Martín Redrado: The monetary policy response to recent international turmoil

Speech by Mr Martín Redrado, Governor of the Central Bank of Argentina, at the National Academy of Economics, Buenos Aires, 22 November 2007.

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The current turbulences in the most advanced credit markets are, in my view, the most important global financial crisis in the past ten years. And it is here to stay.

Financial conditions in developed economies have deteriorated. There is still uncertainty about the global banking system's real exposure to losses associated to off-balance sheet special investment vehicles. In turn, the ongoing decline of the US real estate market clouds prospects for recovery, since it affects the quality of underlying assets.

Financial innovation in recent years has enabled the fragmentation, division, and transfer of credit risk to new market players. Therefore, it is no longer traditional banks that grant and keep mortgage loans on their books; instead, mortgage loans are securitized and sold to investors who are more prone to taking risks and operate outside the scope of monetary authorities' prudential regulations. These funds have not only taken and traded high-risk mortgages, but have also leveraged themselves based on such assets. These operations crossed the Atlantic to include some of the major European banks.

Back then, this contributed to considerably reducing interest rates, creating incentives to borrow. The supply of mortgage and real estate projects aimed to meet increasing housing needs thus multiplied in the US. However, when interest rates began to rise, this easily accessible financing became non-existent, which affected the housing market. As the value of assets fell, loans, mostly floating-rate loans, not only became more expensive, but also lacked sufficient collateral.

We are facing an "information crisis," since nobody knows how many times these risks have been transferred, nor where they are placed today, hence anesthetizing the credit market. Liquidity constraints have also created uncertainty as to the real value of these assets. Thus, we have witnessed the indiscriminate sale of higher-risk assets, such as emerging markets', and a total paralysis of short-term credit in developed countries. Recently, the drop in the US real estate market deepened, affecting consumption expectations of the world's largest economy. The potential effects of this on the global economy's growth are still not clear.

However, we have also seen that the new international financial context has had no impact at all in the real economy in Argentina. This is mainly due to the monetary and financial strategy the Central Bank is carrying out. Between the second and third quarter, we experienced a reversal of $ 5 billion (2 percent of GDP) in the capital account, which would have significantly affected domestic economic activity in other times.

In particular, our role is to provide for two important public goods: monetary stability and financial stability. To this end, steps have been taken to ensure a predictable scenario for spending, savings and investment decision-making.

We know that the country has a long history of macroeconomic instability. In Argentina, monetary regimes have unsuccessfully shifted from one extreme to the other. The relatively stable periods were short due to inconsistencies in programs that should have ensured macroeconomic solvency. Suffice it to recall the end of price stability in the 1990s, after a sharp appreciation of the local currency resulting from a fixed exchange rate that was inconsistent with fiscal and external deficits.

Therefore, in an economy with precedents such as confiscation of deposits (1989, 2001), hyperinflation (1989, 1990), mega-devaluations (1989, 1990, 1991, 2002), and a default on

the public debt (2001), the monetary system cannot set itself an exclusive goal and ignore the economy's health and vulnerabilities. To achieve long-term monetary and financial stability, this historical evolution needs to be taken into account.

It is not an abstract exercise. Today, each monetary and financial policy move is fully coherent with the intertemporal goals of money market equilibrium and the preservation of the value of currency, stability and financial system depth. By "intertemporal" I mean that the Central Bank must have an across-the-cycle rather than a short-term view.

In this framework, the monetary strategy includes three main pillars:

- First, a prudent and theoretically consistent monetary policy that ensures the equilibrium between supply and demand in the monetary market. This system is the most appropriate for an economy in transition that still makes intensive use of relatively liquid means of payment and has a relatively low bank penetration.

The use of the various monetary policy instruments (the placement of securities at fixed and floating rates, the repo market, the reserve requirement policy, and the collection of rediscounts) is reflected in the evolution of the means of payment. The M2 shows a downward trend, with a significant drop vis-à-vis growth rates in 2003 and 2004. In fact, for the first time after the crisis, money supply is growing below the nominal GDP, reflecting the prudential bias of our approach.

- Second, a managed floating exchange rate regime that enables us to weather financial stress situations – that is, a regime that prevents excessive volatility and provides predictability.
- Third, countercyclical insurance policies to be prepared against shocks. These include the accumulation and active management of foreign reserves and a sound and well-matched financial system that buffers turmoil, instead of spreading it.

In this regard, the past few months have provided a valuable opportunity to stress-test the current system. And, in this case, the flexibility of our monetary and financial system has proved to be adequate.

The Central Bank took several steps to mitigate the adverse effects that could be anticipated, including buy-backs of our securities in auctions and the secondary market; and the optimization of auctions, according to prevailing liquidity conditions.

In this sense, the current managed floating exchange rate regime has been a key factor to our strategy. On the one hand, it does not provide a "foreign exchange insurance" that favors the inflow of hot money. On the other, it aims to prevent short-term volatility from affecting spending, savings and investment decisions. We do not want to prevent variables from converging to their long-term values, but we would rather avoid excessive volatility as a source of unnecessary disturbances in economic decisions.

From the outset of this international crisis, the nominal peso-dollar exchange rate has changed by around 2.5 percent. To put it in perspective, in the same period of time, the Brazilian real changed by 10 percent; the Colombian peso, by 13 percent; the Russian ruble, by 2 percent; the Thai baht, by 12 percent; and the Korean won, by 6 percent. There is no point in mentioning other examples. Clearly, the Argentine exchange market has recently behaved in a normal way from an international viewpoint. Under a free float, the exchange rate would have reached much higher levels, running serious risks of going back to the devaluation-inflation dynamics that has been so recurrent throughout Argentine economic history.

This foreign exchange market evolution was due to the Central Bank's prudential foreign reserve accumulation policy pursued during the favorable phase of the international financial cycle. By definition, countercyclical policies should start in the cyclical upturn, and thinking that such a favorable phase could last forever would have been a short-sighted interpretation

of our most recent history. In fact, the $44 billion in the Central Bank's coffers were enough to discourage any speculation.

The building of a sound financial system which allowed for the recovery of solvency and liquidity should not be overlooked either. Nowadays, the system's liquid assets represent 40 percent of total deposits. Nobody ignores the banks' robust position against risk – be it liquidity, credit, currency or market risk – thanks to the improved regulatory framework.

Financial institutions are still in the process of normalizing both its assets and liabilities. As to the former, credit to the public sector has considerably decreased as compared to credit to the private sector (crowding in), as a result of regulations specifically aimed to that end. As to the latter, there has been an increased recovery of financing through its "normal" channels, time and sight deposits, to the detriment of Central Bank liquidity assistance (which has been fully paid back by the banks). Furthermore, prudential regulations aim to extend financing terms. It is important not to lose dynamism and always keep solvency and prudence.

In a nutshell, we have responded quickly to preserve monetary and financial stability in an uncertain international scenario, where turmoil shows clear symptoms of permanence in time. Overcoming external crises such as the present one, with limited volatility and not giving up integration into the world, is an ideal way of ensuring economic growth. This is the only sustainable monetary policy that will enable us to build credibility, not only on the banking sector but also on the local currency, and thus develop a long-term local currency. In short, thanks to the current monetary policy strategy, we have been able to weather recent international financial turmoil, combining the necessary doses of monetary prudence and flexibility.

And I emphasize this because we should bear in mind two critical issues:

First, that we live and, therefore, have to conduct monetary policy, in a highly uncertain world.

Second, within this uncertain framework, our economy is still heading towards its long-term equilibrium path.

Alan Greenspan defined this phenomenon in his own words: "*uncertainty is not just an important feature of the monetary policy landscape; it is the defining characteristic of that landscape."* This statement may seem evident, almost redundant, especially to those of us who have had to weather crises, either as economic policy makers or in the private sector under changing financial conditions.

Nevertheless, until not long ago, the notion of uncertainty was not systematically included in monetary policy theory. The "world" was considered, as portrayed by models, to be perfectly known by decision-makers. At most, the notion of risk was taken into account which, unlike uncertainty, entails a knowledge of the probability distribution function.

Only recently, since the contribution of Walsh (2003), has the scientific study of the conditions under which monetary policy works focused on uncertainty. Until not long ago, the consensus in the literature on monetary policy implicitly assumed that central banks knew the true economic model, that we were able to correctly observe all relevant variables, and that they accurately knew the various random forces affecting the economic system. Under this perspective, the only remaining "uncertainty" was actually the effective value of these stochastic disturbances.

The different sources of uncertainty are reflected in the concrete challenges central banks face in monetary policy design and implementation. Moreover, they influence the way in which information is processed and the procedures to determine appropriate intervention and operation rules. However, most of these developments are applied in developed economies, relatively little prone to crises (or, at least, frequent crises) and characterized by a high degree of macroeconomic stability.

Despite the considerable progress in many countries of the emerging world, it is undeniable that our countries' macroeconomic behavior substantially differs from that of countries with higher relative development.

Shock absorption mechanisms in developed economies (such as financial depth to diversify risk) are not only absent, but also work as amplifying mechanisms, deepening the effects of shocks. All in all, the same external disturbance that might cause temporary internal imbalances in a developed economy might lead in our economies to fundamental variables taking diverging paths. And this would imply a costly return back to equilibrium. It follows logically that consumption in developing countries is more volatile than output, contrary to the case in developed economies. This shows that the international capital market is procyclical.

As emphasized by Sargent (2003), uncertainty can be especially intense in the case of economies in transition. In these economies, the "right" model, the value of structural parameters, transmission mechanisms or the nature of shocks are not accurately known. Under such circumstances, the lessons learned by agents can markedly increase uncertainty, translating into adaptive answers that permanently alter the economic structure. Uncertainty inherent to every economy boosts in developing countries. Thus, the idea that uncertainty is crucial when analyzing monetary policy options derives not only from methodological or epistemological considerations, but also from the concrete difficulties we policymakers come across in changing scenarios and that, unfortunately, in our case, are encountered too often.

Recent studies have emphasized the fact that economic agents should learn about the economic environment on a day-to day basis. During the "learning period" their behavior does not always turn out to be compatible with that of agents with rational expectations. In other words, economic system players should learn while interacting, which results in a variety of behaviors not always provided for in standard models. In turn, and focusing on the policymaker's task, many papers (such as Levin and Williams, 2003) have shown the significant challenges faced by analysis under uncertainty. They have thus highlighted that the best policies in certain contexts may perform badly in different conditions.

This has resulted in the notion of "robustness": ideally, monetary policy rules should be sustained against the changes in the economy's pattern of behavior. For example, a certain policy may be considered optimal but have very negative effects if the true model governing the behavior of variables differs from the supposed model. On the contrary, if the economic model coincides with the assumed model, an alternative policy might be somewhat less effective, but at the same time less harmful.

Against this backdrop, the latter policy alternative – though not necessarily optimal in all possible circumstances – may be considered more robust than the former. Given the limited knowledge of certain key structural aspects of the economy and the skewed distribution of the costs and benefits of specific outcomes, Greenspan has encouraged a "risk management" approach in the definition of monetary policy (Blinder y Reis, 2005). Under such circumstances, it is necessary to consider not only the most likely future path of economic development, but also the distribution of feasible outcomes around that path. An informed judgment of the costs and benefits of these possible outcomes under alternative choices should be made.

The outcome of a low-probability event with severe adverse effects may then be considered riskier than the costs of insuring against contingencies that in the end are not materialized. In this sense, relatively simple instrumental rules can perform as well as other much more complex "optimal" reaction functions. There is consensus on the fact that pursuing these rules may contribute to an appropriate reference framework for decision-making by monetary authorities. Unusual – or even usual – circumstances make it necessary to assign a predominant role to policymakers' judgment and analysis, in line with the "risk management" approach.

Model-based rules should thus be an important supplement to the judgment based on the careful analysis of empirical evidence and data, but cannot be replaced by it. When designing and implementing monetary policy, it is necessary to take these considerations into account, as well as the characteristics of the local and international macroeconomic environment. Otherwise, monetary policy will not only be inconsistent and lead nowhere, but also an additional source of uncertainty, as had been the case in our country many times before.

One of the most distinctive features of aggregate operating dynamics in Argentina has been the recurring macroeconomic instability episodes. It follows logically that, in the past 25 years, our economy has spent over a third of its time off the dynamic stability path (defined as the range between two standard deviations of the long-term trend), against Australia's 18 percent or Brazil's 25 percent. Argentina shares its resources and position in the world with these countries, and it is expected to be somewhat symmetrical with them as regards the impact of external shocks.

These phenomena have severely harmed long-term performance, and were not cost-free in terms of welfare: excessive volatility is probably the main reason for our country's economic stagnation in the last three decades of the previous century. Furthermore, the past quarter of a century was prolific in terms of the lessons learned from the crises of diverse origin and the consequences for the monetary and financial regime. We know that the channels through which excessive volatility affects economic performance are different.

In Argentina, we have undergone two type of crises:

- Crises arising from *ex ante* nominal volatility, characterized by a persistent noise in nominal signals to agents (high inflation), that lead to a shortening of the horizon, financial anemia, and the loss of value in money functions.
- Crises arising from nominal stability by rule (such as convertibility), which, although they induce an audacious behavior in agents and "shortcuts" to financial depth, cause mass defaults if the rule is not matched by consistent macroeconomic policies.

In this type of economy, where society has developed a high risk aversion and the need to prevent a new crisis becomes a priority objective, macroeconomic policy coordination is critical. If there are doubts about the intertemporal solvency of any of the macroeconomic policy set, the conventional monetary policy room for maneuver can be limited. When designing monetary policy, it is important to take the fiscal, financial and external conditions into account. An autistic monetary regime that dodges these issues, at the risk of becoming an additional source of uncertainty, would be of no use.

In Sargent's words, there is no robust monetary regime for an inconsistent fiscal policy. Our twentieth century history says a lot about the close link between the lack of fiscal solvency and inflation. Even though in recent years the restriction has eased thanks to the surplus public accounts, the literature on fiscal dominance problems is not limited to the current period. It is well known that tax revenue structure depends on the current relative price structure – hence the need to address the question under a general equilibrium approach.

Similarly, doubts as to the financial system's solvency or external sustainability can also limit monetary policy room for maneuver. As to external solvency, it would be wrong to tailor exchange rate policy to temporary trends: part of the current pressure for the appreciation of emerging currencies relates to commodity prices (through the current account) and the investors' risk appetite (through the capital account), which may clearly be temporary instead of permanent forces.

Rajan and Subramanian (2006) have highlighted the difference in treatment according to whether the trend is caused by permanent or temporary factors. In a financial world characterized by capital flow volatility, a massive amount of capital may lead to some kind of

"dutch disease," with unsustainable paths and high real variable volatility. This kind of problem might be often the case in small economies, where the local financial market may be negligible as compared to international flows, and where it is very difficult to know the equilibrium level of real variables. Thus, temporary forces that work from the market side may lead to nominal exchange rate overshooting (whether up or down). Far from adjusting towards the long-term equilibrium level, this may cause excessive volatility and distort relative price signals for savings and consumption.

All in all, it is clear that uncertainty faced by an economy such as Argentina's is not limited to the notion of risk. While in the latter case the stochastic process to generate data is known, in the former the true model of macroeconomic operation is unknown. A frequency distribution bar chart of the Argentine GDP in the last 25 years would show that it is equally probable to grow or fall at a 10 percent rate, so there are empirical problems to project the trend of fundamental variables. I remember that the 1998 national budget provided for a 4.7 percent economic growth for the following year, and in 1999 the decline ended up surpassing 3 percent. This an eloquent example to illustrate the problem. Similar references could be made to the consumption path or long-term equilibrium exchange rate.

Against an uncertain background, my approach is to prevent euphoria, adopting prudent, gradual and coordinated policies to lead the economic convergence process towards its "cruising speed." In that framework, the classical dilemma of rules versus discretion cannot be addressed with a "corner solution." Extreme strategies such as rigid and lock-in rules would not only lead to nowhere but also not even meet the initial aim of building fast credibility if agents do not perceive their consistency with the other policies. On the other extreme, we cannot pursue pure discretion strategies. The demand for flexibility might be the perfect excuse for "not having a plan" and validating persistent trends in nominal variable imbalance. Between both ends, the pillars of our development model must gradually and patiently be built based on a path that adequately combines the right doses of flexibility and credibility.

This approach is not an isolated case in the world either. According to a study based on the work of Sturzenegger and Levy-Yeyati, only 50 percent of inflation-targeting countries – where there is theoretically no central bank intervention in the foreign exchange market – effectively pursue a free floating regime policy. In the field of monetary policy, this resulted initially in the recovery of the basic functions of money, with the normalization of the financial system. In the current phase, it refers to the rebuilding of transmission channels of traditional policy tools to adequately use them when the economy nears its steady state.

In an economy in transition, not only the precise connections among fundamental variables are unknown, but also, and most importantly, many policy tools that are typical of the steady state are unavailable. To mention a few examples of the current case of Argentina, economic agents markedly favor, since the crisis, liquid forms of money to the detriment of wider monetary aggregates. It remains to be seen whether this trend will revert or when it will do so, or even if it is a "structurally" higher demand for liquid means of payment.

As to the effectiveness of conventional policy tools, we know that credit to the private sector represents around 12 percent of GDP. Firms´ access to the capital market tends to be restricted, with evident credit rationing. The money market is highly segmented. This leads to a low relative effectiveness of the Central Bank's reference interest rate as a tool to manage aggregate demand, and with it, pressures on prices. In addition, the financial system, which is undergoing an open normalization phase since the crisis, is however exposed to real interest rate risk. Consequently, using such a tool might be counterproductive and might cancel out the very transmission channel that is to be rebuilt.

To conclude, against a backdrop of high uncertainty, where the economy is still in transition and trying to overcome decades of marked decline, the Central Bank must provide and guarantee two public goods: monetary and financial stability. To that end, our prudent and flexible strategy, together with the theoretical consistency shown in this presentation, has

proved to be the best approach at this stage. Its effectiveness was proved in the last months, when we quickly responded to preserve monetary and financial stability in the face of a new international scenario. This scheme undoubtedly reinforces the need to permanently and comprehensively work to reconcile tools with objectives. This is also the challenge we face in building institutions and, at the same time, contributing to growth with stability and social inclusion, which is, after all, the ultimate aim of every economic authority having a strategic vision. Otherwise, all efforts will be vain and we will fall in the classical Argentine pendulum, going from one extreme of the range of possible policies to the other with no continuity whatsoever. It is, in fact, a two-fold challenge; not a sequential but a synchronic one: making progress in the achievement of our objectives and, at the same time, building institutions for the prosperity of future generations.

Thank you very much.

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