Macroprudential frameworks, implementation and relationships with other policies

South African Reserve Bank

Abstract

This note outlines the South African Reserve Bank's proposed framework for achieving its new financial stability mandate. It sets out the institutional structure, the focus and objectives of macroprudential policy and the decision-making process to be applied. It identifies and describes three important stages in the process of implementing macroprudential policy, namely completing a systemic risk assessment, building a case for macroprudential intervention, and selecting and applying the macroprudential instruments.

Keywords: financial stability, macroprudential policy, systemic risk

JEL classification: E58, E60, G18, G28

Introduction

In line with a growing consensus among jurisdictions globally on the need for a stronger emphasis on systemic risk mitigation in the financial sector, South Africa launched a formal review of its financial sector regulatory framework in 2007.[1] This culminated in the publication of the Financial Sector Regulation Bill (FSR Bill), which is expected to be promulgated in 2017.[2] The FSR Bill assigns primary responsibility to the South African Reserve Bank (SARB) for protecting and enhancing financial stability, and seeks to ensure cooperation between supervisory bodies.

South Africa has had limited experience in implementing macroprudential measures, given the stage of development of the new framework and the current phase of the financial cycle. This note outlines the SARB's approach to executing its financial stability policy mandate, focusing on the institutional structure, the goals of macroprudential policy and the decision-making process to be applied when activating macroprudential instruments.

Institutional framework: who is in charge of macroprudential measures?

The FSR Bill confers on the SARB the mandate to protect and enhance financial stability.[3] The SARB is tasked with monitoring the financial system for potential systemic risks. Moreover, if a systemic event is imminent or has occurred, the SARB is tasked with maintaining and restoring stability.[4] The SARB must take steps to mitigate risks to financial stability, including advising financial sector regulators and any other organ of the state on the policies to be implemented to mitigate these risks. The SARB must also, at least every six months, publish and table in Parliament

1 In February 2010, the Minister of Finance reaffirmed the role of the South African Reserve Bank in overseeing and maintaining financial stability in a letter to the Governor of the SARB. A year later, the National Treasury published a policy paper entitled "A safer financial sector to serve South Africa better", which stated that "the Reserve Bank is best placed to play the role of a macroprudential supervisor". This was followed by a paper in 2013 entitled "Implementing a twin peaks model of financial regulation in South Africa". The National Treasury has subsequently published several drafts of the FSR Bill since 2013.

2 The FSR Bill was tabled in Parliament on 27 October 2015. Subsequent to this, the Standing Committee on Finance held a series of public hearings and invited public submissions on the FSR Bill. On 21 July 2016, the National Treasury published a comprehensive comments' matrix that responded to comments submitted, as well as a further draft of the FSR Bill that reflected proposed drafting changes. Following further comments by the Committee and stakeholders, a new comments matrix and revised draft of the FSR Bill were published on 21 October 2016. References here refer to this most recent draft.

3 The definition of financial stability as presented in this paper stresses the importance of resilience and confidence, as discussed by Tucker (2011).

4 "A systemic event means an event or circumstance, including one that occurs or arises outside the Republic, that may reasonably be expected to have a substantial adverse effect on the financial system or on economic activity in the Republic, including an event or circumstance that leads to a loss of confidence that operators of, or participants in, payment systems, settlement systems or financial markets, or financial institutions, are able to continue to provide financial products or financial services" (extract from Chapter 1 of FSR Bill (2016)).

a financial stability review that identifies and assesses risks to financial stability, and provides an overview of subsequent steps taken by it and other financial sector regulators to address the risks identified.

The FSR Bill seeks to ensure cooperation, collaboration, coordination and consistency between the Financial Sector Conduct Authority, the Prudential Authority, the National Credit Regulator, the SARB and other organs of the state supporting financial stability. The Governor of the SARB may direct financial sector regulators, in writing, to provide the SARB with information and to assist the SARB in meeting its financial stability responsibilities by acting in accordance with the directive when exercising their powers.[5]

The FSR Bill also provides for the establishment of an advisory committee, the Financial Stability Oversight Committee (FSOC), to be chaired by the Governor of the SARB, and to include member representatives from the SARB, the National Treasury and financial regulators.[6] The FSOC will meet at least every six months. Its primary objectives are to support the SARB when it performs its functions in relation to financial stability, and to facilitate cooperation and coordination of actions among financial sector regulators and the SARB in matters pertaining to financial stability.

The FSOC will serve as a forum for representatives of the SARB and the financial sector regulators to discuss their activities in pursuit of financial stability. It will also make recommendations to the SARB on the designation of systemically important financial institutions (SIFIs), and advise the Minister of Finance and the SARB on steps to be taken to promote and maintain financial stability, as well as on matters relating to crisis management and prevention. In addition, the FSOC will make recommendations to other organs of the state regarding appropriate steps for them to take to assist in promoting, protecting, or maintaining financial stability, or managing or preventing risks to financial stability.

Within the SARB, macroprudential policy formulation in pursuit of the financial stability mandate will be the responsibility of the Financial Stability Committee (FSC). The FSC was established in 2000 and was recently restructured in accordance with the SARB's enhanced mandate. The FSC has overlapping membership with the Monetary Policy Committee (MPC) of the SARB, which facilitates communication between the committees, and the coordination of macroprudential and monetary policies.[7] In addition to MPC members, the FSC also includes senior SARB officials who represent relevant areas of the Bank. The FSC meets quarterly, or as frequently as required. Once the FSR Bill is promulgated, the FSC will issue a press statement following its meeting.

5 See section 18 of the FSR Bill (2016).

6 In terms of the draft Bill, the FSOC will consist of the following members: the Governor of the SARB; the Deputy Governor of the SARB responsible for financial stability matters; the Chief Executive Officer of the Prudential Authority; the Commissioner of the Financial Sector Conduct Authority; the Chief Executive Officer of the National Credit Regulator; the Director-General of the National Treasury; the Director of the Financial Intelligence Centre; and a maximum of three additional persons appointed by the Governor.

7 See, for example, the discussion in Kohn (2015).

What are the goals of macroprudential policy?

Macroprudential policy has two broad goals that are not mutually exclusive: first, to strengthen the resilience of the financial system to economic downturns and other adverse aggregate shocks; and second, to lean against the financial cycle and prevent the buildup of excessive financial risks, and reduce the likelihood or extent of a financial crisis. For macroprudential policy to be successful intermediate policy objectives must be identified, such as:

- preventing excessive[8] growth of credit, asset prices and leverage;
- reining in excessive lending and funding maturity mismatches;
- limiting direct and indirect concentrations of exposure to the same markets, products and institutions; and
- reducing moral hazard by avoiding situations where financial institutions increase their exposure to risk in the expectation that the government will bail them out in the event of an adverse outcome.

The focus of the macroprudential policy framework presented here is on the prevention of risk build-up and its propagation,[9] while the framework for the resolution of financial institutions is presented elsewhere (National Treasury, SARB and FSB (2015)). A sound macroprudential policy increases the resilience of the financial system against adverse aggregate shocks by establishing buffers that help to cushion the impact of such shocks on financial institutions while sustaining the provision of financial services and credit to the economy. It focuses on the interactions between financial institutions, infrastructure, markets and the real economy. By contrast, microprudential policy assesses the risks individual institutions are exposed to without taking into account the state of the financial system and the economy.

Macroprudential policy focuses on the risks that are generated endogenously. It aims to mitigate the build-up of systemic risks over time (cyclical dimension) by limiting the procyclical feedback effects that can emerge between excessive credit growth and asset prices and by discouraging unsustainable increases in leverage and risky funding strategies. Macroprudential policy tools are also aimed at holding back the build-up of systemic vulnerabilities within the financial system (structural dimension) by reducing concentration risks that arise from common exposures or direct balance sheet linkages. It is important for macroprudential policy to keep its focus on limiting systemic risks and vulnerabilities, and not on broader objectives.

[8] The Bank will use its discretion in deciding what it considers to be excessive growth. In the case of credit, a sustained period above the trend growth rate would be a starting point. With respect to asset prices, different valuation metrics will be used to assess whether growth rates are significantly above their historic average.

[9] See the discussion in Goodhart and Perotti (2013).

How are decisions concerning macroprudential policy made?

Three key steps can be identified in the policy process leading up to the activation of macroprudential tools: (i) completing a systemic risk assessment; (ii) building the case and establishing the motivation for policy intervention; and (iii) choosing and implementing the macroprudential instruments.

Systemic risk assessment

The first step requires monitoring of the financial system and completion of a systemic risk assessment. The monitoring efforts focus on vulnerabilities that facilitate the propagation of adverse shocks rather than on the shocks themselves (eg Adrian et al (2015) and Bernanke (2013)), and comprise a risk analysis of SIFIs, as well as of so-called "shadow banks", asset markets and the non-financial sector. The risk assessment uses indicators that confirm the build-up of imbalances in the financial system.

The following are examples of indicators used for assessing systemic risk:

- Macroeconomic: assessment and monitoring of the level of leverage and general credit market conditions.
- Financial sector: measures related to maturity and currency mismatches that point to funding vulnerabilities in the financial sector. Changes to lending standards are assessed to determine the level of risk appetite. The resilience of the financial sector to severe adverse market conditions is also assessed through periodic stress tests.
- Market-based: assessment of asset market conditions using residential and commercial property prices and stock valuations in equity markets. Government and corporate bond spreads, credit default swap spreads and measures of risk premiums could be used to assess funding and credit market conditions.
- Qualitative information: assessment of data such as credit underwriting standards, asset quality and credit conditions.

According to the Bank for International Settlements' guidelines,[10] such indicators should provide useful signals relating to the build-up of vulnerabilities ahead of a crisis. However, they are imperfect in that they could also issue false signals. Therefore, the indicators should be interpreted with caution when used for policy formulation. The set of indicators used by the SARB may vary over time as circumstances dictate. An analysis of these indicators is published in the biannual *Financial Stability Review* of the SARB.

The case for macroprudential policy

Following a systemic risk assessment, the next step is to determine whether there is a case for policy intervention. The SARB would need to satisfy itself that, even with

10 Bank for International Settlements (2012).

appropriate prudential supervision and monetary policy, the level of risk and its distribution across the financial system could intensify if it remained unattended. In this regard, an assessment of the suitability of monetary and/or microprudential policy would precede any decision on the need for macroprudential intervention.

Price stability and financial stability are mutually dependent policy objectives. Price stability is a necessary condition for financial stability, but it is not sufficient by itself. The effectiveness of monetary policy in addressing financial vulnerabilities arising from leverage and maturity transformation is not well established; prudential or supervisory action is likely to be more targeted.. The promotion of financial stability by means of interest rate changes may increase the volatility of inflation and employment, more so if high interest rates are required. There is evidence that low interest rates contribute to higher leverage and increased reliance on short-term funding. Though higher interest rates may mitigate such vulnerabilities, prudential limits on leverage and short-term funding, as well as tighter underwriting standards are likely to be a better targeted and more effective method for addressing them.[11]

In building the case for macroprudential policy intervention, it is important to conduct a cost-benefit analysis and to weigh the possible trade-offs involved in failing to anticipate a crisis that is building up and implementing measures that are not needed (Freixas et al (2015)). While macroprudential tools have costs, so too does inaction (the Great Financial Crisis serves as a reminder of this). Timing policy action is also important. A belated policy intervention is often ineffective as there is insufficient time for measures to take effect, resulting in a further deterioration of financial conditions. Similarly, a badly timed deactivation of the tools could lead to undesirable outcomes, with a deleterious policy signal effect to markets and the potential to amplify procyclicality.

Selection and deployment of macroprudential instruments

Macroprudential policy tools are intended to target the sources of systemic risk, such as liquidity and maturity mismatches, leverage and interconnectedness. Although the discussion here is focused mainly on the banking sector, it is clear that systemic vulnerabilities could also arise from non-bank SIFIs, the emerging 'shadow banking' sector, asset markets or the non-financial corporate sector. The macroprudential policy framework would have to consider this. It is important to confirm the appropriateness of tools before implementing them and to evaluate whether it is feasible to assess their possible impact. Each instrument should be related to an intermediate policy target(s) in order to track its success, or lack thereof, in reducing either procyclical or structural risks. The purpose of such instruments is to respond to the financial cycle. During an upward phase of the financial cycle, the macroeconomic backdrop should be able to support a tightening in financial conditions if a vulnerability is identified. Macroprudential instruments could be applied with a view to targeting a specific sector. The successful implementation of macroprudential instruments will depend on the ability to identify and assess systemic vulnerabilities, and on an appropriate and well-timed

[11] Speech by Federal Reserve Chair, Janet Yellen (2014).

intervention. Poor implementation timing could have undesirable and unintended consequences.

An important subset of macroprudential instruments is microprudential tools that target specific sectors of the economy with a macroprudential focus. The generic design of some of these instruments stems from supervisory and regulatory agreements crafted at the multilateral level. One example is the Basel III countercyclical capital buffer that should be introduced when the economy is in an upswing (and the ratio of credit to GDP is above its long-term trend) and could be de-activated when the cycle turns. This instrument, designed at the multilateral level, is susceptible to being adapted to local conditions and applied to the domestic banking sector using national credit growth and GDP data.[12]

The selection of macroprudential instruments and their implementation will be guided by three main criteria, namely effectiveness, efficiency and transparency.[13] First, effective implementation of macroprudential instruments demands a focus on instruments with well-understood transmission mechanisms. Despite idiosyncratic elements and still limited and preliminary econometric evidence on their effectiveness,[14] a better understanding of the transmission mechanisms could be gained from other countries' experiences. .[15] The phase of the financial cycle may also be relevant in selecting macroprudential instruments as policy instruments may well work differently in different phases. Some research shows that macroprudential tools may be less effective in their response to a downturn in the wake of an adverse event than when mitigating risks during upswings (eg Claessens et al (2014)). Decision-making under macroprudential policy is largely an unchartered territory but its effectiveness should improve over time.

Second, efficiency is to be assessed against the instrument's ability to avoid any unintended consequences and adverse effects. The effects of credit flows and economic activity are important in this regard. An ex post assessment based solely on the implementation of a single policy instrument could encounter difficulties, as episodes of financial instability do not occur as frequently as other events, eg price instability. The list of instruments available will probably evolve over time as new events develop and experience is gained.

Third, policy-making, decision-making and implementation actions demand effective transparency. In selecting the instruments, the focus should be on instruments with applications characterised by transparency, simplicity and predictability. This would enhance the understanding, communication and operation of macroprudential policies.

12 See Schoenmaker and Wierts (2011).

13 Bank for International Settlements (2012).

14 See the survey by Galati and Moessner (2013).

15 See Lim et al (2011) and Cerutti et al (2015 and 2016).

What is the relationship between macroprudential and other policies?

Coordinating policies that have a bearing on financial stability is challenging. Macroprudential policy clearly overlaps and interacts with monetary policy. Both are aimed at economic stability and maximising sustained long-term growth. However, coordination between those two policies and with other policies is also important. For example, when international capital mobility is high, some recent literature suggests that macroprudential capital flow management measures – controls aimed at mitigating externalities to reduce the risk of financial crises – may be considered. There are also both complementarities and possible conflicts with fiscal, microprudential, capital control, bank insolvency resolution and competition policies. Furthermore, cross-border operations make the assessment of systemic risk more difficult, while requiring bilateral and multilateral coordination agreements and consultation with authorities in other jurisdictions. Well-established mechanisms that facilitate consultations between different authorities need to be in place to ensure the effective coordination of policies. Research into policy coordination issues is part of the SARB's current research agenda, as is the case in many other jurisdictions.

Conclusion and the way forward

The promulgation of the FSR Bill will provide the SARB with the necessary legal powers to pursue its financial stability mandate. This note outlines the SARB's approach to achieving that mandate. It identifies and describes three important steps in the process of making active use of macroprudential instruments, namely assessing systemic risk, building the case for macroprudential intervention, and selecting and applying the relevant macroprudential instruments.

Further information regarding policy instruments, their use and impact on financial system stability will be published in a regular section in the biannual *Financial Stability Review*. Additional details will also be communicated in press releases and regular speeches by the Governor and Deputy Governors of the SARB.

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