

# “INNOVACIONES FINANCIERAS Y EL CAMBIANTE ROL DE LA BANCA CENTRAL”<sup>1</sup>

**DIETRICH DOMANSKI<sup>2</sup>**

Let me start by emphasizing that it is a great pleasure for me to speak at today's conference and that I regret very much that I cannot be in Montevideo physically. At the same time, I would like to thank the organizers for giving me the opportunity to join the panel via video link.

I would like to talk about one area of Central Bank policy where credit market turmoil has indeed raised fundamental questions about the role of Central Banks: the role of Central Banks in money markets and monetary operations.

Graph 1 gives you a sense of what happened almost exactly one year ago, when the problems in the US subprime markets (which are here indicated in this graph by the dark grey line, which is the price of ABX tranches which reference US subprime mortgages), when the decline in the price of these assets suddenly, in early August, spilled over into the money markets of major advanced economies including the United States, the Euro area, the United Kingdom, Switzerland and others. The black and light grey lines here show the sudden emergence of tensions in these money markets. These lines show the spread between the three months interbank

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- 1 Panel of discussion in honour of Daniel E. Vaz on “Financial innovations and the changing role of the Central Bank” held at the XXIII Economic Annual Meeting, August 5th 2008, composed of Dietrich Domanski, Gerard Dagés and Carlos Pérez.
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rate, the LIBOR and the expected three months policy rate – which is supposed to be a risk-free rate. So, the fact that this spread has shot up is indicative of market concerns about liquidity, pressures in the interbank market and possibly also concerns about the soundness of counterparties in the interbank markets, i.e. the soundness of large and medium size banks that are active in interbank markets.

**Graph 1.**



The fact that this decline in the price of US subprime mortgages, the deterioration in a relatively limited segment of the US credit market, had an impact on what is really the heart of the global financial system was, I think, a big surprise to everybody.

And it was not just a big surprise; it was also a big challenge for Central Banks, because these tensions in money markets have raised two sets of issues. The first relate to monetary policies. As you know, interbank markets are a key part of the monetary transmission mechanism and, if the interbank markets do not function properly, then monetary policy stimulus does not get transmitted smoothly. There are also issues related to financial stability because, if banks are not able to fund themselves in interbank markets, there is a risk that the bank can become illiquid and, as we have learned in the course of the crisis, the illiquidity of a major financial institution can have systemic implications.

**Table 1**  
**Special measures taken during the financial turmoil<sup>1</sup>**

	AU	CA	EA	JP	CH	GB	US
Exceptional fine tuning (frequency, conditions)	✓	✓	✓	✓	✓	✓	✓
Exceptional long-term open market operations	✓	✓	✓	✓	✓	✓	✓
Front-loading of reserves in maintenance period	•	•	✓		✓		
Change in reserve requirements/targets	•	•				✓	
Change in the standing lending facility							✓
Broadening of eligible collateral	✓	✓			✓ <sup>2</sup>	✓	✓
Broadening of counterparties						✓ <sup>3</sup>	✓
Introducing or increasing securities lending						✓	✓

AU = Australia; CA = Canada; EA = euro area; JP = Japan; CH = Switzerland; GB = United Kingdom; US = United States. ✓ = yes; blank space = no; • = not applicable.

<sup>1</sup> Table reflects information up to end-April 2008. <sup>2</sup> Entered into effect on 1 October 2007, but not linked to the turmoil. <sup>3</sup> Only for four special auctions of term funding announced in September 2007, for which, however, there were no bids

Source: Central banks.

These tensions in interbank markets, which started almost exactly one year ago, have elicited a wide range of Central Bank responses. Table 1 summarizes these responses. In the first column you have a whole list of measures and the second and following column show you what the different Central Banks in various countries have specifically done. This is just to give you a broad sense of how active Central Banks have been. I will come back to the specific measures later in my presentation.

### THREE KEY ISSUES

The turmoil in credit markets that has spilled over into core money markets has raised three key issues that I would like to address today. The first is why have money markets been affected, how could a shock emanating somewhere in a remote part of the global financial system hit right at the heart of financial markets in advanced economies; the second question, seeing that Central Banks have done a lot, is how successful have they actually been in addressing money market tensions; and the third question is, of course, what are the lessons going forward for Central Bank liquidity operations<sup>3</sup>.

<sup>3</sup> My presentation draws heavily on a report that a study group of the Committee of the Global Financial System has just completed and published in July, just a few weeks ago. The link is given here, so I would recommend this report as a very good and interesting read on this issue.

**1. How could the problems in the US subprime markets actually affect money markets in core advanced economies?**

To answer that question it is useful to take a step back and look at the implications of the shift towards a more market-paced global financial system that has taken place during the past decades. Overall, I think one of the main characteristics of this structural change in the global financial system has been a greater reliance on liquid markets. I would like to give three examples of this change.

The first one is *securitization and loan trading*. Back in the good old days, banks granted loans and kept them on their balance sheets. However, nowadays it is more or less standard practice to provide loans, repackage them into asset-backed securities and sell them to investors in securities markets.

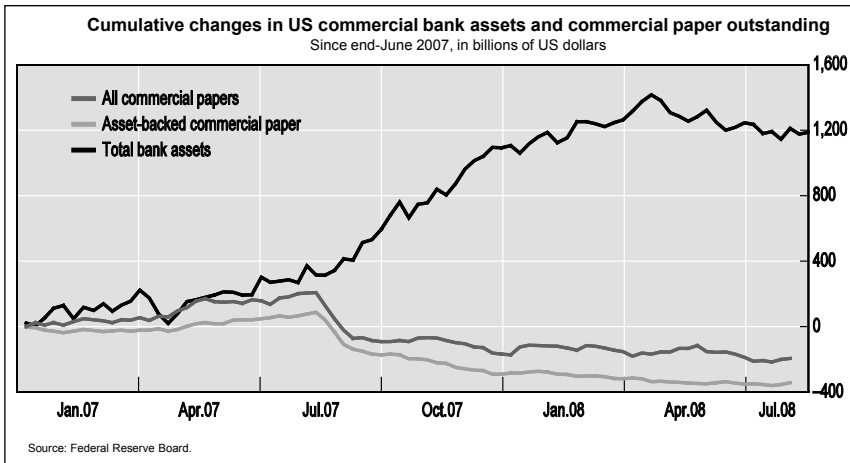
The second example of the greater reliance on liquid markets is related to the *funding side* of the banks' balance sheets. Banks have increasingly used their holdings of securities to borrow in interbank markets against collateral using these securities, including all kinds of structured products and asset-backed securities as collateral.

The third example is what is called the *off-balance sheet maturity transformation*. Over the past couple of years, banks have increasingly used off-balance sheet vehicles such as the notorious SIVs (structured investment vehicles) to invest in long-term, highly-rated assets and finance these investments by issuing short-term papers (in most cases a so-called asset-backed commercial paper). This means a massive maturity transformation, but once it is no longer possible to sell asset-backed commercial papers on the market, banks had to step in and provide liquidity.

Last year, once market liquidity evaporated because of the problems in the US subprime market, funding liquidity needs of banks increased sharply. The problems in the US subprime markets led to a loss of confidence in many – if not to say in almost all – structured products. As a consequence of this, the liquidity in the markets for structured products suddenly evaporated: these markets became illiquid. As a response or as a consequence, banks were no longer able to sell loans in the security markets, to package them and sell them, so they were left with loans on

their balance sheet and, moreover, they also had to take on-balance sheet assets that were previously held by these off-balance sheet vehicles that I mentioned before.

**Graph 2.**



This phenomenon is illustrated in graph 2: the black line shows how total bank assets of US commercial banks increased in the second half of 2007, partly as a consequence of taking on-balance sheet assets involuntarily. At the same time, as you can see from the light grey line, the amount of asset-backed commercial papers – outstanding papers that were issued by these off-balance sheet vehicles – declined sharply. So, in a nutshell, as a consequence of the evaporating liquidity in structured finance markets, banks were confronted with large and hard-to-predict liquidity needs.

As a result, money markets dried up. First of all, banks could no longer foresee their liquidity needs and this posed highly unstable demands on Central Bank reserves. In other words, the demands for Central Bank reserves became highly unstable. Second, because banks were eager to hold liquidity to have some sort of caution in case of further liquidity shocks, banks became unwilling to lend to each other. The result was that the interbank market was no longer functioning and some institutions could not get funding on the interbank market, which amounted to a maldistribution of reserves provided by the Central Bank. Third, the demand for term funding grew because banks were eager to secure their funding for longer

duration in an uncertain environment. Thus, banks were trying to shift, to extend the duration of their liability side, to be better protected against the shock at a time when the supply of these funds was already declining. Fourth, banks also faced difficulties in obtaining foreign currency funding. This seems to have been particularly an issue for banks in Europe, who had problems funding their long positions in US dollars. Finally, in March, shortly before the beginning of the Bear Stearns situation, the illiquidity broadened to even collateralized markets, as banks became increasingly unwilling to accept securities other than the highest quality securities, other than government bonds, as collateral in repo operations.

Central Banks tackled these various problems by taking different actions.

**Table 2.**  
**Money market distortions and central bank responses**

<b>Distortion</b>	<b>Action</b>	<b>Central banks</b>
Unstable demand for central bank reserves	Exceptional fine-tuning operations, modifications to reserve requirements	AU, CA, EA, JP, CH, UK, US
Maldistribution of reserves	Broadening of counterparties, broadening of collateral	AU, CA, CH, UK, US
Demand for term funding	Exceptional long-term open market operations	AU, CA, EA, JP, CH, UK, US
Difficulties to obtain foreign currency	Swap lines	EA, CH, US
Repo market illiquidity	Securities lending facilities	UK, US

Table 2 is essentially a reorganization of Table 1. The first column shows the different distortions in money markets that I just mentioned. The second column shows which action Central Banks have taken to address these distortions. The last column indicates those Central Banks that actually engage in this kind of actions. Let me just go through this list.

In order to counter the unstable demand for Central Bank reserves and keep interbank rates close to policy rates, Central Banks conducted exceptional fine-tuning operations or modified their reserve requirements. This is something virtually all major Central Banks have done since the

beginning of the turmoil. The second distortion, the maldistribution of reserves I mentioned, the fact that some institutions could not get interbank funding at all, that was addressed by broadening the range of counterparties inside bank transactions. Central Banks directly stepped into money markets and assumed an active intermediation function, in a sense replacing the interbank markets. To address the growing demand for trans-funding created by this distortion, all Central Banks conducted exceptional long-term market operations. That means that Central Banks generally extended the maturity of their open market operations. In order to address difficulties in obtaining foreign currency funding, the Federal Reserve, the European Central Bank and the Swiss National Bank established a dollar swap line towards the end of 2007 to make dollar liquidity directly available to banks in Europe. Finally, to address the illiquidity of repo markets reflecting the unwillingness to accept lower quality assets as collateral, Central Banks (the Federal Reserve and the Bank of England) established a securities lending facility in which they swapped certain asset-backed securities against government bonds, which the banks could then use to fund themselves in collateralized interbank markets.

So, what does this all mean for Central Banks? Graph 3 shows the composition of the major items of the Federal Reserve balance. I am going to focus on the quantity of reserves provided to the market (these bars).

**Graph 3.**

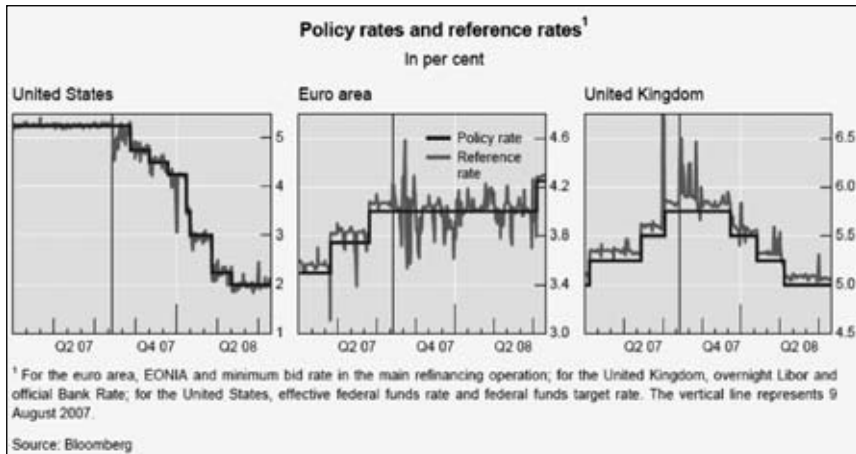


Two observations stand out. The first one is that, in contrast to conventional wisdom, Central Bank actions have not been associated with a massive increase in the provision of reserves. If you look at the total size of the bars, they have more or less remained constant, they have increased temporarily and then declined more recently. So, the Federal Reserve – and the same pattern is also valid for other Central Banks – has addressed liquidity tensions by changing the composition of their balance sheet rather than by expanding their balance sheet. The second point is that, if you look at the composition, you see this massive increase in the bars that are somewhat darker grey. These are open market operations at longer maturity, so this increase is indicative of the large increase in the provision of term funding by Central Banks. This is how Central Banks reacted to the crisis.

**2. How successful have Central Banks actually been in addressing money markets tensions? Have all these Central Bank actions helped?**

One objective was to keep the overnight rate at levels close to policy rates. The policy targets are given here for the US, the Euro area and the United Kingdom in black. The grey line shows the overnight rates or comparative reference rate (interbank rate).

**Graph 4.**



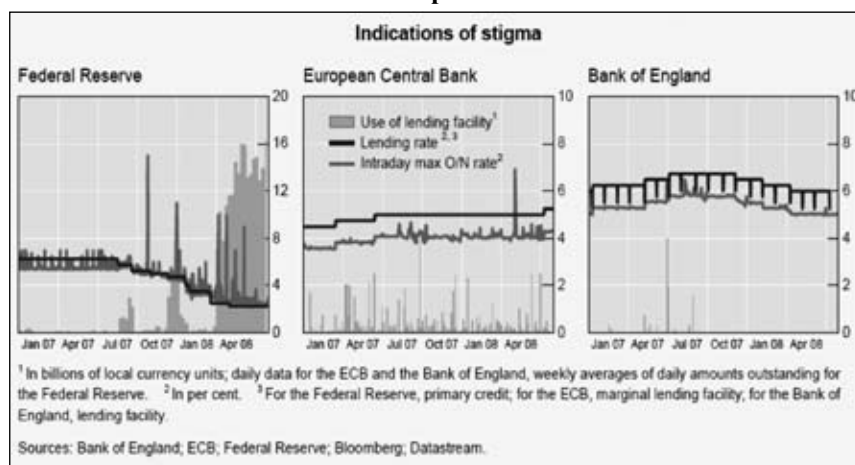


As you can see, immediately after the outbreak of the crisis (which is indicated by the vertical line), deviations of interbank rates from policy rates were quite large, particularly in the case of the Euro area and the United Kingdom. But you can also see that over time, over two months or so, Central Banks increasingly regained control over overnight rates and were able to reduce the volatility of overnight interbank rates around policy rates. So, in terms of ensuring that overnight rates remained close to policy rates, Central Banks have indeed been quite successful.

This has been important in order to avoid false signals about future monetary policy, while it has also been helpful in ensuring market participants that the Central Bank will provide overnight funding on a reliable, revolving basis as a substitute for longer term funding.

Graph 5 illustrates one specific phenomenon that has been an issue during the crisis, which is the issue of “stigma”. Most Central Bank operational frameworks have as one of their components a standing facility that financial institutions can use to obtain liquidity without asking the Central Bank. This liquidity is usually provided at a penalty rate slightly above the policy rate, and this provides sort of automatic access to Central Bank liquidity. However, the interesting observation is that interbank rates (again, as indicated by the green line, please look at the left panel for the United States Federal Reserve) also temporarily rose well above these penalty rates, these rates at which banks could have accessed liquidity automatically. They did not use this facility, and the reason for that is that in some instances banks have been concerned that, if their borrowing with the Central Bank became public in an environment of highly fragile market conditions, then investors or counterparts in the interbank market might become even more skeptical and might think that these banks are actually having problems. So, in other words, using the standing facility with the Central Banks was stigmatized. This was an issue particularly in the case of the United States, as I mentioned, and to a certain extent also in the case of the United Kingdom (which you can see in the right panel). It has not been an issue in the case of the Euro area (which is shown in the middle panel). You can see these small bars which show that banks have been using the standing facility on a regular basis and have continued to do so during the crisis.

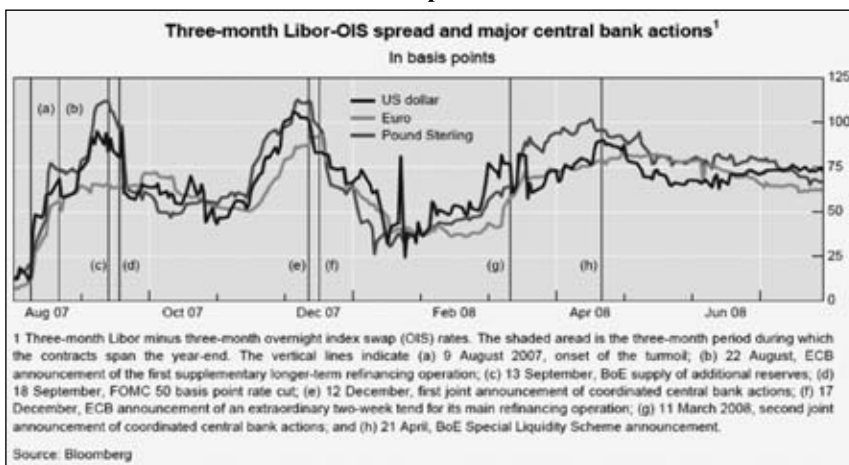
Graph 5.



So, addressing the stigma issue has been a particular challenge for some Central Banks and, going back to the United States (the left panel), as you can see, since the beginning of 2008, the borrowing under a facility has increased and this reflects the introduction of a new facility – the so-called term auction facility – which can be interpreted as sort of a stigma-free, longer term lending facility

So, turning to the longer tenors in the money markets (three months and more), here you can see that the spreads in the three months maturity and also in the one month maturity (which are not shown here) have persisted in the major currency areas. In other words, the various Central Bank actions – the provision of more term funding, joint provision of liquidity by various Central Banks in late December and also in the Spring of 2008 – have not helped to bring term spread in the money market back to where it was before the crisis.

Graph 6.



Why is this the case? Well, there are different possible explanations, I will give you two. One explanation is perhaps that, as I mentioned before, the term spread also includes the credit risk component and, because counterparty risk or concerns about the soundness of counterparties in the interbank market are still an issue, it might be the case that some of this spread reflects credit concerns.

A second component could be that the amount of term liquidity provided by Central Banks has simply not been large enough to offset the withdrawal of other investors in money markets term. I am thinking here primarily of money market funds, which are sort of the traditional large term suppliers of funds in the term money market, and these funds have become extremely risk averse since the outbreak of the crisis. In addition, associated with this, there has probably been a large reduction in the supply of term funding which Central Banks could not completely offset. However, I think it is important to recognize that we do not know the counterfactual. If Central Banks had not intervened in term markets as aggressively as they have, things could of course be much, much worse.

### **3. What are the lessons from all these operational frameworks going forward?**

As a first part of answering this question, let me just highlight seven recommendations that the CGFS (Committee on the Global Financial System) Study Group has put forward in its recent report. The first one is that Central Banks should be capable of achieving their desired policy rate target even in the case of unexpected shifts in aggregate demand or supply for reserves. This is what we observed, what I mentioned before. In the early days of the turmoil, when the demand for reserves becomes highly unstable, under these conditions it is important that Central Banks can adjust balance sheets sufficiently quickly to offset these unexpected fluctuations in reserve demand by fine-tuning operations, by short term repos and other instruments.

The second conclusion is that Central Banks should be capable of conducting operations with an extensive set of counterparties and against a broad range of collateral. I also mentioned before the maldistribution of reserves, the fact that certain banks which under normal conditions can access interbank markets were cut off from interbank funding. If that is the case, it is important that the Central Bank can step in and provide funds to these institutions directly.

Third lesson: Central Banks should be prepared to expand their intermediation activities if market illiquidity poses a great threat to the effective transmission of monetary policy or financial stability. This is the case that was made with respect to Central Bank interventions in term money markets. Regarding term money markets, it may be opportune and important for Central Banks to intervene in these markets to ensure that they can function properly in order to avoid a threat to monetary policy or financial stability.

The fourth lesson is that Central Banks should take steps to strengthen their capacity to counter problems in the international distribution of liquidity. We have learnt during the turmoil that particularly large and internationally active banks have had difficulties managing their international liquidity position, and I have already mentioned the difficulties of European banks in obtaining dollar funding. These are very complex issues and at the same time there is a recognition among Central Banks that there is probably a need to improve the mechanisms for providing

cross-border liquidity. This is something Central Banks are investigating further at the moment.

The fifth recommendation is that Central Banks should enhance their communication with market participants and the media in terms of market stress. It is particularly important – of course, this is quite an obvious recommendation – that market participants and the media properly understand what Central Banks are doing. What we have observed during the credit market turmoil is that sometimes there was some misrepresentation in the media regarding the liquidity measures taken by Central Banks when the media said “well, the ECB is injecting 300 billion Euros into the market” and this was presented as if the ECB was pumping a lot of liquidity into the market, but it was not mentioned that this liquidity was withdrawn two days later. So, there have been some issues in terms of the clarity of presenting Central Bank activities.

The sixth recommendation is related to “stigma”. I have already talked about the stigma problem. Central Banks should continue their efforts to reduce stigma and try to establish facilities that are stigma-free.

And, last but not least, in taking action Central Banks should of course carefully weigh the expected benefits of their actions to re-establish liquidity against their potential costs, namely in the form of moral hazard.

To conclude, let me just mention two broader issues going forward that are not addressed in the CGFS report. The first one is the question of “Exit Strategies”. I mentioned the wide range of Central Bank actions that were taken. These have involved the establishment of many special facilities – security lending facilities, term lending facilities, lending to securities dealers, etc. – and one question is, of course, should these new instruments, these new tools, be retained or not? There are pros and cons. One of the pros is, of course, the stabilizing effect on money market conditions, funding conditions aimed at achieving market confidence. The counterargument is that these mechanisms – which imply that the Central Bank plays a more active role in financial markets, money market intermediation – that these mechanisms may distort market mechanisms and may involve moral hazard in the form of commercial banks thinking, “well, in times of a crisis I will get all the liquidity I need, so why care about liquidity risk management?”

Finally, the last question is really a big question going forward: Is there something like an optimal operational framework for Central Banks? An optimal operational framework in terms of the range of counterparties and eligible collateral... You could say “well, the broader the better, so why not just allow all banks to access liquidity with the Central Bank and why not just accept all securities as collateral, wouldn’t that be the best solution?” The answer is probably not. Let me just give you one example. At the beginning of the crisis, the Euro area operational framework – which is very broad in terms of counterparties and collateral – worked very well because it was so broad. However, now, one year later, there are questions as to whether (especially the collateral framework) is too broad because the ECB has been accepting a number of structured finance (asset-backed securities) as collateral, and what seems to be the case is that a lot of banks seem to be generating these securities just for the purpose of pledging them with the Central Bank to obtain liquidity. So there are some concerns about distortions to market mechanisms and long incentives given by too broad a collateral framework. So this is an important issue going forward.

The second question I already mentioned before is what are the proper arrangements for the cross-border provision of collateral? Should there be more swap lines among Central Banks? Should there be more cross-border use of collateral? What can be done to improve the cross-border provision of liquidity? And a related question: If the Central Banks provide more to internationally active banks in terms of cross-border liquidity, is there a need for more supervision, better supervision, in order to deal with moral hazard?

The third question is: should the facilities that Central Banks have introduced be permanent or is it just enough to have them on the shelf, ready for use in case of a turmoil? All these are open questions that are at the moment under intense discussion among Central Banks and also academia, and I think we will read a lot about this going forward.

**GERARD DAGÉS<sup>4</sup>**

It is the one-year anniversary – not a happy anniversary – of the crisis, so there is a lot to talk about. We are going to talk a little bit about the lessons of the crisis, what we have been doing at the Federal Reserve and some of the implications for the changing role of the Central Bank.

But, before we get into the discussion, let me point out a few caveats at the outset. First, the usual one: these are my views and not the Federal Reserve's. Second, I think that the implications of the crisis for Central Banks will depend a lot on each country, they will depend on the nature of the financial system, the structure of the financial system, the role of the Central Bank, the tools in the Central Bank toolkit, so I do not mean to imply that what we are doing at the Fed is what other Central Banks should be doing. Third, the crisis is not over. The pressures that we have seen have taken a long time to build up and they will take some time to work through, so there could be additional lessons or implications for Central Banks as the crisis continues to unfold.

I would also point you to a couple of studies and reports of the Financial Stability Forum and the President's Working Group on Financial Markets and the Institute of International Finance that have looked at various aspects of the crisis, have drawn their own lessons, pointed out some recommendations. I would say that work is already underway and put into place through some of these recommendations.

Here is a quick summary of what we are going to talk about. First, I will talk about some similarities and differences of this crisis. Second, some longer term changes in the structure of the financial system in America which I think are very relevant to how the crisis has played out. Third, some of the things we have been doing at the Fed and looking ahead a little bit – although it is hard to look very far ahead.

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4 Gerard Dagés is Senior Vice-President of the Federal Reserve Board of New York in the Financial Markets and Institution Function in the Emerging Markets and International Affairs Group. He has been Vice-President since December 2000 and Assistant Vice-President since December 1996, both in the same area. In December 1995, he was assigned to the newly established Emerging Markets and International Affairs Group. In March 1993, he was named an officer of the bank assigned to the International Surveillance and Review Department. Mr Dagés joined the bank in August 1988 as a bank examiner. Mr Dagés holds a B.S. degree from the University of Illinois and an M.P.A. from the Woodrow Wilson School of Public and International Affairs, Princeton University.

I have had the fortune and misfortune of going through a number of crises. I joined the bank twenty years ago, when the financial system in the US was having a lot of trouble. Then I worked in the Emerging Markets Group where of course I went through a number of crises, but not so much recently: it’s been extremely quiet and that’s a good thing. More recently, with the crisis in the US, actually I have gone back to bank supervision (we will talk about that a little bit).

### **History doesn’t repeat itself, but it does rhyme**

Anyway, having gone through these crises, I am often reminded of a quote by the famous US author Mark Twain that says that “History doesn’t repeat itself, but it does rhyme”. And there are a lot of things about this crisis that rhyme, which we will talk about quickly.

First of all, the *big increase in international credit*. If you look, four years before 2007, bank credit as a share of GDP increased 9 percentage points. Look at the total financial system credit that went up 25 percentage points as a share of GDP. Obviously, we have seen some big increases in credit and, as night follows day, when we see big increases in credit, we usually see *big erosion in credit standards*. We saw that especially in the subprime sector, but also in leverage finance.

A third issue – Dietrich referred to this and it is a basic no-no – is the *funding of long term illiquid assets with short-term money*. Dietrich mentioned the SIVs, asset-backed commercial paper conduits, but also investment banks which were increasing their share of illiquid assets at an overnight basis, and the repo leverage, of course both on-balance sheet and off-balance sheet.

We have seen *resources flowing to the less regulated areas of the financial system*. Capital and accounting treatment are more liberal, certainly the off-balance sheet route is a case in point. *Liberalization* typically is associated with crisis, we know from experience and the literature that there is a pretty good link. One might draw a connection between some liberalization that we did at the end of the 90s – called the Gramm-Leach-Bliley Act – which broke down the barriers between commercial and investment banks and you might say “well, that played a big role”. I think it may have played some role. I think the bigger issue,



though, that was more *de facto* liberalization in the form of all of these new products and new structures that have played a very large role. And, of course, who can forget *fraud*?

There are some key differences. Dietrich has already talked about this: this crisis occurred in a financial system radically transformed by financial innovation. Renovation, securitization, derivatives, the “originate-to-distribute model”<sup>5</sup>, all this brought a lot of good things and a lot of benefits in the ability to trade and hedge risk, optimize balance sheet utilization and match risk appetite and opportunities. But the crisis also shows that it also brought some very serious challenges along the securitization chain: misaligned incentives (Professor Dixit referred to this yesterday); increased complexity and sensitivity of valuations; inadequate risk management; too-heavy reliance on credit ratings. There is a question: are we losing important risk information between the beginning of the securitization process and the end of risk management problems? The last two are somewhat associated. Too many institutions, I think, outsource their credit analysis to the credit rating agencies, and these do not always get things exactly right.

Dietrich did a really good job talking about how the crisis unfolded, so I am going to skip this slide and I think I’ll focus a little bit on the US and some of the broader, longer term changes in our financial system structure which, as I said before, played a very key role in how this crisis has unfolded and how the crisis was amplified.

First, banks – depository institutions – account for a much smaller share of the financial system than they did in the 1980s: now they are less than 20 percent, which is a low number and it is about half of what it was in the 80s. The system has become much more concentrated, consolidated, like a lot of systems around the world. The top five bank holding companies now represent 50 percent of assets, and that is double of what they were in the 1980s. Of course non-banks play a much bigger role. Here I look at the securities firms and we are looking at the end of last year, when we had five – this is before the Bear Stearns situation – and so there are about two

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5 In the originate-to-distribute model banks can originate loans, earn their fee, and then sell them off to investors who desire such exposures. Simply put, originate-to-distribute (as opposed to originate-to-hold) is an innovative process that allows banks to expand their lending business (i.e. originate more loans) without violating the lending limits placed by regulators. Editor’s note.

thirds of the assets in the hands of the top five bank holding companies. You can look at other types of non-banks – hedge funds, private equity – those numbers are growing and are very large: the two together account for about three trillion dollars in assets under management. So, we are looking at a very different kind of system.

Commercial investment banking activities over time have converted. Banks, of course, are doing a lot of underwriting and trading of securities and derivatives. Over time, and especially with the Gramm-Leach-Bliley legislation that I referred to earlier, banks are more into bridge finance, leverage finance. And the last point that I want to mention here is that asset systems are much more integrated.

### **Implications of changes in the financial landscape**

We have seen an increase in the role of capital markets, a blurring of the line between banks and capital markets. I think one of the big implications there is that, at least in the US, supervision, which is really based principally around prudential supervision of banks, is really no longer adequate for providing a good prism, a good window into systemic risk and also into institutional risk. This is relevant for certain very large important central institutions, loan bank institutions, securities firms, and the question is what their oversight regime should be.

A second issue is that we need a broader view on managing the financial markets. In the US these issues are very aggravated by the structure of our regulatory system. I do not know if you know about it, but it is very, very complex: we have four federal bank supervisors, fifty state bank supervisors, the FTC, fifty insurance supervisors, no federal insurance supervisor, and it goes on and on. It provides a lot of avenues and opportunities for arbitrage and lender-of-last-resort tools.

So what has been happening at the Fed? In terms of typical tools and some new or perhaps modified tools, lending facilities, supervision and some efforts to strengthen the broader market infrastructure.

**Chart 1.**

	Depository Institutions	Primary Dealers
Backstop Standing Facilities	Primary Credit Program of the Discount Window	Primary Dealer Credit Facility (PDCF) Reflects “unusual and exigent” circumstances
Auction Facilities	Term Auction Facility (TAF) Designed to reduce DW stigma; originally 28 days, recently extended to 84 days	Term Securities Lending Facility (TSLF) Designed to improve trading conditions in repo markets

One thing perhaps Dietrich did not address is auctions. We have gone very much to an auction process for two of our facilities. We think that that is a very good way to deal the “stigma” problem.

I do not want to focus too much on the individual facilities. This chart just gives you a brief sketch of what some of them are. In this chart the rows are the types of facilities, a traditional discount window, backstop facilities or these auction mechanisms, and the columns are the type of borrower. On the left side it is depositories, on the right side it is primary dealers. Traditional discount window operation is at the upper left, and the newest and perhaps the biggest – the biggest and most exceptional – new facility in the wake of the Bear Stearns episode and its acquisition by JP Morgan Chase, it opened up the discount window to the investment banks and that is under authority that we have at the Fed to lend to just about anybody but it is an authority that we have not used since the 1930s, so it’s very exceptional.

### **Changes in financial institution supervision**

The largest single change has been the increased role of the FRS in the monitoring of primary dealers, with the opening of the discount window to the investment banks, that is, we have very much increased our oversight and supervision. That really is not a kind of statutory role here for the Federal Reserve. Our feeling is that, if we are writing the check, we need to be involved in supervision both to address moral hazard issues but also the extension of the safety net. What we have done is we have put teams

in place at the various large securities firms. I can say that I have been on one of them since the Bear Stearns weekend. We looked very closely at liquidity capital risk management issues working very closely with the FCC and along with the marketplace, and then we formalized this agreement with a Memorandum of Understanding with the FCC.

None of this is very interesting because nothing has changed in legislation to give the Fed this kind of power. In fact, the FCC just said “we are going to cooperate and we are going to share information” and we signed this document. We recently also extended this primary dealer credit facility to next year<sup>6</sup>. One of the issues that Dietrich was talking about was “once you have introduced something, how do you take it back and under what conditions?”

Looking ahead, I think the crisis really points to a need to do something significant about the fragmented and complex U.S. regulatory structure but also internationally. The areas that I think we need to strengthen include the shock absorbers, liquidity capital buffers, reserve buffers. The U.S. Treasury has outlined its Blueprint for reform, and regulatory reform has been the subject of recent Congressional hearings. Besides, now the BIS is doing a lot of good work in this area to increase capital charges and some of the off-balance sheet items, the credit risk and the trading book, they are also working on liquidity. So a lot of work is already happening on this front. I would say perhaps – and it is no criticism – that my feeling after a lot of crises is that people look for technical solutions: “let’s just quickly change this risk a little bit and then, you know, we can avoid the next crisis.” I think that is a piece of this process, but it is a much bigger issue than that *per se*.

### **Strengthening market infrastructure**

A key area of focus, of course, is market infrastructure. So in the US there is a big debate right now about the regulatory system and the US Treasury has issued a Blueprint for reform but what that calls for is for the Federal Reserve to be sort of the umbrella as market stability regulator, to have the ability, at least on paper, to go into any kind of institution, hedge fund, bank, and get information. So that has been put out there, that

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<sup>6</sup> January 2009.

is something that is being discussed and the Congress is holding a lot of hearings<sup>7</sup> on this topic. But it is going to take some time.

Some of the other things that we are doing: payments. The payment system's oversight is kind of like a microcosm of the broader regulatory system: it's very fragmented, it's based on a patchwork of authorities. The Fed's oversight is based on its role as a bank supervisor so, if the payment system is not a bank, then we don't have oversight authority. For some of those entities our authority has really been limited to moral persuasion, and we think this is a problem. We think that the US, like a lot of other countries, should have the Central Bank as the principal overseer of systemically important payment systems and we have requested that the Congress give us that authority.

The second big area of what we are doing to improve the broader market infrastructure refers to taking steps to strengthen the resilience of the over-the-counter (OTC) derivatives infrastructure to a potential failure of a major participant, that started about three years ago in September 2005. We brought together a lot of parties around the world to look at a couple of issues relating to unconfirmed backlogs of trades and the OTC derivatives market and I think we had a lot of success there. The biggest vein is a range of initiatives where the biggest one right now is setting up a central lines clearing house for credit default swaps. As you know this is a huge market, around 60 trillion or something like that, and I think this is a very significant achievement. This week we talked about launching it in December of this year 2008.

### **Reorientation of financial supervision**

We need to continuously adapt our supervisory approach to the realities of today's financial landscape. That is always true, it is been forever true, but it has never been so true or so evident than over the past year.

Some of the things we do at the New York Fed in that area is something called "*horizontal*s", that is, multilateral cross-firm reviews of institution practice to identify best practice and potential vulnerabilities.

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7 In their recent testimony to Congress, Chairman Bernanke and NY Fed President Geithner expressed their desire for Congress to grant the FRS authority over systemically important payments and settlements systems.

It is where we will look at the major firms and look at a particular area of their activity and build strategies on a multilateral basis. So, looking at that, we help other regulators in the US, but also other regulators overseas, to see what is happening, what is the best practice, what are some of the vulnerabilities, which institutions are doing well, which perhaps are not doing so well. We have done that in a lot of areas, things like stress testing, exposure to hedge funds, economic capitals and things like this.

Let me just point you to a recent report by something called the “*Senior Supervisors Group*” (which is something that is chaired by the New York Fed) where they took a look at the risk management practices in the major countries and studied which of those worked and which of those did not work. I think a big effort needs to be focused on so-called tail risk, that is to say low-probability, high-severity events and the ability of institutions to weather those. So that gets us back to the stress testing scenario kind of net losses.

The second area is one that I think came up in the form of a question: how to make the system more dynamically stable, that is to say, how should liquidity and capital requirements adjust through the cycle? So, more of a counter-cyclical kind of liquidity and capital regime. Various people are thinking about that.

A big question is the role of the Central Bank and supervision. This has been a debate that has been ongoing for as long as I can remember. Of course, we have seen a number of countries move supervision out of the Central Bank to an independent financial supervisor, while leaving the Central Bank responsible for overall financial stability on its own or shared with the supervisor. In terms of the Fed, we have long argued that bank supervision responsibilities are intrinsic, are critical to what we do in monetary policy, what we do in the payment system, crisis management, lender-of-last-resort responsibilities. For the usual reasons, I am sure this gives you the kind of understanding and expertise, the access that you need to understand how to do your other activities or significant economies of scope care. While the crisis has been kind of a real world test of this argument and, in short, my own sense, my own feeling about these issues has never been stronger, that if we had not had supervisor responsibilities we would have been much more challenged to deal with multifaceted kinds of things that have happened over the course of past year, but this has given us very significant insight into what was happening in the banking system,

what was happening in the non-bank system. So I think it is critical for the Central Bank to be involved in bank supervision. This is part of the debate in the US: how should the Fed plug into the supervision.

It is interesting that over the course of the last year more responsibility has been migrating to the Federal Reserve in terms of bank supervision responsibility. Some of this has to do with what has been happening with the discount window, to be sure, so we are going a little bit against the tide. I will also just quickly note that other countries are taking a look at this issue of the division of responsibilities between the Central Bank and the supervisor.

### **Some conclusions**

The crisis has raised important questions about whether we get the balance right between efficiency/innovation and resilience/stability. It does make a case for some kind of heightened regulation. The issue though is that it is necessary to be careful in instituting reforms to ensure that we maintain the strengths of our current system because they have the potential to make the system less safe, if not done right.

Besides, I think we are going to see changes in financial intermediation as a result of the crisis and some of this is going to be pushed by market forces. The banking system – as we saw in the chart Dietrich showed us – has taken a lot more lending over the second half of 2007, so there is a certain dis-disintermediation or reintermediation into the banks. Certain varied, exotic and complex products maybe are not going to stand the market test for at least some period of time. Some other things are rationalization of legal vehicles. We see a lot of institutions with a lot of different legal vehicles which may complicate the counterparty credit risk management process.

Finally, regulators need to think about what kind of regulatory system maps to new market realities, and resist urge to adapt intermediation to regulatory models. The question is really, I think, what regulators' approach to all of this is and what kind of system we want to have. Do we want to squeeze the system back into what it used to be because perhaps that is something easier for us to supervise? Or do we want to adapt ourselves to the new realities of a different kind of financial system?

**CARLOS PÉREZ**<sup>8</sup>

Quedo impactado con la coincidencia de Gerard respecto a la introducción de Mario Bergara acerca del pensamiento de Daniel Vaz en cuanto al cuidado que hay que tener respecto a la regulación fragmentada de los sistemas financieros. Este es un tema sobre el cual yo tenía pensado hablar algo cuando fuese el último capítulo, respecto a las recomendaciones para la estabilidad monetaria y financiera para América Latina. La verdad es que me sorprende gratamente la coincidencia entre Gerard y Mario Bergara en cuanto al pensamiento de Daniel Vaz en este punto: el peligro que significa la regulación del sistema financiero de manera fragmentada, con todas las implicancias y peligros que conlleva – arbitraje, solapamiento en la regulación, vacíos regulatorios, etc.

Comienzo con la presentación, que tiene cuatro partes. Muy rápido va a ser el primer punto, ya muy bien tratado tanto por Domanski como por Dagés: contexto internacional. La verdad es que estamos ante una muy importante crisis, una conmoción internacional de envergadura, donde se combinan la desaceleración del crecimiento económico, las mayores presiones inflacionarias y una crisis financiera de envergadura. Después vamos también a tocar rápidamente América Latina, el crecimiento, las políticas macroeconómicas que han sido llevadas a cabo en estos últimos años y cómo vienen impactando en la región las turbulencias financieras del exterior. Por supuesto que, siendo argentino, voy a hablar de la Argentina, voy a tratar de explicar el régimen monetario de la Argentina y cómo el diseño y la aplicación del régimen monetario de la Argentina ayudaron a transitar de manera exitosa dos turbulencias (una entre agosto y octubre del año pasado y otra entre abril y junio de este año). Finalmente, voy a tratar de mencionar los desafíos para la estabilidad monetaria y financiera en la región de América Latina.

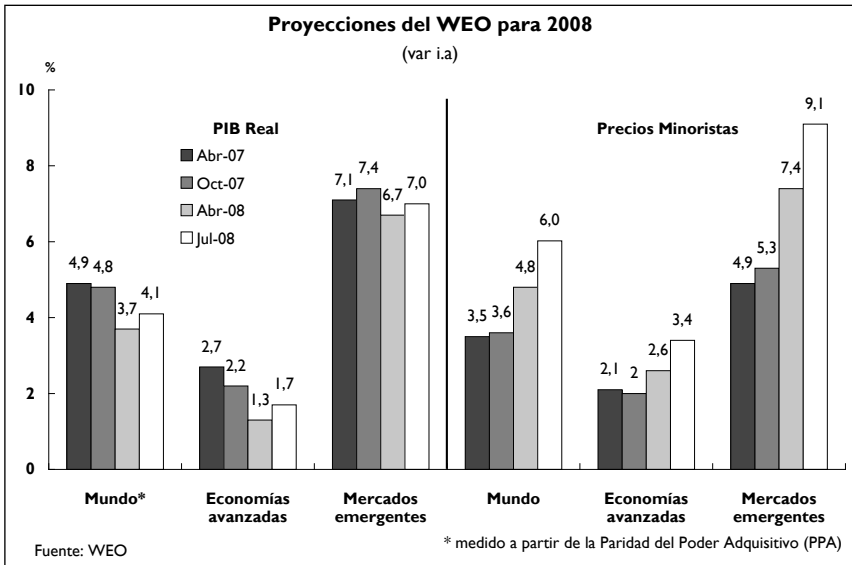
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8 Director del Banco Central de la República Argentina. Presidente de la Comisión de Economía y Finanzas. Ocupó la función de Gerente General del Banco Central desde diciembre del 2004 hasta abril de 2008. Previamente se desempeñó como Director Ejecutivo de la Fundación Capital. Así mismo, fue miembro del Consejo de Comercio Internacional de la Cancillería Argentina y creador del primer departamento económico de un banco privado nacional en la Argentina, fue asesor económico de diversas cámaras empresariales, gobiernos provinciales y del Congreso. En la actividad docente se desempeñó como profesor en la Universidad de Buenos Aires y la Universidad Católica Argentina, en las que dictó cátedra de Estadística, Moneda y Crédito, Economía Monetaria y Principios de Dirección.



Básicamente, en cuanto a las proyecciones para el año 2008, lo que se puede observar es una proyección de menor crecimiento mundial (4 por ciento), sobre todo por un ajuste a la baja en el crecimiento económico de las economías avanzadas, no así en las economías emergentes. En cuanto a la evolución de la inflación, ésta es creciente no sólo en las proyecciones de la inflación mundial, sino tanto para las economías avanzadas como para las economías emergentes. Básicamente lo que podemos ver es una desaceleración muy importante en el crecimiento norteamericano dentro de lo que es la expectativa de crecimiento de economías avanzadas. Poco más de un año atrás, la perspectiva de crecimiento de Estados Unidos era de casi 3 por ciento, hoy esa perspectiva de crecimiento se ha reducido más de la mitad.

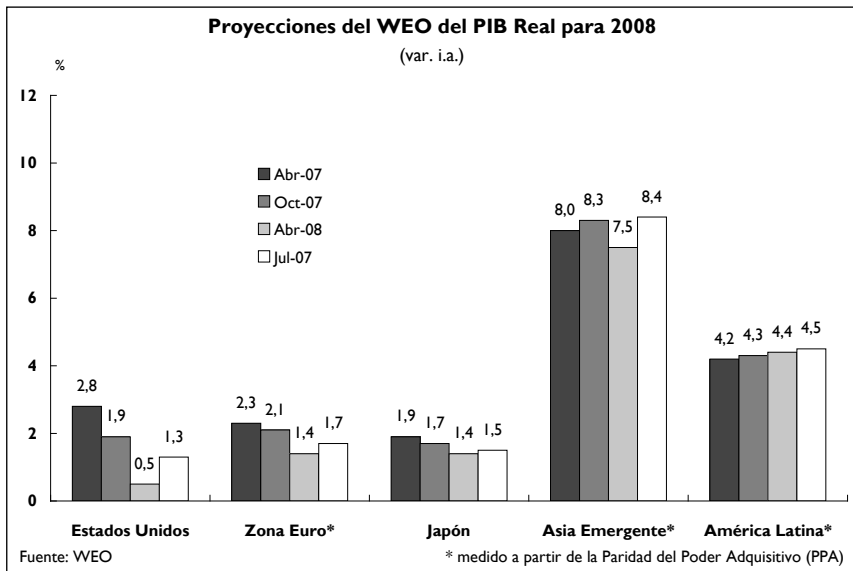
**Gráfica 1**



Fíjense cómo la evolución en los países desarrollados, tanto en la zona de Estados Unidos como en la zona europea, se ve claramente una desaceleración muy importante del consumo. Esto es lo que indican los gráficos, fíjense la caída magnífica que tiene el índice de confianza de consumidores en Estados Unidos (el gráfico de la izquierda) y también las ventas minoristas están mostrando tasa de variación negativa en la zona del Euro. Esto tiene que ver con la pérdida de riqueza patrimonial que se

puede observar en el último cuarto y primer cuarto de este año tanto en Estados Unidos como en Europa, deterioro del mercado laboral – el último registro de tasa de desempleo indica 5,7 por ciento de tasa de desempleo en los Estados Unidos, con pérdidas de casi 500 mil puestos de trabajo en los últimos siete meses consecutivos.

Gráfica 2



Además, un acceso cada vez más difícil al crédito, también pérdida de los ingresos reales, suba de precios en energía, en alimentos, lo que de algún modo determina estos números en ingresos reales. En definitiva, una combinación del efecto riqueza negativo y de menores ingresos reales para estas economías desarrolladas es lo que genera un deterioro del consumo, principal variable explicativa de la evolución del crecimiento económico y por ende la desaceleración económica de las economías avanzadas.

Lo que se observa también, en el *headline*, en la inflación total, es una aceleración del dos al cuatro por ciento tanto en Estados Unidos, en Europa, como en Gran Bretaña, y una inflación neutra o nula a una inflación de algo más de un uno por ciento en Japón. Esto es así en el *headline*, en el *core inflation*. Sin energía y sin alimentos no se ven efectos de segunda

ronda y por lo tanto el *core inflation* se mantiene en torno al dos por ciento en las inflaciones para Estados Unidos, Europa y Gran Bretaña y en torno a cero para lo que es la economía en Japón.

El tercer problema que estamos viendo en el contexto internacional, hablábamos de desaceleración económica y hablábamos también de una inflación creciente por lo menos en el *headline*, no así en el *core inflation*. Lo que se ve también es una evolución de la crisis financiera. En el sombreado se ve que todavía el nivel de volatilidad en el mercado de renta variable de Estados Unidos es muy elevado y adicionalmente hay un deterioro que se ve en el índice de Standard & Poor's de las entidades financieras. Esto lo saben ustedes: la caída de las cotizaciones, de los precios de las acciones de los bancos, tanto de inversión como comerciales en Estados Unidos ha sido muy importante.

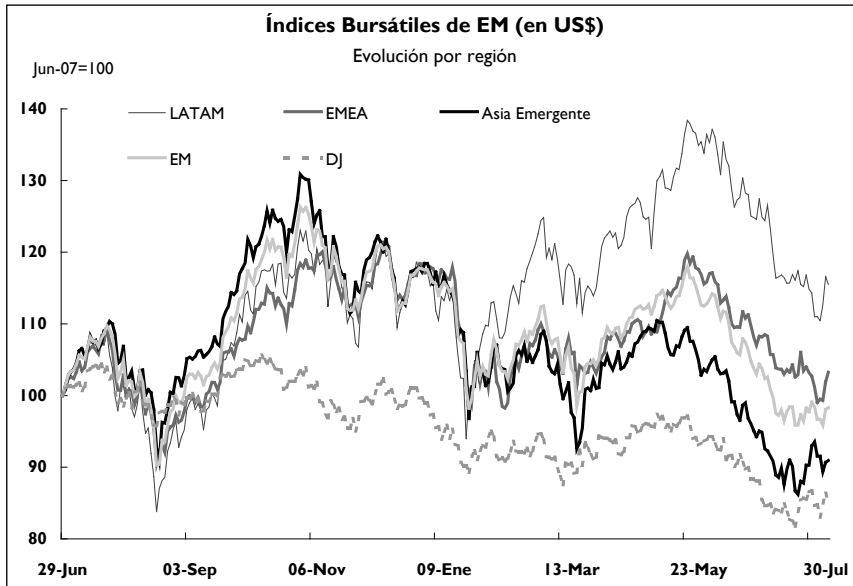
Con respecto a las políticas macroeconómicas y el impacto de las turbulencias financieras en América Latina, podemos observar que, básicamente, el crecimiento económico no ha sido afectado en la región. Pero sí hay una aceleración inflacionaria muy importante no sólo en el *headline* sino también en el *core inflation*, con lo cual aquí sí, en nuestra región, se están viendo efectos de segunda ronda.

Las políticas adoptadas en la región de América Latina han sido muy buenas en los últimos años. Básicamente, la región se caracteriza por tener mejores cuentas fiscales, mejor cuenta corriente en la balanza de pagos, concretamente superávit primario en las cuentas fiscales, cuenta corriente / balanza de pagos bastante equilibrada, regímenes cambiarios mucho más flexibles que los que se tuvieron en la década pasada. Esto permitió no sólo una reducción de la deuda externa en términos del PBI en América Latina, sino también el incremento también como porcentaje del PBI de las reservas internacionales a lo largo del tiempo para la región latinoamericana, que hoy está en torno al 15 por ciento del PBI.

Lo que podemos ver por ahora es que, primero, en lo que son los precios de los bonos, el EMBI de mercados emergentes, como el EMBI de América Latina, su evolución desde la crisis – que ya lleva un año como decía Gerard – ha sido claramente en ascenso en materia de los riesgos soberanos, pero mucho menos que el *spread* que han tenido los bonos basura de los Estados Unidos. También lo que podemos ver en términos de la evolución de índice bursátil es que, de un año a esta parte, el índice

bursátil de la región latinoamericana ha tenido un comportamiento mejor que el resto de las bolsas, como lo muestra el gráfico.

Gráfica 3



Yo diría entonces que, hasta ahora, en base a los dos puntos que vimos, nos encontramos frente a un contexto internacional de gran conmoción, un riesgo muy importante, desaceleración del crecimiento económico, mayor inflación y crisis financiera, en tanto que la región América Latina que adoptó políticas macroeconómicas mucho más saludables en los últimos años, en esta década en particular, de algún modo ha reaccionado y ha acusado el impacto parcialmente. Sí se ve una aceleración de la inflación, no sólo en el *headline* sino también en el *core inflation*, pero los crecimientos de las economías más o menos se mantienen y adicionalmente el impacto financiero ha sido escaso. Lo que uno podría decir es que hasta ahora ha funcionado el *decoupling* o el desacople en nuestra región respecto a la crisis internacional.

De todos modos, y en esto coincido con los panelistas anteriores, no está dicha la última palabra respecto a la crisis financiera internacional y por cierto habrá que ver si el desacople que se ha dado hasta ahora se

mantiene en el futuro. Pero lo concreto es que sólo la aceleración de la inflación ha sido, digamos, el contagio de nuestra región de la crisis internacional que no sólo tiene mayores presiones inflacionarias, sino que también muestra una desaceleración económica importante y una crisis financiera pronunciada.

### **La situación argentina**

En cuanto a la Argentina, mi intención es básicamente explicar el régimen monetario que llevamos a la práctica y cómo este régimen monetario permitió transitar dos turbulencias importantes, una sobre todo de carácter exógeno (la de agosto-octubre del año pasado) y la otra de carácter más endógeno (la que sufrimos entre abril y junio de este año 2008).

La Argentina ha tenido una recuperación del crecimiento económico muy importante en los últimos seis años, con una mejora de los indicadores sociales desde registros extremadamente deteriorados, sobre todo en el año 2002 – indicadores de pobreza, indicadores de desempleo extremadamente elevados. Se han visto reducciones muy importantes tanto en lo que son los indicadores de pobreza como en la tasa de desempleo, y básicamente se ha caracterizado en estos años la Argentina por tener superávit gemelo – superávit primario fiscal y superávit de cuenta corriente – por encima de los tres puntos del producto bruto interno, con reservas internacionales crecientes que representan aproximadamente un 18 por ciento del producto bruto interno.

Nuestra economía se ha caracterizado por tener crisis recurrentes y yo diría hiper-crisis, tragedias macroeconómicas, desde el año 1975. En 1975 hubo básicamente una crisis política y económica, una carrera de salarios / precios muy importante; en el 82 la crisis de deuda externa de la región latinoamericana; en el 89 la Argentina sufrió la hiperinflación, una confiscación a través de lo que se conoció como Plan Bonex; en el 95 la crisis por el Efecto Tequila con un ajuste de 10 puntos en el crecimiento económico entre un año y otro (1994 y 1995); en el 2001-2002 también hubo una crisis muy importante, cesación de pagos por un lado, confiscación de los depósitos por otro. Les digo la verdad, un cóctel bastante explosivo, por lo que me parece que tenemos que tener en cuenta, más que el pasado, el prontuario de la Argentina en la evolución macroeconómica a la hora de diseñar un régimen monetario. Y también que la economía

argentina está en una etapa de transición económica y por eso es que hemos ideado un régimen monetario basado en tres pilares.

Por un lado, una política monetaria consistente, prudente, asegurando el equilibrio entre la oferta y la demanda de dinero. Ahí básicamente siempre hemos estimado de manera cauta la evolución de la demanda de dinero y ajustamos la oferta para lograr el equilibrio en el mercado monetario.

Por otro lado, este régimen monetario se caracterizó por tener una política financiera anti-cíclica que no sólo contemplase por una parte la acumulación prudencial de reservas internacionales, sino por otra parte el saneamiento del sistema financiero.

El tercer pilar del régimen monetario argentino es un régimen cambiario de flotación administrada. Acá no tenemos que olvidar que la Argentina es y fue una economía sumamente dolarizada y por lo tanto con una experiencia, con una historia de régimen cambiario de tipo de cambio fijo, con lo cual hay que avanzar hacia un régimen de flotación de manera muy gradual. Fue por esto que se pensó en esta transición con un régimen de flotación administrada. Este régimen monetario se pensó para tratar de evitar todas esas tragedias que se vivieron en Argentina: hiperinflación, megadevaluación, cambios drásticos en cuanto a la evolución del nivel de actividad económica en la Argentina, tratar de evitar la pesificación compulsiva como la que sufrió la Argentina en el año 2001-2002, tratar también de evitar cesaciones de pagos como el que también sufrió Argentina en ese mismo año y confiscación de los depósitos. Me parece bueno tener en cuenta que este régimen monetario intenta trabajar para evitar todo tipo de tragedias en una economía que está en transición.

En ese régimen monetario, básicamente primero en el equilibrio en el mercado de dinero, hemos trabajado con una política monetaria basada en agregados monetarios, una estimación muy cauta de la demanda de dinero, y hemos ajustado continuamente la oferta para lograr el equilibrio en ese mercado de dinero. Hemos cumplido el programa monetario en los últimos cinco años: veinte trimestres consecutivos de cumplimiento del programa monetario. Hemos trabajado con distintos agregados monetarios – arrancamos con la base monetaria, después fuimos al M2 y ahora estamos trabajando, aparte de con el M2 total, con el M2 privado y con proyecciones móviles, siempre a doce meses respecto del agregado monetario M2.

Básicamente, tuvimos una política de acumulación de reservas internacionales – lo muestra claramente el gráfico – y esa política de acumulación de reservas internacionales se vio más que compensada por una política de esterilización monetaria sumamente profunda. Una esterilización monetaria que se dio fundamentalmente a través de instrumentos de regulación monetaria que utilizó el Banco Central para absorber base monetaria a través letras y notas del Banco Central que se conocen como LEBAC y NOBAC. Lo que eso permitió no fue sólo tener un stock de reservas internacionales que permitiese estar prevenidos para shocks externos, sino que adicionalmente, al esterilizar con instrumentos de regulación monetaria, eso le permitió al Banco Central tener un sistema financiero con una liquidez del orden del 40 por ciento de los depósitos del sistema financiero.

Gráfica 4



Esto permitió de manera muy importante poder transitar la turbulencia de agosto-octubre del año pasado (esa turbulencia tuvo un origen en la crisis de los *subprime* y después en octubre tuvo bastante que ver con la incertidumbre electoral que generó el proceso de elecciones presidenciales que tuvo la República Argentina). En ese período, claramente el mercado

quiso recuperar sus dólares. El Banco Central tuvo que ofrecer el mercado 1500 millones de dólares aproximadamente y para eso primero hubo un ajuste en los tipos de interés al alza, porque primero se entregaron los dólares requeridos y después se le dio el oxígeno necesario al sistema financiero, la liquidez en pesos necesaria, a través fundamentalmente de las recompras en el mercado secundario, de la renovación parcial de los vencimientos de LEBAC y NOBAC. A través de esos instrumentos – que eran instrumentos de regulación monetaria – se le fue dando liquidez al sistema financiero.

Este año 2008 hemos tenido una segunda turbulencia en el periodo abril-junio. Esta turbulencia no sólo fue de origen diferente (de origen endógeno más que exógeno), sino que también fue más intensa: en esos tres meses el Banco Central tuvo que proveer tres mil millones de dólares. Recordemos que más o menos el stock de reservas internacionales del Banco Central de la República Argentina era de aproximadamente cincuenta mil millones de dólares antes de esta última turbulencia, y hoy en día está en algo más de cuarenta y siete mil millones de dólares. Bueno, decía que en esta oportunidad el Banco Central tuvo que entregar al mercado tres mil millones de dólares, obviamente que esto impactó de manera significativa en los tipos de interés. Después de ese ajuste, el Banco Central empezó a proveer liquidez en pesos a través de los mismos instrumentos que había utilizado el año anterior con alguna que otra variedad, como por ejemplo compras también en el mercado secundario de títulos públicos nacionales. También se abrió una ventanilla de liquidez donde se agregaron otro tipo de activos contra los cuales entregar liquidez al mercado financiero. Esto no se utilizó, pero claramente se abrieron distintas ventanillas de liquidez. Lo concreto es que, en tres meses, el año pasado se perdieron mil quinientos millones de dólares, y en tres meses este año se perdieron tres mil millones de dólares. Estamos hablando de turbulencias importantes que emigraron de carácter exógeno a carácter endógeno. Pero seguimos diciendo que son turbulencias acotadas, habida cuenta de que el stock de reservas internacionales es de cuarenta y siete mil quinientos millones de dólares en la actualidad y era de algo más de cincuenta mil millones antes de la turbulencia del periodo abril-junio de este año.

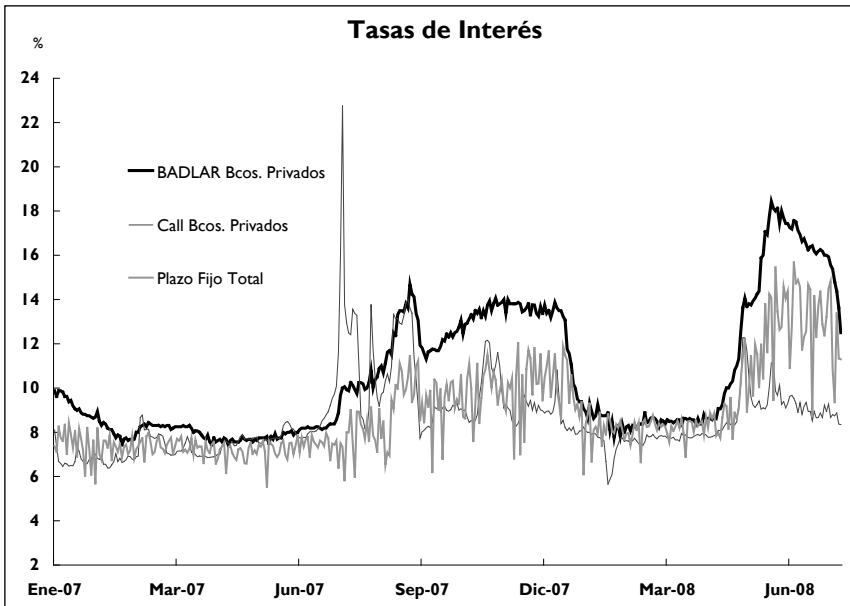
Me parece que esto habla a las claras de lo importante que fue tener la política de acumulación prudencial de reservas internacionales, porque la Argentina – que es un país con recurrentes crisis – tenía que estar preparada para cuando algún tipo de turbulencia como las que tuvimos en estas dos ocasiones estuviese presente.



El Banco Central de la República Argentina, tanto el año pasado como este año, estuvo generando liquidez en pesos en el mercado financiero a través de la colocación neta de LEBAC y NOBAC en el mercado primario, a través de la recompra de LEBAC y NOBAC en el mercado secundario, a través de la recompra de LEBAC y NOBAC en licitaciones, a través de los pases activos otorgados por licitación o los pases activos tanto a tasa fija como a tasa variable y la compra de Bonos del Tesoro en el mercado secundario.

Fíjense en la gráfica 5 cómo, en las dos turbulencias, tanto en la del año pasado como también en la reciente, hubo un ajuste en los tipos de interés, en la tasa de interés a plazo, pero cuando se empieza a entregar la liquidez en pesos hay un ajuste a la baja o una vuelta a la normalidad. De todos modos, creemos que en esta oportunidad seguramente los tipos de interés van a permanecer bastante más altos que en la etapa previa a la turbulenta de abril-junio de este año. Teníamos registros de tasa BADLAR (que es la tasa mayorista de depósitos a plazo fijo) que estaba en el ocho por ciento antes de la turbulencia, llegó al dieciocho por ciento y hoy está en torno al trece por ciento anual.

Gráfica 5



En cuanto al sistema financiero, yo les decía que no sólo la política anti-cíclica había sido muy buena en términos de la acumulación prudencial de reservas, sino también en términos de saneamiento del sistema financiero argentino. Ahí básicamente fíjense que tanto en el pasivo del balance consolidado del sistema financiero como en el activo ha habido una mejora de calidad muy importante.

En el pasivo del balance consolidado del sistema financiero no hay más redescuentos, no hay más préstamos por iliquidez como supo haber seis años atrás. Hoy básicamente la mayor parte del fondeo tiene que ver con los depósitos.

Por el lado del activo, cuatro años atrás los préstamos, las financiaciones al sector público representaban el cuarenta por ciento del total de activos, mientras que hoy representan apenas el catorce por ciento del total de activos. Y el financiamiento al sector privado, el crédito al sector privado que representaba el veinte por ciento cuatro años atrás, hoy representa el cuarenta por ciento del total de activos.

Todo esto – el crecimiento del crédito privado – se dio en un marco de baja irregularidad del financiamiento privado y de recuperación y rentabilidad creciente del sistema financiero, con capitalizaciones que le dan al sistema financiero muy buena solvencia y además con una liquidez importante, una liquidez obligatoria (que son unos requerimientos legales que establece el Banco Central) en torno al veinte por ciento de los depósitos y una liquidez amplia cuando le sumamos los encajes (LEBAC y NOBAC) del orden del cuarenta por ciento del total de los depósitos del sistema financiero.

### **Desafíos para la estabilidad monetaria y financiera en América Latina**

En cuanto a lo que hace a la estabilidad monetaria, lo que está claro es que frente a riesgos de naturaleza sistémica y, en mayor grado, de incertidumbre agregada, parece consolidarse la implementación de un nuevo enfoque en términos de ejecución de política monetaria. Este es el enfoque de administración de riesgos que, frente a reglas simples de intervención, propone un esquema con mayor flexibilidad y pragmatismo de política, muy relevante dado las crisis recurrentes. La política monetaria sin duda,

para nuestra región, debería lograr abordar los efectos de segunda ronda y por lo tanto me parece que claramente en materia de política monetaria hay que trabajar en hacerla más restrictiva para abordar el problema de la aceleración inflacionaria que está teniendo la región, no sólo en el *headline* sino en el *core inflation*.

Por otro lado, me parece importante la tarea conjunta para moderar las presiones inflacionarias de la política monetaria y la política fiscal, de acuerdo obviamente con las particularidades de cada país, donde los mecanismos de transmisión son diferentes y las profundidades de los sistemas financieros también son diferentes. Me parece que es muy importante en términos de política monetaria seguir construyendo credibilidad para la región. Esto es muy importante y, como ejemplo, en la medida que se gane credibilidad esto va a permitir reducir los costos de una política monetaria más restrictiva en términos del impacto sobre el crecimiento económico.

En cuanto a los desafíos y condiciones de estabilidad financiera, parece que la región se caracteriza por tener un sector financiero con baja profundidad y también por tener poca sofisticación. Por lo tanto, el problema que veíamos en la presentación de los panelistas anteriores era que hubo mucha innovación y la regulación tal vez no acompañó con la velocidad debida el avance de esa innovación financiera.

Me parece que en la región es muy importante mantener el cuidado respecto a dos temas. Los sistemas financieros generalmente fueron utilizados para financiar los problemas fiscales y también los sistemas financieros de algún modo han trabajado descalzados, es decir han trabajado con financiamiento en dólares. En este punto también se ha trabajado bastante en des-dolarizar a los sistemas financieros de la región, y me parece importante también profundizar en este aspecto, profundizar la independencia respecto a las necesidades financieras del Fisco y profundizar también el proceso de des-dolarización en el financiamiento de los sistemas financieros.

Los sistemas financieros de la región han evidenciado tendencias comunes en los últimos años. Hay una gradual incorporación de nuevos segmentos de clientes más riesgosos con escasa historia crediticia bajo la cobertura de los bancos, hay una significativa expansión del crédito al consumo de la familia, hay una pro-ciclicidad de los marcos regulatorios tanto

en lo que hace a exigencia de capital como en materia de política de provisiones bancarias, y hay una proliferación de operaciones *over-the-counter* incrementando la opacidad de los mercados. Me parece entonces que va a ser muy importante, en términos de estabilidad financiera, trabajar sobre las fallas informativas, la necesidad de generar e interpretar información sobre nuevos agentes que se incorporan al sistema financiero, y también hay que trabajar bastante en materia de cambios regulatorios, hay que trabajar más con mercados regulados que con *over-the-counter* por un lado, también hay que tratar de evitar los esquemas pro-cíclicos fundamentalmente en la región (hay casos como el de Uruguay que trabajan de otra manera, pero la mayoría de los países de la región son muy pro-cíclicos en términos de la exigencia de capital y de la política de provisiones). Creo también que es muy importante trabajar en la capacitación de los supervisores en materia de supervisión bancaria, habida cuenta las innovaciones financieras que tenemos por delante.

Finalmente, hay un punto muy importante que ya fuera mencionado con respecto a las preocupación que tenía Daniel Vaz y que básicamente tiene que ver con tener mucho cuidado con la regulación fragmentada, porque la regulación fragmentada de algún modo da lugar a arbitrajes, a solapamientos y también a vacíos regulatorios. Ahí va a ser muy importante el trabajo coordinado entre los distintos reguladores que tiene el sistema financiero y que requiere la estabilidad financiera en América Latina.

## SESIÓN DE PREGUNTAS Y RESPUESTAS

**Jack Selody:** My question is a bit of a devil's advocate question. It was not so long ago that we were talking about market participants who were very sophisticated, saying that markets could regulate themselves, that they were innovative, that they were essentially the solution to the over-regulated banking problem. Now we are talking about Central Banks providing liquidity support maybe on an ongoing basis to the markets, we are regulating markets, we are really coming on real hard. What I wonder is if there is not the risk that we are overreacting, doing too much, whether these kinds of turmoil or crises are not natural to markets and if we are not going to essentially over-regulate.

**AA:** I have two quick questions. The first one is in terms of the lessons drawn from the crisis, whether the speakers have anything to say regarding valuation techniques like *pricing-to-market* that have been held responsible for a lot of the amplification mechanism of this crisis. The second question: There's been recent theoretical literature on liquidity and specifically on modeling marginal requirements and in particular there have been a couple of articles that show that market margins are quite inefficient and there is a lot of room for regulation. I don't know anything about interbanking regulation techniques, but I wonder whether it is possible and feasible for the Fed to regulate margins. That could have a huge impact on system liquidity, probably in some stages even higher than regulating or targeting interest rates.

**Dietrich Domanski:** If I understand correctly, the question is about the role of Central Banks in determining margins in the securities markets. It is true, I think that specially in March this year, shortly before the Bear Stearns weekend, the rapid increase in margin requirements was close to triggering a downward spiral in financial markets. So, I agree with you that, under certain market conditions, a sort of orderly adjustment of margin requirements may have an impact on market dynamics. As to what the Central Bank can do about this in terms of liquidity management, I think Central Banks have tried to address the issue by broadening the range of collateral that they accept, saying "look, here's an alternative to the market, you can bring your assets to the Central Bank, you can obtain liquidity here."

Another aspect of your question, I believe, alluded to whether there is a case for action in terms of determining margin requirements. Let me

put it like this: I think we have learned clearly from the turmoil that there are important issues in terms of risk management, and that existing risk management models failed to adequately capture, in particular the liquidity risk. The fact that they realized that there was more liquidity risk than they thought and that they rapidly adjusted their margins just was not particularly helpful. Formal regulations should respond – this is something that I think we should discuss in the coming months and is actually under consideration by regulators – I think one key element is stress testing, and the proper design of stress testing, and how to incorporate liquidity risk into stress testing frameworks. I think that this is a much more promising avenue than to think about how to establish margin requirements.

**Gerard Dagés:** I would like to go back to Jack’s question “Are we doing too much?” This is a really good question. Dietrich has already referred to this, are we increasing the distortions in the markets by what we are doing? On the other hand, the counterfactual, it is a little tricky for me, sitting in New York as all these things are taking place, as Bear Stearns is going down, to get my mind around which of them could have very significant effects on our financial system. You know that it is hard to know where to draw that line. Obviously we would prefer not to do something like that, but we felt compelled to do it in the interest of systemic risk. So, I think part of it is perhaps becoming more adjusted to a new market system, and we are certainly going to have a lot of bumps. On the other hand, these are having some very negative effects in the short term and, as the Central Bank, we need to do something. Maybe in the light of history we will be judged as having done too much – we will see about that. I do not know if that answers the question, but it is a great question and a tricky one too.

In terms of some of the other questions about pricing some of these assets, as I said, in the US and elsewhere, the crisis has coincided with the introduction of *fair value accounting* which requires marketing various types of assets. In some cases, these are assets for which there is not a very good market and where someone needs to price through a model. So we have these increased requirements and at the same time that liquidity has evaporated pricing is very difficult to obtain, so there are a lot of questions about regarding whether this is really the kind of environment that the fair value accounting people envisaged. This is a very new thing. Firms are working to deal with this. If you look at market values, they are way down here; if you look at discounted values, they are way up here. So there has been a lot of criticism of fair value accounting and some have

actually suggested temporarily suspending fair value accounting. This is a tricky thing also, because you do not want to suspend accounting rules in the middle of a crisis. That typically does not help credibility, does not help confidence, we have seen this in other countries and it is something I would prefer not to do. At firm level, the better firms I see are the ones that actually try to test their price verification, where they will try to sell a little bit of their exposure and see what kind of pricing they get for it. So I think there are ways around this, I think some firms are doing a pretty good job.

Regarding the margins, I think you are right. Margin spirals can certainly be a problem, we have seen this. As to what Dietrich said, there might be a role to look at, a better harmonization of exchange margins. That could be a role for someone, perhaps the Central Bank. But I am not going to advocate that.

**Dietrich Domanski:** Let me just add one thing on fair value accounting. I think when we look back now, after twelve months, on this very unhappy anniversary, I think the fact that banks have recognized losses globally for about 400 billion dollars, if I am not mistaken, I think this is really a lot of money. At the same time I think it is a good thing that banks had to recognize losses so rapidly. I would see this as a positive aspect of fair value accounting, as it has forced banks to recognize losses, to speed up capital rating efforts and to try to work through the crisis as quickly as possible.