Macroprudential policy in Brazil

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Abstract

This note discusses recent developments relating to Brazil's financial stability policy framework, including efforts to enhance its ability to anticipate vulnerabilities and prevent financial distress. The main sections are as follows: (i) institutional arrangements; (ii) the experience with macroprudential instruments; and (iii) ongoing initiatives to enhance the framework.

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Institutional arrangements

Over the past decades, the world has experienced a number of financial crises that highlighted the complexity and, at times, the fragility of the financial system. In response, Brazil has developed a comprehensive policy framework that combines financial stability policies and tools aimed at mitigating vulnerabilities and maintaining the soundness of the financial system. The framework includes microprudential supervision, macroprudential policy, crisis management, and resolution mechanisms.

The Central Bank of Brazil (BCB) and the National Monetary Council (CMN) play a prominent role in shaping macroprudential policies, given the bank-centric structure of the Brazilian financial system. The CMN is in charge of formulating monetary and credit policies, including regulations that are relevant to financial stability, while the BCB has executive power over the implementation of policies.

Other regulators involved in the formulation of proposals to the CMN are the Ministry of Finance (MoF), the Securities and Exchange Commission of Brazil (CVM), the Superintendence of Private Insurance (SUSEP) and the National Superintendence of Complementary Pension (PREVIC).

The Governor of the BCB is a member of the CMN and also Chairman of the Technical Commission for Money and Credit (COMOC), an interagency forum that debates policy proposals before tabling them to the CMN. Four Deputy Governors from the BCB also maintain a presence in COMOC.[3]

The BCB heavily influences the design and structure of macroprudential policy. Most policy instruments are designed by the BCB, which as Secretariat to the CMN, can set the Council's agenda. The BCB and CMN are jointly responsible for the management of macroprudential instruments including, among others: countercyclical capital buffers; sectoral and countercyclical capital requirements; margins and haircuts; loan-to-value (LTV) ratios; debt-to-income ratios; limits on currency mismatches; limits on short spot FX positions; and reserve requirement ratios.

Although the legal framework does not assign explicit responsibilities for financial stability to any specific agency, the BCB – acting on a de facto mandate – fulfills a supervisory role in overseeing and safeguarding, when necessary, the financial system.[4] Thus, it has developed robust mechanisms to monitor systemic risk and design macroprudential measures used to date (see section ii).

In 2011, the central bank set up a new Financial Stability Committee (COMEF) within the BCB to define strategies and guidelines to maintain financial stability, mitigate systemic risk, and serve as a focal point for discussions related to macroprudential policies. The BCB's Board of Governors convenes at COMEF

3 The President of the CVM; the Executive Secretary of the Ministry of Planning, Budget and Management; the Executive Secretary; the Treasury Secretary; and the Economic Policy Secretary of the MoF are also part of COMOC´s composition.

4 Since the legal framework does not assign explicit responsibility for financial stability to any institution, policy coordination is essential. In this sense, BCB, CVM, SUSEP and PREVIC are members of the Committee for the Regulation and Supervision of Financial, Securities, Insurance, and Complementary Pension (COREMEC) within the Ministry of Finance, with an advisory role and aims at promoting coordination among the four regulators.

meetings, held quarterly, to discuss the outlook for systemic risk and financial stability and to establish a timetable for the future course of action. During these meetings, a number of micro- and macroprudential issues are taken into account, including: overall domestic economic conditions; the international financial and economic outlook; the soundness of the Brazilian financial system from individual and aggregate standpoints; new research and surveys relating to credit conditions; regulatory issues that might impact financial stability; and other relevant, timely topics. This combination of inputs allows for a system-wide view of emerging vulnerabilities and, as required, the adoption of well-considered prudential measures.

COMEF's Secretariat is responsible for preparing the committee's agenda. Prior to each COMEF meeting, strategic and technical staff from teams with micro- and macroprudential responsibilities debate extensively to ensure a consistent and holistic diagnosis of the Brazilian financial system.

These preparatory meetings are intended to summarise the current and prospective state of financial stability, and establish policy recommendations and themes to be discussed during COMEF meetings. Micro- and macroprudential policies benefits greatly from the high degree of granularity and quality of data sets made available to the BCB, particularly with respect to identifying emerging vulnerabilities and formulating appropriate responses.

Coordination

In 2006, a new committee was created to facilitate coordination among national financial regulators. The Committee for the Regulation and Supervision of Financial, Securities, Insurance and Complementary Pension Markets (COREMEC) is composed of the BCB, CVM, SUSEP, and PREVIC, under a rotating presidency. It is a consultative committee, responsible for information-sharing and advising on multi-agency regulatory and supervisory actions.

In addition, the BCB has signed agreements with 15 Brazilian authorities, with the goals of exchanging information and coordinating actions. Several memoranda of understanding are in place for information-sharing between the BCB and other regulatory and supervisory agencies.

These arrangements improved coordination among national regulators actions and have been important in shaping policy implementation. A comprehensive collection of data, strong analytical capabilities and the collaborative mechanisms in place enable the BCB to identify systemic risks that emerge in and outside its regulatory perimeter, and act accordingly.

However, as the system becomes more complex, and systemic risks more intricate and difficult to monitor, effective coordination and formal leadership become even more crucial elements of the institutional framework. Thus, a formal assignment of responsibilities for financial stability and macroprudential policy would reduce uncertainty, and enhance coordination and accountability.

Communication

At present, the BCB communicates COMEF's current and forward-looking assessment of risks to financial stability through its semi-annual *Financial Stability Report* (FSR) and at a press conference thereafter. The BCB Governor also attends quarterly hearings of the Senate Committee on Economic Affairs and semi-annual sessions of the Joint Budget Committee. The BCB's Deputy Governors are frequently invited to speak about financial stability issues during congressional committee meetings. BCB Board members also make public speeches to address relevant issues.

In January 2017, COMEF took over the primary responsibility for setting the countercyclical capital buffer level, which is disclosed to the markets after every quarterly COMEF meeting. This move consolidates COMEF´s position as the principal forum for financial stability oversight and macroprudential policy decisions. It also helps guarantee regular and consistent communication throughout the credit cycle, avoiding surprises and helping to better manage expectations. In this regard, communication is itself increasingly functioning as a macroprudential policy tool (see section iii).

Interaction with other policies

Brazil's existing institutional framework weaves together microprudential, macroprudential, fiscal, and monetary policies. Cases where potential conflicts arise as a result of interconnected policies (particularly between fiscal and monetary policies), are resolved within the CMN. However, some fiscal policy-related issues are resolved within a broader forum (that goes beyond the CMN mandate).

The BCB has adopted a separation principle whereby monetary policy targets price stability and prudential policies focus on financial stability. In addition to COMEF (which takes into account its interactions with other public policies, when necessary), the BCB has established the Monetary Policy Committee (COPOM). The two committees have separate mandates but the same composition. The BCB's Board of Governors convenes separately and periodically in COPOM meetings when the Board has to decide on the target for the basic interest rate. This arrangement allows for the smooth coordination of policy actions and issues. In addition, monetary policy is taken into consideration by COMEF when discussing financial stability issues, proposing action plans and calibrating macroprudential instruments.

Microprudential supervision, when implemented effectively, can help prevent the need for macroprudential policy actions. In this respect, high standards of risk management and adequate transparency within financial institutions are essential. Tensions may arise when the conduct of prudential supervision lacks a macroprudential perspective, given that the soundness of individual institutions does not necessarily guarantee the soundness of the system as a whole. A natural tension occurs along the cycle. For example, from a macroprudential point of view, countercyclical buffers may need to be activated during periods of strong credit growth and relaxed during periods of weaker growth, which is not necessarily consistent with microprudential supervision. Another example is the intertwining of prudential supervision and macroprudential policy during the resolution of financial institutions. Early resolution is less consequential in macroprudential terms but microprudential supervisors – even when strong – may have incentives to engage in forbearance.

These challenges can be mitigated by coordination among the authorities involved in prudential supervision, macroprudential policy, and crisis monitoring and resolution. An integrated governance framework that allows for information-sharing, strong dialogue, and joint analysis and decision-making among authorities can be useful.

As mentioned earlier, COPOM and COMEF have distinct objectives, and separate processes and deliverables. On the one hand, COPOM establishes the basic interest rate, communicates its decision and releases the minutes of its meetings. On the other hand, COMEF has a more medium- to long-term perspective due to the nature of prudential issues and the longer window of time involved in seeing the effects of prudential actions. Since the BCB's Governor and Deputy Governors are members of both committees, consensus formation is less complicated. The membership overlap between the committees provides an effective conflict avoidance mechanism[5].

During COMEF meetings, the primary focus is on macroprudential themes. However, microprudential policies are occasionally addressed, including those related to vulnerabilities arising from the credit exposures or business models of specific institutions.

Micro- and macroprudential supervisors participate in the process of elaborating key messages pertaining to the domestic financial system. This process considers recent financial developments and prospective analyses about sector/system-wide developments in earnings, balance sheet trends, credit, liquidity and market risks, and threats that might stem from the real sector or the global economy. The combined scope of micro- and macroprudential developments allows for a system-wide view of nascent vulnerabilities. COMEF also receives presentations from BCB internal staff on potential vulnerabilities to financial stability, for example, from external shocks or from the real estate sector.

Macroprudential policy in practice

Banking supervision at the BCB is well regarded and, having adopted international standards, the BCB applies a full range of microprudential instruments to achieve its supervisory goals.

Brazil is also an early adopter of macroprudential instruments, having used them at the level of the BCB, the CMN and the MoF.

As noticeable in advanced and emerging economies alike (Claessens, 2014), the BCB actively uses prudential or monetary instruments with macroprudential purposes, either directly or through CMN policymaking. These instruments – aimed at addressing conjunctural risks and bolstering the resilience of the financial system – include the use of capital and reserve requirements, as well as maturity and position limits applied to the banking system under the BCB's supervision.

Selected macroprudential instruments used in Brazil

Auto loans

The BCB's handling of rapid growth in the auto loan market during 2009-2010 is one example of how proper monitoring can help detecting the buildup of vulnerabilities and prompt subsequent policy action (Afanasieff et al 2015).

[5] On the downside, overlapping membership may favour groupthink.

The steep expansion of car credit was accompanied by an increase in loan maturities and LTV, and a simultaneous reduction of interest rate spreads. This raised concerns about the soundness of those assets. Supervisory monitoring suggested that the risk of such an unbalanced expansion could lead to an increase in the delinquency rate and cause bank losses; thus the BCB opted to raise the regulatory capital requirement for auto loans with certain combinations of long maturities and high LTVs. After that, the ratio of total credit to targeted loans decreased sharply to sounder levels, while the ratio of total credit to untargeted auto loans increased moderately. On review, BCB analysis confirmed that the quality of the targeted assets was low. There was a significant expansion of the share of non-performing loans in the targeted loans contracted before the prudential measures came into force. Thus, the measure prevented further bank losses.

The BCB has adopted measures to prevent the build-up of vulnerabilities in other targeted areas as well. Increases in capital requirements on consumer credit and on minimum payment limits on credit cards were successful in changing the composition of consumer credit and in fostering a more prudent handling of credit card debts by households. The measures were extended to personal credit and payroll-deducted loan portfolios.

Reserve requirements

Immediately following the disruption resulting from the Great Financial Crisis (GFC), the BCB took action to ease liquidity conditions in the financial system.

The GFC's first impact was detected in the FX market. Carry trade transactions were interrupted and the Brazilian real depreciated swiftly despite the high interest rate differentials relative to the main funding currencies. The higher volatility of the exchange rate led many participants to face increased margin calls, worsening their liquidity positions. Some liquidity indicators showed that smaller banks specialising in export financing were suddenly facing shortfalls in foreign currency liquidity. Offshore funding became more expensive. As confidence deteriorated, the BCB also focused on withdrawals made by institutional investors in those banks.

To foster a better distribution of liquidity among banks, the BCB reduced or even eliminated reserve requirements for the entities most affected by liquidity shortages, with larger reductions for banks that provided liquidity to illiquid small- and medium-size banks.

Reserve requirements were also reduced for large banks that chose to pay their contributions to the deposit insurance fund ahead of the due date, increasing its liquid assets. That action, combined with other specific measures, enhanced the fund's role as a liquidity provider to financial institutions. The measure remained in place from March to December 2010 and helped to manage the credit cycle in a countercyclical way.

Finally, reserve requirements were also used to counteract large and abrupt capital inflows. For instance, in 2011, due to concerns that banks or, more broadly, the local currency market, could face disruption following a shock to the exchange rate, the BCB imposed a 60% unremunerated reserve requirement on banks' short FX positions in the spot market exceeding $3 billion or in their Tier 1 capital level, whichever was lower.

FX swaps

The use of FX swaps in Brazil during challenging economic times for emerging market economies (EMEs) provided market participants with the means to hedge against a sharp depreciation of the real, halting feedback loops. In a currency devaluation scenario, foreign investors and companies would benefit from the possibility of hedging their exposure to exchange rate risk, a better option than buying foreign currency outright.

The BCB decided to supply FX swap contracts to reduce volatility, to offer market agents FX hedges, and to provide more liquidity to the onshore FX market. A long position in such contracts is equivalent to selling USD and investing the proceeds in real-denominated securities. Analogously, a short position corresponds to financing a US dollar position at the cost of real-denominated interest rates. The BCB assumed the long position, effectively providing counterparties with protection in case of a devaluation of the real. This hedge eliminated the risk that foreign investors and Brazilian companies with foreign currency borrowings would have otherwise faced.

Without the BCB's intervention, the devaluation pressure might have resulted in foreign investors fleeing the country, while Brazilian companies with foreign currency borrowings would have had to scale down their operations and pay back their loans in advance. Hence, the devaluation trend would have reinforced itself at the expense of economic output and likely led to financial instability.

The measure was effective in reducing volatility in FX markets. Importantly, the BCB was able to perform interventions without tapping into the country's international reserves, unlike in other EMEs where such interventions ate into reserves.

Leakages and spillover effects

Assessing potential leakages when designing macroprudential measures is not straightforward. Take, as an example, the LTV measure for auto loans: in December 2010, the BCB doubled the risk weight applied on new car loans with long maturities and high LTV ratios (to 150%). The measure was successful in reining in the origination of auto loans and, even after the measure's withdrawal in November 2011, the share of long-maturity and high LTV loans continued to decrease and reached 50% in December 2012.

In this case, all banks in Brazil were automatically subject to the LTV-dependent risk weights and the targeted portfolio was highly concentrated in the banking sector without easy substitutes. Down-streamed restrictions also affected banks operating abroad given the applicable consolidation rules.

Spillover effects are another aspect to take into account, as it influences the convenience and design of macroprudential measures. In May 2013, the so-called taper tantrum event led to a sharp downward pressure on real (as was the case in for many other EME currencies) (Pereira Da Silva and Harris, 2012). The spillover effect from this exchange rate movement caused financial stability concerns and, as mentioned above, the BCB acted accordingly.

FX swap contracts have several advantages relative to other possible FX intervention tools. FX swaps are standardised, exchange-traded contracts, with credit risk mitigated by the use of a central clearing counterparty. In addition, the amount and pricing of swap-related interventions are transparent, because the swaps are market-traded. Finally, unlike FX market intervention instruments in other jurisdictions, the swaps are settled in local currency. Therefore, they do not require the BCB to dip into its foreign currency reserves.

The main criticisms raised against the use of FX swaps were the BCB's exposure to this instrument (with a notional amount of over $100 billion at the peak, which declined to $26 billion by the end of 2016) and the fiscal costs of an eventual devaluation of the real. The notional amount, while seemingly large, was offset by a threefold increase in FX reserves. Thus, while FX swaps could have carried a significant fiscal cost if the real had depreciated, this cost had to be assessed together with: (i) the growth of FX reserves in domestic currency terms; and (ii) the implicit societal cost of a sharp currency depreciation in an occasionally dysfunctional FX market (and the ensuing financial instability).

Ongoing improvements

Responsibilities and coordination

As previously mentioned, the Brazilian legal framework does not assign explicit responsibilities for financial stability to any specific agency. However, the BCB has been playing the lead role in financial stability oversight. In practical terms, the comprehensive data collection, the analytical capabilities in place and the collaborative mechanisms provided by, for instance, COREMEC, allows the BCB to identify systemic risks that emerge in and outside its regulatory perimeter, and act accordingly.

Due to the bank-centric nature of the Brazilian financial system and the leading role of the BCB, no major deficiencies have been identified to date. However, a formal assignment of responsibility for financial stability and macroprudential policy would help reduce uncertainty, and enhance coordination and accountability.

As the complexity of the system grows, and the likelihood of systemic risks emerging elsewhere increases, effective coordination will become an even more crucial element of the institutional framework (International Monetary Fund 2013). For that reason, Brazilian regulators are frequently assessing gaps and opportunities for improvements, be it on mandate, powers, information-sharing, coordination, communication etc.

A prominent characteristic of macroprudential policy is that its systemic perspective requires the macroprudential authorities to have access to a wide range of instruments and to make credible recommendations, depending on the nature of the emerging risks. The authorities in Brazil are attentive to the opportunities available to officially delegate responsibilities, so as to enhance coordination and timely actions, and to improve accountability for the appropriate use of the instruments.

In addition, the BCB and other financial regulators continually work to strengthen the data sharing arrangements in place. These arrangements should be comprehensive – covering all types of existing or potential data – and should include specific procedures for the sharing of access to confidential data to ensure that information deemed essential is effectively shared by the relevant agencies.

Communication strategy on financial stability

Communication strategy, with a focus on addressing financial stability, has two primary purposes: (i) to induce favourable policy responses by effectively disclosing decisions taken and their respective objectives; and (ii) to make policymakers accountable for their actions and for the process by which decisions are taken (IMF, FSB and BIS, 2016). Although necessary, communication is a particularly challenging element of macroprudential frameworks for the following reasons:

- the broad scope of frameworks;
- the long and diverse list of potential instruments;
- the difficulties in defining the relevant objectives (let alone observing how specific actions contribute to attaining them);
- the difficulties in quantifying financial stability, which makes the assessment of macroprudential policy more difficult; and
- the lack of a clear cost/benefit timeframe – i.e. costs are often immediate and visible, while the benefits of macroprudential policies often cannot be identified in real time and may only be apparent in retrospect (and even then with uncertainty).

The communication regarding financial stability presents additional challenges. As a matter of principle, more transparency is generally better than less; but a balance between what should be communicated and what may need to remain undisclosed is necessary. In fact, unsuitable communication can have severe unintended consequences. For instance, communication might be less effective when made prior to already expected financial distress, given that agents tend to stick to their profitability incentives and exacerbate risk perceptions, leading to unfavourable results.

Communication strategy also plays an important role in crises, particularly when public support to banks through macroprudential measures is necessary. As messages conveyed to the public may be misunderstood, it should be made clear that such measures are exceptional, and that preventing banks from collapsing is critical to avoiding systemic problems. Banks should also be convinced that these measures are exceptional to avoid moral hazard.

In this context, having an effective communication strategy is key. This is particularly the case in today's increasingly complex financial system, in which more information needs to be communicated, albeit with clarity and brevity to ensure that the message is effective. Such effective communication requires disclosing regulators' definition of financial stability, policy objectives and stance. If the message is clear and credible, policy actions in good times may be less intense. Simply announcing the concern or the intent to act may induce favourable responses. Engagement with relevant stakeholders affected by potential measures – together with public hearings and briefing sessions – should enhance agents' understanding of the rationale for policies.

With respect to the timing of publicised risk warnings, the communication strategy should carefully analyse the various possible outcomes of statements prior to their release. Risk warnings are typically most beneficial in the early phase of a financial cycle. Unfortunately, it is precisely during that phase – when tangible risks are not yet visible – that such warnings are likely to be ignored, questioned or even criticised. The authorities also need to be careful about inducing self-fulfilling prophecies that do more harm than good. A warning from the regulatory agency expressing concerns about the fragility of bank funding models, for instance, could lead to a bank run, causing the risk to actually materialise.

On the positive side, communicating at a relatively early stage – i.e. before banks get too reliant on fragile funding – may give them time to shift to more stable funding sources. That said, communicating vulnerabilities at a later stage in the cycle, i.e. just before financial distress sets in, could be counterproductive. To deal with these obstacles, it is important to make communication regular and consistent throughout the entire credit cycle.

The BCB's FSR is a suitable vehicle for such communication, though the strategy should extend to all forms of communication concerning financial stability policies. As the main channel for communication, the FSR is constantly being revised and refined to better fulfill its objective.

In addition, other communication channels that are aligned with the FSR – including letters of intent, press releases that follow the adoption of macroprudential measures, and specific statements and speeches by Board members – are increasingly being used as part of the BCB's overall communication strategy.

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