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TECHNICAL NOTE—MACROPRUDENTIAL POLICY FRAMEWORK

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MACROPRUDENTIAL POLICY FRAMEWORK

Prepared By
Monetary and Capital Markets Department

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program in Ireland. 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

BTL	Buy-to-Let
CCB	Countercyclical Capital Buffer
CCR	Central Credit Register
CET	Core Equity Tier
COREP	Common Reporting
CRD	Capital Requirement Directive
CRE	Commercial Real Estate
CRR	Capital Requirement Regulation
DOF	Department of Finance
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
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
FINREP	Financial Reporting
FSAP	Financial Sector Assessment Program
FSC	Financial Stability Committee
FTB	First-Time Buyer
G-SII	Global Systemically Important Institution
ICR	Interest Coverage Ratio
IFSRA	Irish Financial Services Regulatory Authority
IMF	International Monetary Fund
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
LLF	Loan Loss Forecasting
LTI	Loan-to-income
LTV	Loan-to-value
MCM	Monetary and Capital Markets Department
MFR	Macro-Financial Review
NAMA	National Asset Management Agency
NCA	National Competent Authority
NDA	National Designated Authority
NFC	Non-financial Corporations
NPL	Non-performing Loan
NSFR	Net Stable Funding Ratio
OECD	Organization for Economic Co-operation and Development
OFI	Other Financial Intermediary
O-SII	Other Systemically Important Institution

PD	Probability of Default
PDH	Primary Dwelling Home
REIT	Real Estate Investment Trust
RRE	Residential Real Estate
SME	Small and Medium-size Enterprise
SPV	Special Purpose Vehicle
SRB	Systemic Risk Buffer
SSM	Single Supervisory Mechanism
U.K.	United Kingdom

EXECUTIVE SUMMARY

The high costs of the financial crisis showed that a strong macroprudential policy framework is essential to ensure financial stability. A strong policy framework is particularly important in currency unions, since the monetary policy stance adopted at the center may give rise to diverging developments in credit across Member States that will require macroprudential policy action at the national level.

Macroprudential policy regarding banking is a shared competency between the Central Bank of Ireland and the European Central Bank (ECB). The Central Bank of Ireland is responsible for prudential policies for both banks and non-banks as the National Competent Authority (NCA) and National Designated Authority (NDA). The ECB has the power to apply more stringent measures than those applied by the NDA or NCA of participating Member States ("topping-up power"). To foster sound macroprudential frameworks across Europe, the European Systemic Risk Board (ESRB) can issue recommendations on a "comply or explain" basis to Member States, covering all segments in the financial systems (both banks and non-banks) of all the EU member countries.

The current institutional arrangement in Ireland is appropriate for effective macroprudential policy and in line with IMF guidance. As part of the Ireland FSAP assessment, the current macroprudential policy framework is evaluated according to three key principles: (i) willingness to act in the face of potential opposition, thereby countering inaction bias; (ii) ability to act, through access to data, resources and regulatory powers; and (iii) cooperation across all agencies in both domestic and cross-border dimensions. The Central Bank of Ireland has a clear financial stability mandate under the Central Bank Acts 1942 to 2014 ("Central Bank Acts"), It is accountable to the Houses of Oireachtas and**,** in a broad sense, to the general public in discharging financial policy functions. Central bank communication has continued to evolve since the onset of the financial crisis, and for the first time the Central Bank of Ireland published minutes of its meeting, with those from December 2015 in February 2016. As memories of the financial crisis fade, the independence of macroprudential policy-making needs to be conscientiously preserved to avoid undue delay in taking actions or conflation with other policy objectives. To further strengthen the legitimacy and accountability of macroprudential policy and promote public support, the Central Bank of Ireland should consider publishing a record (or a summary) of the meetings of the in-house Financial Stability Committee.

The Central Bank of Ireland's analysis of systemic vulnerabilities is sophisticated and timely. The Central Bank of Ireland has the power to request data directly from regulated entities, and also has powers to require information from unregulated entities under the Central Bank Acts. The Central Bank of Ireland also has powers to change the levels and regulatory perimeter of macroprudential instruments under national law, such as the LTV and LTI limits. There is a dedicated division (Financial Stability Division) that leads systemic risk analysis and macroprudential policy discussions. The biannual Macro-Financial Review (MFR) covers well the stability of individual sectors and property markets. There is, however, still room for further improvement, in particular as to filling data gaps. First, information on domestic and cross-border bilateral liability positions of banks and non-bank financial institutions is still incomplete in places. Second, detailed information on important elements of commercial real estate market activities is lacking. Third, balance sheet data for non-financial corporations is not fully available. Fourth, the absence of a comprehensive credit register precludes the Central Bank of Ireland from connecting credit information of borrowers across financial institutions in Ireland. Moreover, the Macro-Financial Review can usefully cover financial interconnectedness among sectors, as well as within each sector.

The Central Bank of Ireland has been introducing a range of macroprudential instruments to contain a build-up of systemic risks in the financial system. Ireland's boom-bust experience amply demonstrates the need for forward-looking action to head off incipient financial problems. The recently introduced limits on loan-to-value (LTV) and loan-to-income (LTI) ratios on residential mortgages should be seen in this light. These measures are intended to strengthen the resilience of households and the financial sector and reduce cyclical dynamics in the housing market. There is some evidence that these tools have had an effect, in moderating housing pressures, especially via the expectation channel. The Central Bank of Ireland should maintain the proportionate limits on LTV and LTI ratios. As the measures are still new, more information is needed before trying to refine their calibration (Box). Rigorous impact analysis is warranted to evaluate the effectiveness and examine possible policy leakages. In addition, the Central Bank of Ireland should consider transforming proportionate limits on the LTI ratio into caps on the DTI ratio after the Central Credit Register is successfully implemented.

Because of the unitary structure, there is a strong coordination of micro- and macroprudential policy within the Central Bank of Ireland. For checks and balances, there are two in-house "advisory" committees, the Financial Stability Committee and the Supervisory Committee. There is also a forum, so called "Principals Group," for discussion and coordination among other Irish agencies on economic issues, including the Central Bank of Ireland, Department of Finance, and National Treasury Management Agency. The Central Bank of Ireland seeks the views of industry participants, academics, other regulators and the public through consultation papers.

Cross-border cooperation and coordination are important and should be efficient. Because several agencies are involved in the decision making process of macroprudential policy actions in Europe, it is important to have a strong but efficient coordination mechanism. The coordination at the European level involves extensive notifications and consultation requirements regarding the use of macroprudential tools, and the requirements vary across macroprudential instruments. A challenge for all the relevant agencies will be how to handle efficiently and effectively all the notifications they receive. It remains to be seen how efficiently this system of notifications and responses will work in practice.

Table 1. Ireland: Recommendations on the Macroprudential Policy Framework

Recommendations and Authority Responsible for Implementation	Agency	Time 1/
In order to strengthen accountability and transparency, a record of the meetings of the in-house Financial Stability Committee should be published.	Central Bank of Ireland	I
Improve surveillance further by closing remaining data gaps on granular bilateral exposure data within and across the banking sector and non-banking sectors, corporate sector balance sheets, and commercial real estate market activities.	Central Bank of Ireland	NT
Make good progress to establish the Central Credit Register.	Central Bank of Ireland	NT
Enrich the Macro-Financial Review with detailed discussion of financial interconnectedness and include indicators of overall financial conditions.	Central Bank of Ireland	NT
Maintain, and in due course review LTV and LTI limits.	Central Bank of Ireland	NT
Transform limits on loan-to-income ratio into limits on debt-to-income ratio once the Central Credit Register is operational.	Central Bank of Ireland	MT
Work through the membership of the European Stability Risk Board, the European Banking Authority, and European Union Commission and Council to streamline notification system at the European level to support timely macroprudential policy action while still allowing adequate consideration of cross-border issues.	Central Bank of Ireland, DOF	MT

1/ I-Immediate" is within six months; "NT-near-term" is six months –2 years; "MT-medium-term" is 2–5 years.

BACKGROUND[1]

1. In the wake of the global financial crisis, Ireland experienced a historic banking crisis from the bursting of a real estate bubble. The real estate boom was accompanied by a credit boom, fueled by domestic bank loans and cross-border capital flows. House prices almost doubled and total banking assets tripled from 2002 to 2008. When the burst came, debt overhang and deleveraging spirals threatened financial and macroeconomic stability. The government recapitalized the banking system in the amount of €64 billion (about 40 percent of GDP).

2. The Irish authorities identified significant failings in the previous regulatory and supervisory framework after the banking crisis. The Commission of Investigation (2011) found that: (i) systemic risk in the run-up to the crisis was seriously misjudged by the Irish Financial Services Regulatory Authority (IFSRA), whose actions and warnings were insufficient; (ii) the Central Bank of Ireland chose to passively rely on the financial regulator handling bank stability issues; and (iii) the Department of Finance (DOF) did not, despite its mandate, see itself as directly involved in financial stability issues. Under the fragmentation of responsibilities related to financial stability, no single institution attempted to monitor the system as a whole, identify potentially destabilizing trends, and address them in a timely manner.

3. The high costs of the crisis showed that a strong macroprudential policy framework is important to ensure financial stability. IMF (2013) stresses that a strong policy framework is particularly important in currency unions, since the monetary policy stance adopted at the center may give rise to diverging developments in credit across Member States that will require macroprudential policy action at the national level. Ireland did a major reorganization of its institutional framework for regulatory and supervisory policy in 2010. The Central Bank Reform Act 2010 (the "2010 Act") amended the Central Bank Acts and fully integrated the Central Bank of Ireland and the IFSRA within a single board called the Central Bank Commission. The new European Union banking legislation and national laws have given a wide range of macroprudential instruments to address systemic risk.

4. This note evaluates the current macroprudential policy framework and the need for further policy actions by the Central Bank of Ireland and the ECB. It assesses the systemic risk monitoring framework, macroprudential policy toolkit, and the institutional arrangement and international collaboration. The assessment proceeds in the context of the overall stability analysis and maps identified vulnerabilities into specific policy recommendations. It is built on the "Staff Guidance Note on Macroprudential Policy (IMF, 2014a)," its background note ("Detailed Guidance on Instrument (IMF, 2014b)"), numerous publications by the Central Bank of Ireland, the ECB, and the ESRB, as well as other relevant material reflecting the emerging international consensus in this field.

[1] This Technical Note was prepared by Heedon Kang, Monetary and Capital Markets Department, IMF, in the context of the 2016 Ireland Financial Sector Assessment Program.

5. There are three sections in this note. Section II assesses strengths and weaknesses of the institutional framework that is currently in place and provides policy options to strengthen it further. Section III describes the staff assessment of systemic risks and the systemic risk monitoring framework in Ireland, focusing on the Central Bank of Ireland's capacity and resources as well as data gaps. Section IV summarizes the macroprudential policy toolkit available and implemented by the authorities. It also tries to evaluate the effectiveness of existing measures.

INSTITUTIONAL FRAMEWORK

6. Ireland undertook a major reorganization of its institutional arrangement for regulatory and supervisory policy in 2010. With effect from October 1, 2010, the 2010 Act fully integrated the Central Bank of Ireland and the IFSRA within a single board called the Central Bank Commission. IFSRA ceased to exist. All financial policy functions (i.e., macroprudential, microprudential, and conduct supervision) were assigned to the Central Bank of Ireland.

7. The Central Bank of Ireland is responsible for prudential policies for both banks and non-banks as the National Competent Authority (NCA) and National Designated Authority (NDA).[2] The Central Bank of Ireland plays an important role in undertaking macroprudential policy on the banking sector in collaboration with the ECB under the Single Supervisory Mechanism (SSM), the ESRB, and other European supervisory agencies (e.g., the European Insurance and Occupational Pensions Authority (EIOPA) and the European Banking Authority (EBA), and the European Securities and Markets Authority (ESMA). For the non-banking sector, such as insurance companies and pension funds, the Central Bank of Ireland framework for macroprudential policy is in consultation with the ESRB and the EIOPA.[3]

8. Macroprudential policy regarding banking is a shared competency between the national authorities and the ECB in the SSM Member States. The SSM Regulation (Council Regulation (EU) No. 1024/2013) confers to the national authorities and the ECB specific tasks relating to macroprudential instruments for the banking sector set out in the CRR (European Union Capital Requirement Regulations No. 575/2013) and the CRD IV, which was transposed into Irish law by the European Union (Capital Requirements) Regulations 2014 (Statutory Instrument No. 158 of 2014).[4] The ECB can apply higher requirements for capital buffers and more stringent measures than those applied by national authorities ("topping-up power"), but cannot set lower requirements than those

[2] Thus, for example, the Central Bank of Ireland is the macroprudential authority for the purposes of Article 74(4) of CRD IV.

[3] Attention here focuses on the use of financial instruments for macroprudential purposes. Other instruments such as tax policy than can have macroprudential effects. Wil not be addressed directly.

[4] The CRR and CRD IV provides for a few indirect tools to address risks in the corporate sector, such as Pillar II, large exposure limits, public disclosure requirements, and systemic risk buffers.

set nationally.[5] When a measure is intended to be undertaken by a national authority, the ECB should be notified ten working days in advance of the relevant decision, and the ECB can object to the proposed measure within five working days stating its reasons for the objection in writing.[6] Where the ECB objects, the national authority is required to consider the ECB's reasons prior to proceeding with the decision as appropriate. Similar notification requirements apply to the ECB decision to apply higher requirements (Appendix I). For instruments outside of the CRR and CRD IV, such as limits on loan-to-value (LTV), loan-to-income (LTI) or debt-to-income (DTI) ratios, the Central Bank of Ireland has the full powers and responsibilities, but the ECB can suggest national authorities to use their powers over these instruments. The Central Bank of Ireland fully informs the ECB and the ESRB about the exercise of those powers. For the non-banking sector, such as insurance, pension, and securities markets, the Central Bank of Ireland framework for macroprudential policy is in coordination with the ESRB, the EIOPA, and the ESMA.

9. The following sections review the current institutional arrangement in Ireland, which are deemed to be appropriate for effective macroprudential policy and in line with IMF guidance. The review evaluates the arrangement according to three key principles: (i) willingness to act in the face of potential opposition, thereby countering inaction bias; (ii) ability to act, through access to data, resources and regulatory powers; and (iii) cooperation across all agencies in both domestic and cross-border dimensions.[7] Mechanisms are also evaluated for cooperation among domestic and international bodies under the SSM regulation, focusing on how collaboration among domestic agencies and with the European agencies, such as the ECB, the EBA, and the ESRB, has been working in practice. The review is based on an examination of legislation and regulation, and evidence of practice. The Central Bank of Ireland published the macroprudential policy framework in 2014 (Central Bank of Ireland, 2014).

A. Principle 1: Willingness to Act

10. The Central Bank of Ireland has a clear financial stability mandate under the Central Bank Act. Other than those related to monetary policy functions, the Central Bank of Ireland has the following objectives: (i) stability of the financial system overall; (ii) proper and effective regulation of financial service providers and markets, while ensuring that the best interests of consumers of

[5] The Governing Council is the ultimate decision-maker for macroprudential policy in the ECB. The Council decides on macroprudential measures based on a proposal by the Supervisory Board, taking into account the input of the ECB's Financial Stability Committee and the Macroprudential Coordination group. Quarterly high-level macroprudential discussions with the Supervisory Board allow the Governing Council to assess the interaction between micro- and macro-prudential policies. The ECB's Financial Stability Committee brings together high-level representatives of national authorities and provides the platform to establish a common ground in macroprudential frameworks across the SSM Member States. See Appendix I for the decision-making framework in the ECB.

[6] Informal notification is encouraged in this framework and has been happening.

[7] ESRB (2014) assessed the Irish authorities to be "largely compliant" with the 2011 recommendations on the macroprudential mandate of national authorities. This grade means actions taken implement almost all of the recommendations.

financial services are protected; (iii) the efficient and effective operation of payment and settlement systems; (iv) the provision of analysis and comment to support national economic policy development; and (v) the resolution of financial difficulties in credit institutions. Moreover, under the Central Bank Acts, the Central Bank of Ireland no longer has statutory responsibility for promoting the development of the financial services industry. The role of providing consumer education and information has been transferred to the national consumer agency.

11. The Central Bank Commission is the highest decision making body in the Central Bank of Ireland.[8] It is chaired by the Governor and consists of the Deputy Governor of Central Banking, the Deputy Governor of Financial Regulation, the Secretary General of the Department of Finance, and at least six members (no more than eight) appointed by the Minister for Finance. The functions and powers of the Central Bank of Ireland as the NDA for the purposes of the CRD IV and the CRR have been delegated to the Governor, with the power for the Governor to further delegate these statutory functions and powers. The designated authority powers include the powers over the capital buffers (Articles 128–140 CRD IV and Article 458 CRR).[9] The Commission retains its decision power regarding macroprudential instruments under national laws (e.g., limits on LTV and LTI ratios).[10] To support the role of the Governor and the Commission in macroprudential policy discussions, there is a dedicated division (Financial Stability Division) and an advisory committee (the Financial Stability Committee (FSC)) that are explained in detail below.

12. The Central Bank of Ireland is accountable to the Houses of Oireachtas and, in a broad sense, to the general public in discharging financial policy functions. This is mainly through both an annual report that the Central Bank of Ireland must present to the Minister for Finance setting out its operations for the year and an annual performance statement that needs to contain: (i) details of regulatory activities planned for the current year; and (ii) a review of regulatory performance during the preceding year regarding the regulatory performance plan for that year, and other relevant matters.[11] In addition, the Central Bank Acts require a periodic "internal peer review of regulatory

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[8] The Commission can make its decisions by voting. The Central Bank Acts states: "A decision supported by a majority of the votes cast at a meeting of the Commission at which a quorum is present is the decision of the Commission." In practice, decisions do not go to a formal vote, rather it is clear when the Commission is in support or otherwise of a proposal.

[9] A number of decisions taken under the delegated powers are brought to the attention of the Commission and discussed at Commission meetings in the normal course of business. A report is compiled annually for the Commission summarizing how the delegated powers are exercised. In addition, the Commission reviews the exercise of these powers every two years with a view to ensuring the effective discharge of the Commission's functions and the most efficient use of its resources.

[10] The Commission approved the Central Bank (Supervision and Enforcement) Act 2013 (Section 48) (Housing Loan Requirements) Regulations 2015 (S.I. No. 47/2015) in January 2015. At this time, the capacity to commence the Regulations and approve any final changes was delegated to the Governor, but no further delegations regarding these instruments have been made.

[11] It does not preclude the Central Bank of Ireland from taking macroprudential policy measures that are not planned for the current year.

performance" to be carried out at least every four years. The Governor or relevant senior staff members can be asked to appear before a committee of the Oireachtas and provide the committee with further information related to the performance statement. In addition, the Governor and specified senior staff members can be requested to appear before a committee of the Oireachtas responsible for examining matters relevant to the Central Bank of Ireland to provide the committee with such information as it requires (subject to the ESCB Statute, the Rome Treaty or any restrictions imposed under any other legislation).

13. **Central Bank communication has continued to evolve since the onset of the financial crisis, and for the first time the Commission published minutes of its meeting of December 2015 in February 2016.** Clear and rich communication will promote public understanding of the need for policy actions, counter biases in favor of inaction, and enhance legitimacy and accountability of macroprudential policy. The Central Bank of Ireland has experience in communicating risks to the markets and the general public, which is an important part of macroprudential policy. The publication of a record of the Commission meetings would promote greater understanding of its policy decisions. It is too early to evaluate the content of minutes, but in principle it would be useful if the minutes provide detailed information of the meetings.

B. Principle 2: Ability to Act

14. **The new framework includes provisions to adapt to the potentially evolving nature of systemic risk.** The Central Bank of Ireland has the power to request data directly from regulated entities. The Central Bank of Ireland also has powers to require information from unregulated entities under the Central Bank (Supervision and Enforcement) Act 2013 where this information is necessary for the performance by the Central Bank of Ireland of its functions under financial services legislation relating to the proper and effective regulation of financial service providers. In addition, section 18 of the Central Bank Act 1971 provides the Central Bank of Ireland with the power to require information from credit institutions and certain categories of unregulated entities. The appropriate use of these powers is assessed on a case-by-case basis. For example, these powers were applied to the non-bank financial sector in 2015 when reporting requirements were extended to include special purpose vehicles (SPVs). These powers are of importance in Ireland given the large size of the non-banking sectors, enabling the Central Bank of Ireland to assess the activities in the non-banking sectors and the linkages with the banking sector.

15. **The Central Bank of Ireland also has powers to change the levels and regulatory perimeter of macroprudential instruments under national law, such as the LTV and LTI limits.** It was communicated at the time of introduction of the limits that it may be necessary to adjust any or all of the parameters of the tools in response to economic, market, or other developments in due course. The adjustment would involve a consultation with the Minister for Finance, as was the case with the original introduction of the limits, for the purpose of policy coordination.

C. Principle 3: Effective Coordination and Cooperation

16. The integrated arrangement has clear strengths in fostering coordination across policy functions. Because of the unitary structure, there is a strong coordination of micro- and macroprudential policy within the Central Bank of Ireland. For checks and balances, there are two in-house "advisory" committees, the FSC and the Supervisory Risk Committee. There is also a forum, so called "Principals Group," for discussion and coordination among other Irish agencies on economic issues, including the Central Bank of Ireland, DOF, and National Treasury Management Agency.

17. Concentrating responsibilities and powers requires checks and balances mechanisms to challenge dominant views, and a number of arrangements are in place to mitigate this risk of group-thinking. The FSC, chaired by the Governor, has representation from both macro- and microprudential policy areas within the bank and advises the Governor on issues central to the fulfillment of the mandate of the Central Bank of Ireland, to contribute to financial stability in Ireland and the Euro area. Discussions on financial stability or macroprudential policy issues benefit from a range of perspectives from participants, and staff reports are subject to challenge by the FSC members.[12] Furthermore, six external members in the Central Bank Commission bring a different range of knowledge and insights to the Commission. The Minister may request the Governor or the Commission to consult with the Minister in relation to the Central Bank of Ireland's policy functions (other than what is imposed by the Rome Treaty or the European System of Central Banks (ESCB) Statute).

18. The Central Bank of Ireland also seeks the views of industry participants, academics, other regulators and the public through consultation papers. Roundtables with industry on financial stability issues take place on an annual basis at present. A recent example is the convening of a round table on real estate issues in both 2014 and 2015. These roundtables provide market intelligence about developments and risks in the Irish residential and commercial property market that can be used to assess systemic risks posed by this sector. In addition, the Central Bank of Ireland organizes a bi-annual "Economics Roundtable," which is mainly attended by representatives from academia and financial sectors. Discussions cover topics across the Central Bank of Ireland's mandate. For example, a recent roundtable dealt with mortgage arrears.

19. Cross-border cooperation and coordination, including with non-SSM countries, are important and should be efficient. The introduction of the SSM implies that the ECB has the power to apply more stringent measures than those applied by the NDA or NCA of participating Member States ("topping-up power"). The ESRB was established in 2010 to act as the macroprudential oversight body in the EU. To foster sound macroprudential frameworks across Europe, the ESRB has issued recommendations on a "comply or explain" basis to Member States, covering all segments in the financial systems (both banks and non-banks) of all the EU member countries.[13] Because several

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[12] The FSC meets approximately 15 times a year.

[13] The ESRB can issue warnings and recommendations not only to the national authorities but also to the ECB.

agencies are involved in the decision making process of macroprudential policy actions in Europe, it is important to have a strong but efficient coordination mechanism. The coordination at the European level involves extensive notifications and consultation requirements on the use of macroprudential tools, and the requirements vary across macroprudential instruments (see Appendix II). A challenge for all the relevant agencies will be how to handle efficiently and effectively all the notifications they send and receive. It remains to be seen how efficiently this system of notifications and responses will work in practice.

D. Recommendations

20. The independence of the Central Bank of Ireland should be fully maintained to avoid delayed actions. The Central Bank Acts state: "nothing in the Central Bank Acts 1942 to 2010 affects the independence of the Central Bank of Ireland, the Governor, and the Commission required by the Rome Treaty and the ESCB Statute." The Central Bank of Ireland's imposition of limits on LTV and LTI ratios provides evidence of how this independence can operate in practice. The Central Bank of Ireland did not change its decision despite financial industry and political pressure.[14] The Central Bank of Ireland's willingness to act is welcome, and the framework should be preserved to counter biases for inaction or insufficiently timely action. While there is no observed political interference, the legal framework is not fully satisfactory, for example, regarding the ability of the Minister for Finance to dismiss members of the Commission for specified reasons which are broad in nature and interpretation. It is noted that no member has been removed under this section to date.

21. To strengthen the legitimacy and accountability of macroprudential policy and promote public support, the Central Bank of Ireland should consider publishing a record (or a summary) of the meetings of the in-house Financial Stability Committee. As mentioned above, most of the decision-making powers related to macroprudential tools (except the limits on LTV and LTI ratios) are delegated to the Governor, and the Financial Stability Committee plays a major role in advising the Governor on financial stability issues. Given its important role, the Central Bank of Ireland should publish a record of its meetings periodically.

22. A more streamlined notification system could more efficiently support timely macroprudential policy action while still allowing adequate consideration of cross-border issues. The national authorities currently need to work through the membership of the EU Council, the EU Commission, the ESRB, and the EBA. While the motivation behind the notification requirements in the CRR and CRD IV is understandable, the system that has been established seems lengthy and complex, and quite rigid. For example, the implementation process of Article 458 (flexibility measures) is particularly onerous. It can take 2–3 months under the CRR from the time of notification of the national authorities to the adoption of the draft national measure.[15] Considering

[14] During the consultation process, the DOF and a number of political parties and representatives responded in an open and transparent manner and their responses can be found on the Central Bank of Ireland website.

[15] The national authorities must consider if they can use the other measures contained in the CRR and CRD IV before using flexibility measures in Article 458; meanwhile systemic risks can be significant and require imminent actions.

the possibility of an urgent need to implement a proposed measure, the authorities at least should be able to make their case for accelerating the approval process, perhaps on condition that the relevant measure be subject to early review.

SYSTEMIC RISK MONITORING

A. Assessment

23. While the Irish financial system is recovering from the crisis, there are still some pockets of vulnerabilities that deserve close monitoring.[16] These vulnerabilities relate to, inter alia:

- **Legacy issues:** Dealing with the stock of non-performing loans (NPLs) remains a challenge despite a series of policy measures. The authorities have deployed various measures to accelerate the resolution of problem loans and especially mortgages, commercial real estate (CRE) loans, and loans to small and medium-sized enterprises.[17] Nonetheless, the system still holds a large stock of NPLs, composed to a significant degree of long-overdue mortgage arrears and CRE loans;

- **Low bank operating profits:** High private indebtedness and the prevalence of variable rate loans imply that an economic slowdown—especially where unemployment rises significantly—or higher lending rates could lead to the need for more provisioning and write-offs. Consolidation in the domestic banking sector has increased the relative importance of each surviving bank, and thus decreased diversification. Despite increased concentration and low investment in fixed assets, bank profitability has been squeezed, mainly because of a decline in earnings under the low interest rate environment;

- **Presence of vulnerable households:** Segments of households that are particularly susceptible to economic shocks have been identified using aggregate and loan-level data. By analyzing household debt dynamics and comparing the simulated probability of default (PD) across different groups, existing borrowers with high LTV ratios (e.g., young borrowers and buy-to-let investors) and standard variable rates are found as the segments that are relatively more vulnerable to adverse shocks;[18]

- **High indebtedness of some corporates:** The level of non-financial corporate (NFC) debt and corporate NPLs remains high, therefore limiting firms' ability, particularly SMEs', to access finance and undertake new investment. While firms' financial health has improved, about one-fifth of the domestic firms—mostly of small size—were under "technical default"

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[16] See Technical Note on Banking Sector and Technical Note on Non-Bank Sectors for detailed assessment.

[17] This issue has been extensively studied (e.g., in IMF SDN/15/19, "A Strategy for Resolving Europe's Problem Loans") http://www.imf.org/external/ns/cs.aspx?id=353. See Box 1 in the main FSAP document as well.

[18] See Section III in Technical Note on Non-Bank Sector Stability Analyses.

(with interest coverage ratio (ICR) of less than one) in 2013, with the share of debt owned by firms with ICR of less than one at 10 percent. Furthermore, the share of risky debt among small firms constituted nearly half of small firms' debt;[19] [20]

- **High sovereign indebtedness:** The public debt-to-GDP ratio is declining, but still remains high at 93.8 percent for end 2015, leaving the sovereign vulnerable to economic and financial shocks;

- **Cross-border interconnectedness:** Cross-border financial linkages appear to be weaker than in the pre-crisis period, but Irish domestic banks have large exposures to the U.K. relative to the size of their balance sheets. A severe financial distress in the U.K. economy would inflict large losses to the Irish banks and affect Irish corporates, employment, and domestic banks.[21] Insurance companies and pension funds could propagate negative foreign shocks into Ireland because domestic households are exposed to non-residents through their savings in these financial sectors, which invest in foreign assets in net terms. In addition, the government and NFCs, mainly multinational companies, rely on funding from non-residents, and remain vulnerable to a reversal of sentiment in the global financial market;[22]

- **Inter-sectoral interconnectedness:** The banking sector is the linchpin in the network of domestic financial sectors. The largest bilateral connections run between the banking and real sectors (e.g., households, NFCs, and governments). Inter-bank linkages amounted to 41 percent of GDP. Other financial intermediaries (OFIs) are also linked to the real sectors, but the linkage between OFIs and NFCs mainly reflects intra-company transactions between multinational companies and their treasury companies, and OFIs do not directly finance households to any significant degree, but are largely connected through the purchase of securitizations and sales of mortgage loans. Irish-domiciled money market funds have no meaningful link with other domestic sectors;[23] and

- **Rapid rebound of CRE and RRE market prices:** Residential real estate (RRE) and CRE prices in Ireland have been rising rapidly in recent years, raising concerns about possible overvaluation and a build-up of new imbalances. The rebound in the Irish RRE and CRE market has been more vigorous than in other OECD countries. Both non-parametric and

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[19] See Section IV in Technical Note on Non-Bank Sector Stability Analyses.

[20] One-in-three Irish SMEs have no debt on their balance sheet (McCann, 2014), therefore vulnerabilities are concentrated amongst a group of indebted SMEs.

[21] Central Bank of Ireland (2015a) notes that the impact of a Brexit on the Irish financial sector, including banks, insurance firms and non-bank financial intermediaries, could be significant if it occurred in a disorderly manner and/or had a large negative impact on the U.K. economy. Potential financial sector impact could be on firm business models and profitability.

[22] See Section III in Technical Note on Bank Sector Stress Tests and Contagion Analyses.

[23] See Section I in Technical Note on Non-Bank Sector Stability Analyses.

parametric methods suggest that the RRE and CRE market prices are close to their equilibrium level, but the rapid price growth in the CRE market can be an early signal of new imbalances and thus should not be overlooked.[24]

24. The Central Bank of Ireland's analysis of systemic vulnerabilities is sophisticated and timely. There is a dedicated division (Financial Stability Division) with 29 staff that leads systemic risk analysis and macroprudential policy discussions. The Central Bank of Ireland staff has published a number of high quality research papers to discuss topical issues on financial stability and macroprudential policy. The biannual Macro-Financial Review (MFR) comprehensively covers the stability of individual sectors and property markets in the financial system, such as households, firms, government, banks, and non-bank financial institutions.[25] It also includes boxes on special topics, such as potential implications for the Irish financial sectors of a U.K. exit from the EU, economy-wide vulnerabilities from credit growth, and an introduction to the countercyclical capital buffer and O-SII buffer. The Loan Loss Forecasting model allows the Central Bank of Ireland to conduct granular stress tests for mortgages with detailed loan-level data, considering various dimensions of household characteristics (Gaffney, Kelly, Lyons, and McCann, 2014). The Household Credit Market Report uses a wide range of data sources to give up-to-date information on developments in household debt, such as the distribution of LTV ratio of mortgage loans and mortgage arrears/modifications (for example, Central Bank of Ireland, 2015b).

25. There is, however, still room for further improvement, in particular filling data gaps. First, data on individual Irish banks' asset positions vis-à-vis counterparties are available to the Central Bank of Ireland for both domestic and cross-border linkages, but information on their bilateral liability positions is still not fully available. Second, detailed information on transactions and construction activities in the CRE market is lacking.[26] Third, balance sheet data for non-financial corporations is incomplete. Fourth, the absence of a comprehensive credit register precludes the Central Bank of Ireland from connecting credit information of borrowers across financial institutions in Ireland. Moreover, the MFR does not cover financial interconnectedness among sectors as well as within each sector.

26. A project is ongoing to develop tools to enhance monitoring of the structural dimension of systemic risk at the Central Bank of Ireland. The recent crisis highlighted the intricate interlinkages between financial institutions which can pose a threat to a financial system. Institutions can act as absorbers, originators, or transmitters of shocks within an intertwined web of multilateral exposures. The Central Bank of Ireland has paid keen attention to make advances in data collection and tools to assess risks arising from interconnections, with a few high-level publications

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[24] See Section II of the accompanying Technical Note on Non-Bank Sector Stability Analyses.

[25] The authorities halted publication of the Financial Stability Report in 2008 (previously available 2004–07), but started to publish the Macro-Financial Review in 2012 after a four-year break.

[26] The Central Bank of Ireland staff has conducted important analyses of CRE market developments (e.g., O'Brien and Woods, forthcoming).

on banking sector interconnectedness and Irish network of CDS counterparties (Hallissey, 2016; Kenny, Killeen, and Moloney, 2015). Hallissey (2016) finds that the interbank credit network in Ireland is relatively sparse with just a few key hubs, the most connected of which were on the list of global systemically important financial institutions.

B. Recommendations

27. Even if exposures between non-bank financial institutions and other sectors are not directly linked to the Irish economy, it is important to continue to collect granular data for bilateral exposure within the banking sector and the non-bank sectors, as well as across these sectors. The institution-wide collaboration within the Central Bank of Ireland to fill the data gaps and enhance understanding of financial interconnectedness in Ireland is therefore welcome. Sufficient resource allocation will be required to process the large amount of new data.

28. The Central Bank of Ireland needs to work with other European countries and agencies on closing data gaps on cross-border bilateral financial exposures. The problem with lack of bilateral exposure data exists across other European countries which collect the standard common reporting (COREP) and financial reporting (FINREP) templates from commercial banks, and thus there should be multilateral efforts to fill the data gap in the European context.

29. The tight linkages with the U.K. financial system warrant ongoing attention of the supervisors. In this vein, the Central Bank of Ireland's close monitoring of U.K. exposures of Irish banks is welcome, including the development of stress-testing loan-loss forecasting models.

30. The authorities should enhance data collection and continue to allocate sufficient resources for CRE market and corporate sector analyses. A recently announced project to develop a CRE statistical system, co-funded by the Central Bank of Ireland and National Asset Management Agency (NAMA), is welcome. It will be give detailed information on sales and lease transactions, and construction activities, such as permissions, commencements, and completions. After the first stage of the statistical system project, it would be useful to include price information as part of the database. Also, corporate vulnerability assessment could be expanded with an extensive coverage of firm-level data.

31. It will be crucial to continue to collect the loan-level data from commercial banks for systemic risk assessment and macroprudential implementation, and the Central Bank of Ireland should make good progress to establish the Central Credit Register (CCR). The loan-level data has allowed the Central Bank of Ireland to understand granular information in the Irish mortgage market, which was previously inaccessible with aggregate data (Lydon and McCarthy, 2013). To properly evaluate the impacts of limits on LTV and LTI ratios, the loan-level data will be the basic essentials. In addition, for efficient use of the CCR, it will be important to design the CCR in such a way that individual credit information can be accurately verified and consolidated.

32. The MFR should discuss overall financial conditions and financial interlinkages in Ireland. It will be useful to periodically examine structural dimension of systemic risks and present the findings in the MFR. The Central Bank of Ireland has been developing various financial condition indictors and the MFR could include them in the introductory section to describe overall developments in the financial system.

MACROPRUDENTIAL INSTRUMENTS

A. Assessment

34. The Central Bank of Ireland and the ECB have a range of macroprudential instruments at their disposal to address systemic risk in the financial system (Appendix II). It is useful to distinguish between macroprudential instruments specified in the EU framework (the CRR and the CRD IV) and those governed entirely by Irish laws. The CRR and CRD IV, which was transposed by the European Union (Capital Requirements) Regulations 2014 (Statutory Instruments No. 158 of 2014), provide the macroprudential authorities with a number of instruments: countercyclical capital buffer (CCB); sectoral capital requirements (e.g., risk weights, minimum loss given default (LGD) floors); specific buffers for global systemically important institutions (G-SII) and other systemically important institutions (O-SII); pillar 2 requirements; leverage ratio; and national flexibility measures. Liquidity measures, such as the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR), are incorporated in the CRR, and are subject to an observation and phase-in period.[27] National laws also provide for credit-based tools, such as limits on LTV and LTI ratios (Grace, Hallissey, and Woods, 2015).

35. The Central Bank of Ireland has recently tightened some measures to strengthen financial stability.[28] In February 2015, the Central Bank of Ireland introduced limits on the proportion of mortgage loans at high LTV and LTI ratios by all regulated financial institutions in Ireland in order to enhance the resilience of both lenders and borrowers to aggregate shocks (e.g., house price, interest rate, and income shocks) (Central Bank of Ireland, 2015c; Kelly, O'Malley, and O'Toole, 2015).[29] Banks are obliged to maintain a minimum LCR of 60 percent from October 2015, which will be phased in until 2018 with an increase of 10 percentage points per year.

[27] The NSFR rule is still in the process of being finalized at the European level, but will be implemented by 2018. The CRR Article 510 outlines the timeline for the finalization of the NSFR. The EBA has concluded its report (https://www.eba.europa.eu/-/eba-recommends-introducing-the-nsfr-in-the-eu) and has recommended the introduction of the NSFR. The Commission must submit a legislative proposal, if appropriate, on the NSFR by 31 December 2016. (http://www.eba.europa.eu/documents/10180/1162591/Call+for+advice.pdf

[28] Stricter risk weights have been imposed on certain CRE and RRE loans since 2007. Risk weights on CRE loans are set at 100 percent, which is stricter than those set out in the CRR for banks that use the standardized approach for credit risk. In addition, a preferential risk weight, 35 percent, is restricted to owner-occupied loans (for principal dwelling houses) with an LTV ratio less than 75 percent. 100 percent risk weight is imposed on other mortgage loans.

[29] Differentiated LTV limits are imposed for different categories of buyers to minimize distortions. For primary dwelling homes (PDHs), lower LTV limits (80 percent) apply to non-first time home buyers (FTBs). For FTBs of PDHs, a 90 percent LTV limit applies to the first €220,000 of the value of the property, and a limit of 80 percent is imposed on

(continued)

36. The Central Bank of Ireland announced the CCB and O-SII buffer in December 2015. The counter-cyclical capital buffer came into force in January 2016 and was set at zero percent considering the weak credit market conditions, while a 1.5 percent O-SII buffer (in the form of CET1) will be phased in from July 2019 to July 2021 for two systemically important banks—the Governor and Company of the Bank of Ireland and Allied Irish Bank plc. In assessing an appropriate CCB rate, the Central Bank of Ireland uses guided discretion based on the credit-to-GDP gap and other indicators, such as asset prices and credit growth rates. The Central Bank of Ireland will review and announce the CCB rate on a quarterly basis. The Central Bank of Ireland carries out its assessment for the identification of O-SIIs on an annual basis. No Irish bank is currently categorized as a G-SII.

37. The macroprudential toolkit is still evolving. The CRD IV allows the authorities to introduce a systemic risk buffer (SRB) to address the cross-sectional dimension of systemic risk, but the DoF has not transposed the SRB into national law. The government has discretion to do so at a future date. The leverage ratio, defined as the ratio of Tier 1 capital to total exposures with the denominator covering both on- and off-balance sheet activities, is subject to an observation period until mid-2016 and may become a binding requirement by 2018 following review and calibration at the European level. Banks are required to publicly disclose certain information on their leverage ratio from 2015.

38. Household sector analysis supports the rationale of proportionate limits on LTV and LTI ratios. As shown in IMF (2014b) and Hallissey and others (2014), the two tools will complement each other in reducing the probability of defaults for borrowers and loss given defaults for lenders. LTI limits reduce the probability of defaults and LTV limits without a complementary role of LTI limits could leave borrowers' capacity to service their mortgages vulnerable to income shocks. LTV caps bolster borrowers' resilience to house price shocks by increasing the equity in the residential property and LTI caps without LTV measures could leave lenders highly exposed to severe house price shocks, as occurred in Ireland after 2008. Combining the Irish experience during the crisis with results from household vulnerability exercises, it is highly advisable to keep the measures and closely monitor the risky segments.[30]

39. It is still too early to properly evaluate the effectiveness of the measures. These measures are intended to strengthen the resilience of households and the financial sector and

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the value of the property above this threshold. The value of mortgage loans for PDHs above these limits should not exceed 15 percent of total PDH loans of a credit institution by the end of each year. A 70 percent LTV limit is applied to new Buy-to-Let (BTL) mortgage loans, which should be exceeded by no more than 10 percent of the total value of BTL loans of a lender in a year. The Central Bank of Ireland imposes an LTI limit of 3.5 times gross annual income to new PDH mortgage loans, which should not be exceeded by 20 percent of total value of PDH loans of a lender in a year. There were exceptions: both limits do not apply to switcher mortgages or loans for the restructuring of mortgage arrears; the LTV limit does not apply to borrowers in negative equity who are purchasing a new home; and the LTI limit is not imposed on BTL loans. The "proportionate" limits, which are also used in New Zealand, allow some flexibility (part of new lending above the limits) while maintaining prudent lending standards.

[30] See Section III in Technical Note on Non-Bank Sector Stability Analyses.

reduce cyclical dynamics in the housing market. There is some evidence that these tools have effects in reduce price pressures, following very strong growth in 2013–14.[31] Moreover, as would be expected, following the introduction of the two measures, market expectations for future house price increases have also moderated (expectation channel). The 2015Q3 survey of RRE price expectations shows that the percentage of respondents expecting prices to rise across 1 quarter, 1 year, and 3 year-time horizons were 46, 82, 93 percent, respectively, down from 90, 97, and 98 percent, respectively, in 2014Q3 (Central Bank of Ireland, 2015a). House price growth rate had moderated to 6.6 percent (y-o-y) at end-2015, from 16 percent at end-2014.

B. Recommendations

40. The Central Bank of Ireland should maintain the proportionate limits on LTV and LTI ratios and conduct rigorous impact analyses to evaluate the effectiveness and examine policy leakages with the new wave of loan-level data. The authorities will need to investigate if there has been any policy leakage, for example where the provision of credit migrates from mortgage loans to unsecured consumer loans, as pointed out in IMF (2014b).

41. In additions, the Central Bank of Ireland should consider transforming proportionate limits on LTI ratio into caps on DTI ratio after the CCR is successfully implemented. While most countries, which have implemented this type of affordability regulation, use caps on DTI to ensure affordability, Ireland introduced LTI limits (Box 1). DTI caps are applied on individual household level consolidated all debts, while LTI limits are imposed on individual loan basis in the absence of a reliable credit register. Unlike the former, LTI limits cannot prevent a potential leakage problem, such as the use of unsecured loans to compensate for lower credit availability against the collateral value and income.[32]

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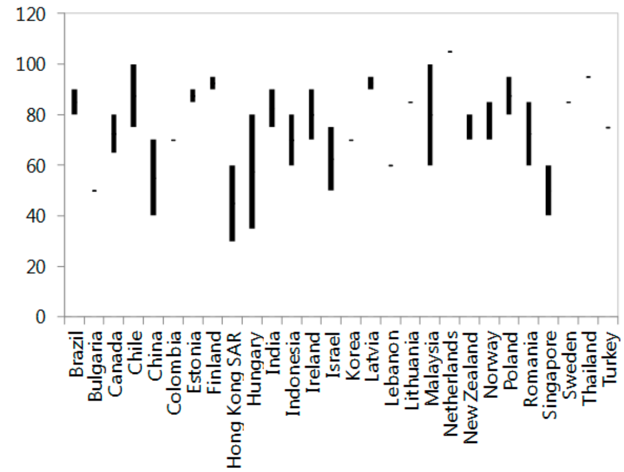
[31] For detailed description of the transmission channels of limits on LTV and LTI ratios, see IMF (2014b), "Staff Guidance Note on Macroprudential Policy-Detailed Guidance on Instruments" and Coates, Lydon, and McCarthy (2015)

[32] The potential for a shift to unsecured lending after the introduction of the measures was widely discussed before implementation, as summarized in the Feedback Statement to the public consultation on the measures. The Central Bank of Ireland highlighted that currently the consumer protection code contains provisions in terms of how Irish banks assess the affordability of a mortgage loan. Irish credit institutions, as part of their mortgage credit underwriting process, currently verify the source of the borrower's deposit and any change in this matter will be closely monitored.

Box 1. International Experience of Limits on LTV, LTI, and DTI Ratios

In February 2015, the Central Bank of Ireland introduced the proportionate limits on LTV and LTI ratios. They are imposed on all regulated financial institutions in Ireland. The main objectives are to enhance the resilience of both lenders and borrowers to macro-financial shocks. International experience shows that these measures have been effective in achieving the objectives as follows.

Limits on LTV ratios
(In percent)



Source: IMF staff calculation.

A growing body of evidence points to the benefit of LTV and DTI ratios in enhancing resilience and reducing fire-sale dynamics, when the housing market turns downwards. Lee (2012) shows that house prices in Korea fell from 2008, but the delinquency ratio on household loans remained below one percent well into 2012, and claims that this implies that strict implementation of limits on LTV and DTI ratios prevented household defaults even as house prices fell, thus reducing financial institution losses. Financial Services Authority (2009) finds evidence of a correlation between higher LTV ratios and higher default rates during 2008 in the U.K. Hallissey and others (2014) find that, based on loan-level data in Ireland, the default rate was higher for loans with higher LTV and LTI levels at origination, and that this relationship is stronger for the loans issued at the peak of the housing boom. They also show a positive relationship between LGD and LTV for loans with an LTV greater than 50 percent, with a sharp increase in the losses of defaulted loans at LTVs greater than 85 percent. Wong and others (2011) present cross-country evidence that, for a given fall in house prices (one percent), the incidence of mortgage default is higher for countries without an LTV ratio limit (1.29 basis points) than for those with such a tool (0.35 basis points). The paper also notes that in the wake of the Asian financial crisis, property prices in Hong Kong SAR dropped by more than 40 percent from September 1997 to September 1998, but the mortgage delinquency ratio remained below 1.43 percent, which suggests that limits on LTV ratio reduced the probability of defaults faced by lenders.

Limits on LTV and DTI ratios have been successful in targeting financial accelerator mechanisms that otherwise lead to a positive two-way feedback between credit growth and house price inflation. A number of studies have found that a tightening of LTV and DTI ratios is associated with a decline in mortgage lending growth, thereby reducing the risk of an emergence of a housing bubble. Lim and others (2011) find that credit growth declines after limits on LTV and DTI ratios are introduced, and the LTV limits reduce substantially the procyclicality of credit growth. Igan and Kang (2011) show that limits on LTV ratios curb speculative incentives among existing house owners, validating the expectation channel. Crowe and others (2013) confirm the positive association between LTV at origination and subsequent price appreciation using state-level data in the U.S.—a ten percentage point increase in the maximum LTV ratio is associated with a 13 percent increase in nominal house prices. Duca and others (2011) estimate that a ten percentage point decrease in LTV ratio of mortgage loans for first-time buyers is associated with a ten percentage point decline in the house price appreciation rate. Krznar and Morsink (2014) find that four measures to tighten macroprudential instruments (LTVs in particular) in Canada were associated with lower mortgage credit and house price growth. IMF (2011) finds that lower LTV ratios reduce the transmission of real GDP growth shocks and shocks to population growth to house prices. Kuttner and Shim (2013) find that an incremental tightening in the DTI ratios is associated with a four to seven percentage point deceleration in credit growth over the following year. RBNZ (2014) suggests that a cap on the share of high LTV loans was effective, showing a dramatic fall in the share of mortgages over 80 percent LTV ratio since the introduction in August 2013. Ahuja and Nabar (2011) find that limits on LTV ratios in Hong Kong SAR, where monetary policy is constrained as a small open economy with exchange rate pegs, reduced house prices and transaction volumes, albeit with a lag.

Since the financial crisis, many countries have newly adopted these instruments. Limits on LTV ratios are below 80 percent in more than half of 28 sample countries (text table).

Use of Limits on LTV, LTI, DTI (or Debt-Service-To-Income) Ratios

	Advanced Economies	Emerging Market Economies	Total
Limits on LTV ratio	Canada (2007), Estonia (2015), Finland (2010), Hong Kong SAR (1991), Ireland (2015), Israel (2012), Korea (2002), Latvia (2007), Lithuania (2011), Netherlands (2011), New Zealand (2013), Norway (2010), Singapore (2010), Sweden (2010)	Brazil (2013), Bulgaria (2004), Chile (2009), China (2001), Colombia (1999), Hungary (2010), India (2010), Indonesia (2012), Lebanon (2008), Malaysia (2010), Poland (2013), Romania (2004), Thailand (2003), Turkey (2011)	28
Caps on DSTI ratio (including LTI caps)	Canada (2008), Estonia (2014), Hong Kong SAR (1997), Korea (2005), Ireland (2015, LTI), Lithuania (2011), Netherlands (2007), Norway (2010, LTI), Singapore (2013), United Kingdom (2014, LTI)	China (2004), Colombia (1999), Hungary (2010), Latvia (2007), Malaysia (2011), Poland (2010), Romania (2004), Thailand (2004)	18

Source: IMF staff calculation.
Note: Parentheses show the year a jurisdiction introduced currently imposed measures; changes tracked since 1990.

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Appendix I. Functions and Powers of the ECB and the ESRB on Macroprudential Policy

1. **The ECB and the ESRB both exercise macroprudential policy functions, each within the remits of their respective mandates and with different powers.** The ECB's macroprudential mandate covers the banking sector in countries that participate in the SSM, whereas the ESRB's remit comprises the financial system as a whole, including the non-banking sector, and for the entire EU. While the ECB has hard ("topping-up") powers over the set of instruments set out in the CRD IV and CRR (see further below), the ESRB only has powers of recommendation to relevant agencies.

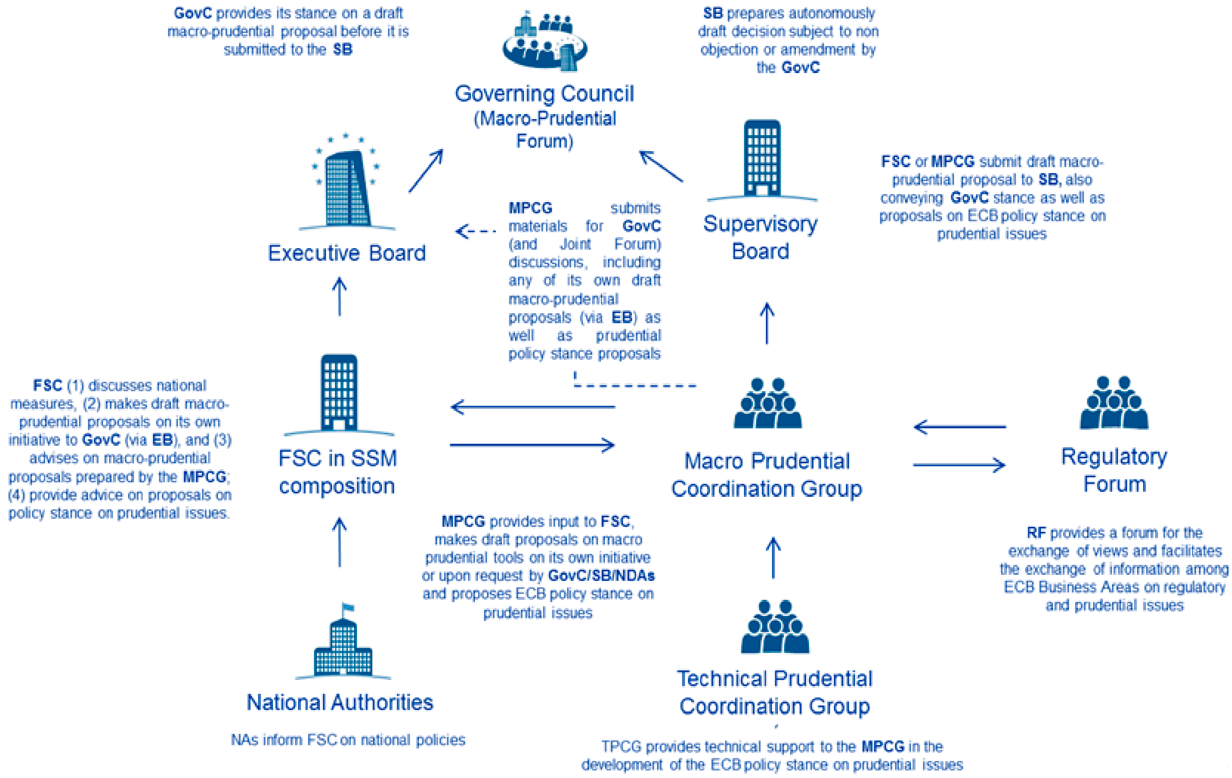
2. **For SSM countries the competency for macroprudential policy is shared between national authorities and the ECB.** The SSM Regulation confers to the ECB specific powers over the macroprudential instruments for the banking sector that are set out in the CRD IV and CRR (Appendix II). For these measures, such as the countercyclical capital buffer, the ECB must be notified in advance and can apply higher requirements and more stringent measures than those applied by national authorities (so called "topping-up" powers). The ECB can relax the higher requirement set by it, but cannot set lower requirements than those set nationally. For instruments outside of the CRR and CRD IV, such as limits to LTV, LTI or debt service-to-income ratios, the ECB can suggest national authorities to use their powers over these instruments and national authorities are obliged to fully inform the ECB about the exercise of those powers.

3. **The ECB internal governance of its macroprudential mandate is complex, with the Governing Council the ultimate decision-maker (Figure 1).** The Council decides on macroprudential measures based on a proposal by the Supervisory Board, in turn based on the initiative and taking into account the input of the Financial Stability Committee and its sub-structure (the Macroprudential Coordination group). The Financial Stability Committee brings together high-level representatives of national authorities, and provides the platform to establish common ground in macroprudential policy across the SSM Member States.

4. **The ESRB is tasked with identifying and monitoring systemic risks in the EU financial system, but has no direct powers to impose specific measures.** The ESRB has only semi-hard powers. It can issue non-binding warnings and recommendations on a "comply or explain" basis to: the European Union as a whole; one or more Member States; and one or more of the European or national supervisory agencies, including the ECB in its supervisory role. The CRR and CRD IV provide additional roles for the ESRB, including issuing "opinions" on specific measures notified by national authorities and the ECB under Art 458 CRR, which ultimately require approval by the European Council.

5. **The ECB cooperates closely with the ESRB, by coordinating the macroprudential agenda and work plans.** Among other things, this cooperation aims at ensuring that spillovers across sectors and between SSM and non-SSM countries are duly considered. The ECB also provides analytical, statistical, logistical and administrative support to the ESRB Secretariat.

Figure 1. ECB Framework: Coordination of Macro- and Microprudential Supervision



Source: ECB

Appendix II. Ireland: Macroprudential Instruments

Instruments	Legal basis	Agency in charge of implementation	Usage		Reciprocity	Perimeter	Notification Requirements		
			Availability	Implemented			European Commission	ESRB	EBA
Macroprudential tools under CRR and CRD IV									
Countercyclical capital buffer	Regulation 125-128 of S.I. 158 of 2014	Central Bank of Ireland, ECB	Jan. 2016	Jan. 2016	Mandatory	All banks and some investment firms	-	O	-
G-SII buffer	Regulation 123 of S.I. 158 of 2014	Central Bank of Ireland, ECB	Jan. 2016	N/A	-	No Irish institutions	O	O	O
O-SII buffer	Regulation 123 of S.I. 158 of 2014	Central Bank of Ireland, ECB	Jan. 2016	July 2019	-	The Governor and the Company of the Bank of Ireland, Allied Irish Bank plc	O	O	O
Systemic risk buffer	Regulation 124 of S.I. 158 of 2014	Central Bank of Ireland, DOF[3], ECB	-	-	The Central Bank of Ireland has the power to reciprocate	To be determined	O	O	O
Risk weight for RRE and CRE exposures	Article 124.2 of the CRR	Central Bank of Ireland, ECB	2007	2007	Mandatory	All banks and some investment firms	-	-	O
Loss given default for RRE and CRE exposures	Article 164.5 of the CRR	Central Bank of Ireland, ECB	Jan. 2014	Jan. 2014	Mandatory	All banks and some investment firms	-	-	O
Flexibility measures[1]	Article 458 of the CRR	Central Bank of Ireland, ECB	Jan. 2014	-	Can be requested	All banks and some investment firms	O	O	O
Pillar II	Regulation 90-95 of S.I. 158 of 2014	Central Bank of Ireland, ECB	Jan. 2014	-		All banks and some investment firms	-	-	O
Macroprudential tools under national law									
Limits on LTV and LTI ratios	Section 48 of the Central Bank (Supervision and Enforcement) Act 2013	Central Bank of Ireland	2013	Feb. 2015	-	All financial institutions	-	-	-
Asset to liability ratio (LDR targets)	Section 23/23A of the Central Bank Act 1971	Central Bank of Ireland	1971/1989	-	-	All banks and some investment firms	-	-	-

Sources: Central Bank of Ireland; and IMF staff.
Note: 1/ The list of possible measures include the level of own funds, large exposure limits, public disclosure requirements, the level of the capital conservation buffer, liquidity requirements (e.g., LCR and NSFR), risk weights for residential and commercial property sectors, and measures for intra-financial sector exposures.
2/ The DOF may exercise its discretion to make this tool available at a future date