the presentation. I think the long historical perspective is really interesting. And so I'll talk a little bit about contemporary China in a moment, but I want to start by saying, looking at Ira's crises, the East Asian financial crisis, 1998 and then, the global financial crisis 2008. I would argue that in that 10-year period, China was the good guy doing exactly what we World Bank and IMF official typically tell countries to do.

So, China had a golden age of growth from the end of the East Asia crisis until the global financial crisis. And it was a time when you did not have much debt buildup in China. It was quite remarkable, almost no government debt. They didn't have local government debt at the time. And central debt was never more than 20 percent of GDP and even corporate debt was modest and extremely stable.

So, a remarkable thing in that period was the China -- the measures of leverage were pretty stable in China. Corporate debt relative to GDP, or corporate plus households relative to GDP. All of that was pretty stable at acceptable levels for about 10 years. So, I would say, China saved during the good time. So, when the global crisis hit, which was a terrible shock for China, their exports dropped by a third in a few months. It was a terrifying period at the time. Twenty million workers thrown out of work. They had all the ammunition they needed to just really blast stimulus into the economy. And that's what they did in 2008, 2009. An infrastructure project, real estate investment and they, after a brief growth recession, they rebounded.

Now, the unfortunate thing is they went too far. They didn't just rebound, they actually took their growth rate up to new higher levels. And I think that looking out over the period since, it's basically 10 years since the global financial crisis, so in in the slides we saw about emerging market debt rising, that's almost all China. You notice you take China out and that picture was a little bit worrying, but not terribly worrying. So, it's China that's had the big explosion in debt since the global financial crisis. And I divide that between necessary stimulus in the first few years and then sticking with it way too long. So, why did they switch? Why did they stick with it way too long?

So, partly I think is just -- is political economy. Once they opened the door to local governments borrowing for infrastructure projects, very hard to close that door. And that's what we've seen continuing on. Also, once you've got this real estate boom going, you can from time-to-time, they would tighten up a little bit. As soon as there was any threat of housing prices falling, the government got really worried and reversed that. So, you become addictive, addicted to this kind of stimulus. And then the other thing is it's easy for us World Bank technocrats to say, don't be pro-cyclical be counter cyclical. Meaning when you're in a downturn, you want to stimulate and then when you're in the boom period, you want to pull back on fiscal. But that has -- requires a very firm understanding of what your trend growth rate is. So, a lot of the IMF dialogue with China in the more recent years has been the IMF, Christine Lagarde, saying, now it's time to pull back. And the Chinese feeling that, well, their trend growth rate should still be up around eight and therefore, they're in that part of the cycle where they need to keep stimulating the economies. And it's very hard to try to convince real political leaders that will actually, you can't grow nearly as fast as you think you can. And you're going to have to pull back from that.

The last thing I would say, I think, Doug, you were the one who asked the question about does this kind of advice from the IMF help during these good times. And I would say that for years the IMF has been encouraging China now to pull back on the stimulus. And for a couple of years we could say the authorities were ignoring that, but then finally in 2017 they started find religion and you began to get a serious deleveraging campaign from China. And so, I think it is useful to have that carping voice coming from the outside, even if it takes a little while for it to have an impact.

Now, unfortunately, just as China was starting to stabilize leverage, then the trade war comes as a new development and now, China feels it needs to stimulate its economy. But I would argue it's no longer in that sweet spot where it has a lot of ammunition is stimulate its economy. It's now in a very tough position where it should be pulling back on stimulus just as external conditions are deteriorating.

MR. REDIKER: Thanks, David. I actually want to stay with you before we move on. And Ceyla just a heads up, the next question is going to be about banks. But David, you talked about the domestic and the outward growth impact of China's economic policies, but what about China's role externally on a more direct basis? So, whether it is the role that they're playing in the belt and road initiative; the debt transparency issues that are coming to the fore; or, even their role in creating these parallel institutions, the AIB, the New Development Bank. How do you see that? Is that again, additive to the broad provision of both capital and institutional lender of last resort capability, or is it somehow destabilizing?

MR. DOLLAR: Right. So, China's becoming a major source of development finance. It will almost certainly become the biggest source of development finance, financing infrastructure around the world. I think broadly we have to see that as a positive because there is so much need for infrastructure, but having said that it's broadly positive, I would quickly have some caveats. There are a lot of different Chinese institutions involved. I think the new Asia Infrastructure Investment Bank is well designed. It has a hundred different members now. Almost all western countries are members, not the United States or Japan, but just about everybody else has joined. I think AIB is off to a good start.

It's transparent and has good practices, but a lot of Chinese money's coming from other banks. China Development Bank in particular, it's not very transparent. So, we have trouble getting information on what projects are they financing, what are the terms?

So, I think that's very worrying. There've been number of cases of countries trying to go to the IMF and you often start that process by clearly indicating these are our debts; these are our obligations; this is what we have to worry about. You've got countries that say we don't really know what our debts because the Chinese built something for us and we don't really know what the implication is. So, I think lack of transparency is definitely something worrying. I would argue the Chinese lending's a little bit indiscriminate in the sense that there's some small countries that have borrowed a lot and her getting into debt problems pretty quickly. Then, there are lots of big countries borrowing from China, countries like Indonesia, Kazakhstan. They don't seem to be any debt problems so far. So, we shouldn't assume that this Chinese lending is going to lead to a slew of debt problems. But there definitely are some individual cases that are starting to stand out.

MR. LIEBERMAN: (Inaudible)

MR. REDIKER: Sure. Please.

MR. LIEBERMAN: David, during the, the East Asian crisis, I went with Joe Stiglitz to China. I was working on Korea intensively at that moment and they wanted to understand what the cause was and the highest, I think we met with Zoorungee at the time and his team, and they explained that their greatest fear was unemployment in the cities. If the growth rate went below 7 percent then, many of the construction workers and other workers in the city did not have living permits and had migrated in from the country. And then we're worried about these people living at job sites and train stations and all sorts of ad hoc living arrangements would riot, that they would have urban riots and they would be forced to quell them forcefully.

Now, I understand the debt is very varied in China. The municipalities have a lot of debt and China, I was just reading today where China's throwing a lot of money at state-owned enterprises instead of reforming them, or privatizing the state-owned enterprises. So, do you think that even if growth goes to 6 percent, for example, they will be willing to address their fiscal or debt problems, or is there going to be a temptation always to reach for the stimulus and particularly, throwing money at the lodge state enterprises?

MR. DOLLAR: Right. I think that's a good question. The demographics have really changed a lot Ira, since the time period you're talking about. So, they don't need to create jobs anymore actually. The workforce is starting to shrink. There's a certain amount of rural urban migration. There's not really any need to net create jobs. And yeah, I don't think there's one magic growth rate, but certainly if their growth could slow down toward five and with the right policies they could generate all the good employment that they need.

So, I'm of the view that they're leaning a little bit too far toward keeping the growth rate up and allowing too much leverage as you say, local governments, state enterprises. And so, they're allowing financial risks to build up because they could end up creating a very serious crisis. Seems to me that's a risky strategy when you could pull back somewhat. Do more opening and reform, still create the jobs they need.

MR. LIEBERMAN: Thanks David.

MR. SELOWSKY: I just want to add to that. In Korea, I was working on Korea, I was at the Fund at the time, and one of the things that we discovered as they were going into the crisis was that they had -- the reserves were negative. Central Bank reserves were negative because they had pledged it with the banks in New York against borrowing by the Korean chaebols. So, I guess they were probably worried about some of the construction workers, but I think they were probably also very worried about the chaebols.

MR. REDIKER: So, I'm going to turn to Ceyla, but one question, this is for the Brookings people here. Ceyla just asked me, is this meeting open to press? Are there press here? There are. Okay. Yes. So, the answer to your question is yes. All right. So, strike everything you've heard so far. So, I want to turn to banks. First of all, I'm going to ask sort of a 30,000 foot question, which is, can you explain what a bank is and what I mean by that, no, what I mean by that is, I would argue that when there's a vitriol that is focused on banks in a crisis resolution setting or ex post looking back and saying this is what caused it, that the public outrage is often focused on banks and then they don't understand why it is banks don't get beaten down. And I would argue that's because banks actually our transfer mediums for the people's savings in the real economy in a way that differs from other corporates in the business world.

So, both the role of the bank and the economy and in a bailout situation may not be well understood by the masses and that creates this antagonism and antipathy. So, question for you. First of all, what are banks? Second of all, in the sovereign bank nexus, is there a way to manage that relationship better than it is now in some cases? And third, is it wrong to, as I used to say at the time of the global financial crisis here, that banks were collateral beneficiaries of the post crisis response. You hear about collateral damage. Banks were effectively collateral benefiters.

MS. PAZARBASIOGLU: Okay, so, in terms of banks, what the banks do? They intermediate savings and funds, borrowed funds into deposits and sorry -- into lending. And if the lending is good and it brings good return, then the banking system works well. And when banks either make decisions that are, that go into poor lending or poor -- maybe investing in poor return bonds or paper and so on, then you do end up with banks going into trouble. And sometimes you actually have by the sovereign bank nexus works in a way that if you have -- if you, as a bank, invest in government securities and the government and this was the case in Greece for example, and the government has difficulties, or if the government were to default on its obligations then, of course, the banking sector becomes hit.

So, what does that mean in terms of the resolution action and why it's very difficult for citizens to understand. And I was, at the time, in Turkey in 2001 crisis when we were cleaning up the banking system and it was very difficult to explain to the public that you are putting in $5 billion to our bank when you are cutting the pensions, when you are cutting education and so on and so forth. But there was no other way to do it because if we didn't recapitalize the banks, then you had to do -- something has to give, right. You had to bail in the depositors. So, if either you have to get taxpayer money to make the bank whole and continue paying the depositors or you have to hit the depositors.

At the end of the day, it's always the taxpayer that usually gets hit in a banking crisis. But I think that brings a very important issue because it's okay and you can explain it and we were able to explain it to the public that this is actually in their best interest. But for that, you need to make sure that this is not a recurrent crisis. You need to make sure that banks operationally restructure. You have to either nationalize or close or, take action against those shareholders, which brought the bank to that point. And that, it was a bit -- we had super powers at the time and it was a bit radical, but it was the first time that many bank owners actually went to jail and they deserve to go to jail because some of it were really ugly debt; some of it were corruption; some of it was basically lost money, which you couldn't recover; and, some of it was bad investment.

But if you look at earlier emerging market crisis, take Russia, Turkey, Poland many of the Latin American crises, Asian crisis. If you take the 15 top banks and before and after crisis, the picture is very different. In US too, there is quite a bit of restructuring, but if you look at Europe, Eurozone crisis, not that much operational restructuring. And I think that's the problem. You need to make sure that bank -- financial restructuring, or if you like recapitalization of the banking system is followed by operational restructuring. And that could be, of course, restructuring of the banks, but in many ways an Ira is the best expert on this, a restructuring of the corporate sector, which is at the end, the root cause of the problem.

MR. LIEBERMAN: Can I add one item here dark? Sure. Let's see if I can get -- I wanted to just follow on with what Ceyla said about the corporate sector. I think there's a -- because of the concern about a banking panic about deposit, withdrawal and hitting the deposit is this a systemic bias in crisis resolution towards rushing in and helping and recapitalizing the banks. Not without reason as Ceyla's explained. But one of the things that happens systemically in crises is first of all, small business -- micro and small businesses get cut off and they're a very important source of employment and also just maintaining the economy at some reasonable level of performance. And everywhere I've worked, immediately SMEs get cut off. And in Korea, for example, we -- Asian Development Bank had $2 billion available to support the crisis. And so what we did is we injected liquidity into SMEs through a partial guarantee facility and we prevented what were thousands and thousands of job losses a month and closures of thousands of small businesses.

We stem the tide there. So, I would recommend highly in crisis resolution that a minimum, we look at the SME situation and then, of course, you get very big groups like the chaebols and that's all that Korea had. It had no natural resources, didn't have agriculture. So, we develop a systemic approach to dealing with the corporate sector because in a crisis, the bankruptcy system gets overwhelmed and most of the countries like Turkey, Mexico had very, very weak bankruptcy systems. And the Fund in the World Bank, we're working on reforming the bankruptcy system, but that's really for the next crisis. And so, you needed to work outside the bankruptcy system.

I saw that in Portugal, but they had six people in the whole country working on SME crisis resolution where the country was mainly a small business economy. And when we tried to address that, they just simply refused to look at the problem. And I would bet that the banking situation in Portugal is still far from resolved. Not to pick on Portugal because we have Italy as well. So, there's always someone below you on the totem pole. Okay.

And Marcelo, let me, let me run over to you if I could, please. For IMF/World Bank programs, there's always a necessity to strike a balance between financing and adjustment. And there's also the need to focus on sustainability. Sustainability is kind of the buzzword, right, you do a debt sustainability analysis. Everybody is trying to get the country to medium-term sustainability. Because the idea from a policymaking standpoint is we're not just trying to solve the crisis today. We are, in fact, trying to make it so the crisis doesn't come back. As you've heard from the panel today, as is in Ira's book, it doesn't always work out as planned, but if the Holy Grail is sustainability, what drives that? What are the factors to more or less success in seeking to attain sustainability in crafting a program?

MR. SELOWSKY: That's a tough one.

MR. REDIKER: Or you can answer whatever you like.

MR. SELOWSKY: No, no, no, no, no. But let me talk a little bit -- I want you to link it to the book. In the introduction of the book, page seven which is sort of a summary of the book, it has a whole paragraph on Greece. I want to rescue that paragraph out. Okay because it says, what rational economists in your (inaudible) official believes that the three bail outs would have a resolved the crisis? Ultimately, it seems clear, almost certain that a large amount of funding will have to be written down because it's unknown and may remain, et cetera, et cetera. We -- it's being kicked for the future. This is very important summary from a book on the history of this, so let me rescue that. Unless straight to see, I don't have the answer.

If we can somehow think about it a little bit more. I was a -- I have to go to my past because I was, during the debt crisis in Latin America, I was very much involved in the movement from Baker to Brady. Actually, I gave a seminar or the IMF -- at World Bank directors on a model of showing that you didn't have to go from Baker to Brady and I was very much involved at that time. Eighteen countries, 30 percent the book has debt reduction and it was relatively -- it was accepted. Okay. The debt reduction, it was clear that it was unsustainable, unless you had the face value reduction. Okay.

Now, obviously it is not as clear today, the magnitude, but it was accepted. The professional was on board. We had an interaction with the banks. I remember with graphs in which showing the evolution over time of the ability to pay or the fiscal, et cetera, et cetera. And at the end, banks say, well look, 30 percent, 20 percent they've been on the country. Now, this has not happened in Greece. Now, I understand that the political economy is different. Contagion, but in 1910, I know from the evaluation of their -- independent evaluation office of the fund that at least half of the (inaudible), maybe I'm wrong, but half of the people and analysts of the Fund thought that this thing was not going to -- no, it's not sustainable. I don't really -- I was there and they were -- people were afraid of saying it, but it seems most of the profession was aware of it. And the issue was okay, they -- at that time, the banks in Europe and that's the reason the banks escape. And then that debt became public debt and now became even more difficult politically. And today, still we have 200 percent of GDP. The managing director say, well we -- I don't feel very confident about the future. So, in 10 years nothing has happened.

Now, why did this happen in a day in Latin America with the American banks? And this has been so difficult. Now, somebody will say, well, look more as a hazard, but can you -- you can design that reduction because we choose to. Do you need an end of the tunnel to generate the incentives? You cannot be, it is different if you get flow relief on every year without the end of the tunnel, a combination both. Politically, for investors, et cetera. I don't think we have studied this enough now.

The best study on this and I want to -- is the Peterson Institute study last year in which they did a very familiar most in depth analysis and I want you to read about it or the debt crisis in Greece and how in the future -- the present the program is not good to be review until 2030 in terms of judging whether you need that reduction. This paper talks about ways to making moral -- reducing moral hazard, even if you have debt reduction by doing yearly year-by-year, that reduction by doing (inaudible), et cetera. So, this is something -- I don't have the answer, but for me, it's a puzzle. Why have to so much learning both institutions at that time in which debt reduction was given, it was not a big science to realize that things were unsustainable. And now, the political economy and even the analysts have not been able to come to grips with it.

MR. REDIKER: Good point. So, I served on the board of the IMF at the time of the Greek program and I've got a lot to answer to your comments, but I'm only moderating here and we've got two minutes before we go to the audience. So, we'll hold that for later. But Ira, let me throw it to you before we throw it open to the audience.

I raised the financing versus adjustment question, which also raises what Marcelo raised and others have raised about bailouts versus bail-ins. And I'm curious whether based on your history, is there any rule; is there any set of lessons about when or bail outs appropriate when are bail-ins appropriate? You've heard the phrase moral hazard being thrown out here. Is this just a case of the rules are there until you actually have to pull the trigger and then everybody gets panicked and a bailout goes in.

I say that in the context of the current IMF exposures to Argentina, which is the largest program in fund history. The potential pending program if ever to Venezuela, which will likely potentially exceed that of Argentina. So, you're talking about very large programs, potentially with a large bail out and potentially a large bail-in component in the case of Venezuela. Anything we can glean from your book about what to expect in the future and in the current status?

MR. LEIBERMAN: That's a great question. I wish I had a good answer. Frankly, I don't think there are any rules, but clearly, I think it would have been advisable to have some bail-ins in the US situation because it was -- it's not only the bond holders, so the equity holders of the banks who were not, who did not lose capital, but it's more the executives who were drawing a tremendous pay and the Debt Commission in the US who studied this thing said, this was a situation that was so egregious that executives leaving, being forced out of banks because of the situation were taking down 50, a hundred million dollars as exit packages while the banks basically lost all their capital. So, I think there need to be better rules of the game on bail-ins.

In fact, I think the Dodd Frank rule prevents individual bailouts. They're the not allowed to do it. And I think that's a mistake because no matter what, I think you will get bailouts if large institutions, banks, or non-bank financial institutions start to fail. How could you not save an AIG? How could you not save the General Motors? At the time, there was such big employers that were so systemically important to the economy, but there ought to be much better rules of the game and I don't think those have been established.

MR. REDIKER: So, I've got a lot of great questions for our panel, but it is too -- oh, okay. We've got comment. Sure. Marcelo.

MR. SELOWSKY: Venezuela.

MR. REDIKER: Sure.

MR. SELOWSKY: So, dramatic. I thought a little bit about this. The problem in Venezuela is that the amount of financing is going to be historically high because you have the macro, fiscal to re-inflation and reserve to bring liquidity. You have the humanitarian (inaudible) you have key public goods like a security. So, the amount of financing that has to be accompany the macro in terms of other areas, social and public goods to be enormous, and probably is going to be the most challenging thing for our institutions and for the developing world in the next couple of years.

MR. REDIKER: Great. All right. I'm going to open it up for questions. There's a roving mic here, somewhere in the back. And I will point to you and hopefully, the person with the mic, will see who I'm pointing to. We've got two right here in the third row. We're going to go for the gentleman on the aisle and then the person to his left so that we can just hand the mic right over. Could you identify yourself, please and then, keep the questions relatively short.

MR. VOLGER: Give it a try. Peter Volger formally World Bank, now, with the German Institute of Global and Regional Studies. I would like to --

MR. REDIKER: Oh, oh, oh, are you okay?

MR. VOLGER: Just a quick question with respect to the role of the US particularly and developed country, in general, that their banks have been the major players of most of the crises in Latin America certainly, but also in Asia. One point is we clear that in the private debt crisis in the Asian countries, particularly the banks who had given medium-term loans two years plus, when it came to the crisis to all of a sudden these were short-term loans. And I would like to stress and find out as you know, to what extent the all -- these to developed world should indeed, as you know, lead by example and not try to teach people to (inaudible) what indeed, is the white and wrong.

MR. REDIKER: Anyone would want to take that? I'll point to somebody if you don't want to step in. Okay.

MR. LIEBERMAN: I fully agree. What happened is that the banks, for example, in Korea, not the banks, but the big chaebols had merchant banks in the major financial centers and in offshore centers, offshore lending like, Cayman Islands were very important. And they took down intermediate term loans and then they were transmitted or intermediated back into the parents. And so, we were essentially looking at short-term, medium-term debt, being used to invest in long-term situations like asset acquisitions and these maturity mismatches were a major cause of the problem in Korea.

So indeed, we should learn the lesson, but it's been historically true, starting back to the 19th century, that short-term debt and excessive trade requirements has often been a trigger for crises. And I will bet if you look at maturities today, it remains so.

MR. REDIKER: Let me just go to the gentleman left, but let me just make a comment that one of the things about this book and about the current day versus precedent examples is, the evolution from banks to bonded debt in the capital markets. And so a lot of the old, good old days of the Paris Club, the IMF and the London Club is not applicable in the current context. Gentleman (inaudible).

MR. LESMANTIS: My name is Maurice Lesmantis. I'm with the World Bank. So, Ira and the panel, thanks for an exciting discussion. My question is related to the bailouts and it's -- I'm coming back to the last point that Ira mentioned during his introduction and that's on the lender of the last resort. The question is what does the panel think of the role of a central banks, which basically provided the largest ever bailouts during the past 10 years? Yes, their balance sheets are bloated, but if we are overdue for the next crisis, what's going to happen when it hits? And whether the central banks would step in again? So any comments on that?

MR. REDIKER: All right, so let me just take that question and phrase it the way Ceyla did about debt. So, central banks, good, bad or ugly. Anyone, Ceyla?

MS. PAZARBASIOGLU: So, I'm not going to go into good, bad, ugly, but I think there's -- you know well, right, there's the liquidity and solvency issues. So, if it's a real illiquidity problem, then yes, you need to come in so that it doesn't end up becoming a solvency problem. But it's rarely, it's very, very few cases where it's just a liquidity problem. The global financial crisis, initially everyone thought that was a liquidity problem. It ended up being a solvency issue. But again, I'll come back to what I mentioned before. If you address the root cause of the problem, then you will be able to reduce the stimulus or what is whatever is in the central bank's balance sheet. But in this context, what has happened in the US, in many of the developed economies, the central banks ended up buying mortgage debt, corporate debt, things that we would say, no way during the Asian crisis, right. So, the types of -- this could have been used as collateral to lend to the bank. So, there was a major change in the definition of collateral and how the central banks did come to the rescue. And part of it was because fiscal space was limited and part of it was because again, it requires much more in depth corporate and bank restructuring, which in some countries has been done. And I think US -- done more in US than some other countries.

MR. REDIKER: Okay. We're going to take two at a time now, just to try and get everybody in? So, let's go to this side, this gentleman here and then we'll go to the gentleman who's persevering and keeping his hand up longer than everybody else. And we'll go to that one.

MR. GOBBO: Hello, Mario Gobbo formerly with the IFC and IBRD and the World Bank. I was wondering whether the panel could comment on what happened during the Greek, before the Greek crisis. In other words, how could the markets, the financial markets misjudge, the pricing of Greek debt in the markets, which was priced at just a few basis points above in German bonds and if they could comment on how to prevent that because it's happening again. Now, they're not called junk bonds anymore. They're called high yield debt which makes it sound much nicer, but in fact, it's the same thing. Thank you.

MR. REDIKER: And this gentleman with the, yeah, the gentleman holding his hand up.

MR. ENFANT: Hi, Louise Enfant, masters business administration student at Georgetown University. I'm originally from Venezuela. So, I would like to sort of pick your mind a little -- know a little bit more about one of the things I'm Mr. Door mentioned is that the China debt or China loans, are rather obscure, you actually could see that in Venezuela. So, how will you balance or what sort of models can Venezuela replicate once the political crisis dives down, hopefully, dies down. What models can they replicate in order to one, restructure that particular debt? And then second, how to deal with this sort of GDP going down to all the way to like $80 billion for a country that is used to be around 150.

MR. REDIKER: Great. Two great questions. The first one on Greece, the second on Venezuela. I'm strongly, I have a strong opinion on the answer, but I'm only a moderator here, so I'm going to throw it to the panel. Who wants to answer the why were investors lending to Greece at the rates they were pre-crisis?

MR. LIEBERMAN: I'm happy to take (crosstalk) take Venezuela.

MR. DOLLAR: I was going to do Greece.

MR. LIEBERMAN: I think Venezuela is so difficult and we can come -- maybe one of my co-panelists wants to address it. Greece, I think, was a symptomatic of the problem of how the Euro and the Eurozone was created overall. That there was an assumption that there would not be bad debts because there would not be crises because there was an implicit guarantee of the Eurozone countries. The presumption was that group of countries would not let another country get into crisis. And for that reason, there was no crisis mechanisms that we know crisis institutions. In fact, there were no institutions except the European Central Bank and it was precluded from engaging in bailouts.

The German Central Bank, Bundesbank insisted that the central bank not be allowed to do bailouts when the European Central Bank was formed or created. And so just with Freddie Mac and Fannie Mae in the US, the presumption was that a collective set of governments would come in and bail out any country. But in this case, we not only had a country, Greece, but we had a whole set of countries that had borrowed at very little over Bundes, German bonds. And no -- by the way, the banks all rushed in to get slightly better margins into Greece and Portugal and Spain. In fact, there was forbearance. The central bank did not require any reserves against lending to sovereigns in the Eurozone. So, everything that could have been done wrong was done wrong to prop up the Euro and the Eurozone as an entity.

MR. DOLLAR: Can I start on Venezuela and then you can correct me?

MR. REDIKER: No, yeah, let me just augment what Ira just said because I think he's right. The only thing I would add to what Ira said on the case of Greece is, it was an explicit zero risk weight treatment of all European, Eurozone sovereign bank, sovereign countries on bank balance sheets and the ECB accepted all of them as zero risk in the repo window. So, by structural design, any bank that held a Greek sovereign bond was rewarded across the board. And that was explicit then.

MR. DOLLAR: So, I'm Venezuela. I think it's easy to imagine multiple equilibrium, multiple outcomes. So, I can imagine an outcome I would think of as a bad outcome where Venezuela never comes to the IMF and never reconciles with the western financial system. Works some kind of restructuring with China. China's already restructured some of these loans. But I view that as bad because it's really hard to see how Venezuela is going to be a prosperous country in that situation.

So, different equilibria is, Venezuela comes to the IMF and there's going to be a certain amount of grousing in the west about, we don't want to bail out China. And so, they'll have to be an honest assessment, kind of technical assessment that Marcelo was talking about, about their debt sustainability, all the various social and political needs. And probably that assessment is going to be that China needs to take a pretty big hit. China has done debt write offs in the past, it participated in HIPEK. So, it has a history of participating in debt write offs.

So, you can imagine a positive outcome, which in some ways is bringing China more into the formal financial system. Writing down the debt to a sustainable level and doing the adjustment that's necessary in Venezuela and bringing things back for this prosperous country.

MR. LIEBERMAN: But David Russia is also throwing money in. So, you have to deal with reconciling this situation or Russia would like to see Venezuela as a client stayed much as it had Cuban in the past.

MR. REDIKER: Yeah. The only thing I would add is just remember that in the case of Venezuela, the only way that economy ever gets restarted is by promoting and incentivizing huge capital investment back in the oil sector. So, those oil interests that are currently also being defaulted upon have to be treated differently than the governments and the bond holders and the IOU holders and the lienholders and the promissory note holders and all the other. So, prioritizing the inter-creditor equities is going to be a very difficult task. Up here in the front and the young lady on the aisle.

MR. SCHROEDER: Robert Schroeder, a president of International Investor. You asked an interesting question earlier on about what is a bank? I'd like to follow up on that. When we talk about shadow banking and a number of arrangements, financial instruments and others that have entered the new financial landscape, it becomes exceedingly difficult to track debt as well as assets. And I even give a talk about how -- 10 reasons why we think economists all have less to measure today and less data that's reliable than they did 11 years ago. So, I would ask any member of the panel, could you talk about how perhaps you should be even less confident in predicting the next financial crisis than ever before?

MS. BUCHWALD: Hi, I'm Elisabeth Buchwald, MarketWatch. Something we don't talk about a lot lately is that banks were supposed to have these living wills and that hasn't quite panned out. Do you think it will be a good defense strategy, if anything? And why hasn't it panned out yet?

MR. REDIKER: Ceyla, I'm going to give you the first shot at this.

MS. PAZARBASIOGLU: Okay. So, great, great point. And I think part of the reason what we saw in the global financial crisis was exactly that, right. There was a lot of pronouncements right before the crisis. If you remember that mortgage back securities are so small, there is no way it can generate any problems and so on and so forth. And we ended up with contagion and that's why we have all these macro-prudential measures, policies. That's why the FSB, the Financial Stability Board has this whole shadow banking group, which is trying to measure and so on and so forth. But I think you're very right. And that's the whole issue.

You can look at exposures, you can look at vulnerabilities and say it looks really bad. What exactly it's going to trigger that is very, very difficult to say. And in some sense, if you look at what has happened since 2008 with all the regulatory reforms, most of them are excellent, is that we have a much more concentrated financial system as well. We now have CCPs, the centralized clearing parties, only 12 of them clear all transactions across the world. We don't have a resolution, a system for CCPs yet. And we saw how difficult it was to resolve internationally active banks in the last crisis.

So, I think the world is much more complex and that's why I underlined, when I was talking about what the Bank and the Fund has been working on is that transparency to try to get as much as possible information about that transparency because that becomes critical when you're managing a crisis. You need to restore confidence. And when there's so much obscurity about what is in -- what is happening with banks; what -- how much nonperforming loans are there; what are their holdings of other debt and so on and so forth.

It's very difficult to convince the market, convince depositors that you are actually taking the right policies because you don't, if you cannot convincingly they explain what the -- how big the problem is. And that's why many countries had to do asset quality reviews and try to bring some transparency and most of the time with third parties because no one was believing the central bank anymore. But I think this is a very critical question, especially now that we have a lot of these assets are cross border, 12 fund managers hold all of -- 95 percent of emerging market debt, 12 only 12. So, it's very, very concentrated and difficult to measure.

Just very briefly and living wills. I don't think anyone would think that in a crisis you'll pick up the living will and use it. But it is a great tool to unfold the regulators and supervisors to understand how complex the institution is and try to get a better sense of preparing for a certain event. Some of the living wills that were put together are thousands of pages and show you how complex the institutions are and how interrelated they are. Even Dexia, there was one page, a slide of Dexia with so many connected the parts and it's not even a systemic bank. Can you imagine some -- a large international bank? So, I think it's not a good defense strategy per se, but it's a great way for the regulator supervisor to learn, to understand, and to engage in a dialogue and if necessary, simplify some of the structures hopefully, before crisis.

MR. LIEBERMAN: One thing on the shadow banking system, in the US crisis, the shadow banks played an enormous role and they were -- they did not have deposits as you know, so they had to borrow from money markets on very short-term basis. So, again, you go back to short-term debt and when they got in trouble, it totally destabilized various financial markets. So, not only were financial institutions coming down, but various important markets like the repo market, the money market funds, one of the money market funds broke the buck and that triggered a major potential crisis in the money market funds.

So, shadow banks, supposedly are better regulated, but I've not heard anyone write about the problem of regulatory arbitrage in the United States. During the crisis, banks or before the crisis, banks were picking their own regulator and shadow banks, like the investment banks supposedly were regulated by the SEC. Now, I've been on the boards. I've actually been the chairman of a public company, not a financial company and the amount of quarterly reporting you need to do and risk analysis, et cetera, is just astonishing to me. The SEC didn't step in and question the leverage of the investment banks and the shadow banks or GE capital. GE -- 50 percent of GE's profits were coming as a result of GE capital during that period. So, I suspect, I haven't really looked at it closely, shadow banking is still a major problem and the question is who's really regulating them and is there adequate regulation indeed over the whole financial sector today? I suspect regulatory arbitrage is still a major problem in the US.

MR. REDIKER: Okay, we've got seven minutes to go. Let's see how many hands we've got. We've got, ooh, one, two, three, four. All right. You know what I'm going to do? Let's take all four questions and then we'll try and pour through them so that we can get out of here on time. So, I'm not sure if Mike's here. Yeah, the gentleman in the second row and then we're going to move towards the back.

MR. LINN: Hi, I'm Johannes Linn from Brookings and formally World Bank. Two of the gentlemen and I were involved, I think, at least two crises, that Turkey crisis and before that, the Russia crisis. And what struck me during the crises is that I, as a non-expert, was observing the experts struggling with trying to understand what was going on and reacting in the best possible way. This was true for IMF. It was true for the World Bank colleagues. It was true for the bilateral partners we worked with and of course, in the country. So, my question to you is, are we collectively better equipped today to actually manage crises when they hit? Do we have a fire engine somewhere that is ready to roll out and bring the best experience about how to manage it? If we don't have it, how do we get it?

MR. REDIKER: Okay. Could you put your hands up again? The, the gentleman about four rows back on the left. There you go. Right.

MR. COCARALL: I am Francis Cocarall formerly, the American Red School of International Management and Arizona State University. Over the years, I have known many of the (inaudible) working for Mr. Lopes (inaudible) and I know they are conservative. I know they are transparent, but the political economy is giving them a little bit of troubles. And the main trading partner is also imposing some constraints that are creating financial troubles for the country. What suggestion, what recommendations would you suggest them? What steps should they do to defend the country? Thank you.

MR. REDIKER: Sorry. So, we've got the first question. We're going to go for the two more. I just want to make sure that the panelists are ready to go. Are we better equipped to manage a crisis today and Mexico political economy under Amarillo? Where do we go from here? In the back?

MR. KINCAID: Hello, Russell Kincaid. I'm from Oxford University. The fact that there are repeated crises, there's repeated over borrowing by countries, by corporations. There is repeated over lending be it by banks or capital markets. My question is what's the systemic problem that's not getting it fixed?

MR. REDIKER: Sir, could you just -- you trailed off at the end. What's the systemic problem --

MR. KINCAID: That's not being fixed.

MR. REDIKER: That's not being fixed, okay. And last question. Yeah.

MS. SATOVA: Yeah, Victoria Satova, University of Maryland, formerly IMF. My question is about transparency. Several of you mentioned the need for greater transparency. What do you think would it take to actually achieve that? Given that much of it is in the format in place in government guarantees or SOE debt. Do you think there is room for global, more targeted initiative in that area?

MR. REDIKER: Four fabulous questions with a limited amount of time. Ceyla, I'm going to start with you on my left and then go down. Everybody comment on any or all that you feel comfortable with and Ceyla be brief so we give everybody a time. Thanks.

MS. PAZARBASIOGLU: Okay. Very quickly. Harness Linn's question. I don't think we are collectively better right now, because we have a much more complex system. We just heard about shadow banks. We have now Fintechs coming in. They are cross border. We don't have -- we have fragmented multilateral -- multinational for us. So, I think, unfortunately, I don't think we are collectively better. There's a lot of expertise and different institutions and we know what the outlines of what needs to be done is. But for every country, it's going to be so different. God forbid we have a regional or global crisis, which requires global coordination as we saw in 2008 and I don't know if we have it right now.

The question by, and I will just go into, well I just try to answer what Russell was asking about, what is the systemic problem that is not being fixed? And I think it's all about incentives and losers, winners and losers. If you need to fix these problems, you need to hit some vested interests. You need to hit some -- some have to lose to correct this. And that's very difficult and usually only done during a crisis.

MR. REDIKER: David, pick your poison.

MR. DOLLAR: I'll be very brief. So, my reaction to what's the structural problem that we're not solving is human nature. And I think it's going to be very hard change. The only one of these various questions I really felt somewhat equipped to answer, Johannes, is focusing on China, but a lot of other Asian economies that I've worked on, I would say the capacity of officials, regulators, it's just increased enormously and I would give a positive shout out to the IMF in particular, for having trained officials. Now, unfortunately I agree with the previous comment that the world is getting more complex at a rapid rate. So, will that talent, that capacity keep up with the challenges? I'm not sure, but I'm just impressed that we have so much better economic management and regulation in developing countries. So many of the recent problems emerged from the rich countries, not from the developing world.

MR. REDIKER: David, before you turn your mic off, which you just did, let me just pick up the transparency question for you because a lot of that does relate to China. How capable, not how willing, how capable is China of actually providing a full accountability of the debt that they've extended across the globe to countries that have been recipients?

MR. DOLLAR: So, since you give me the offer -- the opportunity, let me just point out that Doug and I have a nice podcast on our Dollar and Sense Podcast and one of the topics we get into is a lot of this Chinese lending, the myth in the West is, this is just some big coordinated Chinese plan, but that's completely out of touch with Chinese reality. It's all these different Chinese institutions. So, the Chinese would have to work very hard to figure out how much have they actually lend to Venezuela or do a (inaudible) of other countries. I think we should be pushing China to make that kind of effort, especially as these crises emerge. How can we write off debt for Venezuela if we don't know how much China's actually lent to them.

MR. REDIKER: Marcelo, answer any and all of the above and throw in your concluding remarks as you see fit.

MR. SELOWSKY: On the issue of --

SPEAEKR: Turn your mic on.

MR. SELOWSKY: -- part of this systemic thing that is permeating everything. This is too -- less let's think a little bit more at the margin. I don't think things are getting worse. We have more capital -- open capital account in the world in Jecka, capital is flowing. That generates good things and temptations. Okay. So, within a country let's address some of the temptations. Some I mentioned about the fiscal rule where many countries are working on or financial sector reforms still a talk of a lot of work on financial sector in many countries.

In Latin America, many countries are moving to fiscal rules still under development. So, we have the new democratic governments in many countries and in

Eastern Europe. Obviously (inaudible), but I don't think that there is systemic things that is sort of a general equilibrium issue that we are not many correlated. There are a lot of good new tools. Countries are using capital controls in short-term right. There have been efforts involved in that to smoothen et cetera.

I don't think things are much worse. We are learning at the margin. Okay. Then, now, on Mexico, I think I should be very careful, but I believe that you can make compatible a good market economy, which you have a lot of growth with good transparent incentives to the private sector with an active government, which is very active on the social side. Okay. You can make them compatible. You don't have to scare the private sector in order to achieve your social objectives and in terms of education, et cetera.

You can make them compatible. Okay. And there's a lot of lessons and I think that's the way to go. Let's have the cake and eat it. Let's have growth with the proper incentives in the private sector. And then we'll examine modern government doing some of the things that are required to make a good quality of growth. I think this can be done. There are some good examples.

MR. REDIKER: Ira, the final word is yours. And immediately after this, I just want to point out, Ira is going to be at the back of the room with books available. So, this is all about Ira's enormously important and well written book. So, I just want to encourage you to stop by on the way when you're leaving the room. But Ira, a final word.

MR. LIEBERMAN: Thank you very much. Doug, thank you for chairing this and doing such a great job as moderator and also from my fellow panelists. This is a very smart and distinguished group. Johannes was our boss and a very good one indeed. And understands the world situation quite well. There was a lot of push in the '80s crisis, by Ann Kruger, particularly to set up a debt restructuring agency and she was rebuffed everywhere she went to talk about it. Largely over the issue of moral hazard and I see no will at all and I see no institution ready to get the fire engines out. And if anything, the World Bank has lost a lot of its private sector capacity. Fortunately, we have Ceyla heading the financial sector group and she's not only was deputy banking superintendent and we're supervisor in Turkey during the Turkish crisis, but she's worked all over the world and crises.

So, had hoped the Bank Group would be able to assist at least on the banking side. But if anything, I think the tools and the institutions have become weaker in recent years to address an international crisis. I can't imagine what would happen in the US if they were called on to react to a more global crisis given what you see in terms of pulling back from the world globally. It worries me a great deal. I think that's the inherent weakness now because there are so many situations which could trigger a crisis and I just don't see the, the US playing the role that Bernanki and Paulson and Geithner and others played.

I also see Europe very weak and very worrisome and very fragmented and I just can't see Europe coming together. So, that is also a very worrisome, I agree with Marcelo on Mexico. I lived in Mexico as a student many years ago. And I worked at a great deal on Mexico post the '80s crisis. And I think it's important that someone come in, deal with corruption, deal with the social needs, deal with the very poor in Mexico. And that doesn't prevent there from being a vital private sector or capitalist economy. So, I hope he does a good job, but Mexico needs someone to come in and stake out that kind of role. So, I'm all for it.

MR. REDIKER: All right. On that, I'm going to ask Ira to get up and walk to the back of the room as I thank everyone because I have on my notes here, you're supposed to rush to the back of the room. So, I'd like to thank everybody here for what I hope was an interesting conversation. It's clearly not the last one. (Applause) Thank you.

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