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TECHNICAL NOTE ON MACROPRUDENTIAL POLICY FRAMEWORK AND TOOLS

This paper on Spain was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with Spain. It is based on the information available at the time it was completed on July 10, 2024.

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TECHNICAL NOTE

MACROPRUDENTIAL POLICY FRAMEWORK AND TOOLS

Prepared By
Monetary and Capital Markets
Department

This Technical Note was prepared by IMF STX staff in the context of the Financial Sector Assessment Program in Spain. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at http://www.imf.org/external/np/fsap/fssa.aspx

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Glossary

AMCESFI Autoridad Macroprudencial Consejo de Estabilidad Financiera

(Spain's Macroprudential Authority Financial Stability Council)

AML/CFT Anti-Money Laundering / Combating the Financing of Terrorism

BBM Borrower-Based Measures

BCBS Basel Committee on Banking Supervision

BdE Banco de España (Bank of Spain)

BoE Boletín Oficial del Estado (Spain's Official Gazette)

CCP Central Counterparty

CCPRRR Central Counterparty Recovery and Resolution Regulation

CCS Consorcio de Compensación de Seguros (Spain's Insurance

Compensation Consortium)

CCyB Countercyclical Capital buffer
CET1 Common Equity Tier 1 Capital

CII Collective Investment Institutions

CIS Collective Investment Schemes

CNMV Comisión Nacional del Mercado de Valores (Spain's National

Securities Market Commission)

CRD Capital Requirements Directive

CRR Capital Requirements Regulation

DGSFP Dirección General de Seguros y Fondos de Pensiones (Spain's

Directorate General of Insurance and Pension Funds)

DSTI Debt-Service-to-Income

DTI Debt-to-Income

EBA European Banking Authority

ECB European Central Bank

EIOPA European Insurance and Occupational Pensions Authority

ESCB European System of Central Banks

ESG Environmental, Social and Governance

ESMA European Securities and Markets Authority

ESRB European Systemic Risk Board

EU European Union

FMI Financial Market Infrastructure

FMSI Financial Market Stress Indicator developed (by the CNMV)

FROB Spain's Executive Resolution Authority
FSAP Financial Sector Assessment Program

FSB Financial Stability Board

FSC Financial Stability Committee (of BdE)
FSN Financial Stability Note (of CNMV)
FSR Financial Stability Report (of BdE)
FSRev Financial Stability Review (of BdE)

FSTC Comité Técnico de Estabilidad Financiera (Financial Stability

Technical Committee of AMCESFI)

G-SII Global Systemically Important Institution

IAIS International Association of Insurance Supervisors

IMF International Monetary Fund

IOSCO International Organization of Securities Commissions

IRB Internal Ratings-Based
LGD Loss Given Default

LSI Less Significant Institutions

LTI Loan-to-Income
LTV Loan-to-Value

MINECO Ministry of Economy, Trade and Enterprise

MoU Memorandum of Understanding

MMF Money Market Fund

MMoU Multilateral Memorandum of Understanding

NBFI Non-Bank Financial Intermediation

NCA National Competent Authority

OEF Open-Ended Fund

O-SII Other Systemically Important Institution
SCCyB Sectoral Countercyclical Capital Buffer

SRI Systemic Risk Indicator developed by the BdE

SRISK Systemic Risk Indicator for the banking system (by the BdE)

SSM Single Supervisory Mechanism

SyRB Systemic Risk Buffer

TIBER Threat Intelligence-based Ethical Red Teaming (a framework for

testing cybersecurity)

EXECUTIVE SUMMARY

The macroprudential policy framework in Spain has been significantly reinforced in recent years. A new macroprudential authority, Macroprudential Authority Financial Stability Council, (AMCESFI), has been established in Spain, to provide high level oversight and to strengthen internal coordination on the identification, prevention, and mitigation of systemic risks in the financial system. Techniques and approaches for systemic risk identification have been further enhanced. And gaps in the macroprudential policy toolkit identified by the previous FSAP have been closed, although to date the new tools have not been applied given the assessment of risks. The framework incorporates many areas of strength by international standards, such as the techniques for systemic risk identification and the breadth of permissible macroprudential tools.

The establishment of AMCESFI completes the high-level architecture for macroprudential policy. Addressing a key recommendation from the 2017 FSAP, as well as an outstanding European Systemic Risk Board (ESRB) recommendation, the authorities established the AMCESFI in March 2019. The AMCESFI brings together high-level representatives of the Ministry of Economy, Trade and Enterprise (MINECO) and the three sectoral authorities with responsibilities in the area of regulation and supervision of the Spanish financial system — Banco de España (BdE), Comisión Nacional del Mercado de Valores (CNMV), and the General Directorate of Insurance and Pension Funds (DGSFP)). Besides the responsibility for systemic risk oversight and for ensuring effective policy coordination, AMCESFI has powers to issue warnings and recommendations on financial stability issues, and opinions on policy measures proposed by the sectoral member authorities (BdE, CNMV and DGSFP), albeit the latter retain final responsibility for policy proposal, adoption and implementation.

While AMCESFI has successfully strengthened high-level coordination, and bolstered the institutional framework supporting financial stability, there is scope to reinforce the framework further. For example, relative to peer bodies in other major economies, the highest-level decision-making body, the AMCESFI Council, meets less frequently, and no summary minutes of meetings are published. And the AMCESFI Annual Report is typically published with a time lag of nine to ten months, rendering it somewhat outdated.

The role, credibility, transparency, and accountability of the new authority would be strengthened by more frequent meetings and enhanced communication. To follow current international practice, regular meetings of the AMCESFI Council should be held at least quarterly, rather than as a minimum half-yearly as at present. Publication of summary minutes of Council meetings as well as timely Annual Reports would provide additional clarity on the key work of AMCESFI to support financial stability in Spain. Such reports could also sharpen the communication of the Council's judgements on the major systemic risks identified and policy actions taken. Such judgements would naturally build on the high-quality assessments included in the financial stability publications released by the sectoral member authorities, supplemented by AMCESFI analysis of

cross-sectoral issues, interlinkages and interconnections, and their potential impact on risks to the financial system as a whole.

Active consideration of the case for adding external expert members to the AMCESFI Council is recommended. Addition of independent macroprudential policy experts (such as well-respected academics) to macroprudential authorities (as in France and the United Kingdom, and at the ESRB, for example) provides additional and alternative perspectives, as well as internal challenge. This raises the quality of decision-making and helps to complement the specific views of policymakers from similar backgrounds and experience. Separately, it would also be helpful to review the role of AMCESFI as a potential high level coordination body on specific financial stability topics, in cases where such coordination is warranted. The financial stability risks from climate change are one example where AMCESFI has been assigned such a role, with the authority publishing the first report in a biennial series in September 2023.

In parallel to the launch of AMCESFI, frameworks for systemic risk identification have been further upgraded, and the set of policy instruments available to the authorities has been enhanced. Tools to address banking sector risk have been supplemented by the addition of borrower-based measures, as recommended by the 2017 FSAP, and extensions have also been made to address systemic risks arising in specific sectors, as well as risks from nonbank financial intermediation (NBFI) more effectively.

Systemic risk identification in Spain uses advanced methods and approaches. Continuing investment in improving data and information in key areas such as individual borrower income, and cross-border exposures of investment funds (as part of European and global initiatives) is important. One important aspect is to intensify work within the European Union, as well as globally, to facilitate the availability of granular information on domestic fund investments in other non-domestic funds. Exploiting the scope for further deepening cross-agency work on system-wide risk topics under the AMCESFI umbrella will further bolster risk analysis and policy implementation from a financial stability perspective. Important examples include the impact on system-wide liquidity risk from the recent switch in household deposits to insurance products and investment funds, business model risks from developments in bancassurance, and newer areas such as cyber risks.

The policy toolkit available to the Spanish authorities is broad by international standards. The set of available macroprudential policy tools for addressing banking sector risks is comprehensive and is well-integrated with risk monitoring. The set of tools to address systemic risks from NBFI is also extensive by current international standards, and the FSAP welcomes the active participation of Spanish authorities in the ongoing high priority work of the Financial Stability Board and global standard setting bodies in further developing and reinforcing the policy framework.

Notwithstanding the relatively broad set of tools in Spain, activation of some is in the hands of individual participants, such as fund managers, whose incentives may not always be fully aligned with the system-wide objectives of the authorities. Moreover, the work of the authorities on understanding and mitigating system-wide risks from episodes of rapidly evolving financial market stress is hampered by a shortage of information. Continuing development of the policy framework for addressing risks from NBFI would be enhanced by stronger reporting requirements that ensure

that the CNMV is immediately notified of the activation of policy tools in the hands of fund managers and investment firms. Enhanced capability to monitor fund and firm behavior under stressed conditions is essential to facilitate judgements of whether the tools available to the authorities to handle extreme conditions should be activated.

The current neutral macroprudential policy stance is appropriate. The authorities have adopted a neutral cyclical macroprudential policy stance in relation to the banking sector in recent years. Apart from application of higher capital buffers for systemically important credit institutions, no other instruments have been deployed in the banking sector – the countercyclical capital buffer (CCyB) rate has remained at 0 percent since inception in 2016, and no sectoral or borrower-based measures have been introduced. The FSAP supports the current neutral policy stance. No major cyclical or structural imbalance that would warrant deployment of a policy tool has been detected by the FSAP assessment of current systemic risks.

The introduction of a positive neutral countercyclical capital buffer (CCyB) for credit institutions in Spain is recommended. As of early 2024, the BdE is actively considering the case for introducing a positive neutral CCyB which would provide additional resilience and policy space to ensure that banks can continue lending to the real economy in the event of major adverse structural shocks. The FSAP welcomes this work and supports adoption of a positive neutral capital buffer. To shorten the implementation lag for deployment of macroprudential tools in the banking sector, there also appears scope to simplify and streamline the administrative and consultation procedures that must be followed by the BdE before final decisions to activate macroprudential tools can be taken.

Recommendation Agency Priority	Table 1. Spain: Macroprudential Policy: Main Red	commendations ¹	
Increase the frequency of AMCESFI Council meetings to at least quarterly. [see paragraph 131] Raise the transparency of AMCESFI by publishing minutes / summaries of Council meetings and timely Annual Reports. [133] Strengthen the communication of AMCESFI's assessment of the major systemic risks and vulnerabilities, building on the expertise of the member authorities and detailed analysis of interconnections, interrelationships and spillover risks across the domestic financial system, as well as across borders. [133] Review the case for appointing 2 or 3 high caliber external macroprudential policy experts to the AMCESFI Council to strengthen the diversity of perspectives and expertise. [132] Consider the case for AMCESFI to take on a broader high-level coordination role on financial stability topics and cross cutting risk issues (such as cyber risk and crisis management planning) as warranted, inviting other key public sector stakeholders to participate on relevant topics as appropriate. [134] Complete the first internal performance review of AMCESFI as mandated in the Royal Decree establishing the macroprudential authority. [135] Continue to address data and information gaps to enhance financial stability analysis and the development and application of macroprudential instruments. [143] Increase the complement of CNMV staff with technical skills on big data analysis to support enhanced systemic risk identification and analysis of market trends and risks. [144] Introduce a positive neutral countercyclical capital buffer for the banking sector. [171] Review possible options for simplifying and streamlining the domestic consultation and administrative processes entailed in the deployment of certain key macroprudential policy instruments, in order to shorten the lengthy implementation lag. [164] Review and strengthen notification (and in some cases, permissioning) requirements on funds, and, where warranted, other NBFI providers, to inform the supervisor of the activation of all policy instruments and to	·		Priority
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¹ Immediate (within 1 year); Short-term (1-3 years)	Continue to engage actively in European and global fora on the further deepening and development of the framework and policy toolkit for addressing system-wide risks from NBFI and implement the main conclusions and recommendations when available. [¶65]	CNMV, DGSFP,	ST

INTRODUCTION¹

A. Scope and Approach of this Note

- 1. This technical note (TN) reviews the development and operation of the macroprudential framework in Spain. It follows up recommendations highlighted in the 2017 FSAP,² and reports on enhancements to the framework in recent years.
- 2. The aim is to assess the effectiveness of the framework in supporting the preservation of financial stability in Spain, and to offer recommendations for consideration by the authorities on potential further reinforcements. Three broad areas are covered, drawing on international experience³ and IMF guidance on good practices.⁴ The first main section of the note focuses on the institutional framework for systemic risk oversight and the development and application of macroprudential policies. Specifically: does the institutional framework support strong and effective coordination among authorities charged with responsibilities for identifying and addressing systemic risks, and enable and encourage timely policy actions to mitigate them? The second section concentrates on systemic risk monitoring in Spain, reviewing the approaches and techniques used by the authorities to detect emerging threats. Is the framework comprehensive and effective? The final section examines the policy toolkit available to the authorities. How complete is the armory of policy instruments to combat potential sources of systemic risk in Spain? Is each policy tool readily available for application in case of need, or are there impediments (such as data shortfalls or incomplete regulations) that may delay deployment? Are further steps warranted to overcome such impediments?
- 3. The author is very grateful to the authorities and private sector participants for their excellent help and cooperation in preparing this review. The author benefitted greatly from the valuable inputs and insightful views from meetings with regulators, supervisors, and market participants in Spain.

¹ This TN was prepared by Nigel Jenkinson (IMF External Expert).

² https://www.imf.org/en/Publications/CR/Issues/2017/10/06/Spain-Financial-System-Stability-Assessment-45321 and supporting TNs: https://www.imf.org/en/Publications/CR/Issues/2017/11/13/Spain-Financial-Sector-Assessment-Program-Technical-Note-Systemic-Risk-Oversight-Framework-45387 and https://www.imf.org/en/Publications/CR/Issues/2017/11/13/Spain-Financial-Sector-Assessment-Program-Technical-Note-Institutional-Arrangements-for-45388

³ The IMF Macroprudential Policy Survey Database includes data on 184 economies https://www.elibrary-areaer.imf.org/Macroprudential/Pages/Home.aspx

⁴ https://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Staff-Guidance-Note-on-Macroprudential-Policy-PP4925

INSTITUTIONAL FRAMEWORK

A. Overview

- 4. The macroprudential policy framework has been significantly upgraded and enhanced in recent years. In 2019, the government established a new macroprudential oversight authority, Autoridad Macroprudencial Consejo de Estabilidad Financiera—the AMCESFI. Associated strengthening of macroprudential powers and additions to the set of policy instruments were introduced in parallel. Establishment of AMCESFI addressed a key recommendation from the 2017 FSAP to close an important gap in the arrangements identified in the assessment.⁵ It also fulfilled the outstanding 2011 recommendation from the ESRB requesting Member States to designate an authority entrusted with the conduct of financial system-wide macroprudential policy.⁶
- **5. AMCESFI provides high level oversight of systemic risk and coordination of the policy response across the Spanish financial system.** To ensure effective coordination across the whole system, the Council brings together high-ranking officials from MINECO and the three financial supervisory and regulatory authorities (BdE, CNMV, and DGSFP). Besides responsibility for systemic risk oversight and policy coordination, AMCESFI has powers to issue warnings and recommendations on financial stability issues, and opinions on policy measures proposed by the sectoral authorities (BdE, CNMV and DGSFP).
- 6. The sectoral authorities retain powers for the proposal, adoption, and implementation of macroprudential measures in Spain. The Royal Decree establishing AMCESFI notes that: "The national authorities, which have more information and experience in monitoring the supervised institutions, keep the supervisory powers they have been exercising to date and thus their public independence is respected. AMCESFI aims to strengthen those functions, through analysis and by issuing opinions and warnings and, ultimately, by sending macroprudential policy recommendations to the three sectoral financial supervisors (BdE, CNMV and DGSFP) so that they adopt specific measures." MINECO has legislative initiative powers as regards the financial system, the design of the institutional architecture and the development of macroprudential tools for use in Spain.
- 7. The Spanish framework is fully integrated into the European System of Financial Supervision and the Banking Union's Single Supervisory Mechanism. In relation to systemic risk and macroprudential policy, the ESRB has responsibility for macroprudential oversight of the European Union financial system, and issues warnings and recommendations, where appropriate, as well as assessment and opinions on macroprudential measures proposed or adopted by national

⁵ https://www.imf.org/en/Publications/CR/Issues/2017/10/06/Spain-Financial-System-Stability-Assessment-45321

⁶ https://www.esrb.europa.eu/pub/pdf/ESRB Recommendation on National Macroprudential Mandates.pdf

⁷https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102 2019 de 1 de mar zo en.pdf

authorities.⁸ BdE is a member of the Single Supervisory Mechanism (SSM) for banking supervision in the euro area (EA), comprising the European Central Bank (ECB) and National Competent Authorities (NCAs). Hence, the ECB has direct responsibility for the supervision of the 10 Spanish banking groups designated as Significant Institutions (SI), working closely with the BdE as the Spanish NCA. The Less Significant Institutions (LSIs) are under the direct supervision of the BdE, while the ECB is responsible for exercising oversight of the functioning of the euro area (EA) banking system. In terms of macroprudential policies linked to the banking system, national authorities are assigned powers and responsibilities (under the Capital Requirements Regulation (CRR) and Directives (CRD)).⁹ For members of the SSM, the ECB assesses measures proposed by the specified national authority and also, in relation to certain specified tools, has powers to implement more stringent 'top up' measures than those initially recommended by the national authority.¹⁰ For proposed macroprudential measures relating to securities markets and investment funds, the CNMV notifies the European Securities and Markets Authority (ESMA),¹¹ but retains ultimate power and responsibility for implementation. Similarly, the DGSFP would notify the European Insurance and Occupational Pensions Authority (EIOPA) of proposed measures, but again retains final authority.¹²

8. The overall framework for macroprudential oversight is summarized in Table 2 below. The table also summarizes the financial structure in Spain, which highlights the high relative importance of the banking system in terms of financial intermediation and as a source of systemic risk.¹³ The following section describes the application of the policy framework in practice.

⁸ https://www.esrb.europa.eu/about/background/html/index.en.html National authorities notify the ESRB of planned macroprudential measures in advance of implementation. The ESRB responds with an opinion.

⁹ Besides setting out the framework for a specified set of instruments, Article 458 of the CRR also provides a mechanism for national authorities to apply stricter national requirements for macroprudential reasons in certain circumstances, following prior notification to the European Parliament, the Council, the Commission, the ESRB and EBA, and approval by the Council. https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/1015

https://www.ecb.europa.eu/pub/financial-stability/macroprudential-measures/html/index.en.html Top up powers apply to any tool envisaged in the EU legislation (CRR/CRD), including the countercyclical capital buffer (CCyB), and supplementary capital buffers for global and other systemically important institutions (G-SII and O-SII).

¹¹ In addition to the ESRB which is notified of proposed measures across all financial sectors.

¹² Again, in addition to the ESRB. To date, the DGSFP has not proposed the implementation of any macroprudential tools or instruments.

¹³ Assets of deposit taking institutions (banks) in Spain are some two-thirds of total financial system assets.

Table 2.	Spain: Financi	al Structure and M	lacroprudential Poli	icy Responsibi	lities in Sp	ain
Sector	Responsibility for regulation	Application of macroprudential	Warnings and recommendations	Opinions on macro-	Share of financial	Share of GDP
	and	policies and tools	on issues affecting	prudential	system in	in June
	supervision	policies and tools	financial stability	measures	June	2023
	50.00.00.00.00.00.00.00.00.00.00.00.00.0		inianician statement		2023 (%)	(%)
Credit Institutions	BdE, ECB	BdE, ECB	AMCESFI, ESRB	AMCESFI, ESRB, ECB, EBA, ¹ EU Council and Commission ²	74.8	285.3
Securities Markets (including Investment Funds)	CNMV	CNMV	AMCESFI, ESRB	AMCESFI, ESRB, ESMA	6.9	26.3
Insurance Companies and Pension Funds	DGSFP	DGSFP	AMCESFI, ESRB	AMCESFI, ESRB, EIOPA	8.0	30.7
Other Institutions ³	BdE, CNMV, DGSFP	BdE, CNMV, DGSFP	AMCESFI, ESRB	AMCESFI, ESRB	10.3	39.1
Overall: System-wide	ECB, BdE, CNMV, DGSFP		AMCESFI, ESRB	AMCESFI, ESRB	100	381.4

Sources: Banco de España, CNMV, and CEIC.

B. Operation of the Macroprudential Framework

Autoridad Macroprudencial Consejo de Estabilidad Financiera

9. AMCESFI provides high level leadership, oversight and coordination of systemic risk identification and macroprudential policy implementation. As outlined in the Royal Decree establishing AMCESFI, the specific goal is "to contribute to the stability of the financial system as a whole, by identifying, preventing and mitigating any circumstances or actions that may give rise to systemic risk, and "to that end, AMCESFI shall monitor and analyze the factors that might affect systemic risk and may issue opinions, warnings and recommendations." Through these activities, the

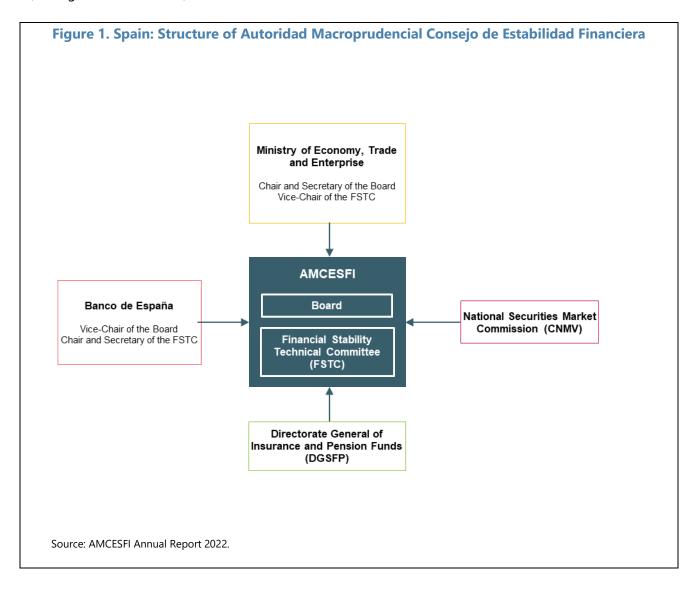
¹Certain specified measures, including application of the systemic risk buffer and stricter measures to protect financial stability under Article 458 of the CRR.

² Certain specified measures, including application of the systemic risk buffer and stricter stringent measures to protect financial stability under Article 458 of the CRR.

³ Other financial institutions in Spain include specialized lending institutions (typically regulated and supervised by BdE) and financial auxiliaries, captive financial institutions and money lenders. Such institutions are supervised and regulated by one of the BdE, CNMV or DGSFP depending on the financial activity.

authority is tasked with "ensuring the financial system makes a sustainable contribution to economic arowth." ¹⁴

AMCESFI is a collegiate body, bringing together the top-ranking officials of MINECO and the three authorities with responsibilities in the area of regulation and supervision of the Spanish financial system. It is led by a Council or Board which is chaired by the Minister of Economy, Trade and Enterprise, with the Governor of the BdE being the Vice Chair and supported by a high-level Financial Stability Technical Committee (FSTC), chaired by the Deputy Governor of the BdE. Further support to the Council is provided by subcommittees or working groups established by AMCESFI (see Figure 1 and Table 3).



¹⁴https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102 2019 de 1 de ma rzo en.pdf

Table 3. Spain: Membership of AMCE	Table 3. Spain: Membership of AMCESFI Council and the Financial Stability			
Technical Committee				
AMCESFI Council	Financial Stability Technical Committee (FSTC)			
Minister of Economy, Trade and Enterprise (Chair)	Deputy Governor of the BdE (Chair)			
Governor of the BdE (Vice Chair)	Secretary General of Treasury and International			
	Financing (Vice Chair)			
Secretary General of Treasury and International	Director General: Financial Stability, Regulation			
Finance (Secretary)	and Resolution of the BdE (Member and			
	Secretary)			
Chair of the CNMV	Vice-Chair of the CNMV			
Deputy Governor of the BdE	Director General: Banking Supervision of the BdE			
Vice-Chair of the CNMV	Director General: Policy and International Affairs			
	of the CNMV			
Secretary of State for Economy and Business	Director General of Treasury and Financial Policy			
Support				
Director General of Insurance and Pension Funds	Director General of Insurance and Pension Funds			
(Head of DGSFP)	(Head of DGSFP)			
	Director General: Markets CNMV or Director			
	General: Institutions CNMV (depending on the			
	topic)			

10. The AMCESFI Council is the decision-making body of the macroprudential authority.

As outlined in the Royal Decree, the Council must meet at least once every six months, and may meet more frequently as needed. All members of the Council (or their senior nominated alternate) must attend meetings physically or virtually for the meeting to be quorate and for resolutions to be passed. The FSTC meets at least quarterly to support and prepare the meetings of the Council. In particular, the FSTC has responsibility to prepare and study the matters to be presented to the Council for review and decision. The FSTC reviews the financial stability landscape and prepares reports; submits proposed opinions, warnings and recommendations to the Council; and monitors macroprudential policy discussions in international fora that may have implications for the Spanish framework and for Spain. There is considerable overlap of membership between the Council and FSTC, with four members in common. This supports communication.

11. Support for the Council and FSTC is provided by the member authorities. There is no dedicated Secretariat or staff. Rather, the support is provided by the staff of the respective authorities from their regular budgets at no additional cost. In line with the arrangements for the Chair, the Secretariat for the Council is provided by MINECO, while that for the FSTC is fulfilled by the BdE. A number of cross-member Working Groups or Subcommittees have been established on a flexible basis to take AMCESFI's work forward. For example, one working group undertakes regular analysis of interconnectedness of the Spanish financial system which is an important cornerstone of

¹⁵ The Royal Decree specifies that: "The measures stipulated in this Royal Decree shall not involve an increase in remuneration, resources or other staff costs. Each AMCESFI member organization shall provide the human and physical resources necessary for the functioning of AMCESFI, charged to their respective budgets." https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102 2019 de 1 de marz o en.pdf

AMCESFI's work. Another subcommittee reviewed possible regulatory and supervisory approaches to crypto assets. Further groups will be created as needed. In addition, drafting teams are regularly established to prepare the Annual Report and other special reports published by AMCESFI.¹⁶

12. Accountability of AMCESFI is provided through an Annual Report and a Parliamentary hearing. The Annual Report is typically published in September or October of the subsequent year, and is followed by the chair of AMCESFI attending a hearing of the Parliamentary Committee on Economic Affairs.¹⁷ Transparency is also supported through a dedicated website, which provides additional reports and details on the membership and mandate of the Council, as well as links to relevant sections of the member authority websites.¹⁸ AMCESFI does not, however, publish minutes or summaries of Council or FSTC meetings.

13. The work of AMCESFI may be categorized into three broad areas:

- Systemic risk analysis—reviewing risks to financial stability in Spain, approaches taken to address
 them and as needed, preparing public warnings on risks and recommendations to the sectoral
 authorities under a comply or explain procedure.
- Reviewing proposed macroprudential measures and issuing opinions on them—the sectoral authorities must notify AMCESFI in advance of proposed macroprudential policy measures.¹⁹
 Following review, AMCESFI shall prepare an opinion or recommendation on the measure for consideration by the sectoral authority prior to the final decision.
- Other tasks to strengthen financial stability and the macroprudential policy framework—for example, assessing potential new or emerging sources of systemic risks.
- 14. An assessment of systemic risks forms a standard component of Council and FSTC meetings. In addition to drawing on the risk analysis undertaken by the sectoral regulators to review the macro-financial environment and developments in each of the major sectors, AMCESFI pays particular attention to interconnections, and to potential spillovers and contagion channels across the whole financial system. A subcommittee supports the work on interconnectedness and system-wide risk, which is featured in a dedicated Chapter in the AMCESFI annual report. The annual reports summarize the Council's views on financial developments and the main sources of systemic risk. AMCESFI has not issued any formal warnings or recommendations based on these assessments to date.

¹⁶ The biennial report on risks from climate change to the financial system (the first report was published in September 2023), and a report assessing public support measures adopted during the COVID19 pandemic and their impact on financial stability, published in July 2021.

¹⁷ Publication of the 2022 Annual Report was delayed until January 2024.

¹⁸ https://www.amcesfi.es/wam/en/

¹⁹ The ESRB and other relevant European authorities must also be notified.

- **15. AMCESFI reviews proposed macroprudential measures and publishes opinions on changes in policy settings.** Each year, AMCESFI is notified of a minimum of six measures by the BdE. These include the setting of the countercyclical capital buffer (CCyB) for the banking sector, which is reviewed on a quarterly basis, and the additional capital buffer rates for global systemically important institutions (G-SII) and other, (i.e., national) systemically important institutions (O-SII) respectively,²⁰ which are reviewed and set annually. The CCyB rate has been held at zero percent in Spain since its introduction in 2016, as announced each quarter by the BdE. AMCESFI confirmed support for the setting at its inaugural meeting in April 2019,²¹ and has not issued an opinion to date in the absence of a proposed change in the CCyB rate. By contrast, AMCESFI decided to publish formal opinions in 2021 and 2023 on proposed changes by the BdE to O-SII buffer rates, in both cases supporting the proposals.²² The BdE has not proposed any other macroprudential measures since the inception of AMCESFI. The CNMV notified AMCESFI in 2020 of the introduction of a temporary ban on short selling given market turbulence at the onset of the pandemic.²³ As the measure required immediate implementation, AMCESFI did not publish a formal opinion.²⁴
- **16.** AMCESFI also undertakes additional tasks to strengthen financial stability and support the enhancement of the macroprudential framework. For example, in 2021, AMCESFI was tasked by the government to coordinate the preparation of biennial reports on the risks of climate change on the financial system. The first such report was published in September 2023.²⁵ AMCESFI is also taking forward work on other emerging issues that may pose cross sectoral and system-wide risks, such as crypto assets. As the national macroprudential authority concerned, AMCESFI took forward the compliance with an ESRB recommendation seeking an assessment of the impact of national COVID-19 support measures on financial stability, publishing a report in 2021.²⁶ Table 4 below provides a summary of AMCESFI activities.

²⁰ As at December 2023, there are four O-SIIs in Spain, one of which is also designated as a G-SII.

²¹ https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI-Annual Report 2019.pdf

²²https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/Opinion_OSIIs2022.pdf and https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/Opinion_OSIIs2024.pdf

²³ Other European securities regulators introduced similar measures. The CNMV approved the restrictions in mid-March 2020, and they remained in force until May 2020, with the approval of ESMA.

²⁴ https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI-Annual Report 2020.pdf

²⁵ https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI Informe Cambio Climatico 2023 en.pdf

²⁶ https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/DO Analisis medidas Covid-19.pdf

	Table 4. Spain: Activities of AMCESFI					
2019 ¹ 2020 2021 2022 2023						
Number of Meetings						
AMCESFI Council	2	5	3	2	3	
FSTC	3	12	4	9	4	
Combined Total	5	17	7	11	7	
Domestic Measures	6	7	6	6	6	
notified to AMCESFI						
Opinions Published	0	0	1	0	1	
Warnings and	0	0	0	0	0	
Recommendations						
Annual Report	July 2020	October	September	January 2024		
Published		2021	2022			
Other Publications	-	-	Occasional	-	1 st Biennial	
			Paper on		Report on	
			public		Climate	
			support		Change Risks	
			measures to		to the	
			mitigate risks		Financial	
			from COVID-		System ³	
			19 ²			

¹ AMCESFI commenced operations in March 2019.

Banco de España

17. The mission of the BdE is to achieve price stability and financial stability in order to support stable economic growth.²⁷ To promote financial stability, the BdE has developed an analytical framework to identify potential systemic risks and has responsibility for proposing and adopting macroprudential tools in the banking domain, following notification and consultation with AMCESFI, the ECB and other European authorities as required. Working closely with European authorities as a member of the European System of Central Banks (ESCB), the BdE has core functions as the national competent authority for banking supervision under the SSM, as well as for promoting the smooth functioning of payment systems, and, without prejudice to the functions of the ECB, of national payment systems. This includes emergency liquidity assistance (ELA) operations.²⁸

18. The BdE has established a regular quarterly process to review the systemic risk situation of the Spanish banking system and the case for taking macroprudential policy action. Each quarter, the BdE's internal Financial Stability Committee (FSC), chaired by the

² Available in Spanish only at https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/DO Analisis medidas Covid-19.pdf
³ https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI Informe Cambio Climatico 2023 en.pdf

²⁷ https://www.bde.es/wbe/en/sobre-banco/

²⁸ https://www.bde.es/wbe/en/sobre-banco/mision/funciones/

Governor,²⁹ undertakes an assessment of stability risks based on staff preparatory analysis, and makes recommendations on macroprudential policies for decision by the Executive Commission, as the relevant governing body of the central bank.³⁰ The process is highly flexible. Additional meetings and discussions can be held at any stage, for example, under conditions of financial stress or crises, or to review the case for changes in policy stance in more detail.

19. The assessment of stability risks and macroprudential policies is underpinned by detailed technical analysis published by the BdE. Twice a year, the quarterly assessment is based on the draft of the BdE half-yearly Financial Stability Report (FSR), which is overseen by the FSC and subsequently approved by the Executive Commission and Governing Council for publication.³¹ In the remaining quarters, a macroprudential note is prepared to facilitate the FSC review. In support, the BdE has undertaken extensive analysis of indicators, models and techniques which guide the use of key macroprudential tools. Up to date monitoring information and explanatory analysis on the major instruments for the banking sector is published on the website,³² together with decisions on the CCyB³³ and on the G-SII and O-SII buffers.³⁴ The BdE also publishes a twice-yearly Financial Stability Review (FSRev) aimed at fostering dialogue and communication on financial stability topics, with a particular focus on macroprudential policy, regulation and supervision,³⁵ as well as working and occasional papers on financial stability topics (ahead of their eventual publication in scholarly journals).

Comisión Nacional del Mercado de Valores

20. The CNMV is responsible for the supervision of Spanish securities markets and activities of all participants in them. As well as promoting transparency, market integrity and the protection of investors, CNMV also undertakes prudential supervision of companies providing collective investment schemes, such as investment funds, and securities market operations, to

²⁹ The Financial Stability Committee comprises the Governor (Chair), the Deputy Governor (Vice Chair) and senior officials (Director Generals of relevant business areas). The Committee meets monthly (or more frequently as needed), although typically there is no meeting in August and December.

³⁰ The Executive Commission comprises the Governor, Deputy Governor, and two members appointed from the Governing Council among its independent members. The Governing Council of the BdE is chaired by the Governor, and comprises the Deputy Governor, six independent members, and the General Secretary for the Treasury and International Financing (from MINECO), and Vice-Chair of the CNMV. https://www.bde.es/wbe/en/sobre-banco/organizacion/organos-rectores/

³¹ https://www.bde.es/wbe/en/publicaciones/estabilidad-financiera-politica-macroprudencial/informe-estabilidad-financiera/

³² For example, for the CCyB <u>https://www.bde.es/wbe/en/areas-actuacion/politica-macroprudencial/herramientas-macroprudenciales/colchon-capital-anticiclico/</u>

³³ https://www.bde.es/f/webbe/GAP/Secciones/SalaPrensa/NotasInformativas/23/presbe2023-101en.pdf

https://www.bde.es/f/webbe/GAP/Secciones/SalaPrensa/NotasInformativas/23/presbe2023-103en.pdf and https://www.bde.es/f/webbe/GAP/Secciones/SalaPrensa/NotasInformativas/23/presbe2023-79en.pdf To date, the BdE has not applied any additional macroprudential instruments that are potentially available in the toolkit.

³⁵ https://www.bde.es/wbe/en/publicaciones/estabilidad-financiera-politica-macroprudencial/revista-estabilidad-financiera/

support the security and solvency of the system. Investment funds activities are closely monitored by the Supervision Department, which allows the identification of those funds with higher liquidity risk, which are specially watched during stress periods. CNMV has powers to assess and mitigate systemic risks from markets, including powers to set liquidity and leverage requirements for investment funds to mitigate the risks of fire-sales of assets in the face of massive redemption pressures that amplify financial instability.^{36,37}

- 21. CNMV actively monitors market developments and participants for signs of incipient and emerging stress. Drawing on a range of indicators and analytical tools, staff prepare regular reports on market conditions, as well as publishing information on the website (for example, posting weekly indicators of market stress).³⁸ In addition to reports at regular cycles, linked to the internal monitoring schedule, various indicators are available at different frequencies; weekly (and if necessary under stress, daily), monthly, and quarterly, and ad hoc reports can be produced at any time in response to major market developments, and under conditions of stress, with CNMV calling for a special meeting of the FSTC or the AMCESFI Council as warranted.³⁹
- **22. The CNMV publishes regular assessments of systemic risks in financial markets.** Besides publishing high frequency indicators, the CNMV publishes Financial Stability Notes (FSN) semiannually, ⁴⁰ as well as an annual monitor on trends and risks in NBFI. ⁴¹ These reports are presented to the Chair and reviewed by the CNMV Executive Committee, which provides high level governance at the CNMV under the Board, although the reports are signed off formally by the Chair under delegated powers. ⁴² The CNMV also publishes a regular Bulletin, an Annual Report as well as other relevant data and material such as working papers.

https://www.bde.es/f/webbe/INF/MenuHorizontal/AreasActuacion/Normativa/en/RealDecreto102 2019 de 1 de ma rzo en.pdf

³⁶ CNMV was granted explicit powers in Royal Decree 22/2018 which established additional macroprudential tools: https://www.boe.es/buscar/act.php?id=BOE-A-2018-17294

³⁷ The CNMV issued a Technical Guide on Liquidity Management in Collective Investment Schemes in 2022, to set out regulatory and supervisory expectations. https://www.cnmv.es/DocPortal/Legislacion/Guias-Tecnicas/GT 1 2022 Liquidez IIC en.pdf

³⁸ https://www.cnmv.es/portal/publicaciones/seriesweb/PagSerie.aspx?serie=XD0006

³⁹ Special meetings of the FSTC may be called by the Chair or at request of two members. There is a provision for the standard notice provision of 15 days for meetings to be shortened to a minimum of 2 days in cases of particular urgency. The FSTC, two members of the Council, as well as the Chair, can also request exceptional meetings of AMCESFI as needed.

⁴⁰ https://www.cnmv.es/portal/publicaciones/publicacionesgn.aspx?id=51 The FSNs were published quarterly from the launch in 2017 to 2021, switching to a half yearly frequency in 2022.

⁴¹ https://www.cnmv.es/DocPortal/Publicaciones/Informes/IFNB_2021_ENen.pdf Monitor_IFNB_2022_EN_2en.pdf (PROTEGIDO) (cnmv.es).

⁴² The CNMV Executive Committee comprises the Chair and Vice-Chair of the CNMV and 3 Board members appointed by the Board. The Board itself comprises the Chair, Vice Chair, the same 3 Board members, and 2 additional Board members (the General Secretary of the Treasury and International Financing from MINECO – who is also a member of the BdE Board as well as the Secretary the AMCESFI Council, and the Deputy Governor of the BdE – who is also the Chair of the FSTC)

23. Decisions on deployment of macroprudential tools in response to perceived systemic risks are taken by the Chair under delegated powers (though would typically be discussed at the Executive Committee), following review of recommendations by AMCESFI and notification to the relevant European authorities as required. The one such measure adopted in recent years was the temporary ban on short selling introduced in response to market turbulence at the onset of the COVID-19 pandemic in March 2020.⁴³ Given the severe turbulence, the measure was introduced urgently, following notification to ESMA and AMCESFI.

Dirección General de Seguros y Fondos de Pensiones

- **24. The DGSFP has responsibility for the supervision of insurance, reinsurance and pension funds**. It has explicit macroprudential responsibilities and powers to identify and address systemic risks arising from the insurance and pension funds sector. Such powers were expanded in 2018 to support the enhancements to the macroprudential policy framework in Spain.⁴⁴ Further amplification of powers will be provided through the finalization of the revision of the governing Solvency II regulatory framework at the European level, following transposition into Spanish law.
- 25. DGSFP staff regularly review potential sources of common or potential system-wide risk in the insurance and pension sectors, based on a range of data, indicators, and technical analysis. Staff undertake a regular quarterly systemic risk assessment, based on a framework of indicators recommended by EIOPA. The assessment is reviewed by the internal Management Committee which comprises the senior officials of the Directorate under the chair of the Director General of Insurance and Pension Funds who heads the DGSFP. The risk assessment, together with supplementary analysis and deeper dives on particular topics, supports the contribution of the DGSFP to the broader discussions on systemic risks at AMCESFI, as well as decisions on macroprudential and supervisory responses. While the DGSFP remains a part of MINECO, 45 decisions on the deployment of macroprudential tools are the responsibility of the Director General. AMCESFI would be consulted in advance to provide an opinion, and EIOPA would typically also be informed.46
- 26. The DGSFP publishes an annual report covering the main developments, issues and risks affecting the insurance and pension sectors, including the implications for macroprudential policy.⁴⁷ The report is prepared by staff and submitted to the Director General for review and approval. The DGSFP also publishes a quarterly bulletin as well as regular statistical

⁴³ https://www.cnmv.es/webservices/verdocumento/ver?t=%7b5baf609e-ed4e-4dad-a697-80c55548e181%7d

⁴⁴ Decree 22/2018 https://www.boe.es/buscar/act.php?id=BOE-A-2018-17294

⁴⁵ The possibility of DGSFP being established as an independent supervisory authority has been mooted in the past, a proposal which was supported by the IMF in previous FSAPs. The Royal Decree establishing AMCESFI contains a final provision enabling a transfer of membership in the event of establishment of an independent insurance supervisory authority.

https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102_2019_de_1_de_marz_o_en.pdf A change in structure is not planned by MINECO in the short term.

⁴⁶ The ESRB would also subsequently be notified.

⁴⁷ https://dgsfp.mineco.gob.es/en/Publicaciones/DocumentosPublicaciones/Informe%20del%20sector%202022.pdf

information and other relevant papers. To date, DGSFP has not introduced any macroprudential measures covering the insurance sector, although, similar to recommendations introduced by the BdE for the banking sector, the Directorate-General did address recommendations to insurance companies and groups, during the COVID-19 health crisis, to exercise extreme caution regarding dividend payments, share repurchases and bonus payments in order to support the quantity and quality of companies' own funds (capital).⁴⁸

C. Assessment and Recommendations on the Institutional Framework

- **27. Spain has a robust institutional framework for macroprudential policy following the establishment of AMCESFI.** The authority supports high level oversight of emerging risks to the Spanish financial system and facilitates the adoption of policies to address them. Bringing together the key authorities on a regular basis has strengthened cooperation and coordination across the system and increased the focus on common risks across financial sectors, as well as on interconnections and contagion risks. AMCESFI fulfils an important need highlighted in the previous FSAP.
- **28. Powers and responsibilities under the new arrangements are clear**. The sectoral authorities retain the responsibility for proposing and implementing macroprudential tools, under the oversight of AMCESFI, which provides further encouragement for policy actions through its capability to provide opinions, warnings and recommendations, as well as through the intensification of the focus on risks to the system as a whole.
- **29. The initial operation of the new framework is encouraging**. Coordination has intensified among the Spanish financial sector authorities. Greater attention has been paid to system-wide issues, and to potential spillovers and amplification channels across sectors. AMCESFI has operated flexibly, with the Council and FSTC meeting frequently in 2020 given the severe financial stress from the COVID-19 pandemic. And AMCESFI has been tasked with additional key responsibilities such as preparing a biennial report on climate change risks to the financial system. ⁴⁹ Moreover, AMCESFI has provided and published opinions on proposed macroprudential measures. To date, the Council has decided that there has not been a need to provide any warnings or recommendations.
- **30.** There is, nonetheless, scope for reinforcing the arrangements and operation of the **Spanish framework in some dimensions.** Table 5 below compares the framework in Spain to that in four major overseas countries. Although there are differences in structures and approaches across countries, given legal and financial systems and national policy preferences, there are, nevertheless,

⁴⁸ The restrictions on dividends and adoption of more prudent variable remuneration policies to preserve capital in response to the COVID-19 pandemic were guided at the European level by the European Commission, ESRB, ECB, EBA, EIOPA and ESMA. AMCESFI Annual Report 2020:

https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI-Annual Report 2020.pdf

⁴⁹ The first report was published in September 2023 https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI Informe Cambio Climatico 2023 en.pdf

some broad pointers from international experience that may help the Spanish authorities to strengthen the system further.

Table 5. Spain	Table 5. Spain: Institutional Frameworks for Macroprudential Policy—International Comparison					
	Spain	France	Germany	United Kingdom	United States	
National Macroprudential Authority	AMCESFI	High Council for Financial Stability (HCFS)	Financial Stability Council (FSC)	Financial Policy Committee (FPC)	Financial Stability Oversight Council (FSOC)	
Form	Committee of Financial Authorities	Committee of Financial Authorities	Committee of Financial Authorities	Central Bank Committee	Committee of Financial Authorities	
Chair	Minister of Economy, Trade and Enterprise	Minister of Finance	Ministry of Finance (State Secretary)	Central Bank Governor	Secretary of the Treasury	
Members	Ministry, Central Bank, Financial Market Authority, Insurance and Pensions Funds Supervisor	Ministry of Finance, Central Bank, Financial Market Regulator, Accounting Standards Authority, External Members	Ministry of Finance, Central Bank, Financial Regulator	Central Bank, Financial Conduct Authority, External Members	Treasury, Regulatory Agencies	
External Members	No	Yes	No	Yes	No	
Hard Powers over Macroprudential Instruments	No ²	Yes	No	Yes	Yes	
Semi-hard and Soft Powers (recommendations and warnings)	Yes	Yes	Yes	Yes	Yes	

¹Including a member with independent insurance expertise.

²Hard powers over macroprudential instruments remain with the sectoral financial authorities (BdE, CNMV and DGSFP).

 $^{^3}$ The prudential regulator (BaFin) has hard powers over macroprudential instruments.

⁴For designation of systemic importance.

Table 5. Spain	Table 5. Spain: Institutional Frameworks for Macroprudential Policy—International Comparison (concluded)					
	Spain	France	Germany	United Kingdom	United States	
Meetings ⁵	At least two times a year ⁶	At least four times a year	At least quarterly	Usually, four times a year	At least quarterly	
Publication of meeting minutes or summary	No	Yes	[No] ⁷	Yes	Yes	
Annual report	Yes	Yes	Yes	FPC publishes half yearly FSRs	Yes	
Annual report timing	September- October covering previous calendar year	December- covering current calendar year	June – covering April of previous year to March of current year	July and December – covering previous six-month period	December – covering current calendar year	

⁵ All macroprudential authorities have the capability to hold additional meetings as required.

31. Consideration should be given to raising the minimum frequency of AMCESFI Council meetings to quarterly. The Council is the decision-making body of AMCESFI, and there is a risk that convening meetings only at a half-yearly frequency⁵⁰ could hold back the timely assessment of emerging risks at the Council level, which may lead to policy decisions being delayed. Moreover, at the margin, this frequency may create an incentive for policy proposals to be held back to coincide with an upcoming Council meeting, as well as a risk that a pending decision by the Council is postponed for up to six months. International practice in the major economies favors meetings of the macroprudential council or authority at a quarterly frequency. Some mitigation to the risk of deferred decisions in Spain is provided by the requirement that the FSTC meets at a minimum at least once a quarter and may request a special meeting of the Council. Moreover, written procedures can and have been launched in the past (in-between meetings of the Council) and extraordinary Council meetings may also be arranged. Indeed, welcome flexibility was applied

⁶ The AMCESFI Council meets at least twice a year, while the supporting Financial Stability Technical Committee (FSTC) meets at least quarterly.

⁷ Although post meeting records are not published after every quarterly meeting, the German Financial Stability Committee recently (December 2023) started to publish an additional release summarizing the latest assessment and deliberations by the FSC. This complements the publication of the Annual Report in June each year and thus ensures a regular half yearly update by the FSC https://www.afs-bund.de/afs/Content/EN/News/FSC-activities/2023/2023-12-14-elevated-risks-require-sufficient-resilience-in-the-german-financial-system.html. The 2022 FSAP review for Germany recommended that the Financial Stability Council starts to publish regular post meeting records https://www.imf.org/en/Publications/CR/Issues/2022/08/02/Germany-Financial-Sector-Assessment-Program-Technical-Note-Macroprudential-Policy-Framework-521671

⁵⁰ For example, the AMCESFI Council met only twice in 2022. It met three times in 2023.

during 2020, with the Council and FSTC holding 17 meetings between them.⁵¹ Nonetheless, macroprudential policies do tend to suffer from a strong inaction bias, as the benefits accrue only in the future, whereas the costs of policy action are borne immediately by financial institutions and the private sector.⁵² Holding AMCESFI Council meetings at a quarterly frequency would increase the active engagement of Council members, and help to guard against any such bias.

- 32. AMCESFI could benefit from the inclusion of independent external members. AMCESFI has helped to further strengthen the communication and coordination between the financial regulatory authorities in Spain. Such coordination is also fostered by the cross-memberships of the principal governing bodies of the individual AMCESFI participating authorities (as the Secretary General for the Treasury and International Finance is a member of the Board of the CNMV and Governing Council of the BdE, while the Deputy Governor of the BdE is a member of the CNMV Board, and the Vice Chair of the CNMV is a member of the BdE Governing Council). Strong coordination is positive, although, as noted in the accompanying TN on Regulation and Supervision of LSIs, the presence of the Secretary for the Treasury on the Governing Council of the BdE creates a potential for political interference on supervisory issues and jeopardizes supervisory independence, and some adjustments to address this issue are warranted.⁵³ While strong cooperation among the financial authorities is highly welcome, there is, however, a potential associated risk that the very close working relationships may foster a uniform approach to emerging issues and topics that may miss alternative perspectives and views. To support the breadth of perspectives and provide additional challenge, some countries, such as France and the United Kingdom, have appointed independent experts to their respective macroprudential committees.⁵⁴ Appointment of external experts (such as highly respected academics) to the AMCESFI Council could help to broaden the discussions and thus strengthen decision making, while preserving the benefits of strong coordination and cooperation across the regulatory authorities.
- **33.** Additional, timely communication by AMCESFI would strengthen transparency and accountability on macroprudential policies. Transparency on AMCESFI discussions is relatively low by international standards. From establishment in March 2019 to the end of 2023, the Council

⁵¹ In official publications, such as the Annual Reports for 2020, 2021 and 2022, AMCESFI reports on the number of meetings held by the Council and FSTC collectively and does not distinguish between meetings of the two bodies individually. They do have separate functions: the Council is the sole decision-making body and the sole body which brings together the highest-level officials (the Minister, central bank Governor and CNMV Chair, while the FSTC is the supporting preparatory committee. It would thus be helpful to more clearly delineate and separate the two functions in communications (see Table 4 earlier in the TN).

⁵² See IMF Staff Guidance Note on Macroprudential Policy 2014 for multiple references. https://www.imf.org/external/np/pp/eng/2014/110614.pdf

⁵³ Spain: TN on Regulation and Supervision of LSIs.

⁵⁴ There are three external experts appointed to the French High Council on Financial Stability https://www.economie.gouv.fr/en/hcsf/hcsf-organisation-membres and five external members of the Bank of England Financial Stability Committee https://www.bankofengland.co.uk/about/people/financial-policy-committee The Chair and two Vice Chairs of the Advisory Scientific Committee are also full members with voting rights on the General Board of the ESRB https://www.esrb.europa.eu/about/orga/board/html/index.en.html

published only 8 documents.⁵⁵ No minutes, summaries or press releases of meetings are currently published.⁵⁶ And the Annual Report, which is the flagship AMCESFI transparency publication, and which is also presented to Parliament by the Chair to provide accountability,⁵⁷ is not particularly timely, and also does not contain a strong summary message of the AMCESFI Council assessment of major systemic risks and vulnerabilities. While the Annual Report for 2022 was delayed exceptionally until January 2024,⁵⁸ the Reports for 2020 and 2021 were not published until September and October of the subsequent year, a longer gap than in other countries.⁵⁹ By the normal date of publication of the AMCESFI Annual Report, the BdE has published the spring FSR for the subsequent year and is about to publish the autumn FSR,⁶⁰ while the CNMV has published the FSN covering the first half of the subsequent year. This weakens the importance and credibility of the AMCESFI report. Publishing minutes or summaries of each Council meeting, as well as improving the timeliness of publication and depth of content of the Annual Report, would raise the visibility and prominence of AMCESFI discussions, enhancing transparency and accountability to key stakeholders.

34. There may be scope to further broaden the role of AMCESFI as the high-level guardian of financial stability in Spain. As part of its goal to contribute to the stability of the financial system as a whole, by identifying, preventing and mitigating systemic risk, ⁶¹ AMCESFI has successfully taken on the task of monitoring and reviewing emerging risks such as climate risks and crypto assets. As it brings together MINECO and the three sectoral authorities at the highest level, consideration could be given to whether AMCESFI could play a useful role in facilitating coordination across the financial authorities on other potentially important issues such as cyber risk and crisis management planning (adding the executive resolution authority FROB to the membership and discussions on the latter topic). Alternative approaches could also be adopted. For

⁵⁵ Three Annual Reports (for 2019, 2020 and 2021), two Opinions on O-SII capital buffers proposed by the BdE, two Special Reports (the first Biennial report on risks from climate change, and a report on public support measures to mitigate the financial system impact of the COVID-19 pandemic) and one Press Release announcing the climate risk report. https://www.amcesfi.es/wam/en/secciones/publicaciones/index2023.html

⁵⁶ The macroprudential authorities in France, the United Kingdom, and the United States (as well as many other countries) publish timely summaries or minutes of meetings. While the FSC in Germany does not publish quarterly meeting summaries, it now publishes assessments every six months.

⁵⁷ An Annual Report to Parliament is required under the AMCESFI's founding Statute to provide accountability. The Statute requires minutes of meetings to be written and approved by the Council, but is silent on the topic of publication.

https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102 2019 de 1 de marz o en.pdf

⁵⁸ The authorities delayed the release of the 2022 Annual Report pending the appointment of the new Parliamentary Committee for Economic Affairs which in turn awaited the swearing in of the Government Cabinet, which took place in late November 2023. The Annual Report was published in January 2024. https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI-Annual Report 2022.pdf

⁵⁹ The gap in Germany is three months. In some other major economies, such as France, the United Kingdom, and the United States, the reports are concurrent when published, apart from a short cut off for the publication process.

⁶⁰ The BdE autumn FSR is typically published in October or November.

⁶¹ Royal Decree 102/2019: https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102 2019 de 1 de marz o en.pdf

example, the three sectoral authorities collectively published a joint statement on risks from crypto assets in March 2022,⁶² and are working together on the implementation of the TIBER⁶³ approach to testing cyber security,⁶⁴ both initiatives being taken forward outside the AMCESFI framework. But it may be worth further consideration as to whether AMCESFI could provide a helpful high-level coordination and oversight role on core financial stability topics where such coordination is warranted, using the flexibility to invite other public sector agencies to participate in discussions on particular topics as warranted.

35. It would be helpful to complete the internal review of AMCESFI performance heralded in the founding provisions. Royal Decree 102/2019 establishing AMCESFI called for MINECO to prepare a performance report every three years, with the first report to be undertaken in 2022. This report is overdue. Conducting such a three-yearly review and stock take on AMCESFI performance is a useful legislative provision to facilitate potential improvements to the framework. Completing and publishing the first performance report in 2024 would thus be beneficial.

SYSTEMIC RISK IDENTIFICATION AND MONITORING

A. Overview

36. Systemic risk monitoring processes in Spain have been further reinforced by the establishment of AMCESFI. Each of the three sectoral regulatory authorities has well-established frameworks for monitoring risks to financial stability—staff routinely monitor a wide range of information and prepare regular reports for high level review and oversight. In-depth high-level monitoring typically takes place within each authority at a quarterly frequency, supplemented (as, for example, during the COVID-19 pandemic) by more intensive scrutiny at times of high stress. Periodic publication of up-to date assessments, such as the half-yearly BdE FSR and CNMV FSN and the annual report by DGSFP, provide transparency and support accountability of the risk analysis. Each quarter, or more frequently if warranted, ⁶⁶ the FSTC undertakes a holistic review of risks to the

https://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/22/presbe2022 19en.pdf

⁶² The statement by the three regulators expanded upon the warning published by European Supervisory Authorities on the risks of crypto assets.

⁶³ Threat Intelligence Based Ethical Red-Teaming.

⁶⁴ https://www.bde.es/f/webbde/INF/MenuHorizontal/Servicios/TIBER-ES/Guia implantacion Tiber.pdf See also the companion FSAP TN: Spain - Cyber Risk and Financial Stability.

⁶⁵ Third additional provision. "Every three years, and for the first time in 2022, the Ministry of the Economy, Trade and Enterprise shall prepare a report on AMCESFI's performance in terms of attaining the goals laid down in this Royal Decree and on the suitability of its organizational structure, the tools available and the framework for cooperating with other authorities to attain such goals. On the basis of this report, the Government may adopt measures to improve the macroprudential framework."

https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102_2019_de_1_de_marz_o_en.pdf

⁶⁶ The FSTC meets more frequently than quarterly in periods of financial stress, for example, during the COVID-19 pandemic. (see Table 4 above).

Spanish financial system. The first part of each FSTC meeting is devoted to systemic risk assessment, drawing on the latest analysis by each of the sectoral regulators, supplemented by a focus on interconnections and spillover risks to ensure that analysis of risks to the overall financial system is integrated and comprehensive. Results are reported to the AMCESFI Council which customarily assesses systemic risks as a standing element at each meeting it holds.

- **37.** The Spanish authorities have invested, and continue to invest, extensively in developing and enhancing risk monitoring and identification frameworks. In addition to regularly scanning a wide array of financial and market data, the authorities use a broad range of analytical techniques to synthesize information, and to interpret and extract signals of emerging imbalances and disequilibria (such as a build-up in leverage, excessive credit growth, ⁶⁷ asset price bubbles, debt stress, risk concentrations, and potential liquidity and capital shortfalls, among others). Techniques regularly used by the authorities include:
- Charts, heat maps, and risk dashboards: The Spanish authorities use heat maps and risk dashboards to help codify and synthesize financial and economic data, and to provide a visual guide to emerging risk areas that warrant deeper and more rigorous analysis (Tables 6 and 7). For example, heat maps typically use historical distributions of observations to help assess whether an indicator is moving towards, or is at, an extreme level (in terms of the percentiles of the distribution, or in relation to selected thresholds), which may provide a signal of incipient stress (often using green, yellow, amber, and red scales). Multiple indicators are also aggregated together to produce summary indicators for particular risks and vulnerabilities, using weighted averages. Although at the simplest level, heat maps provide a useful visual representation of the underlying indicators, providing an alert and pointer to potential areas warranting deeper analysis, in some cases, their derivation also integrates evidence of their value as leading indicators of financial stress, in order to strengthen their signaling capabilities.

⁶⁷ Or, at the other extreme, a collapse in credit provision.

⁶⁸ A green indicator showing that the variable is at a 'normal' level, close to the median of the distribution. Yellow, amber, and red indicate outcomes successively further from the median.

⁶⁹ For example, in the FSN, the CNMV regularly presents summary indicators of 4 categories of risk (macroeconomic; market; credit; and liquidity, financing, and fragmentation risk) in heat or color map form, drawing on a set of 43 individual indicators which are also published in heat map form in the FSN.

⁷⁰ For example, BdE staff have developed a heat map that provides alerts on banking system risks in five broad areas of systemic risk and macroprudential policy (together with a category on the current materialization of risk), that pulls together information from over 100 separate economic and financial indicators. The individual indicators are aggregated using weights that reflect their capacity to anticipate future economic crises (based on Spanish evidence over 45 years), as well as the correlation between them (the weight of highly correlated series is lowered to avoid overcounting). Mencía and Saurina (2016) "Macroprudential Policy: Objectives, Instruments and Indicators" Banco de España Occasional Paper number 1601 https://repositorio.bde.es/bitstream/123456789/6354/1/do1601e.pdf

Table 6. Spain: Selected Examples of Risk Dashboards and Heat Maps for Systemic Risks ¹				
AMCESFI	BdE	CNMV	DGSFP	
Risk Dashboard	Heat Map	Vulnerabilities in	Areas of risk to	
(categories of risk):2	(classification of	Markets:4	insurance and	
	macroprudential		pensions sector:	
	indicators): ³			
Macroeconomic	Credit growth and	Equity markets	Size	
	leverage			
Market	Maturity transformation	Bond markets	Interconnectedness	
	and market illiquidity		(macroeconomic	
			exposure)	
Credit	Concentration	Banking	Interconnectedness	
			(counterparty	
			exposure)	
Real Estate exposure	Incentives and moral	Other (raw materials,	Asset liquidation	
	hazard	risk aversion)		
Liquidity and Funding	Macroeconomic	Risk Categories: ⁵	Substitutability	
	Imbalances			
Solvency and	Materialized risks	Macroeconomic	Underwriting and	
Profitability			Solvency	
(i) Banks		Market	Economic environment	
(ii) Insurance		Credit	Policy Holder Behavior	
Structural risks and		Liquidity, financial and		
Interconnections		fragmentation		

¹ Illustrative examples of the use of risk dashboards and heat maps – please note the table is to be read vertically down each column in each of the four illustrative cases. The columns are independent examples and no meaning is attached to the horizontal rows. Other examples are also in use; for example, by the BdE to assess vulnerabilities in selected emerging markets (BdE Occasional Paper number 2111 by Alonso and Molina https://www.bde.es/wbe/en/publicaciones/analisis-economico-investigacion/documentos-ocasionales/gps-navigator-to-monitor-risks-emerging-economies-vulnerability-dashboard.html), and by MINECO to analyze risks in government debt markets.

https://www.cnmv.es/DocPortal/Publicaciones/NotaEstabilidad/Nota Estab Finan dic 23 enen.pdf

• **Systemic risk indicators**—the BdE and the CNMV both prepare summary indicators of stress in Spanish financial markets as an aggregate metric of systemic risk (the Systemic Risk Indicator, SRI, and the Financial Markets Stress Indicator, or FMSI, respectively). Both measures follow a common approach,⁷¹ and have been tailored to Spanish conditions. (Table 7 below).⁷² The

² AMCESFI Annual Report 2021: https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI-Annual Report 2021.pdf

³Mencía and Saurina (2016) "Macroprudential Policy: Objectives, Instruments and Indicators" Banco de España Occasional Paper number 1601 https://repositorio.bde.es/bitstream/123456789/6354/1/do1601e.pdf

⁴ FSN June 2023. Cambón (2015) "Identification of Vulnerabilities in the Spanish Financial System: An Application of Heat Maps" CNMV Bulletin 2015 Quarter 1 https://www.cnmv.es/DocPortal/Publicaciones/Boletin/Boletin CNMV | 2015 EN Weben.pdf
⁵ CNMV has recently developed new indicators related to Environmental, Social, and Governance (ESG) risks, and risks in crypto-asset markets which were included in the December 2023 Financial Stability Note.

⁷¹ Based on Hollo, Kremer and Lo Duca (2012): "CISS – A Composite Indicator of Systemic Stress in the Financial System", European Central Bank, Working Paper 1426 https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1426.pdf

⁷² The principal differences between the two measures are that the CNMV FMSI index draws on 18 indicators across 6 market categories, as opposed to 12 market indicators across 4 segments in the case of the BdE SRI series, and that (continued)

summary indicators utilize historic evidence to identify whether markets are exhibiting low, medium or high stress. The BdE also regularly draws on an indicator of systemic risk affecting the banking system (SRISK), in assessing financial stability conditions.

	Systemic Risk Indicator (SRI)	Financial Market Stress Index (FMSI)	Systemic Risk Indicator (SRISK)
Authority	BdE	CNMV	BdE
Sector	Financial Markets	Financial Markets	Banking
Objective	Indicator of stress – aggregates 12 stress indicators from 4 market segments, taking into account cross correlations	Indicator of stress— aggregates 18 stress indicators from 6 market segments, taking into account cross correlations	Indicator of Banking sector stress ¹
Frequency	Weekly	Weekly	Monthly
Components and weights	 Money market (0.25) Public debt (0.25) Equity (0.25) Financial Intermediaries (0.25) + Correlation 	 Money market (0.15) Public debt (0.2) Equity (0.2) Financial Intermediaries (0.3) Forex market (0.05) Derivatives (0.1) + Correlation 	
Publication	FSR	CNMV website + FSN	FSR
Reference	FSR May 2013 Box 1.1	Cambón and Estévez (2015) ³	Broto, Fernánde Lafuerza and Melnychuk (2022) ⁴

¹ The SRISK indicator measures the market value of the regulatory capital shortfall of an individual bank or the banking sector overall following a significant correction in the equity market. See BdE FSR Autumn 2023 Chart 3.1.

• **Stress tests**: The Spanish authorities make extensive use of stress tests in assessing risks to stability and the resilience of the financial system in the event of their potential crystallization. Each of the sectoral agencies apply their own stress tests, typically extending and building on the frameworks adopted by the European sectoral financial regulatory authorities (the EBA, ESMA, and EIOPA). The BdE has developed a stress testing framework—the Forward-Looking

²https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/13/IEF-Ing-Mayo2013.pdf

³ "A Spanish Financial Market Stress Index (FMSI)" CNMV Working Paper Number 60". https://www.cnmv.es/DocPortal/Publicaciones/MONOGRAFIAS/Monografia 60 en.pdf

⁴"Do Buffer Requirements for European Systemically Important Banks make them Less Systemic?" Banco de España Working Paper number 2243.

https://www.bde.es/f/webbde/SES/Secciones/PublicacionesSeriadas/DocumentosTrabajo/22/Files/dt2243e.pdf

the FMSI index weights together the 6 individual markets on the basis of their importance to the Spanish economy, whereas the SRI uses a common weight of 0.25. In practice, the indicators tend to move largely in common, providing similar signals.

Exercise on Spanish Banks—FLESB, which is applied to a wider sample of banks than the EBA; takes into account dynamic balance sheet adjustments;⁷³ embodies more granular sectoral disaggregation; and also incorporates more severe stress in some dimensions. Results are published in the FSR each autumn. Expanding on the ESMA framework, the CNMV undertakes regular half-yearly stress tests of investment funds' capacity to meet an extraordinary increase in redemptions, publishing the key results in the annual NBFI Monitor and other reports. The DGSFP carries out regular stress tests of insurance companies' resilience to economic and financial shocks, drawing on the framework developed by EIOPA which has been adapted by DGSFP to Spanish markets. And AMCESFI makes extensive use of stress tests in assessing the risks from climate change in its first biennial report on climate risks.

• **Tailored risk models**: The authorities have developed a wide range of tailored models and indicators to deepen the analysis and understanding of specific areas of risk to the Spanish financial system. Illustrative examples include: vulnerabilities in emerging markets (of particular importance given the high emerging market exposure of Spanish banks);⁷⁴ house price imbalances;⁷⁵ sectoral credit cycles;⁷⁶ structural risks in the banking sector;⁷⁷ risks to bank funding liquidity;⁷⁸ and trends in interconnectedness across the financial system.⁷⁹ Models are also used as additional early warning indicators of impending banking stress,⁸⁰ as well as to improve understanding of downside risks to growth.⁸¹ Moreover, models in common use

⁷³ Balance sheets are assumed to be static in the EBA exercises.

⁷⁴ Alonso and Molina (2019) "The SHERLOC: An EWS-based index of vulnerability for Emerging Economies" BdE Working Paper number 1946 https://www.bde.es/wbe/en/publicaciones/analisis-economico-investigacion/documentos-trabajo/sherloc-an-ewsbased-index-vulnerability-for-emerging-economies.html

⁷⁵ Ganics and Rodríguez-Moreno (2022): "A house price-at-risk model to monitor the downside risk for the Spanish housing market" BdE Occasional Paper 2244 https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesSeriadas/DocumentosTrabajo/22/Files/dt22 44e.pdf

⁷⁶ Broto, Cáceres and Melnychuk (2022): "Sectoral Indicators for Applying the Banco de España's new macroprudential tools" BdE FSRev Spring 2022 https://www.bde.es/wbe/en/publicaciones/estabilidad-financiera-politica-macroprudencial/revista-estabilidad-financiera-numero-42--primavera-2022.html

⁷⁷ Broto and Melnychuk (2022) "Structural risk indicators for the Spanish banking system" BdE FSRev Autumn 2022 https://www.bde.es/wbe/en/publicaciones/estabilidad-financiera-politica-macroprudencial/revista-estabilidad-financiera/numero-43—otono-2022.html

⁷⁸ Chart 3.2 of the BdE FSR Autumn 2023

⁷⁹ Galvez (2021) "Measuring interconnectedness across institutions and sectors" BdE FSRev Autumn 2021 https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/21/4 https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/21/4 https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/21/4 https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/21/4 https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/21/4 <a href="https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesBoletines/InformesBoletines/InformesBoletines/InformesBoletines/InformesBoletines/InformesBoletines/InformesBoletines/Informes

⁸⁰ Galán (2021) "CREWS: A CAMELS based early warning system of systemic risk in the banking sector" BdE Occasional Paper number 2132 https://repositorio.bde.es/bitstream/123456789/19392/1/do2132e.pdf

⁸¹ Galán and Rodríguez-Moreno (2020): "At-risk measures and financial stability" BdE FSRev Autumn 2020 https://www.bde.es/wbe/en/publicaciones/estabilidad-financiera-politica-macroprudencial/revista-estabilidad-financiera-numero-39--otono-2020.html

externally, such as for credit-to-GDP gaps, are typically adapted to take account of the characteristics of the Spanish financial system.⁸²

- **38. Sharing of financial information in support of macroprudential oversight was strengthened at the launch of AMCESFI.** A specific provision in the Royal Decree requires the relevant public authorities in Spain to cooperate with AMCESFI and to provide the macroprudential authority with data and information relevant to its duties.⁸³ Moreover AMCESFI may also gather information relevant to its functions through the three sectoral authorities.
- **39**. There are, nonetheless, data gaps which limit some dimensions of risk analysis. While information on a large proportion of funds is comprehensive, in particular for open ended funds domiciled in Spain, as identified by the FSB84, information on EU open ended funds marketed in Spain through UCITS or Alternative Investment Funds (AIF) passport is not as comprehensive.⁸⁵ Moreover, there are also gaps in disaggregated information on the portfolios of foreign investment funds, both in terms of Spanish funds holdings in these foreign collective investment schemes (CIS), and in respect to EU CIS that are marketed in Spain (which represent almost 40 percent of marketed assets).86 The CNMV receives quarterly information on the identification and amount of every foreign CIS marketed in Spain.⁸⁷ While the CNMV supplements the regulatory information with that available from commercial data vendors, corresponding action at the European and global levels could help to address the data shortfall. A further limitation is a potential shortage of information on the application of policy tools to contain liquidity stress. While the CNMV has access to information from prospectuses on whether tools can be implemented, and to specific information when certain tools are activated in extraordinary circumstances (like partial redemptions, side pockets and temporary suspensions of redemptions) it lacks accurate information on the activation of other tools used both in normal and stressed situations (notice periods and anti-dilution tools). In relation to banking and credit risks, the authorities have been working over a number of years to collect and strengthen information on borrower income which is key to understanding potential debt stress. Information on the income of new mortgage borrowers was added to the Spanish credit register in

⁸² For example, the typical Spanish financial cycle has a shorter frequency than the assumption generally built into such models.

⁸³ Besides the three sectoral regulatory authorities and Spain's executive resolution authority FROB, the Decree lists seven additional public authorities that are specifically requested to cooperate with AMCESFI and also includes a catch all requirement requiring cooperation from "any other pertinent public organization or authority" https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102 2019 de 1 de marz o en.pdf

⁸⁴ See the "Regulatory reporting requirements for OEFs in Spain", included as a study case in the Assessment of the Effectiveness of the FSB's 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds (annex 5). https://www.fsb.org/wp-content/uploads/P141222.pdf

⁸⁵ The ECB and ESRB have highlighted that the gap in the European reporting framework is a matter of macroprudential concern in the euro area.

⁸⁶ Shortfalls in the availability of granular information on cross-border activities of investment funds is a broad European and global issue. CNMV utilize commercial databases to supplement the regulatory and supervisory data.

⁸⁷ The CNMV Circular 2/2017 on information of foreign CIS marketed in Spain, set an obligation to send quarterly data to the CNMV on the amount marketed by each marketing entity.,

40.

2023 which will help to fill this gap over time, as mortgages mature, and the authorities are also exploring the possibility of integrating information from tax records.⁸⁸ The authorities also note shortfalls in data on emerging areas of risks such as climate change, fintech and cyber security, and highlighted the importance of ongoing and potential future data projects to address these.

B. Assessment and Recommendations

The overall framework for identifying sources of systemic risk in Spain is robust. There are effective processes in place within each of the sectoral authorities, combining regular staff review under high level oversight, with the opportunity and capability to undertake more intense

monitoring and deeper dives on targeted risk areas under conditions of stress. Drawing together these assessments each quarter (or more frequently as needed) at the AMCESFI FSTC, supplemented by additional focus on interconnections and spillover risks, provides a strong process for systemic risk monitoring.

- 41. Analytical approaches underpinning risk identification follow international good practices. Authorities draw on a wide range of analytical approaches, including heat maps and risk dashboards; systemic risk indicators; tailored models; and stress tests. Approaches are kept under review and are updated and enhanced in the light of experience in application and advances in analytical techniques. The authorities participate actively in risk assessments and analyses processes in the European regulatory agencies and review international experience to draw potential lessons for risk identification in Spain. For example, as part of the BdE's strategic plan for 2024, staff recently prepared an extensive survey of indicators used by central banks to identify risks to financial stability, to support a codification and selected comparison of the BdE approach with that used internationally, as well as to identify potential gaps. 89
- 42. Communication of systemic risk assessments by the sectoral authorities is effective, although there is scope to strengthen the overall system-wide messaging. The BdE FSR is high caliber and contains a clear summary of the central bank's assessment of the principal risks to financial stability and vulnerabilities in the financial system. 90 A visual synopsis in the form of a

(continued)

⁸⁸ To date, BdE has been using data on income at the level of postal codes as a proxy indicator, while working to collect the necessary granular information.

⁸⁹ BdE Strategic Plan 2024: Risk Identification for financial and macroeconomic stability: "How do Central Banks Identify Risks? A Survey of Indicators" BdE Occasional Paper number 2125 https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesSeriadas/DocumentosOcasionales/21/Files/ do2125e.pdf

 $^{^{90}}$ The FSR highlights vulnerabilities and risks. "<u>Vulnerabilities</u> are defined as economic and financial conditions that increase the impact or probability of the materialization of <u>risks</u> to financial stability, which in turn are identified as adverse changes in economic and financial conditions, or in the physical or geopolitical environment, with an uncertain probability of occurrence, which hamper or impede financial intermediation, with negative consequences for real economic activity." The autumn 2023 FSR identifies three vulnerabilities (high levels of government debt, financial weaknesses of households and firms, and weaknesses in financial intermediation capacity) and 4 sources of risk (geopolitical risk, higher and more persistent inflation, an increase in risk aversion among economic agents, and a downside risk to economic growth). These are measured using three colors (yellow - low, orange-medium, and redhigh) together with arrows showing the change in assessment since the previous FSR.

PowerPoint presentation is readily available.⁹¹ The CNMV FSN also provides an effective summary of the commission's assessment of financial market risks,⁹² which is very helpfully supplemented by the up-to-date weekly publication of the FMSI and its principal elements on the CNMV website.⁹³ As noted earlier, however, the AMCESFI Annual report lacks timeliness and also does not currently contain a clear overall summary assessment of system-wide risks, drawing together the views of the Council members and authorities.⁹⁴ Providing such an assessment, together with high-level summaries of Council meetings, would help to strengthen communication and coordination of messaging to key stakeholders. Moreover, exploiting the scope for further deepening cross-agency work on system-wide risk topics under the AMCESFI umbrella would further bolster systemic risk analysis and support such messaging. Possible examples include the impact on system-wide liquidity risk from the recent switch in household deposits to insurance products and investment funds, business model risks from developments in bancassurance, as well as newer areas such as cyber risks.

43. Continued investment is needed to address data shortfalls and sustain strong risk identification frameworks as the financial system evolves. Closing some existing gaps in key areas is a high priority to overcome current weaknesses, strengthen financial system monitoring and effective risk identification. Continuing investment in improving data and information in key areas such as individual borrower income, and cross-border exposures of investment funds (as part of European and global initiatives) is important. In particular, it is important to intensify work globally to facilitate the availability of granular information on domestic fund investments in other non-domestic funds. In parallel, developing and implementing enhanced data collection, surveys and analysis is essential for the authorities to monitor and analyze emerging risks from climate change and technological innovation in the financial sector. The authorities have taken important initial steps to strengthen information on the potential financial sector impact of climate change, 95 noting

https://www.bde.es/f/webbe/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/23/FSR Autumn2023.pdf

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https://www.bde.es/f/webbe/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/23/FS R 2023 2 Pres.pdf

⁹² The FSN utilizes the FMSI and heat maps in time series form to summarize conditions in key markets (equity; bond; banking; and other) and developments in main risk categories (macroeconomic; market; credit; and liquidity, financing, and fragmentation), using a four color scale (green, yellow, orange and red) <a href="https://www.cnmv.es/DocPortal/Publicaciones/NotaEstabilidad/NotaEstabilida

⁹³ https://www.cnmv.es/portal/publicaciones/seriesweb/PagSerie.aspx?serie=XD0006

⁹⁴ The AMCESFI Annual Report summarizes the macroeconomic environment and financial system developments. A risk dashboard usefully presents a set of summary charts organized by different categories of risk but does not provide an assessment of each risk element or an overall summary of principal systemic risks and vulnerabilities akin to those provided by the BdE and CNMV. https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI-Annual Report 2021.pdf

⁹⁵ The Spanish Law on Climate Change and Energy Transition (Law 7/2021 of 20 May 2021) requires that institutions whose securities are admitted to trading on regulated markets, credit institutions, insurance and reinsurance undertakings and companies due to their size, prepare an annual report. assessing the financial impact on society of the risks associated with climate change generated by the exposure of their activity to climate change, including the risks of the green transition and the measures taken to address them.

that "improved data provided by supervised financial institutions is critical for greater accuracy in future climate change analyses." Continued efforts in this area, as well as to improve the frameworks for data collection on the potential risks from fintech and financial innovation, as well as on cyber risks are likely to be needed. 97.

44. As the financial system adapts, it is also important that the authorities' expertise keeps pace to ensure that new sources of risk are identified and addressed. The biennial cross system report on climate change risks prepared by AMCESFI provides a helpful catalyst for key work in this area, and highlights multiple publications prepared by the member authorities on different aspects. Peveloping and maintaining sufficient expertise in new areas of risk, nonetheless remains challenging. Given resource pressures, ensuring that the authorities keep abreast of developments, may in some cases entail recruitment of additional staff with specialist expertise in areas such as the analysis of large, real-time financial data sets, which is proving difficult at the CNMV, 99 as well as emerging risk areas such as cyber and climate.

MACROPRUDENTIAL TOOLS

A. Overview

45. The macroprudential toolkit in Spain was expanded and strengthened in parallel to the establishment of AMCESFI. Recognizing some limitations and gaps in available policy instruments to address systemic risks, as highlighted in the 2017 FSAP, the government introduced a set of legal amendments to provide additional powers, including: so-called borrower-based tools to mitigate risks from a deterioration in lending standards; instruments applying to systemic risks stemming from particular sectors; and the adoption of measures to strengthen liquidity requirements for CIS. Royal Decree 22/2018 of December 2018 amended various provisions of the sectoral regulatory frameworks to convey additional powers and tools to each of the three sectoral authorities to "prevent and mitigate those risks that they detect that could end up affecting the stability of the financial system." This was followed up by the establishment of AMCESFI in March 2019, with the Royal Decree launching the authority (Royal Decree 102/2019) also providing additional guidance and clarity on the implementation of macroprudential tools. The Decree establishes a wide set of

⁹⁶ AMCESFI (2023) "Biennial Report on Climate Change Risks to the Financial System" https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI Informe Cambio Climatico 2023 en.pdf

⁹⁷ See the accompanying FSAP TN Spain: Cyber Risk and Financial Stability.

⁹⁸ See Annex 2 of AMCESFI (2023) "Biennial Report on Climate Change Risks to the Financial System" https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI Informe Cambio Climatico 2023 en.pdf

⁹⁹ The CNMV is attempting to recruit additional staff with technical expertise in the analysis of large real-time financial data sets, which is currently under-resourced. The addition of specialist staff with such skills would facilitate timelier risk identification and deeper analysis benefiting from the exploitation of such available data.

¹⁰⁰ https://www.boe.es/buscar/act.php?id=BOE-A-2018-17294 (in Spanish). The quote is a translation.

policy measures that can be adopted by the sectoral authorities to address systemic risk and promote financial stability (Box 1).¹⁰¹

Box 1. Spain: Macroprudential Tools in Spain—High Level Legal Framework

Following the expansion of the set of policy tools to address systemic risks in Spain, as set out in Royal Decree 22/2018,¹ the Royal Decree establishing AMCESFI (102/2019),² highlighted that the BdE, CNMV, and DGSFP "may adopt measures, in the terms stipulated in the corresponding sectoral legislation, for the following macroprudential tools in order to prevent systemic risks and ensure the financial system makes a sustainable contribution to economic growth":

- (a) Capital buffer requirements for credit institutions and investment firms.
- (b) Limits on sectoral concentration.
- (c) Conditions on the granting of loans and other exposures.
- (d) Higher risk weights for real estate exposures (for institutions supervised by the BdE).
- (e) Adoption of measures stipulated in Article 458 of the CRR.³
- (f) Suspension of the redemption of shares or units in collective investment institutions (CII).
- (g) Measures to increase the liquidity of CII.4
- (h) Limits on the leverage of CII (in addition to other management restrictions).⁵
- Limits and conditions on the activity of supervised institutions to prevent private sector overindebtedness.
- (j) Prohibition or restrictions on short selling and similar transactions.
- (k) Limits on the aggregate exposure of insurance and reinsurance undertakings as well as limits and conditions on the transfer of insurance portfolios and exposures.
- (I) Any other measure included in the sectoral laws and that the AMCESFI Council rules is a macroprudential tool.

Source: Article 15 of Royal Decree 102/2019

¹https://www.boe.es/buscar/act.php?id=BOE-A-2018-17294

²https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102_2019_de_1_de_marzo_en.pdf

³ Article 458 enables national authorities to apply stricter national measures to address systemic risk that has the potential to have serious negative consequences for the financial system and economy in an EU member state, in cases where such measures cannot be addressed as effectively by tools set out in the CRR and CRD. Prior approval from the European authorities must be obtained in advance of application. <a href="https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-sing

⁴ Also includes venture capital entities, other closed-end CII, and closed-end CII management companies.

⁵ Also includes venture capital entities, and closed-end CII.

46. To apply this overarching high-level framework, the authorities have continued to develop specific policy instruments that may be deployed in each category. The set of specific tools available to the authorities is discussed below.

Banking Sector Tools (including borrower-based instruments)

¹⁰¹ As well as setting out the measures at a high level, the Decree also includes a catch-all clause enabling other potential instruments, provided that the AMCESFI Council rules such an instrument to be a macroprudential tool and provided that the instrument is included in the relevant sectoral law.

47. The macroprudential toolkit for the banking sector has been supplemented by sectoral and borrower-based instruments. Building on the base framework set out in European legislation (which includes the CCyB, buffers for systemically important institutions, and the SyRB), ¹⁰² the Spanish Royal Decrees expanded the toolkit to include measures to address systemic risks focused on a particular sector, e.g., sectoral CCyB and sectoral concentration limits, as well as to mitigate the systemic risks of potential widespread borrower distress and default by setting restrictions on the terms of new loans. The BdE subsequently published a Circular (5/2021) providing the details of the new tools, as well as the indicators and approach that would be adopted to guide their deployment. ¹⁰³ The set of specific policy instruments outlined in the Circular is broad, and the framework provides the BdE with considerable flexibility in terms of specific application. ¹⁰⁴ Incorporating the expansion, the full toolkit of macroprudential policy tools for the Spanish banking system is summarized in Table 8.

¹⁰² The framework in the CRD and CRR also includes the additional provisions specified in Article 458 of the CRR.

¹⁰³ https://www.bde.es/f/webbe/INF/MenuHorizontal/AreasActuacion/Normativa/en/Circular 5 2021 en.pdf

¹⁰⁴ For example, with respect to borrower-based instruments, the Circular notes that the BdE may set limits and conditions on, inter alia, eight specified ratios for households, as well as on loans-to-assets and debt-to-assets for non-financial corporates. Measures may be applied individually or in combination, and may also take into account potential stress (if interest rates are variable or the exposure is in foreign currency). Moreover, the level of the measure may differ depending on the type of property, its use, location, etc. Provisions may also be made for flexibility quotas ("speed limits") or exemptions, such as for a percentage of new loans. https://www.bde.es/f/webbe/INF/MenuHorizontal/AreasActuacion/Normativa/en/Circular 5 2021 en.pdf

Table	Table 8. Spain: Macroprudential Toolkit for the Spanish Banking System						
Instrument	Objective	ECB top up powers	Current setting	Review frequency			
Countercyclical capital buffer (CCyB) (in percent)	Bolstering resilience by building capital and reducing excessive credit growth during upswings. Release of buffer when risks materialize, supports credit provision and avoids a credit crunch.	Yes	0	Quarterly with published press release			
Buffers on Systemically Important Institutions (SII) (in percent)	Raise resilience and mitigate adverse risks from systemically important institutions (including perceptions they are too big to fail, and benefit from a potential funding advantage)	Yes	Designated one G-SII and four O- SII (buffer rates from 0.25 to 1.25) ¹	Annual for both G-SII and O-SII with published press releases			
Systemic Risk buffer (SyRB)	Address cyclical or structural risks not addressed by CCyB or by buffers on systemic banks. Can be applied to whole banking system, to a subset, or to sectors.	Yes	Not activated	Quarterly			
Sectoral CCyB (SCCyB)	Address systemic risks that are concentrated in exposures to particular sectors	No	Not activated	Quarterly			
Limits on Sectoral concentration	Address systemic risks that are concentrated in exposures to particular sectors	No	Not activated	Quarterly			
Limits on lending standards – Borrower- based measures (BBM)	Limiting risks of future borrower stress and default by setting conditions on the granting of new loans to households and non-financial corporates. Conditions may include: loan to value (LTV), loan to income (LTI), debt to income (DTI), debt service to income (DSTI) and maximum maturity among others	No	Not activated	Quarterly			
Other instruments	Address systemic risks that warrant stricter national measures, as per the conditions set out in Article 458 of the CRR ²	No	Not activated	Quarterly			

¹ Banco Santander Is designated as both a G-SII and O-SII. The higher of the two buffer rates apply, namely the O-SII buffer of 1.25 percent in 2024 (the G-SII buffer rate has been set at 1 percent as per the latest G-SIB list published by the FSB).

48. The BdE draws on a wide range of indicators to guide decisions on the potential deployment of macroprudential tools. Building on international guidance and analysis, the BdE has developed tailored frameworks of indicators of systemic risks that support policy discussions

² The CRR also permits the introduction of higher risk weights on real estate exposures from banks using the standardized approach, as well as the introduction of a loss-given-default (LGD) floor for banks using the internal ratings based (IRB) approach.

and formulation. For example, the quarterly decisions on the setting of the CCyB draw on a range of guiding indicators, ¹⁰⁵ including: the credit-to-GDP gap (as adjusted to the Spanish credit cycle) ¹⁰⁶ and econometric models of credit imbalances; ¹⁰⁷a set of macrofinancial indicators, e.g., the output gap, GDP growth, and the current account balance; and indicators reflecting conditions and potential imbalances in real estate markets. Decisions are published alongside a dataset containing the guiding indicators. ¹⁰⁸ Policy decisions on buffer rates for SIIs utilize international frameworks, such as of the Basel Committee on Banking Supervision for G-SIBs and of the European Banking Authority for the identification of O-SIIs and the ECB for the calibration of O-SII buffers. For the other policy tools, the BdE has developed frameworks of indicators reviewing sectoral systemic risks, ¹⁰⁹ and undertaken extensive research to guide judgements on the potential application of borrower-based measures, both in relation to lending in real estate markets and corporate credit. ¹¹⁰ A set of structural indicators has also been developed for the Spanish banking sector to support assessments on the possible case for applying a systemic risk buffer. ¹¹¹

49. Decisions are also guided by analysis of the potential impact of policy activation. In particular, the BdE has undertaken analysis of the impact of alternative macroprudential tools on the

¹⁰⁵ Castro, Estrada and Martínez (2016) "The Countercyclical capital buffer in Spain: An analysis of key guiding indicators" BdE Working Paper number 1601.

https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesSeriadas/DocumentosTrabajo/16/Fich/dt1601e.pdf

¹⁰⁶ Galán (2019) "Measuring Credit-to-GDP Gaps: The Hodrick-Prescott filter revisited" BdE Occasional Paper number

https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesSeriadas/DocumentosOcasionales/19/Files/do1906e.pdf

¹⁰⁷ Galán and Mencía (2021) "Model-Based Indicators for the Identification of Cyclical Systemic Risk" Empirical Economics Vol, 61.

¹⁰⁸ https://www.bde.es/wbe/en/areas-actuacion/politica-macroprudencial/herramientas-macroprudenciales/colchon-capital-anticiclico/

¹⁰⁹ Broto, Cáceres and Melnychuk (2022) "Sectoral Indicators for applying the Banco de España's new macroprudential tools" BdE FSRev Spring 2022.

https://www.bde.es/f/webbde/GAP/Secciones/Publicaciones/InformesBoletinesRevistas/RevistaEstabilidadFinanciera/22/5 FSR42 Indicadores.pdf

¹¹⁰ Galán and Lamas (2023)" Beyond the LTV ratio: lending standards, regulatory arbitrage, and mortgage default" Journal of Money, Credit and Banking: Carro (2023) "Taming the housing roller coaster: the impact of macroprudential policy on the house price cycle" Journal of Economic Dynamics and Control; Fernández Lafuerza and Galán (2024 forthcoming) "Should macroprudential policy target corporate lending? Evidence from credit standards and defaults"; and Box 3.1 of the BdE FSR (Autumn 2022) "The effect of credit standards for mortgage loans on credit growth and on default risks assumed".

https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/22/F SR Autumn2022.pdf

¹¹¹ The research concluded that there was no current case to deploy the SyRB on grounds of structural features of the Spanish banking system. Broto and Melnychuk (2022) "Structural Risk Indicators for the Spanish Banking System" BdE FSRev Autumn 2022.

https://www.bde.es/f/webbde/GAP/Secciones/Publicaciones/InformesBoletinesRevistas/RevistaEstabilidadFinanciera/22/2 FSR43 Structural.pdf

downside risk to GDP growth, based on cross-country evidence. The study identifies differences between capital instruments and borrower-based measures (BBM), suggesting that BBM have a quicker impact. Under financial expansions, the benefits of capital measures on the left (or lower) tail of the GDP growth distribution are observed with some delay (between 6 and 12 quarters), whereas BBM have their maximum impact on growth-at-risk after 4 quarters. Conversely, in downturns, the benefits of loosening capital measures are more immediate, while those of BBMs are limited. Moreover, as highlighted on the BdE website drawing from the same study, the adverse effect of lost GDP from deployment of the CCyB in an economic expansion are far outweighed by the benefits associated with reducing the likelihood and impact (in terms of GDP losses) of future crises. The study thus emphases the importance of timing as well as calibration of the instruments.

50. The legal framework for the activation of the banking sector tools is in place, although consultation, notification and implementation processes affect the timing and impact.

Following an internal decision by the BdE to activate a new macroprudential measure, including a change in the CCyB rate, the central bank must undertake a long administrative process of consultation prior to the final decision and implementation. This entails public consultation via the Spanish official gazette;¹¹³ consultation with AMCESFI (and the relevant European authorities);¹¹⁴ hearings with affected institutions; analysis of the comments received during the public consultation and the hearings; drafting of reasoned responses to the senders of comments; and potential redrafting of the measure in light of the reactions. Beyond the initial internal analysis and provisional decision by the BdE, the authorities estimate that the administrative approval process of any new macroprudential measure would take at least 14 weeks to be completed.¹¹⁵ European consultation processes may be run in parallel, although in some cases may await the post-consultation decision and so could extend this period. And banks (and borrowers) would then typically be provided with a transition period to adapt to the new measures ranging between 6-12 months depending on the instrument.¹¹⁶ An initial decision by the BdE to change the CCyB from zero percent to one percent, or from one percent to two percent, could thus take 15 to 18 months before it impacts capital requirements.¹¹⁷

¹¹² Galán (2020) "The benefits are at the tail: Uncovering the impact of macroprudential policy on growth-at-risk" Journal of Financial Stability 10083.

https://www.sciencedirect.com/science/article/abs/pii/S1572308920301340?via%3Dihub

¹¹³ Boletín Oficial del Estado (BOE).

¹¹⁴ For some instruments, such as the CCyB, as outlined in the CRR and CRD, application requires notification and approval by the relevant European authorities. For some others which are regarded as national instruments, such as the application of BBM, consultation is limited to notification and formal approval is not needed.

¹¹⁵ The process and timeline for the identification and application of SII buffers is shorter as this affects only a few institutions and a public consultation is not required.

¹¹⁶ Provisions exist for this to be shortened in extreme circumstances.

¹¹⁷ Banks may, nonetheless, take some action to adjust their capital planning on the announcement of the measure. Decisions to release buffers can be implemented with little or no delay.

Policy Instruments for Non-Bank Financial Intermediation

51. Policy tools for systemic risks arising from NBFI have also been enhanced in recent years. As key elements of the process to provide the financial authorities with the necessary policy tools to combat systemic risks, the CNMV and DGSFP were granted additional powers in the Royal Decrees establishing macroprudential tools and AMCESFI. Instruments may be categorized into three broad areas: measures to address risks in investment funds and the asset management industry; instruments to mitigate potential systemic risks arising from other financial market activities; and tools to contain risks from the insurance sector.

Investment Funds and Asset Management

52. Multiple steps have been taken to develop and deepen the policy toolkit to address risks in the asset management and investment fund sector. A major focus in Spain, as more broadly internationally through the work of IOSCO and the FSB, has been to lower the risks arising from liquidity mismatch¹¹⁹ and excessive leverage, which may incentivize market runs and fire sales in the event of stress. The CNMV has published a Technical Guide on the Management and Control of Liquidity in Collective Investment Schemes which incorporated new policy tools,¹²⁰ as well as other publications which describe the macroprudential toolkit for investment funds more broadly.¹²¹

53. The set of available policy tools may be placed in different categories (Table 9):

- **Limiting the potential build of risks**: a number of requirements are specified in the Spanish legal framework governing open-ended funds to limit the risks in the fund and also in the whole investment fund sector. These cover liquidity management policies, including stress test requirements; portfolio diversification rules to avoid asset concentrations; and limits on investments in unlisted securities, on borrowing, and on derivatives investments.
- Reducing incentives for 'first mover' advantage through anti-dilution measures: such tools, including redemption fees, swing pricing and switching valuation from 'mid' to 'bid' prices,

¹¹⁸ Royal Decree-Law 22/2018 (December 2018) https://www.boe.es/buscar/act.php?id=BOE-A-2018-17294 (in Spanish). and Royal Decree 102/2019 (March 2019) https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102 2019 de 1 de marz o en.pdf

¹¹⁹ As funds often undertake extensive maturity transformation – offering immediate or near-term availability of funds while investing the proceeds in long-dated and/or relatively illiquid assets

¹²⁰ https://www.cnmv.es/DocPortal/Legislacion/Guias-Tecnicas/GT 1 2022 Liquidez IIC en.pdf The guide set out the framework for the use of anti-dilution tools (such as swing pricing, and switching valuations from mid to bid/ask prices) as well as the requirements for periodic stress tests to assess the resilience to meet extraordinary redemptions, and thus help to guide liquidity management policies.

¹²¹ CNMV (2019): "The Participation of the CNMV in Macroprudential Policy" https://www.cnmv.es/DocPortal/Publicaciones/OTROS/CNMV politica macroprudencial en.PDF and, Cambón and Pedrón (2023): "Macroprudential Tools in Open-Ended Investment Funds" BdE FSRev Autumn (in Spanish) https://www.bde.es/f/webbe/GAP/Secciones/Publicaciones/InformesBoletinesRevistas/RevistaEstabilidadFinanciera/23/3 REF45 Fondos.pdf

aim to impose the costs of liquidity on investors who redeem, and thus deter the incentive to run prompted by the possibility of transferring this cost to investors who remain in the fund. These tools aim to lower the risks of liquidity spirals. Asset managers may deploy them subject to appropriate governance frameworks and notification to the CNMV.

- Lowering redemption pressures by slowing repayment: Funds may adopt liquidity management frameworks that provide flexibility to meet redemption demands by use of notice periods and extension in settlement periods. Such tools thus lower immediate selling pressure.
- Addressing illiquidity of part of the portfolio: Tools, such as side-pockets¹²² and partial redemption, aim to segregate the illiquid segment of the portfolio and enable this to be dealt with separately.
- Extraordinary measures in case of extreme stress: Tools such as suspension of redemptions and redemption in kind provide for extreme circumstances, such as when a high percentage of the portfolio becomes illiquid.
- The legal framework is in place enabling active use of the tools. 123 Many of the tools are 54. designed to be used by investment fund managers to reduce and address the risks of liquidity stress. In some cases, managers may choose to use the instruments to support the application of an effective liquidity management framework, as set out and established in the fund prospectus and governing rules. Examples are notice periods, switching valuation from "mid" to "bid/ask" prices and swing pricing: for such tools no permissions are needed. For some other tools, such as establishment of a side pocket, an extraordinary notice period regime for redemption, or in exceptional cases, suspension of redemption, deployment by an investment fund is subject to notification and authorization by the CNMV. As well as designing the overall framework, and reviewing and providing authorizations for the use of certain tools to individual funds, as warranted, the CNMV itself is assigned three policy instruments which may be adopted in extraordinary conditions to mitigate the system-wide risks of severe liquidity stress and preserve financial stability. These include the suspension of redemptions; requiring additional investments in highly liquid assets; and imposing notice periods.¹²⁴ Multiple market monitoring indicators would support judgements on the potential application of such policy instruments, but no quantified thresholds

¹²² A side-pocket is a segregated account where certain illiquid assets are placed, while the more liquid part of the fund continues to run normally. The side-pocket provides more time to liquidate or value the illiquid element of the fund. For additional information see IOSCO (2018): "Open-ended Fund Liquidity and Risk Management – Good Practices and Issues for Consideration" https://www.iosco.org/library/pubdocs/pdf/IOSCOPD591.pdf

¹²³ Many, but not all, of the tools have been used by some funds in Spain in stress events in the past, as highlighted in the Autumn 2023 BdE FSRev article by CNMV staff María Isabel Cambón and Gema Pedrón: "Macroprudential Tools in Open-Ended Investment Funds".

https://www.bde.es/f/webbe/GAP/Secciones/Publicaciones/InformesBoletinesRevistas/RevistaEstabilidadFinanciera/2 3/3 REF45 Fondos.pdf

¹²⁴ There is also a provision for the CNMV to set specific leverage caps on certain alternative investment funds if their leverage is judged to pose a risk to financial stability.

apply. Any proposed application of such instruments would also be notified to AMCESFI for an opinion in advance, as well as notified to ESMA, and in due course, after application, the ESRB.

55. There are gaps in information on the use of the policy tools. A number of instruments may be applied by investment fund managers under their own discretion, with no notification requirement. These are tools used in both normal and stressed times (anti-dilution tools and notice periods). Their deployment should follow the criteria set in the managers´ liquidity management internal procedures. and their use should be included in the fund´s prospectus. However, regular information on activation and use of these mechanisms is limited and, therefore, the CNMV does not have a full picture of the actual use of every liquidity management tool. This is an important shortcoming when the agency is formulating policy responses under conditions of intensifying market stress.

Table 9. Sp	Table 9. Spain: Macroprudential Tools for Collective Investment Funds in Spain						
Instrument	Intermediate Objective	Available in Spanish Regulation	Need for Authorization by the CNMV	Possibility of Adoption by the CNMV	Comments		
Redemption fee	Maturity and liquidity mismatches	Yes	No	No	Their implementation grants unitholders the right of withdrawal.		
Redemption gate	Maturity and liquidity mismatches	Yes	No	No	For alternative and real estate funds.		
Redemption in kind	Maturity and liquidity mismatches	Yes	Yes	No	Cannot be used under normal circumstances.		
Side pockets	Maturity and liquidity mismatches	Yes	Yes	No	Cannot be used under normal circumstances. Not available for real estate funds.		
Suspension of redemptions	Maturity and liquidity mismatches	Yes	Yes	Yes	Cannot be used under normal circumstances. Real estate funds can suspend redemptions for up to two years. For the rest, there are no limits.		
Valuation at bid/ask prices	Maturity and liquidity mismatches	Yes		No	Set out in the CNMV Technical Guide 1/2022.		

¹²⁵ Based on the prospectus information, the CNMV identify that 85 percent of funds contemplate notice periods and 37 percent swing pricing, as of August 2023.

Instrument	Intermediate Objective	Available in Spanish Regulation	Need for Authorization by the CNMV	Possibility of Adoption by the CNMV	Comments
Swing pricing	Maturity and liquidity mismatches	Yes	No	No	Set out in the CNMV Technical Guide 1/2022.
Partial redemptions	Maturity and liquidity mismatches	Yes	No	No	
Limits to asset concentration	Excessive concentration of risks in certain assets or sectors				Regulatory requirement.
Limits to leverage (in percent)	Excessive leverage	Yes		Partial	Regulatory requirement for UCITS and Quasi UCITS: exposure through derivatives limited to 100 NAV, borrowing limited to 10 percent to face redemptions. The CNMV can set specific leverage caps for some Alternative Investments Funds if deemed that their leverage may pose a risk to financial stability
Liquidity ratio	Maturity and liquidity mismatches	Yes			Regulatory requirement.
Liquidity management policy	Maturity and liquidity mismatches				Regulatory requirement.
Strengthening liquidity	Maturity and liquidity mismatches	Yes		Yes	For reasons of financial stability, and on a temporary basis, the CNMV may require that a fund or a group of funds increase the investments in highly liquid assets.

Table 9. Spain: Macroprudential Tools for Collective Investment Funds in Spain (concluded)						
Instrument	Intermediate Objective	Available in Spanish Regulation	Need for Authorization by the CNMV	Possibility of Adoption by the CNMV	Comments	
Notice periods in redemptions Source: CNMV	Maturity and liquidity mismatches	Yes	Yes	Yes	Possibility to set notice periods under normal situations (up to 10 days if redemptions exceed €300.000). Additionally, in exceptional circumstances, the CNMV may authorize the asset managers to apply a more flexible notice period regime. The CNMV has also the power to impose notice periods. For financial stability purposes.	

Other Financial Market Policy Instruments

56. The CNMV also has access to additional macroprudential instruments to mitigate severe market stress and support market functioning. One key element is to ensure that critical financial market infrastructure (FMI) is robust and resilient. For example, the CNMV has the power to introduce temporary bans on short selling, as well as responsibilities to ensure that margin and haircut models and practices applied by key infrastructure are robust under market stress, and that recovery and resolution plans for critical market infrastructure are reliable and effective. The CNMV also has powers and tools to mitigate risks from investment firms and their activities, for example to prevent excess leverage and contain moral hazard. (Table 10).

¹²⁶ The CNMV was granted additional powers effective in 2022 for the recovery and resolution of the systemically important central counterparty BME Clearing under the European Central Counterparty Recovery and Resolution Regulation CCPRRR (EU 2021/23. See the accompanying FSAP TN: Spain – Regulation, Supervision, Oversight, and Crisis Management of Financial Market Infrastructures for more information on the policy framework and tools for FMIs.

Table 10. Spain: Macroprudential Instruments for other Financial Market Participants					
Instrument	Intermediate Objective	Available in Spanish Regulation	Need for Authorization by the CNMV	Possibility of adoption by the CNMV	Comments
Market Infrastructu		.	T	ı	1
Restrictions on Short Selling	Avoid illiquidity spirals and contagion effect	Yes	Yes	Yes	The Short Selling Regulation defines the framework for ESMA and national competent authorities to intervene in exceptional situations with the aim of reducing risks to financial stability resulting from short selling.
Margins and Haircuts	Excessive leverage	Yes Directly applicable from European Regulation	No ¹	No	Current European legislation on derivatives and SFTs (EMIR and SFTR) does not provide for the macroprudential use of margins and haircuts by authorities. Decided by the infrastructures themselves.
Early Intervention and Recovery measures 10nly significant changes	and strengthening the resilience of infrastructures		Yes	Yes	The CNMV is the competent supervisory authority and chairs the supervisory college. The CNMV can activate recovery and early intervention measures.

Table 10. Spair	Table 10. Spain: Macroprudential Instruments for other Financial Market Participants (continued)					
Instrument	Intermediate Objective	Available in Spanish Regulation	•	Possibility of adoption by the CNMV	Comments	
Resolution Measures	Moral hazard and strengthening the resilience of infrastructures		Yes	Yes	The CNMV is the CCP resolution authority and chairs the resolution college. The CNMV activates resolution measures in the event of failing or likely to fail. The resolution college approves the resolution plan.	
Investment Firms	1	ı	1	T		
Capital Requirements	Excessive leverage	Yes			Regulatory requirement	
Resolution Measures	Moral hazard and strengthening the resilience of entities		Partial	Partial	The CNMV decides whether an entity is failing or likely to fail and the FROB executes the resolution measures. The resolution plan is approved by the CNMV.	
conditions for the activity of these entities in order to prevent excessive indebtedness of the private sector	J	Yes		Yes	Measure applicable to all entities supervised by the CNMV.	
Critical Benchmarks		<u></u>	Γ			
Contingency Planning	Manipulation and impossibility of calculation	Yes	No	No	Benchmark Regulation (BMR) requires contingency plans from entities that use benchmarks (only supervised entities) and not from others, such as issuers. The	

(concluded)						
Instrument	Intermediate Objective	Available in Spanish Regulation	Authorization	Possibility of adoption by the CNMV	Comments	
					authority does no authorize and does no have the capacity t require specific plan for the transition.	
Administration and Mandatory Contribution	Prevent the disappearance of the benchmark and maintain representativen ess	Yes	Yes	Partial	The decision is take by the administrator competent authorit (ESMA) after consultation with the College of Supervisor of which the CNMV is member.	

57. The legal framework is in place to deploy these tools as needed. Indeed, in March 2020, given the turbulence in financial markets arising from the recognition and declaration from the World Health Organization that COVID-19 was a global pandemic, CNMV joined other European authorities in introducing a temporary ban on short selling in equity markets. The measure was taken "to prevent the potential damage that this type of activity may cause in a highly volatile environment." The measure remained in place until May 2020 and was lifted as market volatility declined. Given the necessary speed of implementation, AMCESFI was notified of the CNMV decision but did not express a formal Opinion. ESMA approved the approach taken. Moreover, CNMV is using the new powers provided under the European CCP recovery and resolution regulation to support recovery and resolution planning. 128

Insurance and Pension Funds

58. The DGSFP was granted powers to apply additional macroprudential tools alongside the establishment of AMCESFI. In particular, the DGSFP was assigned power to set limits on the aggregate exposures of insurance and reinsurance companies (such as concentration limits) as well as to establish limits and conditions on the transfer of insurance portfolios and exposures, for example, to address potential risks from the growing interest of private equity funds in insurance markets. Other tools, in particular, to temporarily suspend the redemption rights of life insurance

¹²⁷ AMCESFI Annual Report 2020 https://www.amcesfi.es/f/webwam/RCL/Publicaciones/archivos/AMCESFI-Annual Report 2020.pdf

¹²⁸ See the accompanying FSAP TN Spain: Regulation, Supervision, Oversight and Crisis Management of Financial Market Infrastructures.

policy holders to protect liquidity in extraordinary circumstances, will be granted under the amendments to Solvency II.¹²⁹

- **59.** A range of other mechanisms and institutions, which are actively supported by the DGSFP, also help to provide additional stability to Spanish insurance markets. For example, the DGSFP is actively engaged in providing predictability and certainty on the payout of motor insurance claims, ¹³⁰ as well as reducing the uncertainty to which life insurance undertakings are subject due to the longevity, mortality and morbidity risk. ¹³¹ The DGSFP also chairs the Consorcio de Compensación de Seguros (CCS) a 'Public Business Institution' which provides insurance, coinsurance and reinsurance services for key areas such as natural catastrophes and agricultural crops, as well as other functions such as liquidation of insurance companies and policyholder protection. ¹³² The CCS and the other tools sponsored by DGSFP help to lower some of the uncertainties of insurance underwriting and provide a degree of additional stability to the market. These arrangements lower volatility of the Spanish insurance market and are taken into account in the assessment of systemic risks and the case for deployment of macroprudential tools.
- **60. DGSFP** has the necessary legal framework in place to activate the tools as needed. AMCESFI would be consulted in advance, as per the institutional framework for macroprudential policy, and typically EIOPA would also be notified.

B. Assessment and Recommendations

Policy Toolkit

61. The set of macroprudential instruments available to the Spanish authorities is broad and extensive. The legal changes in 2018 and 2019 establishing macroprudential tools and launching AMCESFI, provided new policy tools to each of the sectoral authorities, ¹³³ closing, and in some cases going beyond, the principal gaps identified in the previous FSAP. As noted above, further steps to support their application were provided in the BdE's 2021 Circular to credit institutions on supervision and solvency, ¹³⁴ and the CNMV's 2022 Technical Guide on liquidity

¹²⁹ Use of the tool requires notification to EIOPA and the ESRB.

¹³⁰ The DGSFP promotes the publication of widely-agreed tables on compensation rates for damages, personal injury and death.

¹³¹ The DGSFP works with the Biometric Commission (including actuaries and industry representatives) to ensure that the biometric tables published by the DGSFP reflect the real evolution of mortality, survival, disability and morbidity rates.

https://www.consorseguros.es/en/la-entidad/acerca-de-ccs

¹³³ Royal Decree-Law 22/2018 and Royal Decree 102/2019 and https://www.boe.es/buscar/act.php?id=BOE-A-2018-17294 and

https://www.bde.es/f/webbde/INF/MenuHorizontal/Normativa/eng/ficheros/en/RealDecreto102 2019 de 1 de marz o en.pdf

¹³⁴ https://www.bde.es/f/webbe/INF/MenuHorizontal/AreasActuacion/Normativa/en/Circular 5 2021 en.pdf

management in investment funds.¹³⁵ European initiatives that provided tools for CCP recovery and resolution also helped to strengthen resilience, while the amendments to Solvency II (yet to enter into force) will provide additional macroprudential instruments to DGSFP.

- 62. A comprehensive range of policy tools is available to address systemic risks for the banking system, following the addition of borrower-based measures and instruments to address sectorally-focused risks. Indeed, following amendments to the European framework by the EBA, that operationalized the flexible use of the systemic risk buffer (SyRB) for sectoral risks, there may be a choice between the European SyRB or the national SCCyB in the event of a decision to apply such a buffer.
- The prerequisite arrangements enabling use of the tools are in place. The legal and 63. regulatory framework is agreed. And the BdE has undertaken analysis of which indicators provide the most helpful information to guide decisions on the application of each of the tools, while noting that other elements could also be considered as part of the inevitably judgmental decision. Moreover, to provide additional clarity and transparency on major factors influencing policy decisions under the approach of 'quided discretion' followed by the central bank, the BdE very helpfully publishes information on the transmission mechanism of capital-based instruments and borrower based tools on its website, together with key charts and data showing relevant trends in key monitoring variables, as well as key supporting analysis. 136 One important aspect of ongoing work by the BdE to strengthen the high-quality framework further, is to improve the granularity of data on household income. Accurate information on income of individual household borrowers would sharpen the analysis, calibration and impact of borrower-based tools such as Loan to Income (LTI) and Debt Service to Income (DSTI) limits. The recent inclusion of partial data in the credit registry for new loans is welcome but does not offer a short term or complete solution. Continued efforts to improve the data by utilizing additional data from either the banks or tax authorities is a high priority.
- **64.** Streamlining relatively complex administrative procedures for consultation would help shorten the implementation lag and raise the effectiveness of the policy tools. The authorities are encouraged to review whether there is scope for streamlining processes to lower the period of a minimum of 14 weeks (and in some cases likely longer) for the consultation, hearings and final approval of initial policy decisions. Such a delay (when combined with the subsequent 6-12 months transition period) adds complications to the deployment of macroprudential tools, particularly those of a countercyclical nature.

¹³⁵ https://www.cnmv.es/DocPortal/Legislacion/Guias-Tecnicas/GT 1 2022 Liquidez IIC en.pdf

¹³⁶ For example, for the CCyB, the BdE regularly publishes data for nine key indicator variables. https://www.bde.es/wbe/en/areas-actuacion/politica-macroprudencial/herramientas-macroprudenciales/colchon-capital-anticiclico/ as well as a press release supporting the quarterly decisions https://www.bde.es/f/webbe/GAP/Secciones/SalaPrensa/NotasInformativas/23/presbe2023-101en.pdf and analysis showing the transmission of the tool.

- **65. Macroprudential policy in relation to NBFI remains a field under ongoing review and development internationally**. The FSB is actively engaged with the global sectoral standard setting bodies and international organizations to strengthen the resilience of NBFI, an ongoing policy goal spanning multiple years.¹³⁷ The Spanish authorities are participating actively in these fora, to provide and share views and analysis, and to contribute to the further reinforcement of the international and European policy frameworks. Such involvement is very welcome and should continue.
- Spain benefits from a relatively extensive set of policy instruments by European and 66. international standards, although the authorities face some challenges in ensuring effective deployment of some policy options from a macroprudential perspective. For example, the regulatory framework for investment funds in Spain enables a broad set of policy instruments (Table 9). 138 Moreover, the Spanish insurance sector benefits from a number of domestic stabilization mechanisms, facilitated by DGSFP and CCS, that help to dampen shocks. Some policy tools are baked into regulatory requirements—for example, CIS must always meet limits on liquidity risk management, asset concentrations and on the use of derivatives. These help to contain risks by design. Moreover, the continuous monitoring of risks by the CNMV investment funds Supervision Department (largely based on the monthly regulatory information received) enables the identification of funds with poorer liquidity risk procedures. Supervisory actions are deployed in such cases. But for some tools, there is no mandatory requirement. Rather, the regulators must actively encourage inclusion of the policy instruments for handling market stress in the guiding documents, for example, inclusion of anti-dilution tools in investment fund prospectuses, and encouraging life insurance companies to establish business approaches for portfolios that ensure a proper asset and liability management and, if possible, fulfil the criteria for application of the matching adjustment. Thereafter, activation of the policy instrument is at the discretion of the management of the fund or firm.¹³⁹ For some tools, prior authorization is required from the regulator, such as establishment of a side pocket. For others, no such permission is required (such as swing pricing, adoption of bid/ask pricing valuations and, for alternative funds, introduction of a redemption gate), and indeed, no notification to the regulator that the tool has been activated is needed.
- 67. Individual firm incentives and actions are affected by, and will affect, broader market conditions. And while 'microprudential' concerns at the level of pressures and incentives facing

¹³⁷ To illustrate, the FSB work program for 2024 highlights that: "The NBFI sector has grown faster than the banking sector since the 2008 global financial crisis and has become more diverse. As a result, the importance of NBFI for the financing of the real economy has increased. The FSB will continue to advance its work program for enhancing NBFI resilience, which is carried out by the FSB and by standard-setting bodies (SSBs) and international organizations." https://www.fsb.org/wp-content/uploads/P240124.pdf

¹³⁸ FSB (2022): Assessment of the Effectiveness of the FSB's 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds. https://www.fsb.org/wp-content/uploads/P141222.pdf

¹³⁹ The decision will be conditioned by the criteria set out in advance in the guiding documents, which in turn must meet the parameters and framework set out by the regulator. For example in relation to liquidity management of collective investment funds, the conditions should meet the conditions set out in the CNMV Technical Guide https://www.cnmv.es/DocPortal/Legislacion/Guias-Tecnicas/GT 1 2022 Liquidez IIC en.pdf In some cases, the decision may not be fully mechanical, however, and there may be elements of judgement to be applied.

individual funds or firms, and 'macroprudential' concerns in relation to overall market pressures and systemic risk may often be aligned, this may not always be the case under stressed conditions. For example, application of a tool by one fund or firm may be perceived by market participants as a signal of broader market weakness and amplify pressures on other funds perceived by market participants as similar. Given uncertain information on the strength of individual funds, market participants may exhibit herding behavior and a race to the exit, leading in the worst case to fire sales of assets. Equally, deployment of protective tools by individual firms or groups of firms may be excessively delayed by fears of stigmatization, and collective action problems may inhibit the effective use of available policy instruments. In such events, there may be a case for market-wide intervention by the regulatory authorities to overcome the market failures. As noted above, discussion and debate is ongoing in international policy circles on how best to further strengthen market resilience and the safety and soundness of NBFI at the system-wide level. This is likely to include further assessment of such macroprudential considerations and the case for more active engagement and intervention by macroprudential authorities. 140 Such factors are likely to play an important role guiding decisions on the further evolution of the policy toolkit. 141 In the interim, a pre-requisite for effective monitoring and understanding of the potential evolution of market stress, to guide informed policy responses and interventions, is to have a clear picture of pressures on investment funds and firms, that includes their use of policy tools such as anti-dilution measures. Reviewing and strengthening the notification (and in some cases permissioning requirements) to the CNMV on firms' activation and use of discretionary tools is an important near-term priority. 142

68. Continued work will be needed by the Spanish authorities to develop and implement tools to address systemic risk in evolving and emerging areas such as cyber risk, crypto assets, and climate change. This is a broader global imperative. The Spanish authorities are actively engaged in European and global fora, to benefit from and contribute to policy development in these areas.

Policy Stance and the Deployment of Tools

69. The current neutral stance of macroprudential policy in Spain appears appropriate. Systemic risk analysis undertaken for the FSAP did not detect any substantial cyclical or sectoral

¹⁴⁰ The CNMV does have some extraordinary powers for direct intervention in extreme stress, namely to suspend redemptions, to require funds to increase liquid asset holdings, and to impose notice periods on redemptions. These are welcome. Nonetheless, they are viewed as very much tools of last resort and have never been used to date. The deficiencies in information available to the CNMV on the evolving use of tools by investment firms would also impact and perhaps impede decisions on whether or not (and also when) to deploy such extraordinary measures.

¹⁴¹ As highlighted by the FSB in the 2023 Progress report on Strengthening the Resilience of Non-Bank Financial Intermediation: "experience with the use of policy tools to address systemic risk in NBFI is limited to date. To this end, the FSB will discuss experiences and lessons of work by its member authorities on the design and use of tools – micro-prudential, investor protection and macroprudential." https://www.fsb.org/wp-content/uploads/P060923-1.pdf

¹⁴² This recommendation echoes the conclusion in the FSB 2022 report assessing the impact of the effectiveness of the 2017 recommendations on liquidity mismatch in open-ended investment firms: "In Spain, further improvements on the connection between funds' behavior and financial markets under stressed conditions are desirable." https://www.fsb.org/wp-content/uploads/P141222.pdf

imbalance that would warrant immediate deployment of any additional macroprudential instrument.¹⁴³

- **70**. The FSAP assessed the case for proposing the implementation of a 'guardrail' as a protection against a major deterioration in lending standards, but decided against such a recommendation at the present time. Such a quardrail would be of the form of setting certain limits, such as maximum levels of, say, loan-to-value ratios (LTV), or debt-service-to-income ratios (DSTI)¹⁴⁴ on new loans. 145 The aim would be to provide protection against a possible major aggregate deterioration in lending standards from current practices. The principal argument against is that setting such limits at levels which are weaker than the lending standards that banks are currently applying themselves, could erroneously signal regulatory acquiescence that a deterioration in lending standards to the guardrail levels is acceptable, or maybe even desirable. A second and related argument is that there is no current cyclical or sectoral need for such an intervention. Moreover, given that implementation of regulation entails market distortions, analysis of the distributional implications should be assessed before implementing such a measure. Staff judged that the cons outweighed the pros at the present time but encouraged the authorities to continue to keep the option in mind, in the event of a significant change in lending standards or build-up of imbalances in real estate markets. Continued analysis of how best to formulate such a quardrail would be helpful in the interim.¹⁴⁶
- **71. The introduction of a positive neutral level of the CCyB in Spain is recommended**. As highlighted by the BdE Governor in his Lisbon speech of October 2023, "macroprudential policy could be designed to have a more active stabilization role." ¹⁴⁷ A positive neutral CCyB provides additional policy space to the authorities and delivers additional resilience to the banking system. It provides an extra policy instrument that can be released in the event of a major adverse exogenous shock (particularly one that is not preceded by a boom in lending and in the financial cycle), ¹⁴⁸

¹⁴³ See the accompanying FSAP TN: Spain - Systemic Risk Analysis and Stress Testing of Banks.

¹⁴⁴ Or indeed other potential borrower-based tools, individually, or in combination.

¹⁴⁵ Variants such as no more than x percent of new loans can exceed the limits, are also possible.

¹⁴⁶ BdE staff have helpfully already undertaken a granular study of lending standards and default risks, which concludes that reliance on the LTV alone would be misplaced given certain biases, and that a richer set of lending standards should ideally be drawn on. Galán and Lamas (2019) "Beyond the LTV Ratio: New Macroprudential Lessons from Spain" BdE Working Paper 1931. https://repositorio.bde.es/bitstream/123456789/9810/1/dt1931e.pdf See also Nier et al (2019): 'Debt Service and Default: Calibrating Macroprudential Policy Using Micro Data" IMF Working Paper 2019/182 https://www.imf.org/en/Publications/WP/Issues/2019/08/22/Debt-Service-and-Default-Calibrating-Macroprudential-Policy-Using-Micro-Data-48533 and Dirma and Karmalevicius (2023) "Micro-Assessment of Macroprudential Borrower-Based Measures in Lithuania" IMF Working Paper 2023/227 https://www.imf.org/en/Publications/WP/Issues/2023/10/27/Micro-Assessment-of-Macroprudential-Borrower-Based-Measures-in-Lithuania-540987 for additional information on calibrating borrower-based measures.

¹⁴⁷ "The role of macroprudential policy in the stabilization of macro-financial fluctuations", speech by BdE Governor Pablo Hernández de Cos https://www.bde.es/wbe/en/noticias-eventos/actualidad-banco-espana/gob-bancodeportugal-oct23.html

¹⁴⁸ The standard CCyB is designed to temper and attenuate the financial cycle and its impact on the economy and on financial stability, through the build-up of a buffer in the boom phase of the cycle, followed by the release of the (continued)

supplementing banks' voluntary buffers which then support continued credit provision and help to avoid a very costly deleveraging cycle and the associated harm to the economy. The Basel Committee on Banking Supervision sees benefits in the ability of countries to set a positive cycle-neutral CCyB on a voluntary basis, ¹⁴⁹ and adoption is also supported by the ECB and ESRB. ¹⁵⁰ The approach has been introduced in multiple countries, both inside the Banking Union (including Cyprus, Ireland, and the Netherlands) and outside (including Australia, Canada, Czech Republic, Sweden, and the United Kingdom). ¹⁵¹

- **72.** The BdE is undertaking detailed technical analysis of the case for the introduction of a positive CCyB. The BdE Governor noted in his Lisbon speech that: "evidence supports the existence of an asymmetry between the costs of activating the CCyB in normal times, even in the absence of significant systemic imbalances, and the benefits of its release during downturns. The gradual activation of the buffer at an early stage makes capital planning easier for banks when conditions are good, reducing potential negative credit supply effects of the activation. It allows also to take into account uncertainty in the identification of risks, which can result in a delay and a more rapid activation later in the cycle." But he also noted that analysis of the respective pros and cons must go beyond this. In particular, analysis must address the factors affecting the appropriate level of the neutral rate to aim for in normal times, including: the cyclical and structural characteristics of the economy, as well as the banking sector; the desired level of stabilization capacity; and the degree of domestic and cross-border interconnectedness of the financial system and overall economy. The analysis must also address the definition and characteristics of 'normal times', drawing on indicators of financial and economic cycles.
- **73. Staff welcome the detailed technical analysis being undertaken by the BdE to support the policy decision**. Staff look forward to early communication of the technical analysis and the conclusions and policy decision. This would also help to lower uncertainty and facilitate capital planning for the banking system.

buffer to lower the risks of severe deleveraging and a credit crunch once the financial cycle turns down. In the event of an adverse shock arising from outside the financial system (such as the COVID-19 pandemic) that is not preceded by a credit boom, there may be little or no macroprudential buffer to release. As the CCyB rate in Spain was 0 percent in advance of the pandemic, Spain was one of a number of countries that did not have policy space to lower capital requirements.

¹⁴⁹ https://www.bis.org/publ/bcbs_nl30.htm

¹⁵⁰ ECB (2022) https://www.ecb.europa.eu/pub/pdf/other/ecb.responsetothecallforadvice~547f97d27c.en.pdf and ESRB (2022)

https://www.esrb.europa.eu/pub/pdf/reports/esrb.reviewmacropruframework.220331~65e86a81aa.en.pdf

¹⁵¹ ECB Macroprudential Bulletin (April 2023) https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202304_01~6eef01bb6a.en.html Rates vary across countries but typically range between 1-2 percentage points, although Canada has set a domestic stability buffer (akin to a positive neutral CCyB) of 3.5% (with an upper limit of 4%)