

José De Gregorio: Capital flows and the interaction between macroprudential policy and monetary policy

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Welcome to the 15th annual Conference of the Central Bank of Chile, this time focusing on “Capital Mobility and Monetary Policy”. In this address, I will discuss the challenges of dealing with macroeconomic and financial instability in the context of inflation targeting in emerging economies and analyze the special case of capital inflows as a source of such macroeconomic and financial instability.

The monetary policy framework based on inflation targeting and exchange rate flexibility has been successful in providing price stability and the conduction of countercyclical monetary policy over the last decades. Perhaps precisely because of this success, the “separability view”, that takes price stability and financial stability as independent goals, was the preferred policy framework before the global crisis in those countries that explicitly pursue financial stability as a policy goal.¹ Nevertheless, the recent crisis and financial turmoil resulted in increasing awareness of the linkages (spillovers) between macro and financial stability, both at the national and the international level. This calls for a revision of this view.²

In my remarks today, I would like to start by discussing some general issues regarding the linkages between price and financial stability and the linkages between monetary and macroprudential policy. In the second part of this talk, I will refer to the context of international capital flows and policy responses in a small open economy with inflation targeting, and the relation that monetary policy has to have with macroprudential policies in that context.

Interactions between Monetary and Financial Policies

Most central banks care not only about price stability, but also about financial stability. The goal for price stability is usually the main mandate of central banks, and is widely understood as maintaining low and stable inflation, which also reduces the deviations of output from its potential. However, the central bank’s mandate for preserving financial stability is less explicitly defined; probably in part because there is less agreement on what is financial stability and what should be considered an indicator of it. Broadly understood, it encompasses a stable and fundamental-driven credit and asset price growth, as well as the absence of large mismatches in the financial sector. It is not the purpose of my talk to narrow the definition of financial stability, so I will use the term in a broad sense. There is also the key distinction between micro and macro financial stability, and in most of what follows I will be focusing on the systemic aspects of financial stability, unless noticed otherwise.

¹ This idea is consistent with the principle known as the Tinbergen rule (Tinbergen (1952)).

² The framework discussed in this presentation takes the perspective of a small open economy like Chile. In many emerging markets the concern for financial stability was explicit, especially regarding international financial transactions. This was not the case in many advanced economies that, as price stability became the main objective, financial stability played a secondary role, or often no role at all. For further discussion, see De Gregorio (2011), and Bernanke (2011).

The recent crisis calls into question the view that macro and financial stability can be really seen as separate objectives. In fact, it seems to have brought a reminder that in the end, macroeconomic and financial stability are related, both directly and through the instruments used to achieve each of them. The direct linkages are natural: it is difficult to imagine a stable financial system operating in a volatile macro environment. Financial systems are good at dealing with idiosyncratic risks, but their ability to deal with aggregate risk is more limited, especially in emerging markets. Vice-versa, financial instability typically ends up creating macroeconomic fluctuations. The uncertainty that accompanies periods of financial instability leads investors and consumers to postpone investment plans and the purchase of durable goods, with foreseeable consequences for output and inflation. Moreover, extreme episodes of financial instability that lead to financial crises almost always end up in a sharp and costly recession.

There are also indirect linkages between macro and financial stability through the main instruments used to achieve them. The main tool used by most central banks to achieve macro stability is the management of a short term reference interest rate. Movements of this benchmark rate not only directly affect the consumption/saving decisions of firms and households, but also have consequences for all asset prices (e.g. equities, bonds, exchange rates, housing), the cost and availability of credit, and the willingness of investors to take risks. For instance, in a stable context, persistently low interest rates may generate incentives for investors whose income depends on absolute returns (such as hedge fund managers and insurance companies) to invest in more risky assets. It may also make it more profitable to engage in carry trades and create currency or maturity mismatches. On the unintended side, the success in achieving macro stability may change the perception of agents about the riskiness of the environment and lead them to take more risky bets in the expectation that good times will continue indefinitely (or at least until the bet pays off). Also, the way to deal with bubbles in monetary policy in the US, applying the so-called Greenspan-put (Blinder and Reis, 2005), may have increased the chance of bubble formation (De Gregorio, 2011). On the other hand, micro and macro prudential regulatory tools, such as caps on credit growth or capital requirements have direct consequences on the cost and availability of credit, with the corresponding impact on investment, consumption, employment, and output, and the transmission channels of monetary policy.

However, the links between macro and financial stability as goals, as well as in the cross impact of their main tools, do not mean that they can be dealt with using a single type of instruments. While, as highlighted above, interest rate movements affect credit and asset prices, they are not the most appropriate for addressing financial stability concerns. For instance, raising the interest rate could in principle tame stock- or house-price growth in a closed economy, helping to prevent the formation of bubbles or bursting them at an early stage, before they threaten financial stability. But even if it were possible to identify a bubble from a fundamental-driven asset price increase, controlling asset price growth may require substantial increases in the interest rate, which will reduce credit supply and the prices of other assets that may or may not be part of the bubble, having negative consequences on output and inflation. In other words, the impact of such policy would be felt across the board in financial markets, on top of the detrimental impact it would have in the real economy by unnecessarily depressing output, employment and real investment.

In an open economy, such policy may be ineffective in controlling asset price growth and may even worsen the prospects for financial stability. I will tackle this further in my coming discussion of capital flows.

The same criticism applies to the use of regulation to achieve macro stability. It could be possible to use bank capital requirements to control inflation through the supply of credit and real activity, but it would raise the cost of capital and would hit especially hard bank-dependent firms and consumers while other borrowers would turn to other sources of financing. Furthermore, the relatively high-frequency changes that managing macro

conditions may require may create unnecessary policy-driven volatility in financial markets. All this indicates that it is more appropriate to tackle each goal with its own type of tool.

The separation of the instruments does not necessarily mean that the achievement of the goals can be separated operationally. Because of the dual causality of price and financial stability, monetary and financial policies should be explicitly coordinated. How this coordination is achieved varies across countries. At the very least, instances to monitor global risks to financial stability should exist. Central Banks should be involved in these monitoring instances (or should centralize the monitoring and supervision functions) because of their relative advantages in providing a macro view of the economy and their market contacts, due to the implementation of monetary operations. In addition regulation that could have systemic implications should be discussed in these instances.

In the case of Chile, the supervisory landmark is made up of three superintendencies (including banks). In this setting, coordination for systemic stability is achieved at two levels. On the one hand, the Central Bank is involved in several aspects of financial regulation directly by dictating regulation, or by participating in consultations with other agencies. On the other hand, the Central Bank participates in two coordination instances with the superintendents and finance ministry. The experience during the last years has shown that during periods of financial turmoil, mainly as result of external shocks, the Central Bank, the Finance Ministry, and the financial regulation agencies have indeed worked in close coordination, and, as the global financial crisis testifies, results have been positive. Moreover, in Chile, as banking supervision takes place outside the Central Bank it is key that it is not out of touch with the broader macro environment, so that financial system stance vis-à-vis the risks perceived in the macro-outlook is the natural first step in the supervisory process.

Recently, these instances have been formalized with the creation of a Financial Stability Council, headed by the Finance Minister. This council will, amongst other things, identify systemic risks and mitigation policies, and discuss the systemic impact of regulation.

Summing up, monetary and prudential policies are closely connected, first because macroeconomic and financial stability are closely interlinked, and second because instruments designed to achieve stability in each front have cross effects. This interconnection suggests the need for coordination of both types of policy. There are arguments, however, that call for specialization of some functions. So far, we have seen in Chile a banking supervisory agency that takes into consideration the macro-systemic aspects and a central bank concerned about both price and financial stability, arrangement that has permitted the necessary coordination in dealing with situations of financial distress.

The role of capital flows

In what follows, I will deal with the issue of capital flows as a source of financial instability within the framework of inflation targeting and flexible exchange rate. In particular, I am concerned with the interaction between price and financial stability when a small open economy, like Chile, is exposed to volatile capital flows. I have to start by emphasizing that in the current surge of capital inflows, Chile was not subject to massive inflows as was the case in the past. However, we cannot rule out this possibility, as prospects for advanced economies are very gloomy, while emerging markets offer very healthy returns to investment.

First, the long history of emerging markets booms and busts has shown us that frequently in this type of economies the building up of risks is associated with periods of capital bonanzas that fuel credit booms, asset bubbles, and exchange rate misalignments, and that frequently end in sudden stops and reversals of capital inflows that wreak havoc in the financial system and the real economy. The form that these flows take in many countries, short-term and foreign-currency based, further contributes to the building up of financial mismatches with potentially severe financial and macroeconomic consequences. Moreover, even before a

crisis occurs, capital surges have macroeconomic impacts through the expansions in activity resulting from credit growth, the factor reallocations that may be associated with persistent exchange rate movements, and the inflationary or deflationary pressures that may arise from the combination of exchange rate pass-through and aggregate demand expansions.

In cases where capital flows are not excessive and driven by fundamentals, the pursuit of macro and financial stability can be consistent with the inflation targeting framework and exchange rate flexibility, even though it may be accompanied by moderate exchange rate volatility and real exchange rate appreciation. Under these conditions, exchange rate flexibility helps the efficient reallocation of resources and thus becomes the first line of defense in avoiding the building up of risks. For example, the delayed appreciation of exchange rates to improved domestic conditions could be a factor that accelerates capital inflows to take advantage of artificially low asset prices. Therefore, a flexible macroeconomic framework geared to avoiding the buildup of overheating and that allows prompt asset price adjustment should be the main way to avoid excessive, especially speculative, capital inflows.

But even if flows are not “excessive”, agents may undertake exposures that could be privately efficient, such as currency and maturity mismatches, but result in aggregate vulnerabilities. In these situations of moderate and fundamental-driven capital flows, the prevention of financial vulnerabilities resulting from exchange rate volatility should be addressed through financial regulation and financial development. In fact, this has been the case of Chile, where the regulation of currency mismatches has prevented banks from excessive risk taking, and the deepening of the financial system has provided an increasing hedging capacity of the private sector. Nonetheless, this approach is not free of situations like those experienced in some emerging market economies like Mexico, Brazil and South Korea after the Lehmann bankruptcy, where the un-regulated corporate sector became systemically important after the misuse of hedge instruments increased dramatically their exposure to exchange-rate risk. In this regard, strict rules for addressing excessive risk-taking from financial intermediaries that fund these positions should be implemented.

On the other hand, when a country is subject to a sudden surge of capital inflows due to the incentives associated with temporary macroeconomic and financial conditions, or due to sudden changes in the international investors’ portfolio decisions, the inflation-targeting framework may be subject to important challenges. These challenges are particularly important when episodes of capital flows also result in inflationary pressures. Under these circumstances, dealing with inflationary risk through interest-rate policy may generate further incentives for capitals inflows, exacerbating exchange rate volatility and even creating an over-appreciated currency. From the point of view of macroeconomic policies, this requires to ensure that fiscal policy is not what is inducing capital inflows. All considered, the pursuit of macro and financial stability in the context of an inflation target regime may call for some exceptional departure from a fully floating exchange rate and a highly integrated international financial market. This can take different forms, as they may require the use of non-interest-rate policy, such as reserve requirements on bank deposits instead of the conventional interest rate policy; a temporary reduction of the degree of financial integration, through the use of some sort of capital controls; or it can allow some exchange rate intervention, through the accumulation of international reserves in order to avoid excessive exchange-rate appreciation. I will comment on each of these options next.

Using alternative monetary policy instruments to deal with inflationary pressures, such as reserve requirements on bank deposits, may prevent the undesired credit growth associated with capital inflows without affecting interest rate differentials. This seems to be the case of Turkey, Peru, Brazil, China and India, which have used extensive reserve requirements to deal with inflationary pressures in the current scenario. Other alternative is imposing a levy on foreign exchange borrowing by banks, as the one implemented in South Korea. However, this road is more appropriate when inflationary pressures come from excessive bank credit related to capital inflows than in other cases. When the surge in inflows comes not only from

the banking system, these measures may only create disintermediation and the allocation of excessive risk in other parts of the financial system.

A temporary reduction in the degree of financial integration may result in some “sand in the wheels” of capital movements and reduce the speed of capital inflows and outflows, allowing some further degree of monetary policy independency. This is behind the idea of using capital controls in some emerging market economies. Although even the IMF has supported the idea of using capital controls under extreme circumstances (Ostry et al., 2010), the empirical literature has found only partial evidence of its effectiveness.³

Finally, the validity of alternative tools to deal with episodes of unsustainable capital inflows may be particularly important when the concerns about real exchange rate volatility are relatively high. For instance, in export-based economies with imperfectly developed financial markets, exchange rate fluctuations and persistent episodes of appreciations may result in sustained damages to the productive structure. In such situations, targeted and limited exchange rate interventions may help reduce temporary pressures and at the same time build up international reserves, which act as precautionary savings and self-insurance against the potential consequences of a sudden capital outflow. This has been the route followed in Chile, since the concern about the external scenario has not been the rise in capital inflows, but rather the pressures on the exchange rate and the need to have an adequate level of international liquidity. Of course, this policy is not free of cost, since holding reserves is costly, and therefore its use is limited.⁴

It is difficult to recommend a particular strategy, since realities are different across countries, not only on the nature and impact of capital flows, but also on the overall macroeconomic policy framework and deepness and strengths of financial systems. However, the general principles discussed above should be taken into consideration.

Final remarks

The connections between price and financial stability suggest that the central banks should consider the cross effects of financial policies and monetary policy. In countries like Chile, the central bank has an explicit mandate on financial stability, and many other countries are moving in this direction as the interactions among policies have been recognized. But also, it is important to have a close and continuous coordination among all authorities with responsibilities on the financial system. This coordination becomes also more needed in times of crisis or extreme distress, since the central bank has to implement its LLR functions.

In normal times, the pursuit of price stability in a small open economy is not in contradiction with financial stability in the presence of capital flows. In this context, the potential vulnerabilities to high exchange rate volatility can be handled with prudential regulation. However, in episodes of capital surges that may affect macroeconomic and financial stability a close coordination of monetary policy and prudential policies is required.

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³ For the case of Chile, see Cowan and De Gregorio (2007), and for a review for a broad set of countries, see Magud et al. (2011).

⁴ For further discussion on exchange rate intervention in emerging market economies see De Gregorio (2010).

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