



საქართველოს ეროვნული ბანკი
National Bank of Georgia

Macroprudential Policy Strategy for Georgia

2019

Preamble

This document represents the National Bank of Georgia's (NBG) Macroprudential Policy Strategy. The strategy closely follows the European Systemic Risk Board Recommendations (ESRB/2013/1) and outlines the NBG's general framework for macroprudential regulation in Georgia. The strategy's publication will improve communication, transparency, and predictability of macroprudential policy for financial market participants. Thus, it will support achieving the macroprudential policy's ultimate objective: financial stability in Georgia.

The strategy was developed by the Financial Stability Department. The financial stability team would like to express a great appreciation to Mr. Keith Hall (IMF) for his valuable suggestions during the preparation of this document. The authors would also like to thank other NBG colleagues for their contribution.

In May 2019, the Macroprudential Policy Strategy was discussed at the Financial Stability Committee meeting and was approved for publication.

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Macprudential Policy Strategy for Georgia

The Purpose of Macprudential Policy for Financial Stability

Financial stability, the state when financial system can provide crucial services to the market participants in good and bad times, is a cornerstone for sustainable development of an economy. The magnitude of economic losses caused by financial crises historically around the world and in Georgia proves the crucial importance of the financial stability for the sustainability of the economy. The global financial crisis emphasized, once again, that microprudential interventions alone are unable to prevent the financial disturbances that impose heavy losses on the real economy and demonstrated the need for macroprudential perspective to regulation and supervision. Establishing a sound macroprudential policy framework, which mitigates and prevents systemic risks in the financial system as well as strengthens the resilience against those risks, alongside the microprudential supervision is therefore necessary.¹ Policy intervention is also justified by market failures and unintended consequences arising from other policy fields.² The ultimate objective of macroprudential policy is to contribute to the safeguard of the stability of the financial system as a whole. This is achieved mainly by strengthening the resilience of the financial system and decreasing the build-up of systemic risks, thereby ensuring a sustainable contribution of the financial sector to economic growth.

The National Bank of Georgia (NBG) aims to ensure that the financial system is safe and sound. The NBG is mandated to maintain financial stability in the country, as defined by the Organic Law of Georgia on the National Bank of Georgia. With the purpose of maintaining financial stability, the NBG conducts macroprudential policy. The NBG identifies, evaluates, monitors systemic risks and implements corresponding policies to prevent or mitigate those risks and therefore enhance the resilience of the financial system.

Systemic risks to financial stability not only disrupt the financial system but also potentially have serious consequences for the real economy. For instance, as a result of the global

¹ G-20 Working Group 2009

² Recommendation of the European Systemic Risk Board of 4 April 2013 on intermediate objectives and instruments of macro-prudential policy (ESRB/2013/1),
https://www.esrb.europa.eu/pub/pdf/recommendations/2013/ESRB_2013_1.en.pdf

financial crisis, in advanced economies, the median cumulative loss in output relative to its pre-crisis trend has been 33% of GDP.^{3,4}

A macroprudential policy framework is seen as an appropriate policy response to changing global financial environment and is considered necessary to support financial system stability. However, it is important for macroprudential policy to be consistent with wider policy initiatives, including microprudential, monetary and fiscal policies, in order to ensure its overall effectiveness.

In promoting financial stability, the NBG is guided by the recommendations of the Basel Committee on Banking Supervision, the ESRB, and CRR/CRD. The Financial Stability Committee (FSC) at the NBG, which is chaired by the Governor, coordinates macroprudential policy within the NBG's mandate. The FSC identifies and analyses systemic risks and ways to mitigate them, makes recommendations on the use of macroprudential measures and coordinates actions that promote financial stability.

The NBG's Macroprudential Policy Strategy closely follows the ESRB/2013/1 recommendation and the best international practice and is consistent with EU directives. It sets the policy framework and maps intermediate objectives into indicators and instruments. The macroprudential policy strategy lays down the cornerstones for implementing macroprudential policy in Georgia with a view to fostering the decision-making process as well as communication and accountability to the general public.

In line with the recommendation ESRB/2013/1 by the European Systemic Risk Board, the ultimate objective of the NBG's macroprudential policy lies in making a material contribution to safeguarding the stability of the Georgian financial system as a whole. In order to make macroprudential policy operational, transparent and accountable, the NBG identifies intermediate objectives. In order to fulfill these intermediate objectives, it is necessary to have macroprudential instruments, namely one or more instruments for each intermediate objective of macroprudential policy. Instruments used to tighten the macroprudential policy stance shall be released if deemed appropriate to stabilize the financial cycle. Over time, however, as the effectiveness of different macroprudential instruments are revealed, the intermediate policy objectives and/or macroprudential instruments may be revised, also taking into account potential new risks to financial stability. This creates a need for a periodic re-assessment of the adequacy of the established intermediate policy objectives and macroprudential instruments.

³ Laeven, L and Valencia, (2013), "Systemic Banking Crises Database: An Update", IMF Economic Review

⁴ In Georgia, according to a similar methodology, the cumulative GDP loss over the period from 2009 to 2012 amounted to around 25% of GDP. The overall cumulative GDP loss should also account for the deterioration of trend growth, which causes additional losses even after the cyclical downturn has ended. In case of Georgia, trend slowdown due to crisis was estimated from 0.5 pp to 1 pp, which by discounting over the entire future gives the additional loss of about 13%-25% of GDP.

Macprudential Policy Framework

Objectives

Promoting financial stability as a precondition for sustainable economic growth is one of the fundamental goals for the NBG. To this end, the NBG employs macroprudential policy that aims to prevent the build-up of systemic risks in order to decrease the probability of crisis and strengthen the resilience of the financial sector.

The ultimate goal of the macroprudential policy is to promote financial stability. Financial stability is a condition where the financial system ensures long-run, sustainable economic development. For this purpose, financial intermediation and market infrastructure (payment systems) need to be efficient, the financial system should be resilient to shocks, and systematic risks need to be mitigated. A stable financial system also assumes the development and deepening of financial markets.

The systemic risk can be defined as a widespread disruption to the financial system, which can cause serious negative consequences for the real economy (ESRB 2014; IMF/BIS/FSB 2009). Systemic risk generally has two dimensions: cyclical and structural. Cyclical dimension is related to the tendency of banks to take excessive risks during upturn and be excessively risk averse during downturn. Therefore, cyclical vulnerabilities is associated to the build-up of risks over time. While, structural dimension is related to vulnerabilities from interconnectedness and is associated with the distribution of risk across the financial system at any given point in time. In the process of identification of the drivers of systemic risk and corresponding instruments, it is useful to consider the structural and cyclical dimensions. However, given close interlinkages it is difficult to make a clear distinction between the two dimensions.

Systemic financial risks would exist even alongside efficiently functioning financial intermediation. Without macroprudential interventions, however, market frictions and market failures may exacerbate systemic financial risks. Consequently, macroprudential policy should mitigate excessive systemic risks primarily by correcting the effects of market frictions and market failures. However, macroprudential policy is not capable of preventing financial systemic risks completely, only mitigating them.

Preventing and mitigating systemic risks to financial stability as much as possible has become an ultimate macroprudential policy objective worldwide. However, to make macroprudential policy operational, transparent and accountable, there is a need for

identifying intermediate objectives⁵. The NBG has identified five intermediate objectives of macroprudential policy. These intermediate objectives are in line with the ESRB/2013/1 recommendation and take into account Georgia's specifics. These intermediate objectives address both cyclical and structural dimensions of systemic risks and are as follows:

- 1. Mitigate and prevent excessive credit growth and leverage.* Excessive credit growth that ranks among the key drivers of asset price bubbles, leads to investment-saving imbalances and results into macrofinancial vulnerabilities. Excessive leverage plays an amplifying channel and makes financial market participants particularly vulnerable to the losses arising from non-performing loans. Therefore, it is extremely important to contain excessive credit growth and leverage and/or strengthen the resilience of financial institutions to financial crises. Macroprudential policy can address this primarily in the upturn of the financial cycle by tightening capital requirements. Limiting leverage and making credit more expensive may reduce the probability of the emergence of a financial crisis. The capital buffers created in the upturn could be released in a financial crisis to absorb the potential losses of financial market participants, alleviating the need for deleveraging and preventing bank runs, while supporting the extension of credit to support economic growth.
- 2. Mitigate and prevent excessive maturity mismatch and market illiquidity.* Excessive use of short-term and volatile funding sources may entail the need for fire sales, which, in turn, could cause illiquidity spirals and contagion effects. During the cyclical build-up of maturity mismatches, financial institutions fund long-term assets with short-term liabilities to an increasing extent. Consequently, the increasing volume of short-term liabilities that needs refinancing amplifies the demand for market liquidity. Macroprudential policy can directly limit asset-liability maturity mismatches and strengthen the liquidity of market participants. A usual response for addressing maturity mismatches is to require banks to finance their non-liquid assets with stable funding and to hold a sufficient portfolio of liquid assets.
- 3. Limit direct and indirect exposure concentrations.* Given a high degree of interconnectedness, shocks to individual financial institutions or segments of the financial system may quickly spread within the financial system and to other parts of the economy via direct links or correlated exposures. Direct concentration risk arises from large exposures to the non-financial sector as well as between financial entities. In addition, indirect exposures arise within the system owing to the interconnectedness of financial institutions and the contagious consequences of common exposures. To limit large exposures, caps for specific sectors and counterparties can be established or other measures can be introduced that help reduce the possible domino effect arising from unexpected default or common exposures across financial institutions.

⁵ See, for example, IMF (2013), "Key Aspects of Macroprudential Policy"

4. Limit the systemic impact of misaligned incentives with a view to reducing moral hazard.

Misaligned incentives result from explicit and implicit government guarantees, and from the fact that the probability of implicit state guarantees rises with the size/significance of an institution and from other distortions. State interventions in times of financial crisis (e.g. emergency liquidity assistance, bank recapitalization, resolution, liquidation) should not weaken financial institutions' pre-crisis incentives for prudent operation. In those circumstances when the instruments serving the intermediate objective can only attain partial results, other measures should be employed to mitigate misaligned incentives (e.g. regulations related to corporate governance).

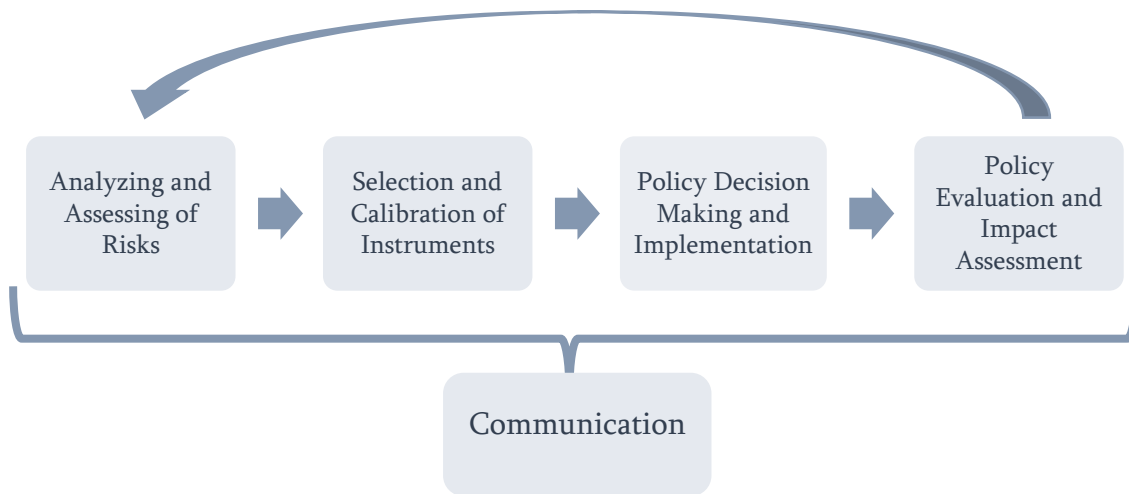
5. Reduce dollarization of the financial system. Dollarization raises systemic risks, including because of increasing currency risks for banks as well as their customers. In a small open economies like Georgia, dollarization, in addition to above mentioned reasons, may become the source of systemic risk through shock-amplifying mechanisms. Georgia is exposed to external shocks that may results into GEL depreciation and given the high level of dollarization this results into increased leverage that becomes hard to service. The NBG actively uses macroprudential policy to reduce dollarization and thus, reduce the probability of systemic risks that it may cause.

The appropriateness of the macroprudential policy framework and its intermediate objectives should be assessed periodically and adjusted in view of the current information to ensure that they are sufficient to effectively pursue the ultimate objective of macroprudential policy. The adjustments are required to incorporate new experience gained in operating the macroprudential policy framework, structural developments in the financial system and the emergence of new types of systemic risks. Therefore, the NBG will review its macroprudential strategy, including the intermediate objectives, on a regular basis and will make adjustments if needed.

Operationalizing Macroprudential Policy

The implementation of the macroprudential policy strategy is done in four stages (see Diagram 1). These stages make up the policy cycle and include: 1. the risks analyzing stage, when relevant indicators help detect and assess vulnerabilities (relative to the intermediate objectives) and when indicative thresholds can be used to help guide policy; 2. the instrument selection and calibration stage; 3. the policy decision making and implementation stage, when instruments are activated; and 4. the evaluation phase, when the impact of instruments is assessed in view of possible adjustment/de-activation. The whole policy cycle is also complemented by a communication process.

Diagram 1. Macroprudential Policy Cycle



Analyzing and Assessing Risks

The first phase of macroprudential policy cycle is the analysis of existing and potential systemic risks. The NBG regularly performs risk assessments in order to identify the sources of systemic risks and their transmission channels. Risk identification and assessment is done using a wide range of information and analytical methods as well as expert judgement. Forward-looking and early warning indicators, market intelligence and information from lending surveys are used in order to identify risks that may have negative consequences for the market.

Set of indicators, developed to identify sources of systemic risks, help to monitor and assess them. However, sometimes indicators can be misleading. Therefore, it is important to complement the analysis of key indicators with other source of information, such as broader indicator sets, communication and cooperation with market participants, supervisory and monetary information and expert judgment.

For the comprehensive list of indicators that are used to identify and assess the risks, please see Table 1. However, it should be noted that the provided list of indicators is not exhaustive and additional indicators and analytical expertise can be applied depending on the analysis conducted.



Table 1. Mapping Indicators and Intermediate Objectives

Intermediate Objectives	Main Indicators
Mitigate and prevent excessive credit growth and leverage	
Aggregate	<ul style="list-style-type: none"> ▪ Credit growth; ▪ Credit-to-GDP gap; ▪ Growth in credit-to-GDP; ▪ Leverage ratio.
Households	<ul style="list-style-type: none"> ▪ Growth in household credit; ▪ Debt-to-income; ▪ Debt service-to-income (new loans); ▪ Lending standards.
Non-financial Corporates	<ul style="list-style-type: none"> ▪ Growth in corporate credit (total); ▪ Growth in corporate credit (sector); ▪ Debt service ratio; ▪ Interest Coverage ratio; ▪ Lending standards.
Financial Sector	<ul style="list-style-type: none"> ▪ Bank capital ratios; ▪ Bank leverage ratio; ▪ Credit and market risk measures.
Real Estate	<ul style="list-style-type: none"> ▪ Growth in real estate lending; ▪ House price growth; ▪ House price-to-income; ▪ House price-to-rent; ▪ LTV; ▪ Commercial property price growth.
Mitigate and prevent excessive maturity mismatch and market illiquidity	<ul style="list-style-type: none"> ▪ Liquidity indicators (e.g. liquidity coverage ratio (LCR)); ▪ Funding structure; ▪ Maturity structure of assets and liabilities; ▪ Loan-to-deposit ratio.
Limit direct and indirect exposure concentrations	<ul style="list-style-type: none"> ▪ Distribution of credit portfolio (e.g. by sectors, regions, currency); ▪ Exposure concentration by selected financial and industrial groups; ▪ Financial sector interconnectedness.
Limit the systemic impact of misaligned incentives with a view to reducing moral hazard	<ul style="list-style-type: none"> ▪ Size, complexity, substitutability and interconnectedness of systematically important financial institutions (e.g. Banking assets-to-GDP ratio; Share of systemically important banks; profitability).
Reduce dollarization of the financial system	<ul style="list-style-type: none"> ▪ Loan and deposit dollarization dynamics (e.g by borrowers; loan types); ▪ NPL for foreign currency loans; ▪ Net open foreign currency positions; ▪ Net interest rate margin by currency.

Selection and Calibration of Instruments

The effectiveness of macroprudential policy depends on the establishment of a set of macroprudential instruments to be effectively applied by macroprudential authorities guided by a set of indicators, alongside expert judgement. After the first phase of the macroprudential policy cycle, where the relevant risks are identified, the NBG moves to the next phase and decides on the measures required to mitigate or eliminate those risks. Selection of a specific macroprudential instrument depends on number of factors, such as the scale of risk, the source of risk, impact of the instrument and possible side effects. Furthermore, it is important to ensure that the instruments are used in consistency with other policies and are calibrated to the scale and potential contagion area of the risks and the conditions of and prospects for financial sector development.

The main instruments of the macroprudential policy employed by the NBG are capital buffers, which are introduced consistent with Basel III standards and the EU supervisory framework. In addition to capital buffers, the NBG also uses the payment-to-income ratio and loan-to-value ratio risk weights and other instruments for macroprudential policy purposes. The choice of specific measures depends on the intermediate objective. Moreover, a single instrument can help achieve several objectives. The most frequently globally used instruments, which the NBG uses to fulfill macroprudential intermediate objectives are described below.

Countercyclical Capital Buffer

The countercyclical capital buffer was introduced within the Basel III framework and represents one of the main macroprudential policy instruments. Countercyclical buffer is designed to counter pro-cyclicality in the financial system. Additional capital requirements are set by the authorities during the periods of excessive credit expansion with the option of easing or releasing in times of financial stress.

Countercyclical capital buffer aims to increase the resilience of the banking sector, protect banking system against losses and mitigate the fluctuations of the financial cycle. The additional capital requirements increases the cost of capital by increasing the share of capital in the banks' liabilities. As the capital is considered to be a more expensive source of funding, this may restrain credit supply and lead to a decline in lending activities during the period of excessive credit growth. On the other hand, a release of the buffer during the financial downturn will have an opposite effect and stimulate lending activity.

The countercyclical buffer should be met by using only Common Tier 1 capital and is determined in the range of 0%-2.5% of total risk-weighted assets. It is determined on a quarterly basis and, whenever necessary, the countercyclical buffer is changed by 0.25 percentage points or by a multiple of that amount. In the event of a rate increase, capital

requirements should be met within one year; however, in the event of a rate reduction, the requirements should be met immediately.

Systemic Buffers / Capital Buffer for Systematically Important Banks

Systemic buffers aim to enhance the resilience of systematically important financial institutions, thus decrease the probability of the crisis and the scale of their impact. Buffers set additional capital requirements separately for each systematically important institutions, whose failure would have serious adverse effect on the country's financial stability and the economy. It is a preventive macroprudential tool intended to limit the contagion effects stemming from difficulties in systematically-important banks by improving their loss-absorption capacity.

In order to determine which banks are systematically important, the NBG follows the Basel Committee on Banking Supervision's (BCBS) recommendations and the European Banking Authority's (EBA) methodology. In addition, the specific characteristics of the Georgian financial sector are taken into consideration. Those characteristics are expressed within these general criteria such as the share of a bank's assets in the total banking system, its interaction with other banks, and its substitutability and complexity.

Capital Buffer for Sectoral and Name Concentration Risk

The capital buffer for sectoral and name concentration risk is used to reduce risks accumulated in a particular group or sector of borrowers. The purpose of this buffer is mitigate the concentration risk of a credit portfolio.

Unlike the countercyclical capital buffer, which affects the entire credit portfolio, the concentration risk buffer aims to identify and mitigate systemic risks arising from specific sectors/borrowers.

The concentration risk buffer is set individually for each commercial bank, depending on the share of specific sectors and borrowers in their portfolio.

GRAPE Risk Buffer

The net GRAPE buffer is determined by the NBG through a risk-based supervisory process called the General Risk Assessment Program (GRAPE). GRAPE entails assessment of risk levels of commercial banks according to the following risk categories: credit risk, liquidity risk, market risk, operating risk, business model and profitability risk, as well as considering the macroeconomic environment, group structure and corporate governance. The purpose of net GRAPE buffer is to determine adequate capital buffers for the risks identified within GRAPE and not covered or inappropriately covered by other capital buffers within Pillar 2.

The Stress Test Buffer

The stress test buffer aims to evaluate the capital adequacy of banks based on stress scenarios and macroeconomic risk factors. More precisely the purpose of the net stress-test buffer is

to determine the amount of the additional capital that will ensure, despite incurred losses, protection of a bank from regulatory default in case the scenarios and risk factors applied in supervisory stress-tests are realized.

The stress scenarios change counter-cyclically, making the stress tests buffer an additional macroprudential instrument. In addition to macroeconomic parameters, these scenarios also include the distribution of shocks according to different economic sectors, which allows analysis of a borrower's financial sustainability. The use of stress scenarios makes macroprudential policy more forward-looking, reduces the dependence on historical data and improves comparability among different banks. The stress test buffer is set individually for each commercial bank based on the results of supervisory stress tests.

Leverage Ratio

Leverage ratio is a simple coefficient, which is a supplementary measure to the risk-based capital requirements. The leverage ratio is intended to restrict the build-up of excessive leverage in the banking sector.

Since it is not based on risk-adjusted assets, it provides a simple and transparent back-stop to safeguard against excessive expansion of bank balance sheets when risk weighting do not reflect actual riskiness of operations.

Liquidity Coverage Ratio

Liquidity coverage ratio (LCR) is calculated as the ratio of high quality liquid assets (HQLA) to expected net cash outflow over a 30 calendar day liquidity stress scenario. LCR is meant to increase resilience to liquidity shocks by increasing the stock of liquid assets available to cover sudden outflows. Though it is a micro-prudential measure, it can be used for achieving macroprudential objectives by setting additional requirements (fixed or time-varying) over the prudential minimum requirement.

According to the NBG's regulations, absent a situation of financial stress, LCR should be equal to at least 100%, because the stock of unencumbered HQLA is intended to serve as a defense against the potential onset of liquidity stress. In addition, LCR should be equal to at least 100% and 75% in foreign currency and national currency, respectively. Varying LCR according to the currency is another way to employ this measure for macroprudential purposes.

Net Stable Funding Ratio (NSFR)

Net stable funding ratio (NSFR) defines the minimum proportion of stable (long-term) funding depending on the liquidity and residual maturity of a bank's assets. The NSFR aims to foster longer-term stability by incentivizing banks to adequately manage their maturity mismatches by funding long-term assets with long-term liabilities. The ultimate goal of this ratio is twofold: on the one hand, it tries to guarantee that given a stress scenario the bank has enough stable funding so as to continue granting loans, ensuring that the ability of the

bank to undertake its main activity is not hampered [Domingo (2010)]; on the other hand, it guarantees that the confluence of maturities of short-term liabilities and potential advanced maturities of longer-term liabilities does not provoke additional market tensions. By doing so NSFR helps to limit credit cycle volatility. NSFR is a microprudential instrument that can be used for achieving macroprudential objectives.

LTV/PTI

The payment-to-income ratio (PTI) and loan-to-value ratio (LTV) requirements are macroprudential policy instruments that affect lending conditions. Unlike supply side instruments (capital requirements for banks), PTI and LTV requirements affect the demand side and ensure the sustainability of both borrowers and banks. Broadly speaking, LTV limits reduce the potential loss of the bank in case the borrower defaults (lower loss given default, LGD), while PTI limits reduce the probability that the borrower will default (lower probability of default, PD).

The loan-to-value ratio determines the maximum value of a loan, according to the market value of the real estate used as collateral for the loan. This instrument ensures the sustainability of the financial sector in the event of real estate price reductions and also restricts the formation of a real estate price bubble.

The payment-to-income ratio sets limits on maximum loan payments, which are determined proportionally to a borrower's disposable income.

The transmission mechanism of those instruments is twofold. On the one hand, limits on PTI and LTV can restrain excessive credit growth and reduce the probability of the build-up of cyclical risks, while on the other hand it can mitigate the risk of default by countering the occurrence of excessive indebtedness.

The PTI and LTV ratio requirements can be changed in relation to financial cycles and may vary depending on domestic and foreign currencies.

Currency Induced Credit Risk (CICR) Buffer

The currency induced credit risk (CICR) buffer is created for risk positions that are dominated in a currency different from the currency used to cover those positions. CICR buffer aims to reduce systemic risks caused by dollarization. It contributes to building a more resilient banking system capable of withstanding external shocks.

Limits on Open Foreign Currency Positions

The goal for setting the limits on overall open foreign exchange position is to reduce possible risks stemming from foreign exchange transactions, in the case of possible exchange rate movements. Introducing the limits on overall open foreign exchange positions mitigates the negative impact of exchange rate fluctuations on profit, capital, liquidity and solvency of commercial banks.

The Table 2 summarizes the list of instruments employed by the NBG with the corresponding intermediate objectives. The list of instruments is constantly evolving by introducing additional measures in response to developing needs and specifics of the financial sector.

Table 2. Mapping Instruments and Intermediate Objectives

Intermediate Objectives	Key Instruments
Mitigate and prevent excessive credit growth and leverage	
Aggregate	<ul style="list-style-type: none"> ▪ Countercyclical Capital Buffer; ▪ Other Capital Requirements (e.g based on stress tests; for systemic banks); ▪ Leverage Ratio; ▪ Reserve requirements; ▪ Other Instruments.
Households	<ul style="list-style-type: none"> ▪ Limits on PTI (new loans); ▪ Limits on LTV (new loans); ▪ Risk weights.
Non-financial Corporates	<ul style="list-style-type: none"> ▪ Risk weights; ▪ Lending limits.
Financial Sector	
Real Estate	<ul style="list-style-type: none"> ▪ Limits on PTI (new mortgages); ▪ Limits on LTV (new mortgages); ▪ Risk weights.
Mitigate and prevent excessive maturity mismatch and market illiquidity	<ul style="list-style-type: none"> ▪ Liquidity coverage ratio, LCR; ▪ Net Stable Funding Ratio, NSFR; ▪ Reserve Requirements.
Limit direct and indirect exposure concentrations	<ul style="list-style-type: none"> ▪ Limits on the concentration of large exposures; ▪ Name and sectoral concentration buffers; ▪ The Stress Test buffer.
Limit the systemic impact of misaligned incentives with a view to reducing moral hazard	<ul style="list-style-type: none"> ▪ Systemic buffers; ▪ GRAPE risk buffer; ▪ Other Instruments.
Reduce dollarization of the financial system	<ul style="list-style-type: none"> ▪ The currency induced credit risk (CICR) buffer; ▪ The Stress Test buffers; ▪ LCR requirement in foreign currency; ▪ Limits on open foreign currency positions; ▪ Reserve requirement; ▪ Differentiated LTV and PTI Requirements; ▪ Restriction on FX borrowing under 200 000 GEL.

Policy Decision Making and Implementation

A wide range of quantitative and qualitative information is used during the decision making of macroprudential policy. This includes primarily the analytical material prepared in the previous phases, including information about risk assessment, key indicators and their indicative thresholds, instrument selection and their expected transmission mechanisms and the evaluation of the instruments used. In addition, it is also very important to incorporate legal consideration and the stance of other policy areas.

In the phase of policy decision making, the Financial Stability Committee makes recommendations based on the analysis and the Governor approves the decisions on the use of macroprudential instruments. The Committee consists of thirteen members and includes the President of the NBG, the Vice-Presidents of the NBG, and heads of corresponding departments and divisions. The Committee is headed by the Governor. The Financial Stability Committee meets once a quarter in accordance with a pre-announced schedule. Unplanned committee meetings may also be called in special cases. The NBG informs the market participants regarding the macroprudential policy decisions via press-releases and press-conferences.

Decision making of macroprudential policy, however, comes with a number of challenges. First, it is typically difficult to identify financial vulnerabilities early enough and with sufficient certainty to take action. In some cases, it is also hard to distinguish the development of financial imbalances from financial deepening and innovation. Vulnerabilities may also build up over many years, without leading to serious stress. Moreover, sometime financial system may appear stable due to misleading signs of low risk and in this case, tightening measure when the system is already vulnerable could trigger the instability.

Another challenge is related to “inaction bias”. A bias towards inaction could result from political economy costs of taking preventive measures, combined with difficulties in the timely identification of systemic risk. On the one hand, policymakers are usually concerned of sounding a false alarm, preferring to wait and see whether a development is actually damaging – even though the prompt intervention is typically more effective. On the other hand, the short-term costs of preventive actions (e.g. forgoing profitable opportunities, incurring compliance costs) are quite obvious while their long-term benefits (higher and more stable economic growth, lower fiscal costs), while large, are harder to recognize. For using macroprudential instruments, the NBG relies on the framework that combines both rules-based and discretionary elements such as “guided discretion”. A guided discretion approach formulates certain presumptions as to when action can be expected in response to the development of key indicators.

Evaluation and Impact Assessment of Macroprudential Policy

Evaluation and impact assessment is the key element of the policy cycle. This phase helps to refine all stages of the policy cycle: risk identification and assessment, instrument selection and calibration, and policy implementation. Evaluation provides feedback on the effectiveness and efficiency of macroprudential instruments and helps to increase understanding of the transmission mechanism and to improve decision-making and accountability.

Following the macroprudential policy interventions, the NBG monitors the effect of the interventions. After the evaluation, the NBG may pass decisions on further interventions, or the modification of existing regulation. Moreover, the communication tools discussed below and cooperation with other policies are also important parts of the follow-up process. The NBG will assess the effectiveness of an instrument based on the output of models and feedback from market participants.

The NBG analyzes the transmission mechanisms of instruments, ex-ante and ex-post, collects and analyzes the data on the effects of macroprudential policy instruments in order to better assess the impact of the instruments and improve their calibration. The assessment of the instrument's impact on the financial system is based on the analysis of individual bank reports, key indicators for the banking system and for markets and the changes in market sentiment. This helps to understand if the risk was correctly identified, if intermediate objectives were achieved, and if the instrument was effective.

Communication

One of the most important parts of the NBG's financial stability policy framework is to increase transparency and improve communication. Proper communication largely determines the effectiveness of the macroprudential policy. It facilitates awareness regarding macroprudential policy, helps to form expectations, fosters understanding of risks by the market participants and the general public and provides basis for accountability.

In order to increase transparency and effectiveness of macroprudential policy, the NBG launched a new framework for the Financial Stability Committee (FSC) in 2018. The Committee evaluates and analyzes financial stability risks, designs macroprudential policy and makes decisions regarding corresponding policy actions. This involves identification, assessment, continuous monitoring of systematic risks and implementation of the corresponding policies to mitigate those risks. Under the new framework, the FSC meets once a quarter according to a preannounced calendar. After each meeting, a press release is published that describes current trends and challenges in the financial system, and the decisions of the committee. Moreover, twice a year committee meeting is followed by a press conferences. This new communication strategy helped to create the basis for strong

communication in order to create public awareness of risks and understanding of the need to take mitigating action.

The Financial Stability Report (FSR) is the key informational and analytical product that is used for macroprudential policy communication. The report plays a role to prevent future crisis by highlighting potential risks to the market and communicating the policies to mitigate systemic risks. Starting from 2019, the NBG will regularly publish the FSR that will be based on forward looking analysis and assess key risks for financial stability.

Communications are mainly disseminated through the Financial Stability section of the NBG's official website, which was updated in 2018. It now provides detailed information regarding the main tasks of financial stability committee and committee meetings calendar; committee statements and decisions; the macroprudential policy instruments; IFRS 9 related issues, etc. The NBG will continue to regularly update the financial stability section of the website to ensure that all the stakeholders are properly informed regarding the latest developments in the macroprudential policy.

Direct communication between the stakeholders can also play a prominent role, as the ex-ante or ex-post feedback from market participants can potentially improve the efficiency of regulation. Transparency may also be improved further by public communication justifying the need for the introduction of the policy instrument and presenting the consultation process with domestic and international organizations.

Interaction with Other Policies

For effective implementation and proper results, the macroprudential policy must be consistent and coordinated with other policies. Within the NBG's mandate, macroprudential policy interacts with monetary policy and microprudential supervision (see Diagram 2). Each policy reacts to different challenges and has distinct objectives, however, proper interaction and coordination between those policies are essential.

Diagram 2. Relationship between Macroprudential and Other Policies



Monetary Policy

The main objective of the NBG, which is defined by the Organic Law of Georgia on the National Bank of Georgia, is to maintain price stability. Price stability implies the existence of a moderate and predictable rate of inflation, which is a necessary precondition for sustainable economic growth. This objective is met using monetary policy. In the conduct of monetary policy, the NBG is independent from the legislative and executive authorities within the limits of the rights granted to it under the Organic Law of Georgia on the NBG and the Constitution of Georgia.

Even though the objectives of monetary and macroprudential policy are distinct, they complement each other. Low and stable inflation is one of the precondition of financial stability – the objective of macroprudential policy. Equally, price stability cannot be maintained in an unstable financial system. At the same time, a more stable financial system and more accessible financial services contribute to the effectiveness of the transmission channel of monetary policy.

However, monetary policy, in some cases, may have undesirable side effects on financial stability. Often the business cycle and the financial cycle are not synchronized since the financial cycle has a lower frequency than the business cycle. Hence, there will be times when monetary policy may negatively affect intermediate macroprudential objectives. For instance, low policy rates consistent with pursuit of inflation targeting may lead to excessive credit growth and indebtedness and at the same time the build-up of asset (including real estate) bubbles and thus pose risks to financial stability. Moreover, in small open economies, increases in interest rates may be necessary in the face of inflationary shocks, but can draw in capital flows (“Hot money”) that may contribute to excessive financial risks. Conversely, the need for interest rate cuts to counter subdued domestic demand may lead to large capital outflows that can jeopardize domestic financial stability⁶.

The presence of strong macroprudential policy framework addresses undesired side effects of monetary policy and creates more room for maneuver for monetary policy to pursue price stability⁷. Given appropriate range of instruments, macroprudential policy can be more targeted and thus, tighten or loosen financial conditions in specific markets or segments. This can help alleviate conflicts in the pursuit of monetary policy and reduce the burden on monetary policy to “lean against” adverse financial developments. Therefore, coordination between monetary and macroprudential policies is necessary to find an effective policy mix, while preserving the established independence and credibility of monetary policy.

⁶ IMF, 2013a, “The Interaction of Monetary and Macroprudential Policies”

⁷ IMF, 2013b, “The Interaction of Monetary and Macroprudential Policies – Background Paper”

Microprudential Policy

Within the framework of facilitating financial stability, the NBG conducts microprudential policy (banking and non-banking supervision). Macro- and micro-prudential policies both aim to build a more robust and sustainable financial system. The former focuses on the stability of the financial system as a whole, while the latter focuses on the soundness of individual financial institutions.

Table 3. Macroprudential and Microprudential Perspectives

	Macroprudential	Microprudential
Ultimate Objective	Stability of Financial System	Stability of Financial Institutions
Address Risks	<u>System-wide, including:</u> Excessive credit growth and leverage Excessive maturity mismatch and illiquidity Exposure concentration Moral Hazard High dollarization	<u>Institution specific, including:</u> Credit risk Liquidity risk Market risk Operational risk Other institution-specific material risks

Macroprudential and microprudential policy perspectives reinforce each other in terms of risk monitoring and policy design. Intermediate objectives of macroprudential policy defined for the whole financial system are also related to financial risks of individual financial institutions (see Table 3). For example, systemic risks stemming from excessive credit growth and illiquidity are associated with a build-up of credit and liquidity risks in individual institutions. Special attention needs to be paid to cyber risk, which as a part of operational risk is usually addressed by the microprudential policy. However, it may become a source of systemic risk and therefore, requires monitoring from macroprudential perspective.

Coordination and cooperation between macroprudential policy and microprudential supervision contribute to policy effectiveness. Shared information, joint analysis of risks and strong dialogue can reinforce the complementarities between these policies. Indeed, strong supervision is essential both to ensure that macroprudential policymakers can draw on supervisory information in risk assessment and to ensure that the macroprudential policy stance adopted is effectively enforced across institutions. Moreover, on-site examination creates a possibility to assess the implementation of macroprudential policy decisions.

However, differences can exist between the macroprudential and microprudential perspectives. For instance, during the upturn, macroprudential policy prescribes a build-up of capital buffers even though institutions may seem sufficiently capitalized from a microprudential perspective. Similarly, during crises, the desire to increase the capital buffers of individual financial institutions to protect them against future credit losses (a microprudential concern) can have negative pro-cyclical effects on credit growth to the economy (a macroprudential concern). Cooperation is therefore needed between

macroprudential and microprudential policies to come to a holistic view on how to address systemic risks and apply appropriate measures reflecting both systemic and idiosyncratic risk.

Presence of proper governance and decision-making framework that internalizes all costs and benefits can bridge these differences. The NBG's internal framework of committees works collaboratively and involves the President of the NBG, the Vice-Presidents of the NBG, and heads of corresponding departments and divisions. This facilitates an exchange of information and ideas, prevents conflicts between policies and allows for the reconciliation of measures and instruments. Committees for financial stability, banking supervision and monetary policy must ensure coordination between macroprudential, microprudential and monetary policies.

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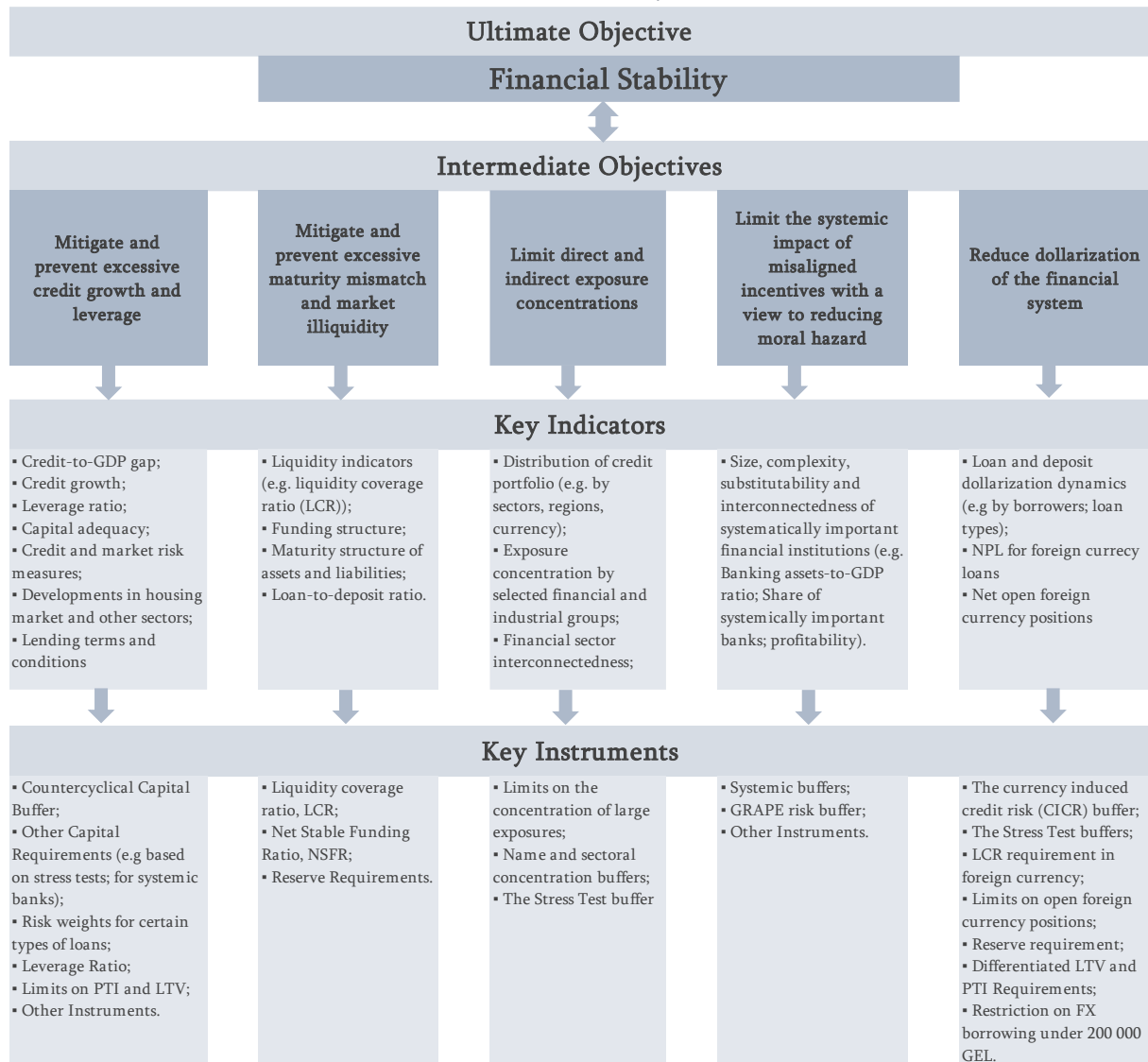


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Appendix – Macprudential Policy at a Glance





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