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AFTER THE CRISIS:
WHAT'S NEXT FOR GLOBAL FINANCIAL REGULATION

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P R O C E E D I N G S

MR. DERVIŞ: Good morning, everyone. We have the really great pleasure and honor to welcome Lord Turner, Adair Turner, here today. I'm really extremely happy that I think you start your program here at Brookings, and it's really a privilege t have you. I don't think you need any introduction but nonetheless let me run through it.

Lord Turner was appointed Chairman of the U.K. Financial Services Authority in September 2008. Prior to that he was Non-Executive Director at Standard Chartered Bank. From 200 to 2006 he was Vice-Chairman of Merrill Lynch Europe, and from '95 to '99 Director General to Confederation of British Industry.

Prior to that, he was with McKinsey & Company from the early '80s to 1995, during which he built McKinsey's practice in Eastern Europe and Russia.

In January 2008, Lord Turner was appointed Chair of the Climate Change Committee, and he's also Chair of the Overseas Development Institute, which is the major British development think-tank. He's a visiting professor at the London School of Economics and at Cass Business School, City University, and he became a Cross Bench member of the House of Lords in 2005.

I think he's been one of the strongest voices, maybe the strongest voice on financial sector issues and financial sector reform recommendations but also some questions marquees. He's not dramatic in his writings. He asks the right questions, but he also suggests that there's still a lot of uncertainty.

We're joined in the panel by two of our own from Brookings, Martin Baily, Senior Fellow in Economic Studies and also Senior Advisor to McKinsey & Company. He is also an advisor to the Congressional Budget Office. He currently serves as the Co-Chair of the Financial Reform Taskforce supported by the Pew Charitable Trusts and is a

member of the Sqaum Lake Group of academics working on financial reform issues which just issued their report, or at least one of their reports.

From 1999 to 2001, Martin was Chairman of the Council of Economic Advisors during the Clinton Administration and one of the three members of the Council from '94 to '96.

And Mauricio Cárdenas, who is the Director of our Latin America Initiative at Brookings. He was head of the biggest, most famous Colombian think-tank and also twice Minister in his government for Transportation as well as for Economic Development.

Thank you very much for being here. I think it's going to be a very, very interesting morning. We will have Lord Turner give his remarks for about 15, 20 minutes, and then we'll moderate a discussion in the panel and then open it up to the audience.

Lord Turner?

LORD TURNER: Well, thank you, and good morning. It's a great pleasure to be here at Brookings. I've been asked to talk about the financial crisis in context, and what I'd like to do is to talk about the financial crisis and how we respond to it but also try to relate it to some fundamental points of economic theory about how markets operate and why particular types of markets are very different from others, but I think that the core of the problem we face is that there's something about the operation of financial markets which is in a different category from many of the other markets which we deal with in a market economy.

I think clearly the financial crisis was a very major one which has had a huge impact on growth on public debt throughout the developed world. We managed to avoid a great depression, and I think the good news was that one of the reasons why we managed to avoid a great depression is that we had the history of the Great Depression

to read and know what not to do to turn a crisis into a depression. But it was still a very significant impact, and it's clearly not over yet. Indeed, what has clearly happened over the last two months is that a new form of the crisis has developed which is the European sovereign debt problems.

So we are still in the period of trying to manage our way out of the existing crisis, and we may well be still in fragile times for many months or even years yet, but also trying to think through what went wrong so that we can design a better system for the future. And in working out what went wrong, I think one of the things we need to try and do is to understand the common patterns behind different financial crises, not just this latest one, but all other previous financial crises that we've suffered in the past.

When you look at the background to the crisis, the build-up to 2007-2008 over a couple of decades, two things are striking: First is a process over about 20 or 30 years of a dramatic increase in the scale of financial activity within the economy, and that is the case on all sorts of different measures of scale.

First of all, it's true on real economy things like credit aggregates, how much is credit in one form or other as a percent of GDP? Very major increases. In the U.K., it goes from about 30 percent of GDP private sector credit in 1965 to something like 130 percent by 2008, and similar patterns in the U.S., in Spain, in Ireland and many different countries.

But also we see a very interesting phenomenon which is an explosion of intrafinancial system claims. It isn't just that the claims vis-à-vis the financial system and the real economy go up; the scale of the financial system claims on itself increase. Indeed, that is one of the most striking facts. We see an explosion of a complexity with complex securitized products as well as the forms of securitized credit we'd always had, and we see an explosion of the scale of trading activity.

If you take over the last 30 years, almost any measure of trading, whether it be oil trading or interest rate derivatives trading or foreign exchange trading, and you try and relate the value of that trading to the value of the real economic variable to which you might think it relates, so value of foreign exchange trading relative to the value of global trade, you will typically see that those ratios over the 30-year period went up by factors of 10, and that is true across a whole series of different markets.

So a huge increase in the scale of financial activity which was also matched by an increase in the percentage of total profits which came from financial services, the increase in the percent of stock market capitalization accounted for by financial firms and very significant increases in the ratio of financial sector compensation to compensation in the rest of economy. Banks have always been quite a good way of ending up towards the upper end of the income distribution, but over 30 years that became dramatically so in a way which was not true back in the '50s and '60s. So huge increase in the scale of the financial system.

And, secondly, the other thing which was striking in the years before the crisis was a steadily growing intellectual assumption, a conventional wisdom that this increase in the scale of the financial system must be a good thing. That was linked to a dominant intellectual belief about the value of completing markets, the idea that we would get closer to a sort of equilibrium (French) in which all markets are complete if we had more financial instruments. And we had very strong beliefs that although we couldn't quite specify exactly the chains of relationship in this financial system, it must be the case that all this innovation and trading and securitization was dispersing risk.

So, for instance, if you look at the global, the IMF's global financial stability review of April 2006, you will find a statement -- and I'm taking it from memory now, but I've got it roughly light -- which says if he's now increasingly recognized that the

development of credit securitization and credit derivatives has dispersed risks into the hands of investors better able to absorb it and has thereby increased the resilience of the economy, this resilience may be seen in the reduced probability of bank failure and the greater and the reduced volatility of credit extension.

If you go back to the words, you'll find that I've got that 90 percent right there and it's certainly right in spirit. And that is extraordinary in retrospect. I mean somewhere in the bowels of the IMF a person who wrote those words has been chained off and is not allowed to see the light of day any longer. But that was the conventional wisdom. It was Alan Greenspan's conventional wisdom. We didn't need to specify exactly how it had reduced risk but somehow this increase of innovation must be right, must be beneficial because we had a theory of self-equilibrating financial markets in which the free flow of private sector profit maximization was almost bound to produce a favorable result.

And then we went through a major crisis. And clearly that means that some of the assumptions we made must have been just wrong. And it's very important we try and work out which of those assumptions were wrong as a background to trying to create a more stable system for the future. And I think the easy bet is to list a set of obvious things -- I mean they weren't obvious at the time, but they are obvious now -- which were wrong and we have to put right.

We had a very significant increase in leverage within the financial system, the leverage of banks and investment banks. And we had reduced levels of liquidity. If you compare the capital ratios of banks or the liquidity ratios of banks back in the mid-20th century and up to the crisis, a sustained period of the reduction of liquidity ratios and capital ratios. We simply tried to run the financial system with inadequate buffers of liquidity and capital.

We saw this explosion of complex trading activity in securitized credit, and it is absolutely clear in retrospect that some of what was going on there was essentially a capital arbitrage came because we have got the capital requirements for trading activities, not just a little bit wrong but dramatically wrong. Essentially, UBS could take a loan, and its own intel audit report describes how it did this, from its banking book into its trading book, and, hey, presto, the capital requirement went down by a quarter or to a quarter or a fifth, and everybody who was involved in it looked like geniuses until it turned rotten. And that was a capital arbitrage going on because we got -- the regulators of the world got in the design of the Basil II regime -- an overenthusiastic love of value at risk models completely wrong.

There was a massive increase in new forms of maturity transformation. One of the fundamental things that a bank does, of course, is maturity transform. It lends for longer than its deposits. The deposits are rather to be short-term, the loans are rather to be long-term, and that's a useful function vis-à-vis the real economy. But what was interesting in the run-up to the crisis is that maturity transformation was occurring in the shadow banking system on a massive scale.

In money market mutual funds, which were holding, long-term maturity, contractual maturity assets, short-term liabilities, and believing that this was safe because those long-term assets, although contractually long, could always be sold immediately. And we had sieves and concretes doing the same thing, fundamentally doing maturity transformation based not on the contractual ability to get hold of cash flows but on the belief that you'd always be able to sell this asset in a liquid market. Liquidity through marketability was something that we overrelied on.

We overrelied on the credit ratings; we stretched the technology of credit ratings which had worked pretty well for years in relation to single-name corporates but

didn't work at all well when we applied it to complex securitizations, and we did lots of things wrong in our remuneration policies that paid people's large cash bonuses for things that looked clever before we'd really been able to work out whether they truly were clever or had simply left a trail of toxic liabilities in the bottom drawer for future people to deal with.

All of that says we understand that, and we have an agenda with regulatory change to put that right. But I think that we may fail to be significant -- adequately radical in our response if alongside sort of setting out those things and saying, well, that's obvious, let's put them right, if we don't step back and say, well, on a more fundamental level, what went wrong? What is it about this financial system that wasn't self-correcting? And if we fundamentally believe in market economies, that they have benefits over planned economies, what was it about the financial system that our reliance on its free market, self-equilibrating characteristics didn't work?

And I'd like to suggest that there are four aspects of special features of financial markets that we need to understand. I think we need to understand that financial markets are different, that credit is different, that credit against real estate assets is different, and that banks are different. Very quickly on those, what we know about financial markets, liquid financial markets, is that they are subject to systematic tendencies to overshoot, to go to overhigh values or over low values. They are subject to momentum and herd effects.

Now, of course, some people in the past have denied that. They say no, in some sense, if the NASDAQ was at 5,000 in April 2000, that must have been the rational level at that time even though it was at 1200 two years later. Now, the great difficulty with arguing with people like that -- I hope I'm to going to offend any Creationists in the room,

if I say -- but it is like arguing against Creationists. If they -- they want to believe that, you will never be able to persuade them that it is not true.

But I don't believe it's true. I think that a reasonable common sense way of looking at the way that the financial markets have operated from Chulik futures in 1737 Holland through to the Internet boom, through to credit securities in the 1920 is that they all are subject to dramatic overshoot.

So I think that has been very well documented starting with Charles McKay's great book on Charles McKay's great book no extraordinary popular delusions and the madness of crowds which was produced back in the 1830s; Charles Kindenbertary's book, Robert Shiller's excellent work on irrational exuberance has set out this pattern of a tendency to overshoots. And I think we also have a set of very good theoretical reasons for believing, understanding why these overshoots occurred. What's actually interesting is that between these different schools of why the overshoots occurred, there's often a great deal of rivalry. There are some people who root the explanation in, as it were, the insights of Frank Knight or Maynard Paynes about the inherent, irreducible uncertainty as to expectations of future cash flow prospects. There are other people who focus, and it's a related concept, on the way that under imperfect information and with imperfect principal agent relationships, even perfectly individually rational people can produce a collectively reflexive and self-reinforcing process.

And then, of course, there is the theories of people like Danny Carnaman, who root their explanations in evolutionary biology and psychology and inherent, almost irrational, herd instincts. So there are people -- every time I debate this with George Soros, and I say, "We've got this problem of irrational exuberance."

George says, "No, it's not irrational, it's perfectly rational. I know exactly what I'm doing, and I intend to make money out of it. It's just that the collective impact of all these individually rational people produces a collectively rational result."

My own belief is we don't need to decide between these different explanations. I think they are all part of the explanation. I think the imperfect information and principal agent relationships are very important to understand. I think fundamental Keynesian, Knightian, inherently irreducible uncertainty is very important, but I think the insights of Carnaman and others are important as well.

But however you explain it, we have financial markets which have a tendency in the history of finance, strange markets or interest rate derivative markets, credit defaults, swap markets, credit markets, they will have a tendency to oscillate quite significantly around any reasonable concept of stable equilibrium values.

So financial markets are different, and they are therefore more problematic in their operation than the market for restaurant meals, or the market of cars, or the market for hotel stays.

But, secondly, credit is different, and I think this is important when we then put credit together with markets. Credit is different because it's a contract which is specific in tenor and specific in nominal amount. The fact that credit is specific in tenor, i.e., it has to be paid back at a precise time in a way that equity doesn't have to be paid back at a precise time, has a very specific consequence which is that in our economy we rely for the dynamism of the economy of a perpetual new supply of new flow of credit to replace that that is being paid back.

When you think about it, a modern capitalist economy could quite easily survive for three or four or five years without a single new IPO, right? It would slowly be some problems which slowly emerge in the allocation of capital and the processes of

efficiency, but you don't need a new supply of new equity capital each year to keep the machine going.

Credit, you do. If you actually have a credit crunch which is denying new flow of credit, you are deleveraging the economy quite fast. And that follows from specificity of tenor. Specificity of nominal value, of course, is the fact that I owe you that credit in a fixed amount, and if I can't pay it back, we go through this extraordinary process of bankruptcy and fire sale and insolvency.

And there's a very interesting note by Ben Bernancke in one of his essays on the Great Depression where he says: When you think about it, the actual existence of bankruptcy is a complete denial of smoothly operating markets. If markets actually operated in the way that "ara d'bleu" (phonetic) describe of smooth operations, every contract we ever wrote would have a state contingent nature to it so that as a company got into trouble, it would smoothly migrate from debt to equity without every going through this irreversibility and these problems of bankruptcy.

And it is the fact that we have these bankruptcy processes in real companies but also particularly in banks that means that credit instruments, when they go wrong, have an ability to make major problems in our economy. And that is why when you look at all the major problems that have occurred in the past of a macroeconomic volatility, in so many of them you will find that oversupply of credit and then sudden drawback of credit supply is absolutely central to what occurs. And certainly that was true in 2008.

It was also true to what occurred in the Asian crisis. At the core of the Asian crisis is a process well described in Rogoff and Reinhart's latest book of a willingness of the credit markets to extend what appeared like limitless amounts of credit to the economies and then what they called a sudden stoop. And that is a tendency of credit markets, and it's a particularly harmful one.

But credit markets are particularly problematic when combined with real assets and, in particular, real assets based upon the scarce resource of land, things which are in locational-specific fixed supply. And indeed it is really quite striking when you look at the financial, the banking crisis of the last 30 years how many of them have been due to, have been related to extension of credit against either residential real estate or, even more, against commercial real estate.

Commercial real estate is the sort of the criminal always present when we get a disaster in financial services. I actually remember, I started my career in banking at Chase Manhattan Bank, and I was in the credit training course in Manhattan in about 1979, and the head of credit came to us, the most important person on the credit side of Chase Manhattan Bank on the executive committee, senior credit officer, and he gave us a talk. And he said, "You know, in 1976, the Chase Manhattan Bank almost went bankrupt because of bad lending to commercial real estate." He said, "We'll make other mistakes in future, but the great news is we won't make that mistake again."

Well, about 10 years later in 1989, Chase Manhattan and City, and all the other banks got into deep trouble again on commercial real estate. And that was behind the Savings and Loans problems here, the secondary banking crisis in the U.K. in the early 1970s, the Swedish crash, financial crash, of 1990s. This tendency to overextend money against real estate is fundamental.

Why does it exist? It exists because there is an inherent cycle between the extension of credit against real estate pushes up the price of real estate which then validates in the mind of both the borrower and the lender why that was a sensible contract, and why you ought to do even more of it. And I do think that here the insights of Hyman Minsky, who talks about a process in which credit extension, particularly against assets of this nature, progresses from what he calls hedge finance, lending to actually be

repaid out of the cash flow of the fundamental enterprise, to speculative finance where at least the interest is coming back out of the cash flow of the enterprise, but the capital depends on capital appreciation, to what he calls "ponzi finance" where event he interest that you're getting back is fundamentally being paid for out of the capital appreciation.

I think that's clearly what happened in the final stages of the subprime boom in the U.S. There were people who were fundamentally expecting to pay even the interest on the loan out of the expected capital appreciation being generated by the very credit extension which was -- which they were enjoying.

So financial markets are different. Credit is different. Credit against real estate assets is different, but, finally, banks are different.

One of the interesting things about banks is that we're so familiar with them, they've been around for so long and they're so much part of our life that we actually don't often think about what very odd things they are. Fractional reserve banking is an odd thing. I remember three days after I started my job at the FSA in September -- I started on September the 20th, 2008, Mervin King had me over for dinner at the Bank of England, and we talked about the situation.

And he said, "You know, Adair, something? Banks are very dangerous things." They may be dangerous things because if everybody wants their money back, they can't have their money back, and, you know, that's what they do. But when you think about it, maturity transformation is a dangerous thing. It's only made a stable thing because of the existence of central banks with lenders of last resorts. And fractional reserve banking which developed in the 19th century with both leverage against the small equity quotient and fractional reserve against only a small liquidity quotient, has very specific risks.

Of course, from those risks come some advantages. There are transformation processes which are enabling groups of savers to hold assets in mixtures of maturity risk and return different from those which liability providers want to provide. And that process of allowing a disconnect between what the savers want and the liability that the borrowers want has an economic advantage. But it also creates major risk.

Walter Badgett argued that the creation of banks in all those fractional reserve banks in England in particular in the 19th century was one of the reasons which gave an economic advantage to, for instance, Britain over continental Europe. But I think one of the dangers is that one then assumes from that that if there is a economic advantage from the existence of fractional reserve banking, that process is limitlessly true and that they are continuously giving us advantages.

And I think one of the things we have to challenge is how big a role of these fractional reserve maturity transforming banks we want in the economy. One of the very interesting things about this crisis is that it has generated a new interest in a tradition of economic theory and writing which has actually challenged whether we want fractional reserve banks at all.

If you look at Larry Kotlikoff's book *Jimmy Stewart Is Dead*, it is actually going back to the idea that you shouldn't have banks at all; you ought to have 100 percent loan funds.

Similarly in the U.K., Professor John Kay has argued the same thing, and these are ideas that go back to Irvin Fisher about narrow banks and that the whole idea of banking is concerning.

Now put all those facts together, financial market's different, credit market's different, credit against assets's different, and banks very particularly different, and I think what we end up understanding is why the financial system can be quite so volatile, why it

is a much more volatile system and a much more dangerous system than any other market that we deal with in the economy. It is a system which is a very complicated piece of engineering with some deep tendencies towards procyclicality, some very strong positive feedback loops in it which can cause severe harm. And at the core of those positive feedback loops are feedback loops in the supply of credit.

And I think one of the things that occurred in the years before the crisis is that we simply weren't intellectually humble enough in understanding how little we really understand how this complicated global financial system fits together.

Interestingly, in 1931 as the then system of global finance and credit collapsed, John Maynard Paynes said: We have got ourselves in a colossal muddle. We have blundered in our management of a delicate mechanisms whose workings we scarcely understand. And, actually, that is somewhat what I think at the moment. We have believed that this thing is a self-equilibrating mechanism and therefore we didn't need to understand how it all fitted together, but I think we have blundered in our management of that delicate mechanism.

So what do we do about it? What are the sets of actions that we might take? Well, what I'd like to do is actually to go in reverse order and suggest four things that might arise out of the assertions that I've just made.

First, we need to do something about banks. We need to understand that banks do play a value-added role in the economy of the sort that Walter Badgett described, but we need to be wary of the idea that simply because they play a useful role, up to a point, that that is limitlessly valuable however large it is.

Let me give you a specific example of that. If you look at the rhetoric which was used to defend financial innovation and banking and light capital requirements against banks, it was always in terms of credit extension. Look at the process of

developing the Basil II capital regime. What is quite startling in the Basil II capital regime which was being put in place between 1995 and 2008 is the overt aim of the designers of that regime was to, quote, "economize on the use of capital."

Now, economize on the use of capital is another word for making the banking system more leveraged. That's what it means. And when they said, well, why is it a good idea to make the banking system more leveraged, they said because this will enhance credit extension. But enhancing credit extension is only a good thing if you'd thought through whether a greater degree of leverage in the real economy is economically beneficial or not. And I think we fell into some very sloppy intellectual habits of believing that we wanted a banking system as big as possible in order to provide as much credit as possible.

It's not at all clear that that is the case. And once you realize that that is not the case, you can end up in a space on capital adequacy requirements or liquidity requirements for banks which is not just marginal but quite radical.

Now, I'm not suggesting this. Nobody is to report this outside because otherwise you'll have markets getting very worked up, but actually, when you step back, it's not obvious why we're debating whether the capital requirements against banks should be five, or six, or seven percent. It's not obvious why you wouldn't have a banking system with 25 percent equity. After all, we had banking system with 25 percent equity, and we had economic growth, and we really need to go back to some of the fundamentals of the theory to get that right.

So we need to be radical in our parametric reform on capital and liquidity within banks. Secondly, however, I think we really need to think about this Minsky cycle between credit and assets. The extension of credit in an over exuberant underpriced form generating asset price appreciation which then it clears to validate for both the

borrower and the lender the previous behavior and encouragement to do more, particularly, by the way, if you have mark to market [sic] accounting.

What should we do about that? Well, some people believe that the most fundamental thing to do about that is to try to put a stop to too big to fail and reintroduce discipline into the system. And there is a lot of focus on the too-big-to-fail agenda and the problems that have arisen from large banks going bankrupt.

But here's an interesting thing. When we look bank on this crisis in 10 year's time, it's highly likely that the cost of rescuing our too-big-to-fail banks will be the small change of the crisis. Basically, when you put equity into a bank to recapitalize it, you often actually get the money back. That's what happened in Sweden, that's what's tending to happen here in the U.S. Central banks put in billions of pounds of money in liquidity support, but central banks typically lend money either at market or punitive interest rates, and they're clever guys. They tend to make profit at the end of the day.

And if you actually run how much the state is likely to lose in its support to the banking system, latest IMF figures suggest two to three percent of GDP, not a very bid figure. But at the end of this process, U.S. debt to GDP will probably -- government debt will have probably got up by 50 percentage points also in the U.K. And the loss of GDP versus trend will be much more dramatic than that two or three percent suggests.

What that shows is that the really big issue, I think, is the volatility of credit extension, and the volatility of credit extension particularly in relation to real estate assets and to the self-reinforcing cycle that exists there. So the second thing that I think we need to think radically about is whether we should have new instruments of quantitative credit control in addition to the interest rate, i.e., whether we should be willing to use loan-to-value ratios or countercyclical capital requirements deliberately to slow down credit

and asset price loops. And these are essentially new ways, other than the interest rates, of taking away the punch bowl before the party gets out of the hand.

Except, of course, they're not new ways at all. I gave a lecture recently in India, and I said I think we need new ways of taking away the punch bowl before the party gets out of hand, but I said, but I recognize there are not new ways, you've done them last year, you've increased reserve account requirements against commercial real estate loans. And the reason why you've done that is that 60 years ago, the time of independence, we told you that was the way to do central banking, and we spent the last 30 years turning up and giving you lectures about how that's all fuddy-duddy and old fashioned, and that if you're really clever, you'll be able to manage the economy entirely through the interest rate.

I think we actually need to rediscover quantitative controls of credit possibly on a sectorially-specific basis.

The third point, however, going back to the particular nature of credit contracts, the way that credit contracts, the co-specific in tenor and specific in amount introduce a rigidity into the economic system which is not there in relation to equity contracts. And think about it. Think about the Internet boom.

The Internet boom, an extraordinary boom of stock prices up and down, but at the end of the day it didn't wreck much economic havoc because, actually, the economy has quite a lot of resilience to absorb irrational exuberance and then despair in equity prices precisely because equity is the residual, the buffer within the system. It's when you get those booms and busts in credit that you actually have problems within the system, and it's the rigidity of the contract.

Now, that rigidity of the contract has some real benefits for investors. There is some real benefit. But it does mean that we have to think very carefully about how much

credit there is within the economy. We need to think about what the optional balance of equity contracts and debt contracts there is.

Now, of course, you could say I'm going to leave that to the market to decide, and actually maybe we should. But at least that means we shouldn't introduce a bias in favor of credit contracts, and we've introduced an enormous bias in favor of credit contracts because we've designed pretty much all our corporation tax regimes in the world to provide a strong incentive for the system to select more credit contracts than it would in the absence of that tax bias.

Go back to Medigliani and Miller's basic theory of the choice between equity and debt and the fact that there would not be a fundamental reason for preferring more debt if it were not for the tax shield. The tax shield on debt is a major bias in the system in favor of credit contracts. And one of the things the banking regulators are doing all of the time is trying as best we can to lean against large bias in favor of debt contracts which our tax regimes have tended to introduce.

Fourthly, however, going back to markets. If markets fundamentally are subject to inherent overshoots, what do we do about that? Well, there are no easy answers because the answer in relation to financial markets is probably like Churchill's argument on democracy: It's better than the alternatives. It's the least bad system. You'd rather have financial markets than not, but you need to understand that they are imperfect. You need to understand that they are probably good at many aspects of a setting relative prices even if the aggregate price can be wrong. They play an important role in allocative mechanisms.

I think the crucial thing on financial markets is to recognize all that and then not flip over into believing that they are always perfect and that you should never intervene against them.

Let me give you one very specific example. I don't see any social purpose whatsoever in carry trades in foreign exchange. I think they are deeply destabilizing; I think they drive the prices of in particular sometimes emerging market currencies to unreasonably high levels. I don't think you can ban them. I don't think there's any way of doing that, but I think we simply need to be pragmatic about whether you'd sometimes lean against them.

And before the crisis we weren't pragmatic. Before the crisis the dominant ideology was that if an emerging market wanted to place constraints on inward financial flows, it was breaking with the orthodoxy. And indeed, you have to remember that back in 1997 it was a famous point. It was in September 1997 in Hong Kong, right as the Asian crisis was happening, so a wonderfully ironic moment, the IMF was then debating whether it should make it a condition of membership of the IMF that you must never have short-term controls of capital.

Well, I think we've moved on from that, and we've realized that financial markets can overshoot and therefore you should simply be pragmatic. We should be pragmatic as to whether, for instance, a countries might sometimes place constraints on inward flows through tax mechanisms, and I think we should be pragmatic about whether within the banking system globally -- and this is a debate we have -- we might be willing to demand that large global banks organize themselves as set for subsidiaries in individual countries with independent resilience.

Whenever I suggest that in front of private bankers' groups, they say this is terrible. You are getting in the way of a free short-term global capital flows. well, my answer to that is, with Jargdish Bardvalti and Danny Roderick, I'm not convinced that free short-term global capital flows are in all circumstances beneficial, so if my actions to increase the resilience of the system happened to have the by-product of slightly

reducing them, I am not sure that that is a negative. That is not a rejection of the role of financial markets but it is a rejection of the quasi-religious belief in their always-right characteristics which I think we had in the years before the crisis.

Thank you.

(Applause)

MR. DERVIŞ: Wonderful, and we're going to have a terrible challenge fitting all of the discussion into the time frame to 10:30, but I think Lord Turner has to leave at that time, so we have to do it.

So I turn to Martin Baily now, who is going to give us his reaction but maybe with a little bit of emphasis on the U.S. scene.

And let me just throw in one element that Lord Turner did not mention but I know from his writings that he's thought about. I mean how does it also link up with the political economy of regulation? In other words, you know, we live in a political system. We don't have platonic guardians that are totally disembodied objective actors. The political system has an impact on how things get done, and I'm, in fact, also really interested in that angle as part of the discussion.

Martin?

MR. BAILY: Well, you have given me a challenge. I've been an admirer of Adair Turner and Lord Turner's work and ideas for a long time, going back to his interest in productivity in the U.K. on retirements when I was working on a retirement; the Turner Report on the U.K. retirement system was a wonderful piece of work, and now on the financial sector.

So but let me say I agreed with, I don't know, a huge percentage of what you said. In the interest of being slightly argumentative, let me just take up a somewhat different perspective. With one major exception around the rules on the adaptability of

interest, the story you framed was one of market failure that these were financial markets that failed and therefore we need to think about ways to regulate more creatively in order to stop that failure.

And let me say I agree with you completely: Markets did fail. I think we do need to think about ways to regulate them better. I have supported the idea of giving the Federal Reserve the power to set margin requirements which it already has in certain areas, but it can do that in loan to value ratios and so on, and making that part of the arsenal of systemic stability. So I agree with you on that.

But there surely were a lot of policy failures as part of this crisis. I mean you said the bailing out the banking system is not going to cost much, and I agree with that, and I agree with you that we sort of exaggerated too big to fail. But Fannie and Freddie are going to cost us close to $400 billion according to the estimates from the CBO, and they were the biggest players in the mortgage market in the U.S. They were buying subprime mortgages and issuing securities on that. They were carrying all of the default risk both on their own portfolio and the securities that they issued, and so -- and Congress was egging them on to issue more securities, make the loans more affordable to people who perhaps couldn't afford those loans.

So I think there was a distinct policy element, and then the other thing on the policy side that I think was a failure was just the failure to regulate the banks, and I think in the U.S. a lot of people knew that lending standards had been eroded or being eroded. Ned Gramlich was warning everybody about that. So were other people. Nothing was done to really do that, and it was sort of, well, let's leave it to the market. So there was a significant market failure there.

Looking at the U.K., and I think this was before your time, so I'm not making this, trying to make this personal, but I think I read that in the post mortem about Northern

Rock that the regulators have not visited Northern Rock in the U.K. for three years. Certainly nobody was really -- the notion of this was in a way London's comparative advice was this light touch regulation, and, you know, when you do have responsibilities not only for the stability of the system but you are with taxpayer money reimbursing depositors through the insured deposit system, that regulatory failure was pretty dramatic.

And I'm stressing this not to blame those, although I think we do need, certainly in the U.S., more accountability for regulators that failed in their jobs. But I think we do, as we set up the system going forward, we need to think about not only getting a better regulatory system and finding ways to perhaps limit the excesses of markets, which I agree with exists, but also ways to make sure that the regulatory system works better.

There are a lot of flaws, as we know, the alphabet soup of different regulators. We're approaching that here in the U.S. and in other countries by sort of unifying the system, putting a bank regulation or at least the regulation of large institutions inside the Federal Reserve or the FSA, or at least a big chunk of it is being put inside the Bank of England. And other countries are apparently doing the same thing.

I think we should think hard about whether that's really a good idea. That seems to be the idea of the day. I'm not so sure it's such a good idea. We're perhaps forgetting that one of the reasons we've kept central banks outside some of that was that we were so concerned about inflation, particularly in the '70s and '80s. And so I think there is a danger that if you put all the bank regulation with the central bank, you may be undermining the independence of that central bank in its ability to make monetary policy.

Certainly, the central bank needs to know what's going on in the financial sector, and I think that was a failure in the U.K. that they did not. But that doesn't mean

you necessarily have to sleep in the same bed, so to speak. I think there can be an exchange of information, and Alice Rivlin and I and others have argued unsuccessfully, it seems, for actually separating having a separate, more like an FSA kind of authority to do the regulation and preserve the independence of the central bank.

Since we are short of time, I will try to make my last comment in the issue of political economy. For awhile it seemed that we were not going to get any kind of financial reform bill coming out of Congress. It seemed like the thing was stalling, partly as a result of Goldman Sachs, and I'm not going to say anything about the rights and wrongs of that case, but it did change the political environment, and it meant that clearly we are going to get a financial reform bill. I think there are going to be some degree of bipartisan support on a reform bill, and I think it will contain many of the right elements for responding to this crisis.

I don't think it goes far enough. I don't think it will eliminate the chances of another crisis, and that's probably because it leaves a lot of things incomplete. There's a lot of stuff in the bill which is sort of pushed off to a study or pushed off to regulators. I'm not going to argue about whether that's a good idea or not. If Congress is not going to specify higher M-8s, it calls for higher capital requirements on financial institutions. It calls for capital requirements on nonbank financial institutions both of which I agree with. It doesn't say what they should be, but, you know, maybe that's a good idea. That's something that we have to work out through international cooperation and maybe that's a little bit less subject to the political process than all this to the thing that's going on with the bill.

So again, quickly, a terrific analysis which I agree with are the issues around financial markets, why they don't work perfectly, and why we do need a certain amount of

regulation, and, but let's also think hard about how we do that regulation because regulatory failure was also a big part of this crisis.

Thank you.

MR. DERVIŞ: Thank you very much, Martin.

Mauricio, I'm sure you have many, many thoughts and many reactions, but I hope you will talk a little bit also about how emerging markets are reacting to all of this, the financial systems in emerging markets and perhaps some words on the degree of international coordination and harmonization that you think is possible, feasible, desirable.

MR. CÁRDENAS: Thank you, Kemal. Well, this has been a terrific lecture and presentation because I think it really shows an independent regulator providing significant information and significant knowledge about the way these markets operate and also providing us with some ideas on the way forward and the changes that we have to introduce in the regulatory framework.

Let me start by saying that when Lord Turner began his talk, he mentioned that 34 years ago Great Britain had about a rate of 30 percent in its ratio of private credit to GDP and that now is around 100 percent. That's more or less the same as you see in continental Europe, even here in the U.S. Well, 30 percent, or 30 to 50 percent range is what you see in many emerging markets.

So there's a big difference on where we are now relative to the develop world. And, of course, when you see those differences, the natural question of what is excessive financial intermediation? When do you start seeing the diminishing returns? Or when do you see in negative returns the financial intermediation? And that, of course, has tremendous implications from the point of view of these harmonized international regulatory framework, because for many countries in the emerging world, the question is

not whether to constrain financial development but how to promote it, and how to increase the level of financial intermediation.

This is not the first financial crisis in recent times. The developing world and the American countries had a very severe financial crisis in the '90s, not only in Asia but rapidly spread to Russia and then to Latin America. And many countries in the emerging world have begun adopting what we call today macro prudential rules more than a decade ago. To paraphrase Moliere, we've begun speaking in prose without even knowing it because we've begun talking about these contracyclical instruments in many countries.

Just to show you or illustrate with a few examples, in Hong Kong the regulation that was attached to loan to values in order to constrain credit in the mortgage sector was adopted in the '90s. The Reserve Bank of India, as Lord Turner also mentioned, attached the higher capital waiting on claims to households in 2004. There have been contracyclical capital buffers linked to credit growth in China. Contracyclical provision is very common now in Latin America as well as in China and India.

And these were not just for contracyclical purposes. There were also measures adopted to deal with systemic risk, the too-big-to-fail issue. For instance, in Asia, in Latin America, capital surcharges for systemically important banks, or limits on currency mismatches, or loan to deposit requirements, loan to deposit is a typical measure to reinforce monetary policy to constrain credit

So these are not new things in the emerging world, and I guess in (inaudible) because of this, the financial crisis in the developed world this time since 2007 did not spread that much into -- into emerging markets.

Now the problem is that these measures that have been adopted in the emerging world are a little bit too ad hoc in the sense that there are no general principles,

there is no international standard, and countries have done that basically with their own domestic knowledge about their own financial sectors. They're a little bit too discretionary. So the next step should be, of course, to agree on a harmonized international framework that allows sufficient flexibility to countries to a sufficient degree of maneuver to adapt to the specific circumstances.

So these, in a way, is more in the direction of a new Basil agreement that will incorporate these market prudential standards but at the same time are proving countries with very significant flexibility.

Now, the idea of a College of Supervisors that looks at these issues and assures some coordination and some cooperation is very appealing. I think that's the -- that's something that we need to basically agree on and move forward in the sense of providing more elements to learn from the experiences in the developed world so that we can apply them in emerging countries.

I think there are many aspects of this crisis that will provide emerging countries with guidance, with understanding, especially when it come to many financial products that are very complex and that, as Lord Turner also mentioned, involve transactions that many times do not have a correspondence with the underlying assets that is being traded. Those type of financial products, the structural products are products that are relatively unknown in the emerging markets and for which I think we need to have better regulation. So it is in that sense that these catabolic (?) systemic risk comes to, and the idea of a College of Supervisors is very welcome.

So I'll stop there just noting to end that these are very important issues, and I think this week is a particularly relevant time for this discussion because, as we know, President Obama sent his colleagues in the G-20 a letter last week basically pushing for more progress in the discussion of these issues in the context of the G-20, and many of

the aspects that he's asking have to do with this discussion, and particularly the issue of more stringent capital and liquidity requirements and transparency and disclosure of the regulation of the (inaudible) market, things like the ones we're discussing today.

Thank you, Kemal.

MR. DERVIŞ: Thank you, Mauricio. Before turning again to Lord Turner, let me warn Ceyla Pazarbasioglu that I would very much appreciate it, Ceyla, if you could say a few words, since you're responsible for the -- in the relevant division, you're head of the Relevant Division at the IMF, or how the IMF has changed, so to speak, since the -- and so we give you a chance to tell us, you know, the IMF significantly has learned from the '90s, and I think doing some very good work, actually, right now.

But anyway, so I'm just giving you a warning.

MR. BAILY: That's a back-handed question if ever I heard one.

MR. DERVIŞ: Now, Martin raised various points, but particularly he raised this institutional unification issue.

MR. BAILY: Sure.

MR. DERVIŞ: And how all this might affect the important, you know, principle of independence of the central bank and in the context of (inaudible). I think that may be a particularly interesting point to elaborate on a little bit.

Mauricio raised the issue of possible regulatory arbitrage and how that international cooperation can work. Let me take the privilege of the chair to add one question of mine. You know, in what you said this morning, you didn't quite use those words, but in your writings you say one has to throws sands into the wheels because the market completion price discovery kind of ideology, when pushed to the extreme, really ignores that momentum and herd effects that we've seen again and again in financial sector history.

I remember building a general equilibrium model for my Ph.D. thesis, and, you know, it was a "Valraisean patem moi," I had to solve it myself. There were no prepackaged dociters in those days. It was the mid-'70s, early '70s. The only way the model would converge is when I slowed down my programming it, the price response to quantity signals. When the price response was too strong, the thing would always blow up, and it has kind of injected into me at an early stage in my life and a great belief in some sense in the wheels.

And in that context you did come out with some support, or at least, you know, take it off the forbidden table in the context of transaction taxes. And that's one way to throw sands into the wheel. There may be others.

There have been lots of talks about taxes, but there's strong resistance against transaction taxes. And I wonder what your latest is on that. And anything else you want to talk about a little.

LORD TURNER: Okay, good. Well, those are very interesting questions. Let me go in the order first of all with Martin's points. And can I say first of all, I entirely accept Martin's points of a regulatory failure, a supervisory failure. I think the interesting thing, though, is you have to connect that with the intellectual zeitgeist as well.

The fact is that if the FSA in 2005 had said we're going to make, you know, a really judgmental decision that HBOS, one of our biggest banks, is a bit out of control on commercial real estate and we're going to slow it down, we would have been hit by a wave of lobbying which would have said you're trying to slow down innovation; you're going to slow down the extension of credit to householders; and regulatory institutions operate within a environment set, for instance, by politicians.

For instance, there is extant on the historical record a speech by Tony Blair in late 2005 at University College Oxford, and it's about regulation, and doesn't have a

single word of worry about the fact that the FSA isn't being tough enough. It is entirely devoted to why the FSA might be overdoing its regulation and getting in way of the entrepreneurial animal spirits of the wonderful British finance system. So it is a very tricky thing to get right this.

The only thing I want to say on this is I think as we go into more intense supervision, which we are doing and other are doing, we've really got to debate how much more versus some of these macro prudential tools. And let me give you a very specific example of this.

Last year in the U.K. we had an institution called Dunn, Fermlin and Building Society which failed. Dunn, Fermlin and Building Society is like a U.S. Savings & Loans institution of a relatively small size. And, of course, when it failed, everybody said, well, were was the FSA? Why weren't you stopping them lending against, as it happened, a hotel in Glasgow. It was one particular hotel in Glasgow, so before I knew I was going to have to go in front of the Parliamentary Commission and ask questions on this, I read all the way through the file, the 2005, 2006, 2007, did the supervisors fail to see the warning signs emerging?

Well, in fact, it turned out that they had been worried this commercial real estate lending by this savings and loans institute, and they'd asked, they'd deliberately gone back to the auditors and said: Are you sure that the loan provisions are justifiable given what we know?

And the auditors came back and said: Yes, we are worried about the loan provisions. We're worried that they're too high because we're worried that they're tucking away profit for the future because they don't have a single loan which isn't paying on time.

So was the supervisor meant to do? All the loans were paying on time, everything appeared in order. They were asking the right question. And the key point there was there was a problem there that you could not possibly spot at the level of the Dunn, Fermlin Building Society. You could only spot it at the level of the fact that all the way across the country there were a whole load of hotels being built with rising values with a rising amount of credit. Some of these problems are inherently macro aggregative problems which you simply cannot get to. And there's a danger -- we are putting right some of those problems of our regulation or supervisory process, or examining process, but we could appoint an army, and the largest army of the best supervisors in the world I don't think can still spot those problems which are cross-economy problems.

So one of the things we've got to get right is this balance between reinforcing intense supervision and more effective supervision but also the macro aspect.

I think on Martin's point about where you do regulation, I mean my starting point is that where you do regulation is the least important issue. But broadly speaking, as you look around the world and try and worked out what went wrong and what went right in different countries, you can spot some things that may have been better in some than others, in a Canadian leverage ratio, Spanish dynamic provisioning, et cetera. The thing you'll not find is any correlation between success and failure and the division of the responsibilities.

And, actually, that's true of an awful lot of things in government and public policy. The structure is the least important issue except to politicians to whom it is always the most important issue, because just as to a man with a hammer every problem is a nail, to a politician every problem requires a change in the organizational structure to put it right. Because that proves they're done something.

So my argument in relation to the U.K. structure was we did do some things wrong. I think within the FSA we should have more clearly distinguished our conduct from our prudential. And I think we undoubtedly needed to build more links with the central bank. I would be in favor, essentially, of Martin's idea of a constructive tension of exchange of points of view in a joint committee between the regulator and the central bank. But, alas that argument, we're going to go down structural change, and we now have to implement as best possible.

There are some advantages of where we're going. There are some disadvantages, and we'll just have to manage through those.

On Mauricio's points, just one point I did want to bring up. I absolutely agree that one of the really interesting issues is what is optimal financial intermediation and credit intermediation? So when I was down in India talking about the U.K. historic record of going from 30 to 130 percent private credit to GDP, and I was hypothesizing that at very least this growth no longer had any particular correlation with economic growth, because almost all of it is actually fundamentally involved in a life-cycle smoothing effect, an intergenerational transfer. That's what the mortgage market does.

We often have this mental model that what bank credit does is take savings from the private sector and put it into industry and therefore put growth. It's amazing how many accounts of what the credit system does tell you that that's what's going on. Actually, that is in countries like the U.K. and the U.S. a very small part of the credit system. It's far more to do with life-cycle consumption smoothing entirely within the personal sector. And it's got nothing much to do with the aggregate level of investment in productive capacity within the economy.

But it's still within that life-cycle smoothing, you can decide how much or how little is a good thing. Well, as I talked about those figures very well aware that the figure I

think in India was still about 15 percent, if I remember rightly, the private sector credit GDP, and it is undoubtedly true that the creation of basic banking services in the Indian villages would be an undoubtedly positive thing. It was fundamentally providing places where people can have secure stores of savings and where small businesses can have working capital credit extended to them that is vital to the process of development.

I think it's a really interesting issue in economic history and economics as to whether we can say anything about optimality. There's an interesting article, actually, by Alan Taylor and Maurice Shilderick recently trying to get exactly to this. And their argument is that, looking historically, they can see what they perceive, looking at the 200-year time series and cross-sectional approach, cross-sectional between countries and time series, that up to a certain level, there does appear to be a positive relationship between the scale of credit intermediation and economic growth, but that beyond the sort of level reached in the developed world 30 years ago no such relationship exists.

Now, I just put it as -- that is, I think, a very interesting area for analysis to look at. Also, I entirely agree with Mauricio in his point, very interesting points about the fact that throughout Latin America, throughout Asia, there has been a whole series of ad hoc development or, as it were, macro prudential tools, loan to deposit, loan to value counts as cyclical.

And I think one of the things which is now also a very important bit of our intellectual understanding is to begin to put some sort of international frame and comparative analysis round these macro prudential tools and try and really work out what we thinks works and what we don't thinks works.

Kemal, to your point of view, your point about throwing sand in the wheels, the interesting thing about transaction taxes is that the world is full of a succession of economists who at some stage in their life have suggested that there is an economically

logical, a argument for transaction taxes but, who once they have got into power, have magically had no interest in this. And, of course, Larry Summers does have a 1988 article called, *A Cautious Case For a Securities Transaction*.

MR. BAILY: He's disavowed that.

LORD TURNER: He has disavowed it. We see the world is full of these disavowers. What I've never been able to find out in the disavowers is whether this is a theoretical disavowal or just a pragmatic. I mean if he's undoubtedly true, the idea of universally agreed transaction taxes is, for instance on foreign exchange movements, is, as James Tavin suggested or, more generally, and it has all sorts of the problems of how would you get international agreements enough to actually impose it?

I also think that even if you did it, you should never fool ourselves that, you know, we know precisely how to chuck enough sand in the wheels, et cetera. But what I have not seen is a really strong theoretically case about why you wouldn't do it to a small extent if you could. And I think your point about, as it were, the (inaudible) royalty on the auctioneer is only clever enough to go as a certain pace I mean is a very interesting one. We know how this extraordinary phenomenon in equity markets of algorithmic traders who want to put their computers 10 meters away from the central exchange computer in order the order will get there, you know, one nanosecond before everybody else's nanosecond.

And again, when you -- you asked, well, you want to do that, and I can't legally stop you doing that, but I want to think about whether this produced more volatility or less volatility, but is there any social value to this, the answer you always get is price discovery. To which my answer is that, you know, the world jogged along for some time with managing to discovery prices sort of minute by minute rather than nanosecond by

nanosecond. And I suspect that the social value of nanosecond price discovery is pretty minimal.

So if we ever did discover -- if we ever did, and it's not clear that this extreme short-term stuff was destabilizing, I suspect, actually, it may not be -- if we ever did, I'd be happy to regulate it out of the way and not regret it. I think, however, the really destabilizing stuff in markets is probably not the day trader in and out quickly, algorithmic stuff. It's the significant position's hold, you know, for a two-or-three-month period. It's the sort of a carry trade stuff which I think is the sort of stuff that is more likely to generate from.

So I continue to be an unrepentant heretic on Tavin tax idea. I don't expect, necessarily, to see one in my lifetime, but I still haven't seen the theoretical argument against it.

MR. DERVIŞ: Well, thanks a lot. And MU II goes to dynamic growth theory, turnpike theory. And for those, you know, I mean there is inherent instabilities there because asset prices can be so fulfilling a long time.

Okay, now --

MR. BAILY: I can't stop myself. I mean I think

-- look, we're sort of engaged in an orgy of, you know, the market fails. And it has it this case, and I, you know, I talk to lots of people who tell me, oh, it's all the government, it's all the government, let the market do it. And I don't agree with that. So I agree with you, Lord Turner, that we have to have these mechanisms to make the market work better.

But let's not be starry-eyed about what the alternatives are.

LORD TURNER: Absolutely.

MR. BAILY: If you have regulated or allocated resources -- I mean India wastes such huge amount of their capital plugging it into government-owned enterprises

that are very inefficiently run. And you could -- that message is reinforced around the world.

LORD TURNER: Yes.

MR. BAILY: And so it's -- and, by the way, to say, oh, you couldn't have found the bad loans, wait a minute. I mean Royal Bank of Scotland was lending money to people that the Greek banks refused to lend it to. I mean somebody could have seen that. You could have seen it in the U.S.

LORD TURNER: Yes.

MR. BAILY: So with all due respect to our visitor, I got a little incensed by your comments.

LORD TURNER: No, and I regret -- you know, I wasn't -- I mean we have done an enormous change which is begun before I came to the FSA, and the intensity and professionalism of our supervision. And we are going things, and there are areas where I do think we missed the trick.

I was simply making the point with the Dunn, Fermlin and Building Society that that was one more (inaudible) that we haven't.

MR. BAILY: Okay.

LORD TURNER: And that was what was interesting because, yeah, it was part of my job. It is because you're going to go in front of a Treasury Select Committee of Parliament. You do have to re-read the files and work out where you think you've made a mistake. And you have to just say, no, we made a mistake, which I think we did with HBOS in some respects, but there are others where we didn't. So I think we have to -- and I do agree with you on India.

I think what's interesting about Indian-directed lending is that there are some bits of it which I'm sympathetic to, constraints on some categories of commercial real

estate vending. Some of the more detailed central allocations are just completely inefficient, and of all the classic problems of ones you go down the sectoral constraint level, it becomes deeply politicized by --

MR. DERVIŞ: I also think that there is a difference conceptually between, you know, trying to argue that some kind of political allocation is an alternative. I think which you didn't really, and I wouldn't either, although in some cases it may have some value in some very exceptional case versus the argument that, you know, herd behavior and an almost ponzi type self-fulfilling prophecies --

LORD TURNER: I agree.

MR. DERVIŞ: --somehow need to be managed.

LORD TURNER: I agree.

MR. DERVIŞ: But I am not clear how to manage it, but there really is a problem there. But anyway, I warned Ceyla, and I think it might be interesting, particularly since we're heading for the G-8, G-20 meeting and the IMF has been extremely active in that context whether Ceyla can reassure us a little bit or maybe not about what the IMF is up to.

MS. PAZARBASIOGLU: Thank you, Kemal. It was a pleasure to listen to this discussion. I don't want to take too much time because there may be other questions, and I think we all agree that there was a collective intellectual failure, and I'm not going to defend the Fund here. And the Fund admits mistakes like everyone else do who were regulators at some stage, or central banker, or academic.

I think what the Fund is at the same GFSI that you're talking about was (inaudible) on investor base. And it was about the changing face of the investor base, and I think that's an important issue that we all need to understand well, because the investors have changed so much in the last 20 years that's it's not clear that we

understand their investment allocation behavior, and therefore decide how best to regulate institutions, intermediaries, and investors who are extremely blurred right now.

And if you look at assets on the management of pension funds, mutual funds, insurance companies, they have tripled, together with financial sector assets, they've also tripled, and they are key players in the market which I don't think we are spending enough time to understand their behavior.

And I'd like to come back to what Martin Baily raised about the importance -- important tax bias against equity, and it's -- and they, much more important issue to address than financial transaction types which is in IFM view closer to a turnover tax, and you would be better off with some sort of a V80.

In what the Fund is doing going forward, I'd like to mention three issues. There's a lot more other work. We're working very closely with the FSB, with the VIS, and G-20. One is this work on systemically important markets and institutions which we have worked with FSBN and VIS trying to understand the analytical underpinning.

The second is we just published staff position notes on the importance of supervision. Here again, I'd like to agree with Martin Baily that rules are there to circumvent. You need to have very good supervision, and so there is some work, ongoing work, in that area which I know Lord Turner is also heading.

And the last one is this is a personal view. I don't think we can prevent failures. We have to make sure we have the resolution schemes to deal with failures, and here the Fund is doing some work on cross-border resolution of institutions and trying to add to the debate.

I'm not going to talk about the financial tax.

G-20 paper was mentioned a little bit before, but I think it's these are difficult times, a lot of challenges, and the Fund is trying to do its best to work with other institutions to contribute to the debate.

Thank you.

MR. DERVIŞ: Thank you, Ceyla. I have read the, you know, the Fund paper on taxation, and I must agree with our host. I don't think there is a conceptual kind of, you know, argument why it shouldn't be done if it could be done. There are all kinds of practical difficulties, but I agree with you. I haven't seen a real conceptual demonstration of why it can in.

Okay, now we have -- this isn't going to be tough. I'll go first with you there. Then with you, but please be short, okay, and in your questions, Peter, and then in the back there. We'll take four questions.

Yeah.

MR. HERRIOT: Judd Herriot, documentary filmmaker. I'd like to address my question to Lord Turner. In the discussions, recent discussions of the new regulatory framework, in particular the discussions around the emergency fund, the bail-out fund, there was some discussion that the conservatives made the point that why not let banks simply go bankrupt? This is a natural mechanism.

Could you comment on this, and what would happen if such a rule were implemented?

MR. DERVIŞ: Please be brief.

MR. KAROFSKY: Pere Karofsky from the Voice of Noise Foundation. Big companies in consolidated sectors like BP in oil tend to have much better credit ratings than those participating in developing markets like wind energy. Do you really think the banks will be formed better, their societal capital allocation role if regulators allow them to

have much lower capital requirements when lending to the consolidated sectors than when lending to the developing? Do you think we can reach a meaning on financial regulatory reform without opening up the discussion on the issue of risk in development? I mean to combat the regulatory exuberance of the Basil committed.

MR. DERVIŞ: Thank you.

MR. BOTELLIA: Peter Botellia, Johns Hopkins SAIS. At the early phase of the crisis, several prominent international economists, including yourself, I believe, Lord Turner, put a lot of emphasis on the global imbalances as a factor underlying the financial instability. You didn't even mention that in your lecture this morning. What has happened?

MR. DERVIŞ: All right, the last question over there. Yeah.

MR. SUMNER: Peter Sumner with FTBL reporter. I want a question to Lord Turner regarding contingent capital requirements. It looks like it could be put into the U.S. Reg Reform bill as early as tomorrow morning. G-20 in Canada is discussing it, and I was wondering what the FSA and the Bank of England's view and your view as a means to regular too big to fail and other banks.

MR. DERVIŞ: Lord Turner?

LORD TURNER: Good. Let me take the first point and the fourth point together, because they are actually related. I think on this issue of whether we put banks into bankruptcy, you've got to distinguish putting them into bankruptcy and imposing losses on debt providers to t hose banks. And the first one is dangerous and the second one is essential.

What I mean by that is, and it goes back to my points about the irreversibility and the fire sale nature of bankruptcy. If you take a big bank or a large numbers of small banks and actually put them into an insolvency regime, right, where you close them down

and they're no longer lending money to the real economy, and there are a whole lot of people who have a claim against that bank who don't know how much that claim is now worth, that is, I think, a very dangerous thing to do.

That's what we did in 1931, and we produced a disaster. And if we had done the same in autumn 2008, I think we would have produced another great depression. I don't think you can take a large bank or a large number of small banks and put them into classic insolvency bankruptcy. What insolvency bankruptcy means is the thing is closed down, there are a set of claims against it, it has to sell, and then everybody works out later how much money is left at the end to meet the claim. So that's dangerous.

But it's also obviously dangerous that we have a situation where somebody lends the money to a big bank, and they thinks, well, because the authorities know that they're going to put it into insolvency, I can do this without any risk. Because if they don't think there's any risk, well, why not lend them limitless amounts of money to do every crazy thing?

So the challenge in regulation is to create loss absorbing capacity without bankruptcy. What we are basically aiming for in our debates about resolution regimes and capital, and this is where resolution regimes and contingent capital just merge together is the issues, is the ability, for instance, over a weekend to wipe out the equity, to wipe out the existing board and fire the top managers, to get a new board in and then to impose enough losses on the existing equity, a slice of contingent capital, and then maybe on senior debt providers but a known loss so that they went on Friday not thinking they've got a claim with a hundred, they come on Monday knowing that they're got a claim of 70. The other 30 haven't been converted to equity, right, so there's no cost to the taxpayer, but it isn't put into bankruptcy.

And I think this is one of the most fundamental things to realize. We get this debate about, do we want to do no cost to the taxpayer, and do we want to do it by allowing banks to go bankrupt? We want to have a way of having no cost to the taxpayer which doesn't have banks going bankrupt. And that's' why contingent capital actually may be absolutely fundamental to that.

I think beyond the equity capital, particularly for launch too big to fail for what we call a significant financial institution, systemically important financial institutions having a large slice of capital, of debt capital which is convertible to equity, is very important.

One of the problems we faced in 2008 is we have this slice of bank capital at the moment called subordinated debt. And subordinated debt is meant to absorb losses, but at the end of the moment, we can only make it absorb losses by putting the bank into insolvency, selling off the assets, and working out how much money is left.

And we were terrified of doing that in 2008 because of the shock waves we could put through the financial system. So what we need in future, I think, is probably to say that for systemically important banks, there's simply no role for old-fashioned subordinated debt. It only becomes loss absorbing in catastrophic situations that we don't want to create. So we've got to make it loss absorbing before catastrophe. We've got to be able to impose losses on those people, overcoming the moral hazard problem, restoring market discipline, but in a way which still keeps the operationing and the lending machines of the economy going. So I think this is an incredibly important part of the picture.

The point about lending to large companies development, I'm not sure. I'm trying to think about that. I mean we try to develop risk weights which are truly related to the underlying risks. And the fact is that on the whole lending to small t medium

enterprises does show up as having both a higher expected loss but also a greater variance of loss. And, of course, capital is there to absorb unexpected loss or either variance of loss rather than the expected loss.

I think, therefore, it's quite difficult for us to be as regulators, skewing the risk weights to achieve, as it were, developmental goals. There are some developmental goals, for instance, in a renewable energy, which I'm very committed to wearing one of my other hats on climate change, where I do think you may need to do, you know, in a straight public subsidy rather than believing that we can do it through the indirect mechanism of the risk weights. So I may have misunderstood your question, but I'm sort of cautious of the sort of the leap to introducing developmental roles into -- I think we, as regulators, have to focus simply on how risky actually is it?

MR. DERVIŞ: I would agree, but you're taking over discriminatory -- discrimination based on risk, and default risk is just one minor risk of all the risks we face.

LORD TURNER: Yeah, okay, but we may need to bring those into a way in another fashion. The financial imbalances, why wasn't it in my speech? Well, I was asked to talk for 15 minutes. I already spoke well over the top. You can't cover it at the -- funny, you know, global financial imbalances are still very important. The way which I described in my report and many other people have of, you know, the accumulation of large balances related to fixed exchange or managed exchange rate policies skews the savings of the world into the pursuit of risk-free instruments, drives down the risk free rate of interest, and then unleashes a ferocious demand for any yield uplift that some clever investment banker says they've managed to manufacture out of structured credit.

So it is a major problem, and, you know, it's a problem in all sorts of respects. It's problems which were debated way back at Breton Woods: How do you deal with the

reciprocal responsibilities of surplus and deficit nations? And we still don't have the answer.

The best news I've heard recently in that respect is strikes and large minimum wage increases in Southern China. That strikes me heading in a very favorable direction in terms of a rebalancing of relative wages and the possible development of the more consumer-led model in China.

MR. DERVIŞ: Thank you very much. I think that's a good development. We will invite you again next time to talk about how the German surplus, increasing German surplus with a depreciating currency, how to deal with that.

Anyway, a round of applause for Lord Turner and the panel. Thanks a lot.

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I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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