Inflation targeting in hard times

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Thank you very much for the invitation. There is not much time today to elaborate on these very large issues, and several of them have already been touched upon by José de Gregorio (in this volume). However, let me just say in response to what he said about having much less "fear of floating" – I agree with him: now there is a "fear of sinking".

When I started to think about this presentation, I realised that I am at a great disadvantage compared with my colleagues on the panel because they look at reality everyday, they talk about it and it is very interesting. But I'm supposed to be an academic these days. So I have to make an effort to come up with something on which we can agree or disagree and that at least helps us understand what is going on from a more or less conceptual point of view. Not only in terms of specifics but more generally.

Reserve adequacy levels and lender of last resort

The first point I am making here is related to what de Gregorio said: there are basically two major responsibilities for a central bank. It seems to me that that there is a much stronger emphasis to price stability and, of course, each central bank will have its own ranking. But, financial stability issues eventually will fall on the central bank's lap – whether central bankers want them or not.

With respect to financial stability, international reserves do play a role. In normal periods you can forget about them, but it seems to me that there was a lot of complacency in the North – thinking that we were going to live in normal periods for a long time. We even gave that thought a name: the "Great Moderation". In the South, the Great Moderation started around 2003. When I went to conferences here, people talked about technical details of how to run inflation targeting (IT), leaving aside sudden stops and related issues. Obviously that is going to change in the future.

International reserves play a role because we do not have a global lender of last resort, and central banks sometimes have to take care of credit problems that go beyond national boundaries. That is, central banks have to give credit not only in domestic currency but also make sure there is enough international credit available. In normal times you do not worry, because markets are not segmented. But during hard times, like the present, the local currency and the international currency cannot be exchanged one for the other. This is evident – you see this in the market – even the European Central Bank (ECB) got a currency swap arrangement with the Federal Reserve to ensure that the ECB could have enough dollars. In this respect, you wonder, why did it happen if floating exchange rates are in place? This is a general point. A more specific issue, for which I do not have a very good answer, is that international reserves seem to be important. In fact, you see a lot of countries accumulating reserves. The question is then, what is the optimal level of reserves?

There is some literature on the question coming out nowadays. My experience, in a paper that we have been writing with Alejandro Izquierdo and Rudy Loo-Kung, is that in our models

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the optimal level of reserves is very sensitive to certain things that are very difficult to assess. So when you change these things, estimates change radically. We have two popular measures of international reserves. Each gives very different answers. For example, if you look at the so-called Guidotti-Greenspan ratio – that of reserves to short-term external debt – in Asia, you conclude that Asia's reserves have increased tremendously from 1994 to 2007. This is true even in Latin America (Table 1). But when you employ the other popular measure, the ratio of Reserves to M2 – which I feel is more reasonable for a central bank because M2 (or M3) represents the liabilities of the domestic banking system, which is something that the central bank is obviously concerned about – then you get a different picture. Under this ratio, Asia's reserves were 32% on average, a rate not that different from Latin America's. In fact, in this case Latin America is ahead of Asia. If you calculate the ratio for China, you find that it is about 35%. Thus, from the point of view of the central bank, I think the second ratio is more relevant. But you can see in these numbers how you can end up with very different conclusions.

Table 1

Reserve adequacy[1]

	Reserves over Short-Term External Debt (Guidotti-Greenspan Ratio)		Reserves over M2	
Region	**1994**	**2007**	**1994**	**2007**
Asia[2]	2.52	6.28	0.19	0.32
Latin America[3]	2.00	3.50	0.40	0.44

[1] Simple averages. [2] China, India, Indonesia, Malaysia, the Philippines and Thailand. [3] Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Venezuela.

Source: Author's calculations based on IMF, World Economic Outlook 2007.

Credit lines and liquidity facilities

International reserves are not the only way for a central bank to ensure that there is enough liquidity in the system or to operate as lender of last resort without having to blow up the exchange rate. In that respect, what we have learned is that private credit lines are not very reliable. They dry up quickly during crises. Now we have this new facility by the International Monetary Fund (IMF) (the predecesor of the current Flexible Credit Line) which is very interesting and is just beginning to be developed. I think it is very imperfect at present, but I am sure they will change it over time to ensure that we have some short-term liquidity facility available. However, it is a facility that, in principle, expires after three months and is extended only if the examiners decide that the country deserves an extension. So even though it is a very fast-working facility – and that's the idea of these liquidity facilities – the problem is that without conditionality, things in a certain sense become even more complicated than with standard conditionality loans from the IMF. The reason is that countries now do not know what kind of conditionality they are going to get after three months, and this is going to happen every three months for one year. And, in principle, that loan is not supposed to last for a year. So actually it is like future conditionality, unless you get lucky enough that in three months' time or one year's time your liquidity problems have faded away. But under the present circumstances, when everybody is saying that recovery may not take place in 2009, liquidity problems can continue for longer. These are issues that we need to discuss.

How to spend reserves

The other issue is that once you have reserves or a credit line, how do you spend them? We have not spent enough time thinking about this, but there are certain forms of spending international reserves that could be counterproductive, and could even provoke capital flight. For example, a sharp decline in international reserves may lead people to take it as a signal that the central bank is in trouble, that the financial system is in trouble, and therefore that there is a financial crisis brewing. As a result, the use of international reserves could just help feed capital flight. Also, in the present circumstances, something worries me that I think we saw in the region in 1998 – the possibility of a global credit crunch. There are firms in Europe that are short of liquidity, short of credit, and they are looking around for new sources of liquidity. Then they come to Brazil, say, where the currency has depreciated tremendously, already 50%, so it is not a good idea to let the exchange rate go further. Thus, on the margin, the economy would be operating under virtually fixed exchange rates (as long as the devaluation pressures continue unabated). I am not saying that this is happening in Brazil or somewhere else – I picked this example because we have already seen a big depreciation there. Therefore, under those circumstances, there is the risk that a big firm, endowed with a large and credible collateral, especially compared to local potential bank clients, may be able to secure credits from local Brazilian banks in order to relieve an external liquidity crunch. This is equivalent to shorting the domestic currency and using the proceeds to buy foreign exchange. So, if the central bank is not careful, all of a sudden, the country may have its international reserves siphoned off to the rest of the world. Therefore, in some extreme cases, using international reserves may call for some kind of capital outflow control.

I also think effectiveness could be enhanced by using up the reserves to direct credit to certain sectors. That is what Brazil did in 2002, and I believe something in that direction is going on now. This is not an old-fashioned policy of picking winners and losers. Rather, it is a strategy to make sure that some large crucial sectors, like the export sector, have enough credit to avoid major disruption. These are, admittedly, heterodox solutions. But it so happens that it is when the market does not work that being heterodox makes sense. The public should also be aware of this. There is a tendency to brag about the accumulation of reserves, so when you use up the reserves people come to the conclusion that accumulating them is good, then decumulating them must be bad.

Maybe bringing the international financial institutions (IFIs) on board could be useful. We do not have many IFIs now that have a very strong reputation. I think it helps a lot that the Federal Reserve, for example, has given a currency swap with countries like Brazil and Mexico. That is very helpful. The problem is that those are only two countries, and I doubt that they would spread the goods around many other emerging market economies. These things are useful because you play on expectations a lot during financial turmoil.

Implications for theory

Before I finish, let me make a general point about theory. I think it is important that we incorporate into theory some of these credit aspects. We have been going too much in the direction of models in which there is no credit market to speak of, there are no monetary aggregates – they can be ignored. The models, themselves – just to give an example – assume that a Treasury bill is a pure bond. In the simple models that we have, we assume that the bond on which the policy interest rate applies is essentially a pure bond. If you assume that, then there is a separation between interest policy and monetary aggregates altogether. But, if the bonds on which the central bank operates provide liquidity services, then it is no longer true that you do not care about the aggregates. And open market operations may not be able to change the relevant aggregate liquidity concept. So, this is a different world.

What we are living through now, especially in the North, is a situation in which there is not much difference between a Treasury bill and cash because the Treasury bill interest rate is virtually zero. So, in practice, there are two forms of cash. When you put it that way, just at that level, you have brought in liquid aggregates onto the radar. In that connection you can understand issues like intervening in the foreign exchange market as an attempt at changing the aggregate itself. Open market operations that involve exchanging domestic money for domestic bonds, or viceversa, may not be able to change liquidity very much. Foreign exchange intervention which changes the composition of domestic and foreign currency, could be more effective. I think that is important because, as de Gregorio mentioned (in this volume), even countries like Chile have resorted to foreign exchange intervention – and they are being very transparent about all that. So foreign exchange intervention is out there, it is being used all the time, especially under conditions of high volatility. We do not have a good theory, and the problem is that sometimes foreign exchange intervention is equated with abandoning inflation targeting. In my mind you are reinforcing inflation targeting with that, but I think more theoretical work on those issues is urgently needed.