



# COLOMBIA

## FINANCIAL SECTOR ASSESSMENT PROGRAM

### TECHNICAL NOTE ON MACROPRUDENTIAL FRAMEWORK POLICY AND TOOLS

June 2022

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May 20, 2022

# TECHNICAL NOTE

## MACROPRUDENTIAL POLICY FRAMEWORK AND TOOLS

Prepared By  
**Monetary and Capital Markets  
Department, International  
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This Technical Note was prepared in the context of a joint IMF-World Bank Financial Sector Assessment Program (FSAP) mission in Colombia during June 1–21, 2021 led by Zsofia Arvai, IMF, and Raquel Letelier, World Bank, and overseen by the Monetary and Capital Markets Department, International Monetary Fund, and the Finance and Markets Global Practice, World Bank. Further information on the FSAP program can be found at <http://www.imf.org/external/np/fsap/fssa.aspx>.

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## Glossary

BIS	Bank of International Settlements
BCBS	The Basel Committee on Banking Supervision
BR	Banco de la República—Colombian Central Bank
CCSSF	Financial Sector Coordination and Monitoring Committee (Comité de Coordinación y Seguimiento del Sistema Financiero)
CIC	Countercyclical Provisions (Componente Individual Contracíclico)
DSTI	Debt Service to Income Ratio
FC	Financial Conglomerate
FCL	Financial Conglomerates Law (Ley de Conglomerados Financieros)
FOGAFIN	Financial Institutions Guarantee Fund (Fondo de Garantías de Instituciones Financieras)
FSAP	Financial Sector Assessment Program (Programa de Evaluación del Sistema Financiero)
FX	Foreign Exchange
IEC	Consolidated Exposure Index (Índice de Exposición Consolidada)
IEI	Individual Exposure Indicator (Indicador de Exposición Individual)
IRL	Liquidity Risk Indicator (Indicador de Riesgo de Liquidez)
LCR	Liquidity Coverage Ratio
LTV	Loan to Value Ratio
MHCP	Ministry of Finance (Ministerio de Hacienda y Crédito Público)
MoU	Memorandum of Understanding
NFC	Nonfinancial Corporation
NPL	Nonperforming Loan
NSFR	Net Stable Funding Ratio
PAD	Debtor Support Program (Programa de Acompañamiento a Deudores)
SFC	Financial Superintendency of Colombia (Superintendencia Financiera de Colombia)
SIFI	Systemically Important Financial Institution
URF	Financial Regulatory Unit of the MHCP (Unidad de Regulación Financiera del MHCP)
VIS	Social Housing (Vivienda de Interés Social)

## EXECUTIVE SUMMARY<sup>1</sup>

**1. There has been little change in the institutional framework for macroprudential policy oversight since the last FSAP.** Macroprudential policy for the banking sector is a shared competency of the Financial Superintendency of Colombia (SFC), the Banco de la República (BR), and the Ministry of Finance (MHCP), although the SFC and the MHCP play dominant roles. The Financial Sector Coordination and Monitoring Committee (CCSSF), which consists of the three institutions and the Financial Institutions Guarantee Fund (Fogafin), is the main platform for information sharing and cooperation, but it does not have a macroprudential mandate or any formal powers. The SFC supervises asset managers and insurance companies, but there is no formal macroprudential oversight framework for those types of financial institutions.

**2. The current institutional framework has allowed for effective conduct of macroprudential policy so far.** The systemic risk monitoring framework is advanced, and the authorities have been proactive in ensuring risks to financial stability remain contained, as well as in enhancing the macroprudential toolkit in line with Basel III recommendations. The implementation of the Net Stable Funding Ratio (NSFR) will be finalized in 2022, while the capital conservation buffer (CCB) and a buffer for systemically important financial institutions (SIFI) will be fully phased in by 2024. The NSFR requirement applies to Colombian intermediaries supervised by the SFC on an unconsolidated basis, and the level of the requirement depends on the systemic importance of the entity. The CCB buffer was set at 1.5 percent and the SIFI buffer at 1 percent. Institutions to which the SIFI buffer will apply were identified following the Basel III methodology.

**3. Nevertheless, the framework could be strengthened in some areas to limit vulnerabilities and to be able to better respond to risks in the future.** As the financial system develops further, major financial institutions become larger and more complex, and the demands on financial regulation and supervision increase; greater formalization of the process and mandates is recommended. Currently, only the SFC has a statutory responsibility for financial stability, but the concept is not clearly defined in the law. To strengthen the framework's *willingness to act*, the authorities could consider preparing a macroprudential oversight strategy, jointly drafted and signed by all relevant institutions. The BR's role in macroprudential policy could be strengthened to counter biases for inaction and to limit the risk of "blind spots" in systemic risk monitoring. The framework's *ability to act* could be further enhanced by giving more powers over macroprudential tools, and a more prominent role in the decision making, to both the SFC and the BR. In this context, current partitioning of hard powers among various agencies, some without an explicit financial stability mandate, is a considerable vulnerability. The current process governing decisions on the Loan to Value ratio (LTV), Debt Service to Income ratio (DSTI), and loan amortization limits poses a risk of these tools being used with insufficient regard for the financial stability objective.

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<sup>1</sup> This Technical Note has been prepared by Lucyna Górnicka, IMF.

**4. In some areas, monitoring and analysis could be enhanced, and data gaps closed.** The SFC and the BR are aware of the existing data gaps and are working to fill them. Collection of more granular data on Colombian banks' foreign subsidiaries will be crucial for early identification of risks from foreign exposures. Closing data gaps on indebtedness of domestic households will enhance the assessment of risks from household credit. Finally, the recently implemented Financial Conglomerates Law has provided the SFC with additional data collection powers regarding financial conglomerates, and the SFC is working on enhancing its analysis of risks stemming from interconnectedness within financial conglomerates.

**5. The possibility of future Covid-19 outbreaks poses a risk to credit quality, and interconnectedness risks within financial conglomerates warrant attention.** While high pre-pandemic capitalization and profitability of Colombian banks have helped them weather the impact of the shock so far, the pandemic has led to a deterioration in credit quality, with nonperforming loans (NPLs) expected to continue rising in the near term as the impact of support measures fades out. Credit risks are building up also in the foreign portfolios, which account for a large share of profits of internationally active Colombian banks. Close monitoring of foreign exposures and efforts to increase granularity of data on the portfolios of Colombian banks' subsidiaries should continue. The monitoring of interconnectedness risks within the financial conglomerates, including through their cross-border networks, should be intensified.

**6. To increase effectiveness of policy actions going forward, the authorities could consider further enhancements to the macroprudential toolkit.** The LTV and DSTI tools could be expanded to cover leasing products and nonbank credit, and the DSTI tool to include nonmortgage debt. This would help limit potential leakage effects and address future risks stemming from rapid growth in overall indebtedness. Given large foreign exposures of some Colombian banks, consideration should be given to applying short-term liquidity and NSFR requirements on a consolidated basis. Finally, liquidity regulations by the SFC and the BR could be better aligned with Basel III standards.

**Table 1. Colombia: Key Recommendations**

<b>Recommendations</b>	<b>Authority</b>	<b>Time<sup>1</sup></b>
<b><i>Institutional Framework</i></b>		
Ensure that the financial stability objective is included in statutory acts or prepare a joint macroprudential oversight strategy.	MHCP, SFC, BR	MT
Strengthen the central bank's role bank in systemic risk monitoring and of the Banco de la República (BR) and the Superintendency of Financial Institutions in macroprudential decision making.	MHCP, SFC, BR	ST
Assign the powers over borrower-based tools, the systemic risk buffer, leverage ratio, and the capital conservation buffer to the BR and the SFC.	MHCP	ST
<b><i>Operational Framework for Risk Monitoring and Analysis</i></b>		
Formalize the BR's role as the institution responsible for the systemic risk assessment.	MHCP, SFC, BR	ST
Close data gaps in the areas of cross-border exposures and household indebtedness.	SFC	I
<b><i>Systemic Risks and Macroprudential Policy Stance</i></b>		
Expand LTV and DSTI tools to cover leasing products and nonbank credit, and the DSTI tool to include nonmortgage debt.	MHCP	ST
Consider better aligning the liquidity toolkit with Basel III standards. Apply the IRL and the NSFR requirements at both unconsolidated and consolidated bases.	SFC, BR	ST
Intensify monitoring of credit risks of cross-border exposures and of interconnectedness risks within financial conglomerates.	SFC	I
<sup>1</sup> I: Immediate (within 1 year); ST: Short term (within 1–2 years); MT: Medium Term (within 3–5 years).		

## INTRODUCTION

**7. The COVID-19 pandemic has taken a severe toll on Colombia's society and economy.** Over five million jobs have been temporarily affected and GDP contracted by 6.8 percent in 2020, the largest recession on record in Colombia. The unemployment rate reached above 20 percent, while the participation rate dropped 11 percentage points in 2020, and although there has been a sharp snapback in labor force participation since then, total employment remains below pre-COVID levels. A recovery is underway, with growth rebounding to 10.6 percent in 2021.

**8. Despite the unprecedented economic contraction, the banking sector has shown resilience so far, supported by policy interventions.** 2020 saw a considerable moderation in nominal credit growth: from 7.7 percent in 2019 to 3.9 percent in 2020. The segment of consumer loans, quickly growing pre-COVID, saw a decline in the annual growth rate from 15.7 percent in 2019 to slightly above 2 percent in 2020. The pandemic has impacted credit quality too. The systemwide ratio of NPLs to total loans increased from 4.3 percent in 2019Q4 to 5 percent at end-2020 and is expected to continue rising in the near term as the impact of support measures fades out. Nevertheless, high pre-pandemic capitalization and profitability of Colombian banks have helped them weather the impact of the shock so far.

**9. Going forward, the main risks for the financial sector arise from (i) a prolonged pandemic with limited containment; (ii) a sharp tightening of global financial conditions; and (iii) political and social uncertainty disrupting economic activity.** These could expose financial and fiscal vulnerabilities, and lead to capital account pressures and a broad-based downturn that would cut domestic economic growth and weaken the quality of the loan portfolios. The main vulnerabilities of the financial sector are (i) fragilities in nonfinancial corporates exacerbated by the COVID-19 related disruptions; (ii) rapidly growing consumer credit before the pandemic, with shortcomings in macroprudential regulation and data; and (iii) opaque domestic and international risk transmission channels. Finally, considerable uncertainty remains about the full impact of the COVID-19 pandemic on asset quality and profit buffers of financial intermediaries.

**10. This note assesses strengths and weaknesses of the macroprudential policy framework in Colombia and provides policy recommendations.** The next section comments on the institutional arrangements for macroprudential policymaking. In the third section, the systemic risk monitoring framework is described and options to improve it are discussed. The fourth section assesses the level of systemic risk vulnerabilities, comments on the appropriateness of the current macroprudential policy stance, and provides policy recommendations.

## INSTITUTIONAL FRAMEWORK

**11. A strong institutional framework is essential for effective macroprudential policy.** The framework needs to generate *willingness to act*, i.e., to counter biases for inaction or insufficient timely action that can arise from difficulties in quantifying the benefits of macroprudential action or



from political pressures. It also needs to foster the *ability to act* in the face of evolving systemic risks, through appropriate access to information and availability of a sufficiently broad set of macroprudential instruments. The framework needs to promote *effective cooperation* in risk assessment and mitigation between institutions with a financial stability mandate. Finally, it should establish *strong accountability* to guide the execution of macroprudential powers and *strong communication* to create public awareness of risks and understanding of the need to take macroprudential policy actions.

**12. In Colombia, macroprudential policy for the banking sector is a shared competency of several institutions.** The SFC, the BR, and the MHCP are all involved in monitoring risks to financial stability and share powers over the macroprudential toolkit. The CCSSF, which consists of the three institutions and Fogafin, is the main platform for information sharing and cooperation. Policy coordination between the SFC, the MHCP, and the BR is carried out also via reciprocal representation in internal decision making and advisory committees of the three institutions.<sup>2</sup>

### A. Willingness to Act

**13. The three institutions have clearly assigned powers over macroprudential tools, but only the SFC has an explicit financial stability objective.** Although the SFC has a statutory responsibility for financial stability, the concept is not clearly defined in the law. The MHCP does not have an explicit financial stability function in its legal framework. The BR is entrusted with “*study and (...) monetary, credit, and exchange measures to regulate (...) liquidity of the financial market and the normal functioning of internal and external payments of the economy, ensuring the stability of the value of the currency.*” At the same time, the laws clearly define the powers of the three institutions regarding various macroprudential tools.

**14. While the CCSSF serves as a platform for information sharing and policy coordination, it does not have a macroprudential mandate or any formal powers.** The CCSSF acts as a platform for cross-agency coordination primarily by (i) allowing information sharing regarding emerging trends and risks that may compromise financial stability; and (ii) providing—through exchange of views during each meeting—inputs for decision making for participating institutions. The CCSSF does not make any decisions, and thus has no formal voting arrangements or powers, including to issue recommendations to individual institutions or to issue warnings about risks to financial stability.

**15. The Colombian model of macroprudential oversight has been effective in securing broad support for policy actions, but informality of the institutional arrangements is a vulnerability.** The wide representation of institutions brings a broad range of expertise to the CCSSF, fosters open discussions on trade-offs, and helps secure broader support for policy actions. Additionally, the cross-agency coordination is strengthened by reciprocal representation in internal decision making and advisory committees: (i) the MHCP is represented in the Advisory Board of the

<sup>2</sup> For example, the Minister of Finance is a voting member of the BR’s Board of Directors, while the SFC head is a voting member of the MHCP’s Steering Committee of the Financial Regulatory Unit.

SFC (Fogafin is a permanent invited participant); (ii) the Minister of Finance chairs and is a voting member of the BR's Board of the Directors; and (iii) the SFC head is one of three voting members of the Steering Committee of the Financial Regulatory Unit of the MHCP (Unidad de Regulación Financiera del MHCP, URF). The system facilitates continuous dialogue among the institutions involved in macroprudential oversight. However, one vulnerability that arises from the current informal arrangements is that, under different senior staff at the three institutions, future exchange of information and views, and frequent multilateral consultations could—at least in theory—be curtailed.

**16. The central bank's weak role in the macroprudential decision-making process may entail risks to the framework's *willingness to act*.** Powers over most of the instruments in the macroprudential toolkit lie with the SFC and the MHCP (URF). Additionally, the Minister of Finance presides over the BR's Board of Directors, and the SFC head can be invited as a nonvoting member. Meanwhile, the BR is not equally represented in the internal committees of the SFC or MHCP (URF). In sum, the MHCP and the SFC, the prudential regulator, play a dominant role in macroprudential decision making.

## B. Ability to Act

**17. The macroprudential authorities have adequate information-collection powers, although access to sufficiently granular data on foreign bank exposures requires further improvements.** The BR and the SFC have a Memorandum of Understanding (MoU) that governs the flow of data between the two institutions. A technical committee meets regularly to discuss changes to the set of shared data. In addition, the SFC supervises and collects data on compliance with FX regulations issued by the BR. The URF can access information on regulated financial institutions through requests to the SFC. Apart from regular data collection for supervisory reporting purposes, the SFC obtains additional information through topical industry reports and surveys. When the COVID-19 pandemic started in early 2020, the SFC was able to intensify frequency and scope of reporting in a smooth manner. The recently implemented Financial Conglomerates Law (Ley de Conglomerados Financieros) has provided the SFC with additional data-collection powers regarding financial conglomerates (FCs). At the same time, despite MoUs and working groups with supervisors in host countries, information received from foreign subordinates of Colombian banks does not seem to be sufficiently granular for the purposes of financial stability risk assessment and macroprudential policy conduct.

**18. Each institution has hard powers over the macroprudential tools that lie within its mandate, although the borrower-based limits are set by the government.** Powers over the macroprudential toolkit are split among the SFC, the BR, the MHCP (via the URF), and the government. The SFC sets countercyclical provisions, the Liquidity Risk Indicator requirement (IRL), the NSFR, the MHCP has powers over the leverage ratio, the capital conservation buffer, the capital buffer for systemically important institutions (SIFI buffer), while the BR controls IRL requirements accounting for currency mismatches, net open FX position limits, a macroprudential reserve

requirement, and credit growth limits.<sup>3</sup> The Loan to Value (LTV), Debt Service to Income (DSTI), and amortization period limits can be changed via a decree at the request of a group of ministries and require the signature of the President of The Republic of Colombia. While the process for changing these limits has not been lengthy so far, it is quite complex and poses important risks. First, the changes can be made at the request of ministries that are not involved in financial sector oversight, and with objectives other than financial stability in mind. Second, while the proposals need to be approved by the MHCP, approval or even consultation of the proposed changes with the SFC or the BR is not required.<sup>4</sup>

## C. Effective Coordination and Cooperation

**19. The framework provides multiple platforms for policy coordination and cooperation between the relevant institutions.** While it does not involve any voting arrangements, the CCSSF fulfills its role of the main platform for information sharing and policy coordination. The CCSSF meetings take place at a minimum quarterly frequency, and preparation of the agenda and technical analysis is led by a Technical Subcommittee that consists of technical staff from each institution. The agenda for each session is proposed by the secretariat to the Technical Subcommittee, staffed by the MHCP, but all members actively participate in the setting of the work program and the agenda through the Subcommittee and the CCSSF itself. As already mentioned, other coordination bodies for information sharing among the CCSSF members include the SFC's Advisory Board, the URF Steering Committee, and the BR's Board of Directors.

**20. Current data-sharing arrangements between different domestic institutions work well.** The framework fosters complementarities that exist between macroprudential and microprudential supervision and regulation. The SFC collects most of the data relevant for macroprudential policy purposes and is obliged to share those with the URF and the BR as needed; although, for now, the BR does not seem to have full access to consolidated supervisory data necessary for the purposes of financial stability risk analysis (see paragraph 29 for details).

**21. The lack of formal arrangements for the macroprudential oversight poses risks to effective coordination and contributes to some multiplication of functions in the risk monitoring process.** Both the SFC and the BR conduct their own systemic risk monitoring and analysis. While the technical staff of the two institutions exchange views on a continuous basis and often cooperate on projects, such as stress tests, the systemic risk assessments of each institution

<sup>3</sup> For example, between May 2007 and June 2008, the BR imposed a marginal requirement on new deposit flows to strengthen monetary policy transmission, and with the macroprudential goal of dampening credit growth. Limits on credit growth (both aggregate and at the sectoral level) can be imposed for cumulative periods not exceeding 120 days per year; the tool has been used only once, in 1994.

<sup>4</sup> For example, in 2018 the Ministry of Housing proposed to increase the LTV limits, but the MHCP, following consultations with the SFC and the BR, objected to the proposal. While the coordination between the MHCP, the SFC, and the BR worked well, despite the absence of formal arrangements, this case highlights vulnerabilities of the current framework. As mentioned in paragraph 9, under different senior staff at the three institutions, future multilateral consultations and the (informal) impact of the SFC and the BR on the borrower-based macroprudential tools could—at least in theory—be curtailed.

are mostly used to inform their own policy decisions, and the existing arrangements do not guarantee convergence on a unified view on systemic risks. The BR's analytical leverage is conveyed mostly through its publications and through the possibility of commenting on the drafts of regulatory initiatives of the MHCP and the SFC, although the future regulatory agendas of the SFC and the MHCP are not coordinated with the BR. Finally, the informality of the framework poses a coordination risk where macroprudential tools used by one agency can undermine any explicit or implicit financial stability mandate of another institution.

## D. Accountability and Communication

**22. The accountability framework of the SFC, the only institution with explicit financial stability mandate, is adequate.** The SFC is obliged to publish an annual report on its activities, and it frequently provides updates on the regulatory agenda and financial sector to the members of parliament. Additionally, the SFC publishes several reports on the industries it supervises on a regular frequency. However, those publications are primarily focused on releases of most recent (aggregate and institution-level) data and do not include a comprehensive systemic risk analysis.

**23. There are multiple channels through which financial stability assessments and macroprudential policy decisions are communicated.** After each meeting, the CCSSF publishes a statement on the issues discussed during the session, and its views on risks to financial stability. The secretariat prepares minutes of every meeting, but these are not available to the public. The BR publishes a semiannual Financial Stability Report (FSR) that is devoted to the assessment of systemic risks in the financial system and topical reports on selected issues. The semiannual Report to Congress also explains the BR's policy actions, which might include financial stability measures.

**24. The absence of explicit financial stability mandates in the case of other institutions, and the BR's weak role in decision making could undermine the framework's accountability.** As already mentioned, the BR and the MHCP do not have a statutory responsibility for financial stability,<sup>5</sup> which might lead to a bias for inaction. Additionally, despite being the institution conducting the systemic risk analysis in a most comprehensive way, the BR's role in the macroprudential oversight process and decision making is limited. In principle, the BR does not have to be consulted regarding new regulatory initiatives but only comments on already drafted proposals of changes in regulations. The BR does not have the formal powers to propose actions to the SFC or to the MHCP.

## E. Recommendations

**25. The institutional framework could be strengthened by ensuring that a financial stability objective is included in statutory acts or by preparing a joint macroprudential oversight strategy.** As the financial system develops further, major financial institutions become larger and more complex, and the demands on financial regulation and supervision increase; greater

<sup>5</sup> The BR's Board of Directors publishes minutes of their monetary policy meetings.

formalization of the process and mandates is recommended. While the constitutional framework in Colombia might restrict the flexibility of adjusting policy mandates of individual institutions, the authorities could consider preparing a macroprudential oversight strategy jointly drafted and signed by all relevant institutions. Such strategy could establish a shared definition of financial stability and define key medium-term priorities, e.g., in the areas of macroprudential toolkit and closing data gaps.

**26. The BR's role in macroprudential policy could be strengthened to counter biases for inaction and support timely identification of risks to financial stability.** The dominant role of the SFC and the MHCP in the current framework poses a risk of “blind spots” emerging in systemic risk monitoring. For example, the SFC, as the prudential supervisor, is more likely to focus on risks related to individual institutions and limit their attention to only supervised entities. Increasing the BR's role in systemic risk monitoring and decision making would help harness its expertise, take advantage of the macroeconomic focus, and reduce the risk of missing the build-up of risks. This could be achieved, for example, by assigning the BR a clearly defined role to provide its analysis of systemic risk and to propose policy actions to other institutions on a comply-or-explain basis.

**27. The framework's ability to act could be further strengthened by giving more powers to the SFC and the BR in decision making.** Participation of the MHCP in the macroprudential oversight framework—for example, through the CCSSF—is useful when changes in legislation are needed to expand the macroprudential toolkit or the regulatory perimeter, and when cooperation of the fiscal authority is needed to mitigate systemic risk. However, the MHCP's strong role in macroprudential oversight in Colombia risks delays in decision making, or decisions that are made for reasons other than financial stability. Ideally, powers over tools such as the systemic risk buffer or the leverage ratio should be passed to the SFC and the BR. Similarly, powers over LTV, DSTI, and mortgage amortization period limits should be in the hands of the institutions involved in financial system oversight. These changes would also address current multiplication of functions among different institutions, and the risk of various agencies setting macroprudential policy that undermines explicit or implicit financial stability mandates of other agencies.

**28. There is some scope to improve the macroprudential publications to enhance clarity of communication.**<sup>6</sup> The FSR's role as a communication tool could be strengthened by centering it more around the assessment of risks to financial stability. For example, the FSR could provide more aggregate statements and charts indicating the change in the level of the overall risk to financial stability since the previous assessment. The description of changes in financial regulations could be put in the context of the developments in financial vulnerabilities as well.

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<sup>6</sup> Prepared by Manuel Perez Archila.

## OPERATIONAL FRAMEWORK AND RISK MONITORING

**29. A well-functioning macroprudential framework involves comprehensive monitoring of systemic risks and the ability to translate risk assessments into policy actions.** The effectiveness of the macroprudential policy framework depends to a large extent on how the process of monitoring and assessment of systemic risk, as well as calibration of macroprudential policy tools, are operationalized in practice. Easy access to good quality data is a prerequisite for effective risk monitoring, which in turn should be carried out through a well-defined functional process and involve analysis of a sufficiently broad range of indicators. The analysis of risks to financial stability should be supported by the use of different econometric and modelling methods. Finally, the mapping of systemic risk into policy actions should involve a thorough cost-benefit analysis and frequent ex post evaluation.

### A. Risk Monitoring

**30. The SFC and the BR both conduct continuous systemic risk monitoring.** Systemic risk assessments of each institution are mostly used to inform their own policy decisions, and the existing arrangements do not guarantee convergence on a unified view on key risks to financial stability. Nevertheless, the technical staff from the two institutions interact frequently, and the institutional framework provides sufficient opportunities for the exchange of views on systemic risks and build-up of vulnerabilities between different institutions.

**31. The systemic risk monitoring frameworks of both the SFC and the BR are well structured and relatively advanced.** The SFC and the BR monitor several indicators to assess the build-up of risks (of which many are derived from in-house bank surveys and micro-level data) and cooperate in the conduct of stress-testing exercises:

- Several indicators of vulnerabilities for aggregate credit developments, as well as for different borrower segments are computed and assessed on a regular frequency.
- Once a year, an assessment of the overall trends in the nonbank financial sector is conducted, but specific nonbank sectors (e.g., mutual funds, pension companies, trust companies) are monitored on a higher frequency.
- For the structural risk monitoring, the authorities collect data on bilateral exposures between financial institutions on intragroup and related-party exposures, and compute indicators of systemic importance of individual institutions using the Basel Committee on Banking Supervision (BCBS) methodology. The SFC is currently working on enhancements to its interconnectedness risk monitoring of financial conglomerates.
- Although not on a regular basis, the authorities conduct ex post assessments of the effectiveness of different macroprudential policies and usually publish them in thematical reports and analytical paper series, e.g., by the BR.

**32. To inform calibration of macroprudential tools, approaches recommended by international bodies, such as the BCBS, are often used.** Colombian institutions inform their decisions also by analyzing the experiences of other countries and by considering approaches suggested, e.g., in academic literature. Nevertheless, there is scope for the calibration of macroprudential tools (e.g., LTV and DSTI limits, the levels of capital buffers) to be additionally supported by more advanced technical analysis. In this context, the ongoing internal review of the BR's financial stability policy framework aims to better align the available analytical frameworks with macroprudential policy decisions.

## B. Data and Information

**33. The recently implemented Financial Conglomerates Law allows the SFC to enhance risk monitoring of financial conglomerates, but some data gaps remain.** The SFC is currently working on using data on exposures and interconnections—including cross-border ones—within FCs to strengthen the monitoring of concentration and contagion risks. Nevertheless, availability of granular data on activities of foreign subordinates (such as detailed information on the credit risk profile of loans by portfolio segment) of Colombian banks on a regular basis could be improved. This poses a considerable risk to efficient monitoring of risk build-up, especially as lending through foreign entities is currently equivalent to 33 percent of total domestic credit outstanding, and foreign entities account for as much as 50 percent of total profits for some Colombian banks. Similarly, currently collected data does not allow for a precise calculation and for a detailed analysis of the *total* household debt-to-income and *total* debt-service-to-income ratios of households. Data on the mortgage loans by borrower type (first-time buyer, investor) is not available either.

## C. Recommendations

**34. Systemic risk monitoring would benefit from more coordination, especially in terms of leveraging the BR's technical expertise and macroeconomic focus.** The existing arrangements do not ensure that inputs from the BR are considered by the SFC from the early stages of its systemic risk assessment process, or that they are taken into account by either the SFC or the MHCP when considering policy actions. Systemic risk assessment would benefit from taking full advantage of the BR's technical expertise and macroeconomic focus; for example, by formalizing the central bank's responsibility for systemic risk assessment and granting the BR a right to suggest policy actions to other institutions involved in macroprudential oversight on a comply-or-explain basis.

**35. In some areas, monitoring and analysis could be enhanced, and data gaps closed.** The SFC and the BR are aware of the existing data gaps and are working to fill them. Collection of more granular data on foreign exposures of Colombian banks will be crucial for early identification of risks from foreign exposures (see next Section for details). Closing data gaps on indebtedness of domestic households will enhance the assessment of risks from household credit. Additionally, more sophisticated modelling techniques and analytical approaches could be used as additional inputs in the calibration of macroprudential tools. Finally, the BR does not seem to have access to all consolidated supervisory data necessary for systemic risk analysis. Given the conglomerates account

for the vast majority of cross-border exposures, the access to consolidated reporting or other relevant data that the SFC has is critical for the BR to contribute to the systemic risk assessment process.

## SYSTEMIC RISKS AND MACROPRUDENTIAL POLICY STANCE

**36. As a part of the crisis response following the COVID-19 shock, the authorities applied a broad range of borrower relief and financial sector measures.** The policy response included initial quick provision of unconditional support to borrowers (e.g., through a temporary moratorium on loan repayments) followed by more targeted measures, including the Program to Support Debtors (PAD). On the macroprudential front, in the first quarter of 2020, the SFC allowed supervised institutions to release the countercyclical provision (CIC) buffers,<sup>7</sup> with 11 entities taking advantage of this possibility. Financial intermediaries should rebuild their CIC provisions within two years from September 1, 2021. Separately, in March 2021, the DSTI limit was increased from 30 percent to 40 percent for social housing (VIS) mortgages. Given high levels of buffers and healthy pre-pandemic balance sheets, capital and liquidity requirements were not relaxed during the pandemic, and the schedule for implementation of the NSFR, capital conservation, and SIFI buffers was not affected (Table 2).

### A. Broad-Based Vulnerabilities

**37. Private credit growth has slowed down sharply, following the COVID-19 shock, and pandemic-related uncertainty poses a downside risk to credit quality.** Due to lag effects and borrower relief measures, the full impact of the COVID-19 shock on banks' balance sheets has not materialized yet. Sudden changes in financial conditions (due to both global and domestic factors) as well as continued difficulties in eradicating the pandemic, which led to further lockdowns, are the key risks to borrowers' solvency and banks' asset quality going forward. The unprecedented size of the economic contraction in 2020 justified the broad-based financial regulatory response, including the release of countercyclical provisions. While it is too early to assess the impact of the CIC easing on credit provision during the pandemic, the existing evidence on countercyclical provisioning shows that it can be an effective tool in smoothing cyclical fluctuations of credit.

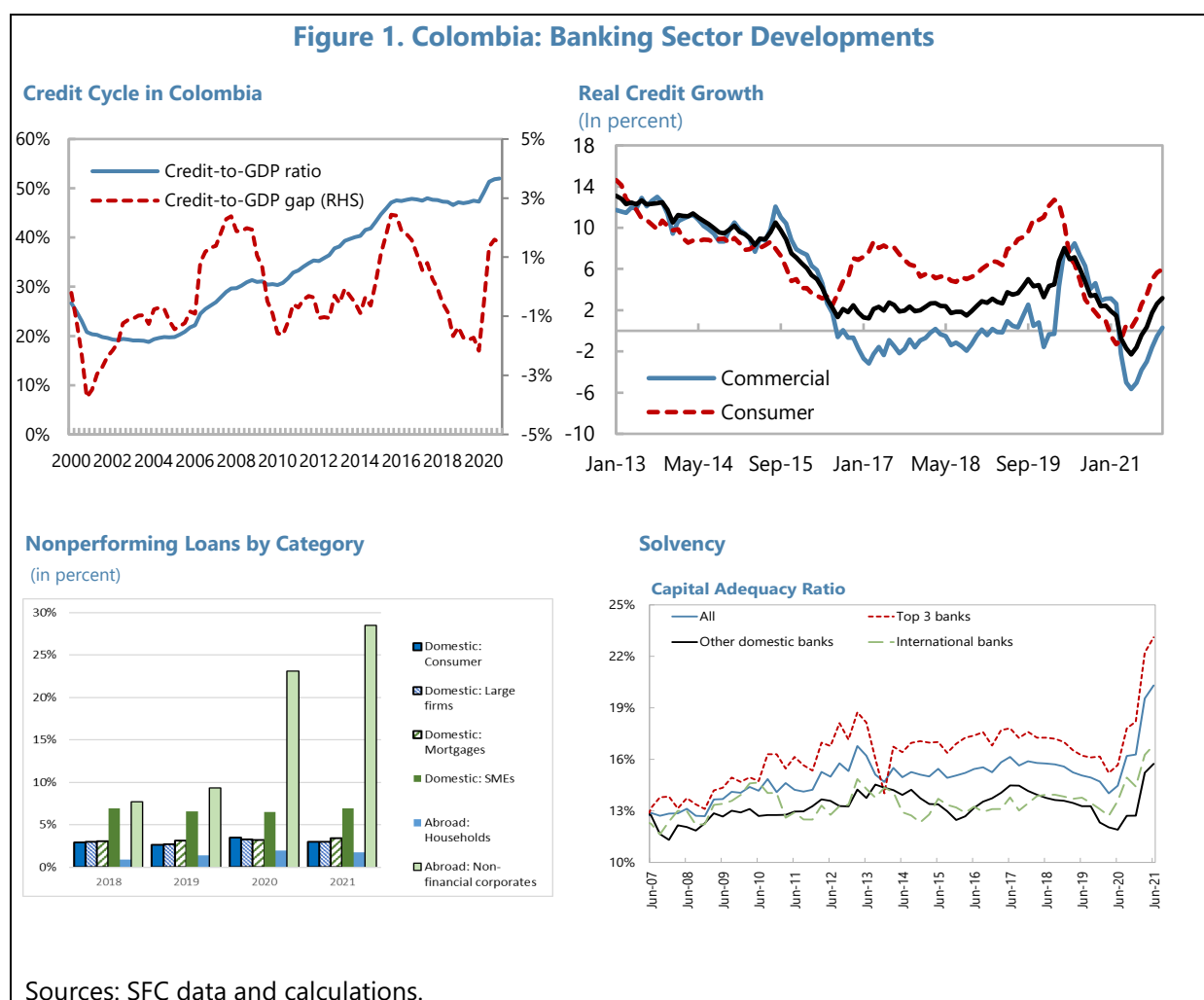
<sup>7</sup> At the same time, the SFC did not impose restrictions on dividend payouts by the supervised institutions (and resorted to using moral suasion instead).



**Table 2. Colombia: Implementation Schedule of Basel III Measures**

Requirement	Implementation schedule
Capital conservation buffer	The capital conservation buffer of 1.5% of RWA must be built up over four years as follows: January 2021: 0.375%, January 2022: 0.75%, January 2023: 1.125%, January 2024: 1.5%.
Capital buffer for systemically important institutions	The capital buffer of 1% of RWA will be implemented over 4 years as follows: January 2021: 0.25%, January 2022: 0.5%, January 2023: 0.75%, January 2024: 1%.
Net stable funding ratio	The NSFR requirement is differentiated by the systemic importance of the regulated entities (Groups 1 and 2), and it will be fully phased in in 2022: Group 1: March 31, 2020: 80%, March 31, 2021: 90%, March 31, 2022: 100%. Group 2: March 31, 2020: 60%, March 31, 2021: 70%, March 31, 2022: 80%.

**Figure 1. Colombia: Banking Sector Developments**



## B. Household and Corporate Sector Risks

**38. The credit quality of consumer loans, which grew at a high pace pre-pandemic, could deteriorate considerably.** The growth in consumer loans slowed down to 2 percent in 2020, but the high volume of lending shortly before the COVID-19 shock hit (Figure 1) raises concerns about the performance of the outstanding stock of consumer loans, with the share of NPLs in the segment increasing from about 3.3 percent to 5.5 percent between June 2020 and June 2021.

**39. Gaps in the design of borrower-based tools might explain why they were not tightened in response to the rapid consumer credit growth pre-pandemic.** After identifying potential risks stemming from rapid consumer credit growth, the SFC tightened provisioning requirements for this loan segment, while macroprudential policies were not used. In this context, it is important to note that there are no debt-to-income (DTI) limits in the macroprudential toolkit in Colombia, while the DSTI limits apply only to costs related to servicing mortgage loans.

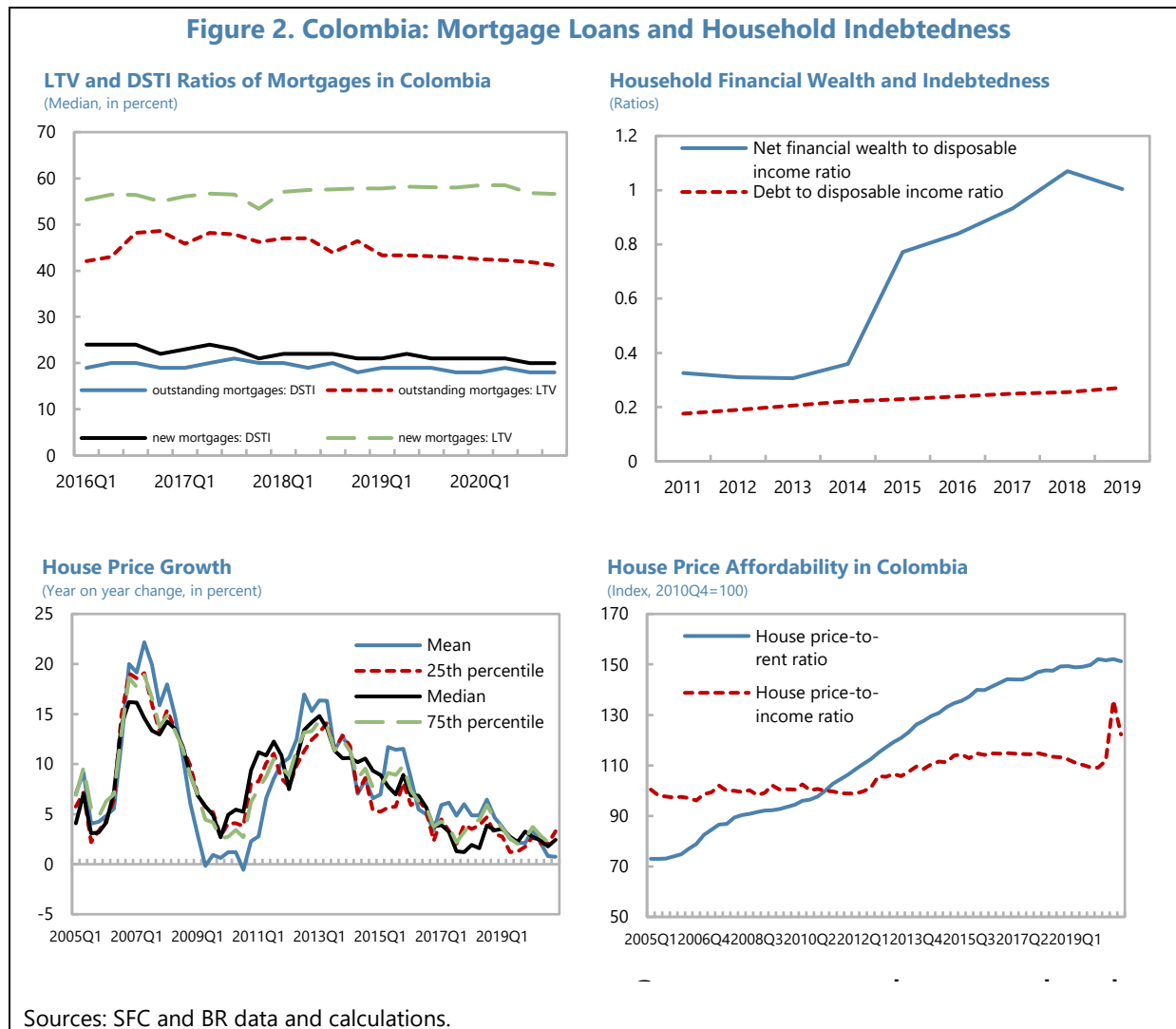
**40. House prices have remained stable over the past years, and relatively tight LTV and DSTI limits have helped keep the riskiness of the mortgage loans at low levels.** Since 2000, the LTV limit for mortgage loans has been fixed at 70 percent (and at 80 percent for VIS loans), while since March 2021 the first payment of a mortgage loan cannot exceed 30 percent of the family income and 40 percent for VIS loans. Previously, it was 30 percent for all mortgage loans. Variable-rate loans account for only 10 percent of all mortgage loans, and practically all loans to households are granted in local currency. Finally, the overall indebtedness of Colombian households remains low, with the aggregate debt to disposable income ratio at about 20 percent (Figure 2).<sup>8</sup>

**41. The current design of the LTV limits poses a risk of leakages.** First, the LTV and DSTI limits are only applicable to mortgages issued by institutions supervised by the SFC. While the size of nonbank lending in Colombia is marginal, this poses a potential risk of leakages to the nonbank sector going forward. Second, the so-called “house leasing loans,” which account for about 12 percent of all housing loans, are not subject to the LTV limits.

**42. Nonfinancial corporate (NFC) debt has been growing at a moderate pace, but the high share of variable-rate loans makes it vulnerable to a sharp tightening in financing costs.** Nominal NFC debt increased by 8.3 percent in 2018 and by 6.5 percent in 2020, while NFC bank credit grew by only 2.3 percent in 2020. Domestic bank credit to NFCs accounts for about 60 percent of NFC debt outstanding, followed by intercompany loans that account for further 32.5 percent. The share of debt securities is relatively low at 6.6 percent. The NFC debt in foreign currency stands at 35.5 percent of total debt, although the majority of it is debt by firms with natural hedges (FX loans account for 8.3 percent of corporate loans by financial intermediaries). Most corporate bank loans (84.9 percent) are variable-rate, which makes corporates vulnerable to sharp adjustments in the financing conditions.

<sup>8</sup> At the same time, the DSTI ratios of indebted households, when accounting for credit card debt, have been edging up in recent years.

**Figure 2. Colombia: Mortgage Loans and Household Indebtedness**

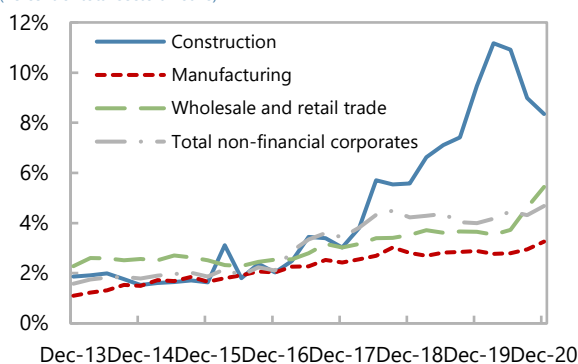


### C. Liquidity and FX Risks

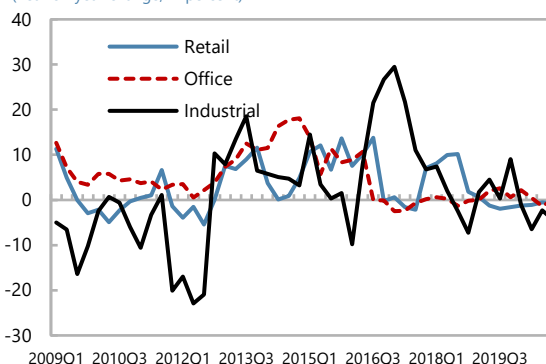
**43. Thanks to conservative FX regulations, risks from FX lending remain low.** Mortgage lending to households in FX currency is not allowed and financial intermediaries are subject to a range of conservative regulations on their FX exposures, including net open FX position limits and a so-called “FX matching” regulation, which requires intermediaries to match any foreign currency funding by an exposure of at least the same maturity in the same currency, or by an exposure in Colombian peso with an appropriate hedging transaction. The FX matching regulation applies at a transaction level and strictly restricts financial intermediaries’ ability to borrow and lend in FX.

**Figure 3. Colombia: Corporate Sector Credit Quality and Commercial Real Estate Prices****Nonperforming Corporate Loans**

(Percent of total sectoral loans)

**Commercial Real Estate Price Growth**

(Year on year change, in percent)



Sources: SFC and BR data and calculations.

**44. Banks maintain considerable liquidity buffers.** Since 2009, the SFC requires banks to keep a minimum 100 percent ratio of liquid assets to short-term liabilities (IRLs) for 7-day and 30-day horizons. While, in general, the ratios are constructed in a similar way to the Basel III liquidity coverage ratio (LCR), many parameters used in their computation are not totally aligned with those prescribed by the Basel III standards, or are not determined yet. For example, most run-off factors receive a more favorable treatment than the ones prescribed by the LCR.<sup>9</sup> Additionally, in March 2020, the SFC started implementation of an NSFR requirement, which is to be finalized by end-March 2022. Colombian banks maintain healthy buffers above the IRL requirements and broadly comply with the final NSFR requirements already, ahead of the March 2022 deadline. Both IRL and NSFR requirements apply to Colombian banks on an unconsolidated basis only.

**45. There is scope for simplifying the framework of liquidity regulations.** The liquidity tools applied by the SFC and the BR are very similar and overlap to a large extent. To better control liquidity risk related to FX exposures, the BR imposes an individual (IEI) and a consolidated (IEC) liquidity requirement on Colombian banks,<sup>10</sup> similar in spirit to the IRL requirements by the SFC. At the same time, the IRL requirements imposed by the SFC include an additional adjustment parameter (haircut) to control for the exchange rate risk.

<sup>9</sup> See the Technical Note “Basel Core Principles Detailed Assessment of Observance” for details.

<sup>10</sup> The two measures require exchange market intermediaries to meet short term obligations in the currencies that are significant. The unconsolidated measure takes into consideration that a liquidity requirement in a currency cannot be covered by a surplus in another one without modelling the potential FX risk that can emerge in that operation. At the same time, the consolidated measure requires the parent company to cover its subsidiaries’ liquidity requirement.

## D. Structural Vulnerabilities

**46. Significant presence of large Colombian banks abroad allows for diversification of risks, but is also a source of vulnerability.** The NPL ratios of Colombian banks' subsidiaries remain relatively low but have started increasing over the past year. At the same time, NPLs of the subsidiaries of Colombian banks have increased significantly, although they account for less than 2 percent of total loans (Figure 1). Given the large contribution of foreign subsidiaries to profits of internationally active Colombian banks, further deterioration in credit quality abroad could have a negative impact on domestic banks' profitability. The considerable dependence on profits generated abroad, combined with a relatively large volume of foreign lending (equal to about 33 percent of total domestic credit outstanding), make the need to collect more granular data on foreign portfolios of Colombian banks even more urgent.

**47. The complexity of financial conglomerate (FC) structures is an important vulnerability.** Lending by nonbanks accounts for less than 5 percent of total domestic credit in Colombia. At the same time, many financial (and nonfinancial) institutions are highly interconnected via financial conglomerate structures.<sup>11</sup> The five largest FCs own about 60 percent of the total financial system's assets, and the share of pension funds and trusts has increased considerably since the last FSAP. At the same time, Colombian FCs' exposures abroad increased from US\$11 billion in 2009 to US\$93 billion in 2020 (one-third of which are exposures in Panama), with about 92 percent of these assets held in Central America. In this context, the SFC's efforts to enhance its monitoring of interconnectedness risks within FCs are much needed and should continue.

**48. The recently implemented SIFI buffer should help mitigate risks from high concentration in the banking sector.** The three largest banks in Colombia account for about two-thirds of the banking system's assets. Although they are well capitalized (Figure 1) and hold large liquidity buffers above the regulatory minima, any issues at any of the top three banks can cause negative spillovers into the rest of the system. To mitigate those risks, the authorities have decided to introduce a 1 percent capital buffer for SIFIs, which will become fully operational in 2024. Capital adequacy of the largest institutions will be further enhanced following the introduction of a capital conservation buffer of 1.5 percent (binding for all banks), to be fully phased in by 2024 as well.

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<sup>11</sup> Another source of interconnectedness is material exposures of the pension funds to banks through holdings of bank-issued debt securities.

## E. Recommendations

### 49. The authorities could consider further enhancements to the macroprudential toolkit in the following areas:

- The LTV and DSTI tools could be expanded to cover (i) leasing products; and (ii) nonbank credit, the DSTI tool to include nonmortgage debt. This would help limit potential leakage effects and address future risks stemming from rapid growth in overall indebtedness.
- The IRL and NSFR limits could be better aligned with Basel III standards. Importantly, given large foreign exposures of some Colombian banks, consideration should be given to applying the IRL and NSFR requirements on a consolidated basis as well.
- Liquidity regulations could be simplified by relying on one set of IRL measures, while ensuring a proper treatment of risks from foreign currency exposures both domestically and abroad. In the case of build-up of FX risks, the IRL and NSFR ratios binding at an individual currency level could be added to the toolkit.
- Finally, while the countercyclical provisions have worked well so far, the authorities could evaluate the possibility of introducing a countercyclical capital buffer at a neutral positive rate. This could help lock in available capital and complement the countercyclical provisions.

**50. Credit risks of Colombian banks' foreign exposures and interconnectedness risks within FCs warrant continued surveillance.** Close monitoring of foreign exposures and efforts to increase granularity of data on the portfolios of Colombian banks' subsidiaries should continue. The monitoring and analysis of interconnectedness risks within the financial conglomerates, including through their cross-border networks, should be intensified.