Rodrigo Vergara: The role of macroprudential policy and monetary policy in safeguarding financial stability

Speech by Mr Rodrigo Vergara, Governor of the Central Bank of Chile, at the First Conference "Banking Development, Stability and Sustainability", organised by the Chilean Superintendency of Banks and Financial Institutions and the Diego Portales University, Santiago, 5 November 2015.

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Good Morning. Before I get to the substance, I want to thank the Superintendency of Banks and Financial Institutions, in particular the Superintendent, Eric Parrado, for inviting me to this conference. On this occasion, I will focus my discussion on macroprudential and monetary policies and their role in safeguarding financial stability. I think that it is from this perspective that I can, as a representative of the Central Bank of Chile, offer a different and complementary view from that of the various representatives of the supervisory institutions gathered here today.

I will begin with a brief review of the definition of macroprudential policies and how these policies differ from monetary policy. Then I will discuss the tools and their effectiveness, plus some ongoing debates, particularly about the convenience of using monetary policy for macroprudential purposes, and the institutional organization of the macroprudential objective. Last but not least, I will touch on the Chilean experience with these policies.

1. What is a macroprudential policy?

The objective of safeguarding the stability of the financial and payment systems has a long history in central banking. Indeed, it can be argued that the role of lender of last resort, that allows central banks to reduce the likelihood of a financial crisis, existed before its more modern role of preserving price-level and macroeconomic stability. Thus, the call by some authors to central banks to consider financial stability as a mandate appears to be based on the experience of specific institutions and jurisdictions rather than on a historical and global perspective (Peek *et al.,* 2015).

However, the global financial crisis that began in 2008 highlighted the importance of the goal of financial stability and prompted an intense international debate on the need for a policy framework that would explicitly focus on this objective since its achievement would not be guaranteed by just macroeconomic stability and good prudential regulation and supervision. This new policy framework, aimed at preserving financial stability, is what has come to be known as macroprudential policy.

Although at first the purpose, tools and implementation of macroprudential policies were unclear, the heated debate of some years has gradually created some common beliefs and visions.

For example, significant consensus has been reached that the objective of macroprudential policy is to reduce the systemic risk resulting from credit being too procyclical and from interconnections between financial institutions, among other factors. It is also relatively accepted that actions taken under this scheme are designed to increase the resilience of the financial system and its participants when dealing with shocks, or the flip side of the coin, to reduce their vulnerabilities.

These definitions have also allowed to specify that macroprudential policy is different from monetary policy, since their objectives (price stability versus financial stability), as well as their emphasis and tools, are different. For instance, while monetary policy operates on the

basis of projections of the most likely scenarios for the economy over a given period, macroprudential policy operates based on tail risk scenarios that are therefore less frequent.

As for the tools they use, monetary policy is mainly conducted with just the benchmark interest rate, whereas macroprudential policy has been associated with many and varied tools, including limits to leverage or credit users' financial expenditure, limits to banks' foreign currency mismatches and the use of some sources of funding, application of reserve requirements and other restrictions to credit growth.

About the latter, it is worth noting that, while it is possible to motivate the need for macroprudential policies based on various externalities and market failures, so far its implementation has progressed in an ad-hoc and experimental manner, and the tools used are not necessarily aimed at resolving such externalities at their origin. Rather, its implementation has been motivated by the perception that the dynamics of some financial prices or ratios are indications of vulnerabilities in all or part of the financial system that could create problems upon the occurrence of one or more shocks. Therefore, many of the tools used are intended to directly restrict or limit the growth of certain financial ratios or aggregates. I will next review these tools in more detail.

2. Macroprudential tools and their use

As I mentioned earlier, in its quest to reduce the vulnerabilities of the financial system, macroprudential policy has made use of multiple tools in different countries. After several years in place, it has provided some evidence on its frequency of use and its effectiveness.

A host of different macroprudential policies have been identified across countries. A possible classification of them (based on Claessens *et al*., 2013) identifies four groups, according to the nature of their objectives. One group considers measures aimed at reducing vulnerability of borrowers, with caps to Loan-to-value and Debt-to-income chief among them. A second group covers measures that reduce –directly or indirectly – credit growth, where the instruments here are Caps on Credit Growth, Reserve Requirements, Dynamic Loan Loss Provisioning, and Countercyclical Capital Requirements. A third type of policy aims to limit foreign currency risks via Limits to Foreign Currency Lending; while a fourth type considers measures aimed at improving bank buffers, with the policy of Restrictions on Profit Redistribution being implemented in different latitudes.

Out of 48 countries considered in the study, 35 adopted some of the macroprudential policies identified. This amounts to 73%, a significant fraction. However, there is large concentration in few policies.

In effect, the most commonly adopted policies are those aimed at reducing the vulnerability of borrowers. For instance, the most widely used measure across countries is caps on Loan-to-value. They have been present in 24 out of 48 countries studied in the period that ranges from 2000 to 2010. Two more countries should be added that adopted similar policies (Debt-to-income caps). Overall, 54% of countries applied this type of measure.

The second most common objective of macroprudential policies adopted is reducing credit growth, with 14 out of 48 advanced and emerging countries (29% of the sample) having used one or more of the instruments in this group. Six countries opted for direct caps on credit growth, five for reserve requirements, nine for dynamic-loan loss provisioning, among which two also applied countercyclical capital requirements.

Finally, limiting foreign currency exposure was adopted by eight countries, while restrictions on profit distribution by six.

As mentioned before, there have been several studies assessing the impact of macroprudential policies in cross-country settings.[1] For the sake of brevity, I will focus on the results of variables that have been tested in at least five studies. Among these, Loan-to-value and Debt-to-income are found by a large majority of studies to have a significant impact on reducing credit growth, banking leverage and growth of Real Estate prices.

Similarly, but with a slightly smaller majority, Provisions – which includes Dynamic Provisions –, and Countercyclical Capital Buffers have a statistically significant impact on the aforementioned variables. Finally, Reserve Requirements and Caps on Credit (or its Growth) do not have the same empirical support as the other policies in attaining their intended goals.

3. Monetary policy and macroprudencial policy

Again, there is enough consensus that macroprudential policy is distinct from monetary policy, in the sense that they have different targets, methods and tools. Despite all the advances made, there is still valid debate ongoing about the connection between these two policies, focusing on whether monetary policy should be used for macroprudential purposes, and how the monetary authority should be involved in the implementation of macroprudential policy.

With regard to the first question, at the Central Bank of Chile we are rather skeptical about using the monetary policy rate as a financial stability tool, for several reasons.

Firstly, it is not clear that the interest rate is an effective tool for dealing with the overexpansion of the financial system during booms, nor for containing systemic events during busts. The interest rate is too broad an instrument to play this role, as it affects not only the financial system, but real businesses and households as well. Economic history is full of episodes in which a preemptive rise in rates had a negative economic effect on the real economy, but was not effective in controlling financial speculation and asset price inflation (the Great Depression being perhaps the most salient).

Nor is it clear that raising interest rates will necessary work in containing the expansion of the financial system: after all, a larger interest rate differential also attracts foreign capital. This force can be of particular importance in EMEs, often subject to carry-trade strategies which can lead to strong currency appreciations in countries that raise rates and create additional problems.

Secondly, credibility and transparency are key assets in the design and implementation of an inflation targeting regime. It is hard enough to communicate the logic behind MP decisions that seek solely to stabilize inflation around our stated target, given the complex interrelations between shocks, transmission mechanisms, and model uncertainty that central banks have to deal with. However, after long years of sticking to our framework and showing consistency between our actions and our inflation objective, we have built a reputation which is essential for isolating longer-term inflation expectations from transitory shocks (both external and internal), which as we all know facilitates the job of central banks enormously. We worry that adding to this framework a second objective of financial stability will most likely create an important degree of confusion and discretion, putting our transparency and credibility at risk.

Nonetheless, while we do not think that the policy rate should be part of a macroprudential framework, we cannot completely rule out its use with financial stability considerations when facing a critical situation.

The second question refers to the institutional framework for decision making regarding macroprudential policies. In this regard, a first issue relates to who should make decisions

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[1] Lim *et al.,* 2011; Tovar Mora *et al.,* 2012; Claessens *et al.,* 2013; Kuttner and Shim, 2013; Bruno *et al.,* 2014; Zhang and Zoli, 2014; Akinci and Rumsey, 2015; Cerutti *et al.,* 2015.

regarding macroprudential policies at a system-wide level. A second issue refers to the decision making process within the central bank in relation to the macroprudential tools within its mandate.

The aftermath of the financial crisis of 2008 has been widely active in institutional design around the world; particularly in countries were the crisis imposed large losses on taxpayers. There is a wide variety in the way decision making about macroprudential policies is organized, and to the extent to which decisions are mandates or recommendations.

In the United Kingdom, a specific committee – the Financial Policy Committee – was set at the Bank of England with the responsibility for delivering financial stability through macroprudential regulation. Decisions by this committee, which is chaired by the Governor of the Bank and where the Treasury has voice but not voting rights, are mandatory for the prudential regulator (the Bank of England).

In the case of the United States, the Financial Stability Oversight Council was formed to identify systemic risks and gaps in supervision and to recommend regulatory enhancements. It is chaired by the Treasury. The central bank (The Federal Reserve) is part of the Council alongside the heads of eight main federal regulatory agencies. The Council identifies systemically important financial institutions, which are supervised by the Federal Reserve, and recommends policies to its members.

In Chile, as in many other countries in the world, a Financial Stability Council was created that gathers together supervisors and the Central Bank. It is chaired by the Ministry of Finance. The Council assesses issues of Financial Stability and coordinates information sharing.

With regard to the decision making within the central bank in relation to its macroprudential instruments, one question is whether it would be necessary to set up a different body for making these decisions within the central bank. Arguments in favor of this idea are the different nature of expertise required by its members, and the potential tension that there might be among the objectives of monetary policy and those of financial stability. Arguments against are that, leaving aside potential tensions between policy objectives for a moment, both polices require coordination, and the most efficient way to do this is within the same decision making body.

Trying to find examples of central banks in a similar institutional setting to ours is not easy. Mainly it has got to be the case of independent central banks without banking supervision. The Bank of Japan and the Riksbank of Sweden are two cases that fit the requirements. In their case a single board takes both monetary and financial stability related decisions.

While both these aspects are still debated and different countries have found different arrangements based on their existing institutional setup, in most jurisdictions, the central bank plays a prominent role either directly or indirectly. This is not surprising considering that central banks, being at the core of a country's financial system and having a macro perspective, have a privileged position for visualizing systemic financial risks. Our existing framework recognizes the relevance of the central bank's role, and any further developments in our macroprudential framework also should.

4. Macroprudential policies in Chile

In Chile we have followed prudently from some distance how macroprudential policies have been implemented and used recently around the world. The main reason is pragmatic. Due to good macroeconomic management and adequate regulation and supervision, the Chilean financial system did not suffer a crisis or excessive stress at the height of the global financial crisis and subsequent years. We have not had either the perception of over-expanding credit. Specific developments in the housing market and bond issues abroad have been analyzed and addressed promptly. In that context, we have been lucky enough to be able to let the use of these policies to decant and wait for evidence to accumulate on the effectiveness of

various tools so we can conduct an educated analysis on how to progress in the implementation of this type of policies in our country.

Although one can still question conceptually the need to have a macroprudential framework in place from a cost-benefit perspective, I think it is important to recognize that the macroprudential agenda has gained ground in the international debate, and is increasingly a part of the framework of stabilization policies that are inherent to a modern, financially integrated economy.

Accordingly, there are reasons of substance and form that suggest that in the coming years we will need to take determined action and progress in the implementation of a macroprudential policy framework in Chile.

It is worth noting, however, that although we have monitored from a distance the widespread recent use of new tools with macroprudential purposes, both the conduct of economic policy in our country and its financial regulation and supervision already contain several macroprudential aspects.

To begin with, the Central Bank of Chile is constitutionally mandated to safeguard the stability of domestic and external payments. As there is a clear link between the payment system and the financial system, this mandate has been interpreted as extending to the stability of the financial system. The concern for financial stability is reflected not only on the regulations that the CBC is responsible for issuing, but also in a permanent monitoring and assessment of the Chilean financial system, its vulnerabilities and the risks it faces. This is done by analyzing many sources of information and the ongoing communications with the financial market's players and supervisors. Whenever the view emanating from this analysis so warrants, it is verified with the respective institutions and communicated to the competent supervisors.

Aside from the continuous monitoring by the CBC, the view of the Bank on the status and risks of the Chilean financial system is communicated twice a year in our Financial Stability Report (IEF), which is made available to the public and presented to Congress together with the Monetary Policy Report (IPoM). The Bank's communication of risks in the Financial Stability Report seeks to inform financial system participants of the Bank's vision regarding the main vulnerabilities and risks in the financial system from a forward-looking perspective and thus encourage them to take action to reduce those vulnerabilities.

This scheme has proved effective. For example, after following the accelerated development of post-crisis housing prices, in the December 2012 Financial Stability Report the Central Bank expressed its concern about this trend and the risk that it implied in a context of high leverage in the origination of credits. After this warning, we saw a fall in the LTV of new loans, especially noticeable in the significant drop in loans carrying an LTV of 100%.

A second macroprudential aspect is that our regulatory system contains several ingredients designed to limit the risks coming from major institutions and interconnections between financial intermediaries. The General Banking Law grants the Superintendent the possibility of making additional capital charges to institutions that, due to a merger, reach a significant market share, which the SBIF has set at 15% or more of the system's total loans. While this requirement does not apply where such participation is achieved organically, something that probably should be examined, it is a disincentive to the rapid growth of an institution that resembles charges to systemic banks that have been promoted in other jurisdictions as a partial solution to the "too big to fail" problem. In addition, the same General Banking Law sets limits on concentration by counterparty.

Furthermore, the regulation of credit risk provisions that the Superintendency of Banks has issued over time contains several macroprudential aspects. Perhaps the most explicit one has to do with the guidelines established for the creation of Additional Provisions which explicitly considers the role of macroeconomic fluctuations, explicitly stating that such provisions may be established to ward off the risk of unpredictable economic fluctuations that

may affect the macroeconomic environment or the situation of a specific economic sector, and that such provisions, and I quote from Spanish, "should anticipate situations of reversal of expansionary economic cycles that, going forward, could end up in a worsening of the conditions of the economic environment. Thus, such provisions should act as a countercyclical mechanism for accumulating additional provisions when conditions are good and releasing or allocating specific provisions when the times turn bad."

The regulations on required credit risk provisions also introduce some macroprudential aspects as they establish that these must be forward-looking and based on the expected probability of future repayment, not the current level of default or delay, and consider the sensitivity to the cycle of the industry where the debtor operates. In addition, regulations establish a minimum level of provisions that does not vary with the cycle and prevents them from falling excessively during favorable cycles of payment behavior. Finally, after the crises that hit emerging economies in the late 1990s, the law ruled that banks, when assessing the financial situation of the debtors, must consider their currency, term, and interest rate mismatches.

The Central Bank's legal framework also includes a number of powers that can be used to mitigate excessive credit cycles if deemed necessary. For one, the Central Bank Board has the authority to establish reserve requirements over foreign exchange operations.

This tool was used in the past (1990s) to control capital inflows to Chile and their impact on macro balances. However, our practical experience with the use of this tool in the 1990s taught us that its success in taming capital inflows is limited because it is always possible to find ways to circumvent the restrictions. Even though we do not consider it particularly attractive (since we have an open capital account) or efficient – and those are the reasons why we have not used it in the last 15 years – its use cannot be ruled out under exceptional circumstances.

Our powers as a financial regulator also include other dimensions that some countries have used as part of their prudential toolkit. For instance, the CBC determines the level of reserves to be kept by banks that take deposits from the public during an operating cycle (reserve requirement) and the interest yield of such resources. Several jurisdictions (e.g. China and Peru) have controlled credit growth and currency composition by imposing differentiated reserve requirements. Moreover, the CBC has the authority to regulate the relations that should exist between assets and liabilities of commercial banks, which have led to our standards of liquidity and market risks.

In a nutshell, our current regulatory and legal framework, as well as the actions of financial regulators and supervisors, including the Central Bank of Chile and the Superintendency of Banks and Financial Institutions, contains elements that are consistent with a financial stability and macroprudential approach, and grants powers that may be used with these purposes if deemed necessary.

5. Final thoughts

The recent financial crisis was a reminder, especially for the developed world, of how costly a financial crisis can be and how important it is to minimize their probability of occurrence and costs, by explicitly safeguarding financial stability. Although this concern has been present for quite some time in many central banks, including the Central Bank of Chile, the international debate has stressed the need to have a macroprudencial policy framework in place, with its own tools to tackle this objective. Countries have already begun to consider this framework as one of the pillars that sustain a good economic policy.

Having been spared a crisis or acute stress from a financial crisis since the early 1980s, and in particular after the latest crisis, has allowed us to watch this debate with prudence and pragmatism, without needing to take hasty policy measures. We already have some of them in place, but as the international debate on these policies is settling and the evidence about

the efficiency and costs of different tools accumulates, it will be important that we assess their efficiency and carefully study if we should introduce additional tools in our general framework.

Thank you.

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