RESTRICTED

European Commission Services European Central Bank Single Resolution Board

MONITORING REPORT ON RISK REDUCTION INDICATORS[1]

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MAY 2019

Executive Summary

This is the fourth edition of the monitoring report on risk reduction indicators,[2] produced at the request of the President of the Eurogroup. As per his letter to the President of the Euro Summit of 25 June 2018, this is a regular monitoring exercise. The aim of risk reduction monitoring reports is to provide an updated assessment of how risks are evolving within the banking union (BU) so as to inform political decisions on how to further progress towards its completion. The report has been prepared jointly by the European Commission services, the European Central Bank (ECB) and the Single Resolution Board (SRB).

An overview of all quantitative indicators confirms that, on aggregate, and based on the available data, banks' capital and liquidity positions have improved steadily since the end of 2014 and remained largely stable since last year. Banks' overall leverage has also decreased since the end of 2014. Non-performing loans (NPLs) on banks' balance sheets have continued to decline. In addition, substantial progress has been made with the adoption of several legislative and non-legislative risk reduction measures at EU and national level (see Annex I and Annex II respectively).

[1] Report prepared for the 3-4 June 2019 Eurogroup Working Group meeting.

[2] November 2017: https://www.consilium.europa.eu/media/31936/note-presenting-a-stock-take-of-financial-reforms.pdf and Annexes.

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Overview of main developments:

Capital position	The average Common Equity Tier 1 (CET1) capital ratio **improved by 3.1 percentage points (pp) to 14.0%** since the establishment of the Banking Union ► Most Member States (MSs) now exhibit higher CET1 ratios than four years ago ► Overall, the capital position in the BU has remained largely stable over the past quarters
Leverage ratio	Banks have, on average, **reduced their leverage by 1.3 pp** as the average leverage ratio improved from 4.0% in Q4 2014 to 5.3% in Q4 2018
Liquidity and net stable funding position	The **liquidity and funding position of banks**, as measured by the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR), **continues to be strong**. The average LCR and NSFR have been consistently above the 100% minimum requirements since the inception of the Single Supervisory Mechanism (SSM) ► Improvements in the NSFR from 101.9% in Q4 2014 to 113.8% in Q4 2018 further indicate that the funding profile of banks, on average, has become more robust over the last few years
NPLs	The average **NPL ratio has decreased by 4.1 pp** since Q4 2014, **reaching 3.8% in Q4 2018** ► NPL ratios decreased for almost all MS, with larger decreases for MS with high NPL ratios
MREL	Overall, banks have made **progress in building up their minimum requirement for eligible liabilities (MREL)** capacity in order to reach the steady-state requirement as set by the SRB. The total MREL still needed to reach the level of the requirement is approximately 7.3% of the total requirement

Assessment of risk reduction indicators

This section assesses (a) the evolution of selected indicators at MS level and (b) how the level of risk in the BU has been affected.[3]

1. Capital position

Quantitative indicators

- **Fully loaded Common Equity Tier 1 (CET1) capital ratio**: Ratio of fully loaded CET1 capital/total risk-weighted assets (RWAs) (**Indicator 1: Charts 1.1** and **1.2**)[4]

- **Fully loaded Tier 1 (Tier 1) capital ratio**: Fully loaded Tier 1 capital/total RWAs (**Indicator 2: Charts 2.1** and **2.2**)[5]

- **Fully loaded total capital ratio**: Fully loaded total capital/total RWAs (**Indicator 3: Charts 3.1** and **3.2**)[6]

Commentary

- **CET1 capital ratio.** From the end of 2014, the BU weighted average CET1 ratio improved by 3.1 pp to 14.0% in Q4 2018. Compared with Q2 2018, Q4 2018 marked a 0.2 pp increase in the CET1 ratio.
- **CET1, Tier 1 and total capital ratios.** Capital resources remained stable with minor fluctuations.[7] (Charts 1.1, 2.1, and 3.1).
- **MS-specific developments.** There have been some improvements for MS with low capital ratios in 2014.

[3] Changes in the indicators from one reference period to another can be influenced by the changes in the sample of reporting institutions.
[4] The CET1 capital ratio indicates the extent to which an institution can absorb losses on a going concern basis using CET1 capital resources.
[5] The Tier 1 capital ratio indicates the extent to which an institution can absorb losses on a going concern basis using Tier 1 capital resources (i.e. CET1 and additional Tier 1 capital resources).
[6] The total capital ratio indicates the extent to which an institution can absorb losses on a going concern basis using total capital resources (i.e. CET1 and additional Tier 1 capital resources as well as Tier 2 capital).
[7] The drop in Q1 2018 was mainly due to a reduction in CET1 capital, which in turn was driven by "accumulated other comprehensive income" and "retained earnings" (and also linked to the IAS39/IFRS9 migration as a number of firms chose to take the full deduction rather than making use of the transitional arrangements). On 1 January 2018, IFRS 9 became effective for EU firms. Regulation (EU) 2017/2395 foresees a five-year transitional arrangement, allowing institutions to phase in the immediate ("Day 1") capital impact. Institutions had to decide whether to apply those transitional arrangements and inform the competent authority accordingly.

Indicator 1: Fully loaded CET1 capital ratio

Chart 1.1: Fully loaded CET1 capital ratio – evolution in the BU

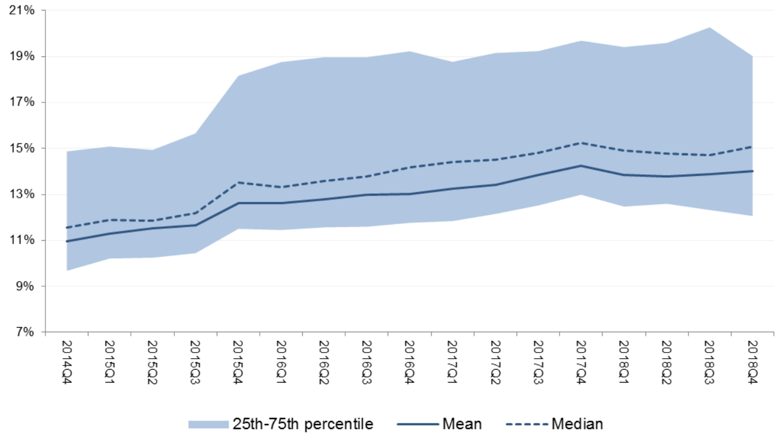
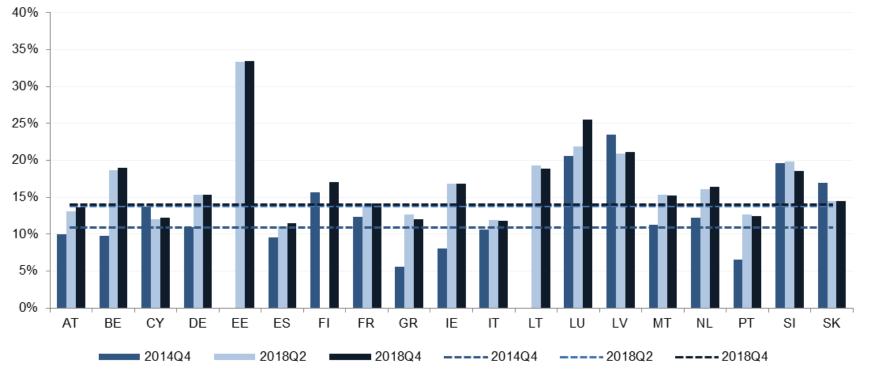


Chart 1.2: Fully loaded CET1 capital ratio by MS



Source: ECB staff contribution, COREP and ECB calculations. See methodological notes in Annex III.

Indicator 2: Fully loaded Tier 1 capital ratio

Chart 2.1: Fully loaded Tier 1 capital ratio – evolution in the BU

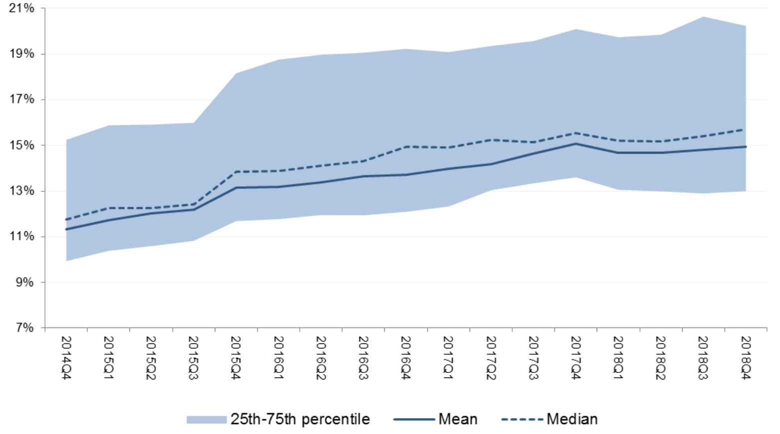
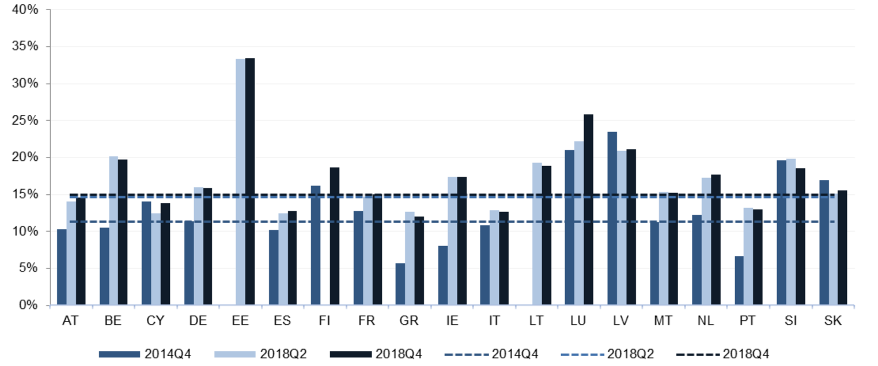


Chart 2.2: Fully loaded Tier 1 capital ratio by MS



Source: ECB staff contribution, COREP and ECB calculations. See methodological notes in Annex III.

Indicator 3: Fully loaded total capital ratio

Chart 3.1: Fully loaded total capital ratio – evolution in the BU

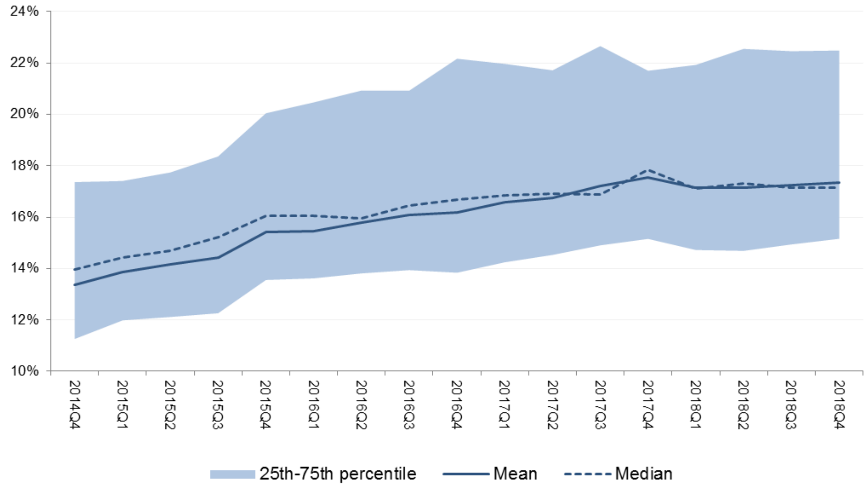
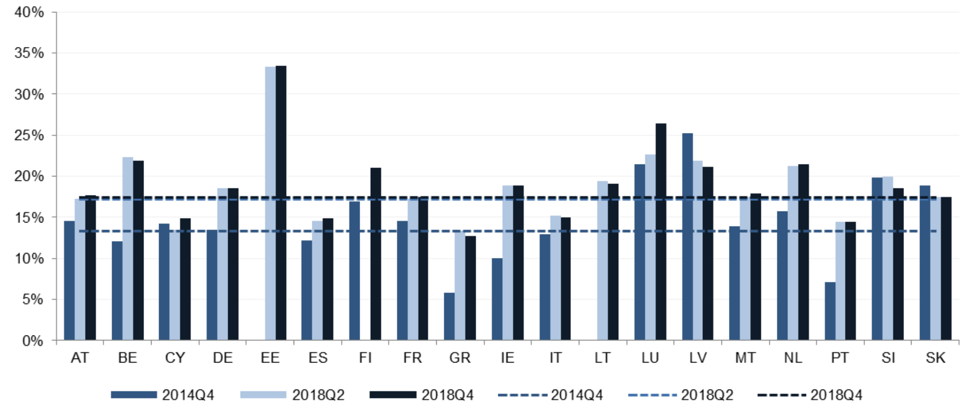


Chart 3.2: Fully loaded total capital ratio by MS



Source: ECB staff contribution, COREP and ECB calculations. See methodological notes in Annex III.

2. Leverage

Structural measure

- The risk reduction package[8], adopted on 20 May 2019[9], introduces a binding leverage ratio to prevent institutions from accumulating excessive leverage as well as a leverage ratio buffer requirement for institutions qualifying as global systemically important institutions (G-SIIs). The leverage ratio is intended to reinforce the risk-based capital requirements with a simple, non-risk-based backstop.

Quantitative indicator

- **Fully loaded leverage ratio**: Ratio of fully loaded Tier 1 capital/total leverage ratio exposure[10], as per Capital Requirements Regulation (CRR)/Capital Requirements Directive (CRD) definitions reported in the European Banking Authority (EBA) Implementing Technical Standards (ITS) on supervisory reporting (**Indicator 4, Charts 4.1** and **4.2**).[11]

Commentary

- **Fully loaded leverage ratio.** As highlighted above, banks have, on average, reduced their leverage by 1.3 pp, with the average fully loaded leverage ratio improving from 4.0% in Q4 2014 to 5.3% in Q4 2018.[12]
- **MS-specific developments.** Most MS have seen an increase in the aggregate leverage ratio compared to Q4 2014.

[8] For an overview of the key elements of the risk reduction package, please see Annex I.
[9] The legal text is expected to be published in the Official Journal of the EU (OJEU) in the course of June 2019 and will enter into force 20 days later.
[10] The exposure measure includes both on-balance sheet exposures and off-balance sheet items. On-balance sheet exposures are generally included at their accounting value, although exposures arising from derivative transactions and securities financing transactions are subject to separate treatment (in essence, amounts owed to a bank are excluded while any on-balance sheet collateral related to such transactions is included).
[11] The fully loaded leverage ratio indicates the level of dependence on either shareholder or external financing for usual financing activities as defined by the institution's business model. This ratio uses Tier 1 capital to judge how leveraged a bank is in relation to its consolidated assets. The higher the leverage ratio, the greater the resilience to shocks affecting a bank's balance sheet.
[12] The decrease observed in Q1 2018 was primarily due to a decrease in Tier 1 capital (numerator), driven by the reduction in CET1 capital (see footnote 7 for further details).

Indicator 4: Leverage ratio

Chart 4.1: Fully loaded leverage ratio – evolution in the BU

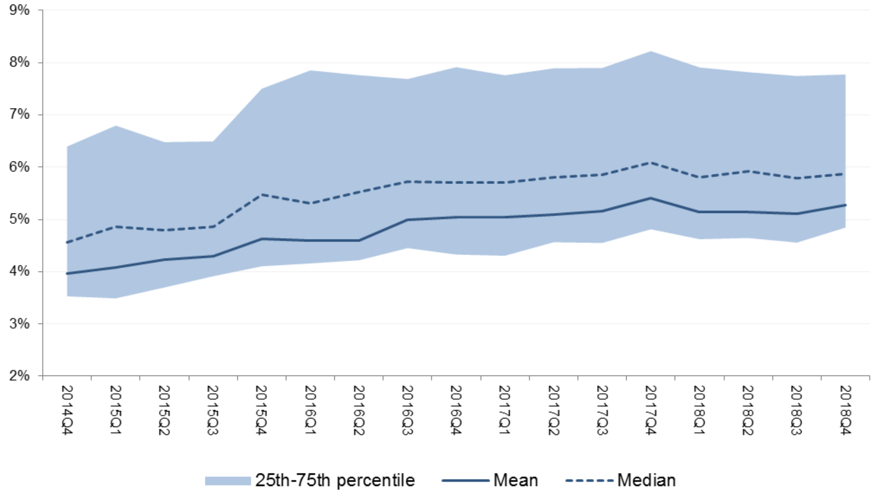
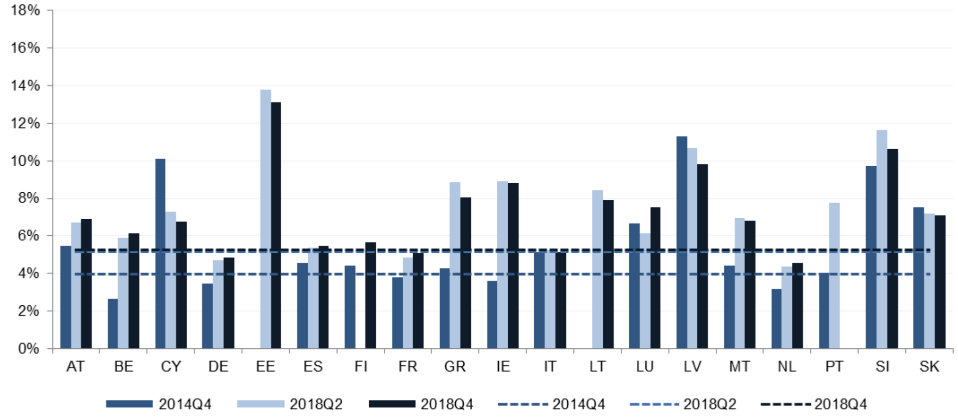


Chart 4.2: Fully loaded leverage ratio by MS



Source: ECB staff contribution, COREP, ECB calculations. See methodological notes in Annex III.

3. Liquidity and funding position

Structural measure

- The risk reduction package[13], adopted on 20 May 2019[14], introduces a binding NSFR to address previous excessive reliance on short-term wholesale funding and to reduce long-term funding risk.

Quantitative indicators

- **LCR**: Ratio of liquidity buffer/net liquidity outflow (**Indicator 5: Charts 5.1** and **5.2**)[15]
- **NSFR**: Ratio of available stable funding (ASF)/required stable funding (RSF) (as reported in Single Supervisory Mechanism (SSM) Short-Term Exercise (STE)) (**Indicator 6: Charts 6.1** and **6.2**)[16]

Commentary

- **LCR.** On a BU aggregate level, the median and weighted average LCR figures have been above the minimum requirement of 100% since the start of the reporting period in Q4 2014.
- **NSFR.** On a BU aggregate level, the median and the weighted average NSFR figures have been above the forthcoming minimum requirement of 100% since the first reporting point in Q4 2014 and the weighted average has improved further by 11.9 pp to 113.8% since then.
- **MS-specific NSFR developments.** All MS met the forthcoming minimum requirement of 100% in Q4 2018.

[13] For an overview of the key elements of the risk reduction package, please see Annex I.
[14] The legal text is expected to be published in the OJEU in the course of June 2019 and will enter into force 20 days later.
[15] The LCR indicates whether an institution has an adequate stock of unencumbered high-quality liquid assets (HQLA) that can be converted into cash with little or no loss of value in private markets, to meet its liquidity needs for a 30 calendar-day liquidity stress scenario.
[16] The NSFR indicates the ASF (calculated using liabilities) as a percentage of the RSF (calculated using assets).

Indicator 5: LCR

Chart 5.1: LCR – evolution in the BU

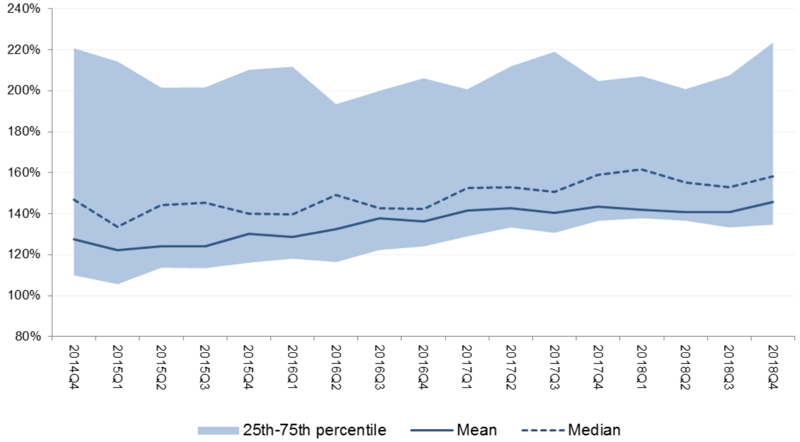
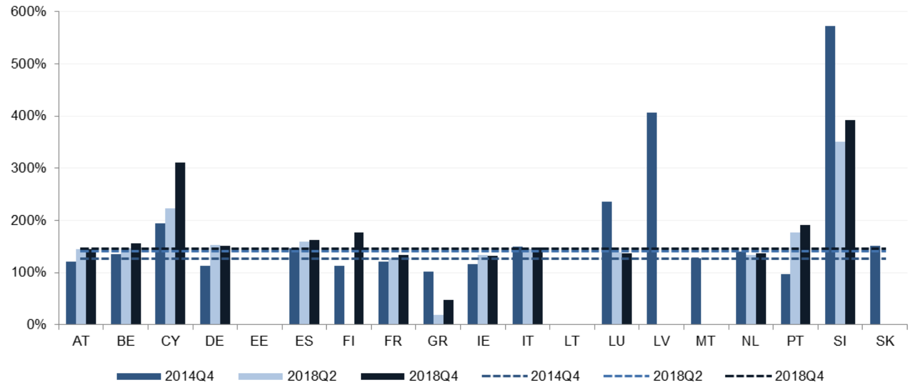


Chart 5.2: LCR by MS



Source: ECB staff contribution, COREP, STE and ECB calculations. The figures for Greek banks should be interpreted carefully as external factors are hindering the use of the LCR as a measure of progress on risk reduction for these banks. See methodological notes in Annex III.

Indicator 6: NSFR

Chart 6.1: NSFR – evolution in the BU

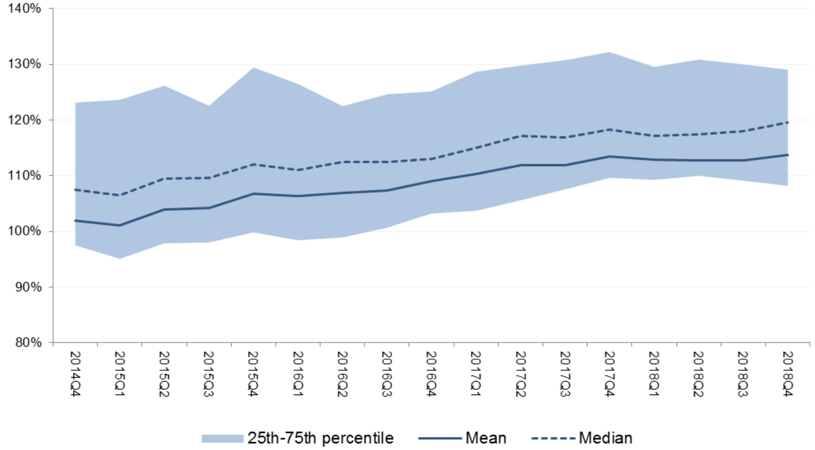
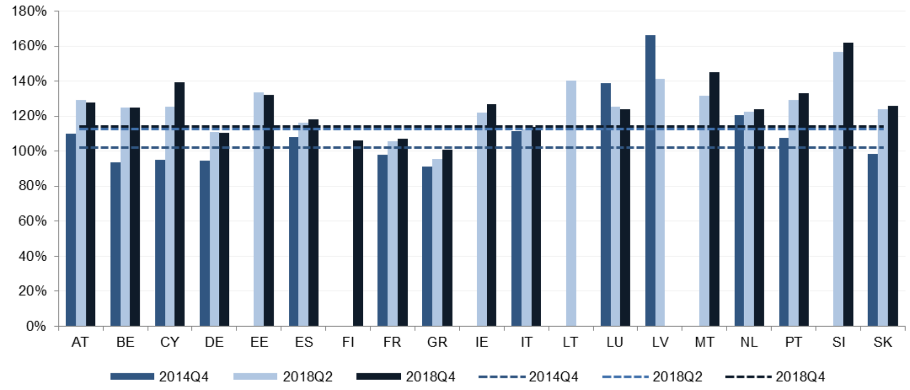


Chart 6.2: NSFR by MS



Source: ECB staff contribution, STE, ECB calculations. The values for Austria, Belgium, Germany, Ireland, Italy, Malta and the Netherlands in 2014 Q4 might be affected by missing data for a small number of banks. See methodological notes in Annex III

4. MREL

Structural measures

Progress made to date:

- **The risk reduction package**[17], adopted on 20 May 2019[18], represents an important step towards the completion of the European post-crisis regulatory reforms and a response to the June 2016 ECOFIN Council invitation to further reduce risks in the financial sector.
- **Adoption of SRB 2018 MREL guidance**. This forms the basis for decisions on MREL requirements during the 2018 resolution planning cycle (for groups with resolution college).
- **Bank Creditor Hierarchy Directive** (Directive (EU) 2017/2399 published on 12 December 2017 (transposition ongoing)). The adoption and transposition of the Bank Creditor Hierarchy Directive ((EU) 2017/2399) enhances legal certainty regarding compliance with the subordination requirement and contributes to the increased issuance of senior non-preferred debt.

Ongoing:

- SRB 2018 (for banks with resolution college) and 2019 (for priority banks without college) **resolution planning cycles** to be completed by the end of 2019 with binding decisions at consolidated and individual levels.
- Ongoing preparation at SRB level to **support the implementation of the provisions of the banking package** that will enter into force in 2019, and, more generally, to prepare for the transition to the future regime after the banking package has been fully transposed.

Quantitative indicators[19]

- **MREL targets:** MREL consolidated target and subordinated requirement, expressed as a percentage of the total risk exposure amount (TREA) per MS (**Indicator 7: Chart 7.1**) and for G-SIIs (**Indicator 7: Chart 7.2**).
- **Outstanding MREL-eligible liabilities:** Outstanding stock of MREL-eligible subordinated and non-subordinated liabilities (including own funds instruments), expressed as a percentage of the TREA per MS **(Indicator 8: Chart 8.1)** and for G-SIIs **(Indicator 8: Chart 8.2).**
- **MREL shortfalls:** Computed as the difference between the MREL target and the outstanding stock of MREL-eligible liabilities, including the part of the shortfall to be met with subordinated eligible liabilities, expressed as a percentage of the TREA and EUR billions per MS **(Indicators 9 and 10: Charts 9.1, 9.2, 10.1 and 10.2)**.

[17] For an overview of the key elements of the risk reduction package, please see Annex I.
[18] The legal text is expected to be published in the OJEU in the course of June 2019 and will enter into force 20 days later.
[19] For further details of data composition, please see Annex III.

Commentary

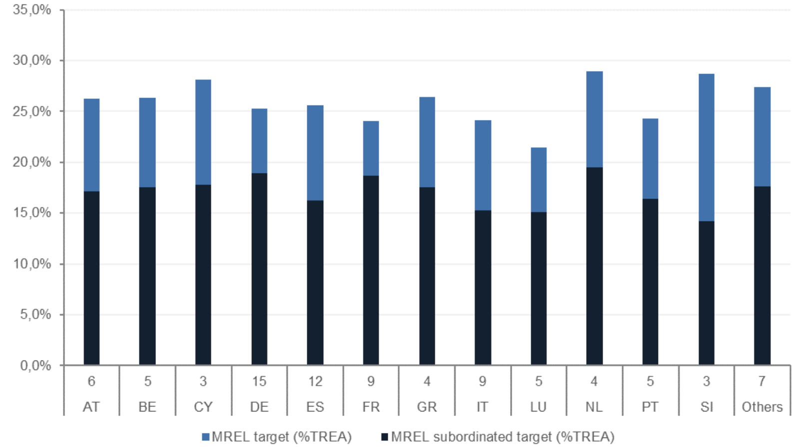
- **MREL targets.** The SRB has adopted (or is in the process of adopting before the end of the year) MREL decisions at consolidated level for most banks within its remit. MREL targets represent on average 25.2% of the TREA. MREL targets take into account bank-specific characteristics to tailor the calibration to the applicable resolution strategy. The SRB also requires (or expects, for banks without college during the 2018 planning cycle) an average amount of 17.8% of the TREA to be met with subordinated instruments. When considering G-SIIs only, the average MREL target equals 25.8% of the TREA with a higher average subordinated requirement, reaching 20.1% of the TREA.
- **Outstanding stock of MREL-eligible liabilities.** The stock of MREL-eligible liabilities for banks within SRB's remit accounts for an average of 29.7% of the TREA. This amount takes into account bank-specific adjustments to the stock of MREL-eligible liabilities. In particular, it considers: (i) the contractual features of the liabilities (governing law, presence of early redemption clauses) and (ii) the location of the issuances for banks subject to the SRB MREL policy 2018, according to which only those eligible liabilities issued by the point of entry can count for MREL. Moreover, subordinated liabilities account for a substantial share of eligible liabilities, with an average of 23.3% of the TREA. In some MSs, the share of subordinated MREL-eligible liabilities is significant, either due to the recognition of statutory or structural subordination, or given the banks' funding model. When considering G-SIIs only, the average amount of MREL-eligible instruments amounts to 25.8% of the TREA, and 22% of the TREA for subordinated MREL-eligible instruments.
- **MREL shortfalls.** Based on the data displayed in this report, the majority of the 17 MSs display a shortfall. MREL shortfalls remain concentrated in a few jurisdictions with a shortfall higher than 5% of the TREA, while the average shortfall is equal to 1.8% of the TREA. Besides, the subordinated component of the MREL shortfalls is limited to and accounts for, on average, 0.2% of the TREA. In absolute amounts, the total shortfall equals €125.1 billion and is concentrated in five MSs with an absolute shortfall higher than €10 billion. As at 31 December 2017, total MREL needs represented approximately 7.3% of the total consolidated MREL target.

Qualitative assessment

- **Resolution planning.** Overall, while efforts are ongoing to close the gaps identified as part of the 2018 resolution planning cycle, progress is needed to reach full compliance with MREL requirements and to help make banks more resolvable, notably via new issuances of MREL-eligible liabilities. The impact of the introduction of the banking package will be factored into the SRB resolution planning cycles: in 2019 with statutory requirements for G-SIIs, and through the SRB 2020 MREL guidance.

Indicator 7: MREL target

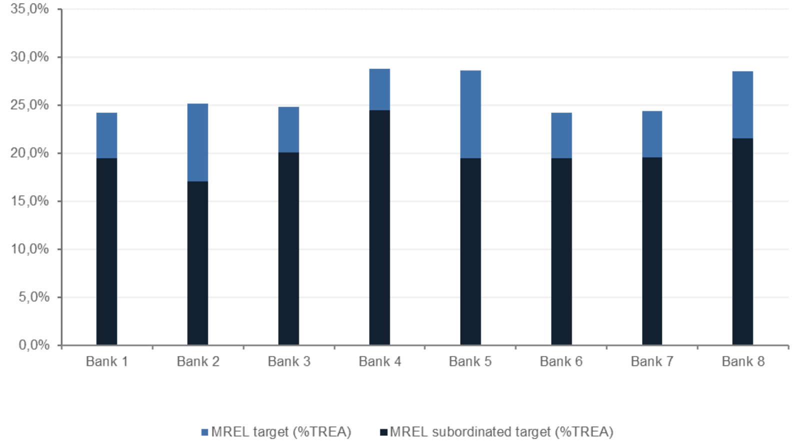
Chart 7.1: MREL targets (of which subordinated), % TREA



Source: SRB staff contribution and SRB calculations. See methodological notes in Annex III.

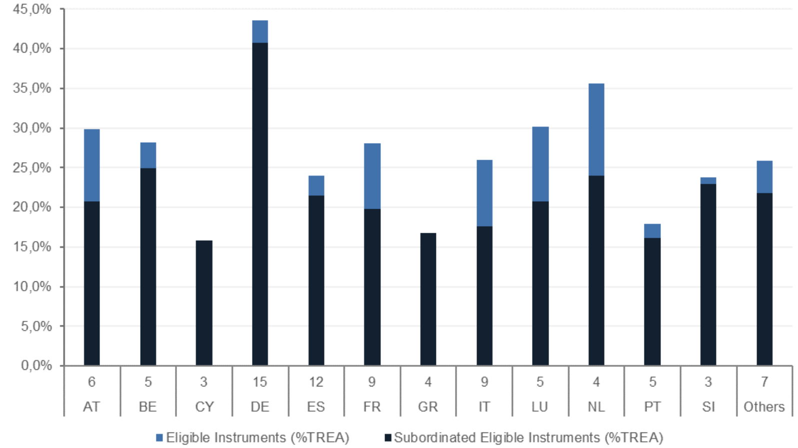
Indicator 7: MREL target

Chart 7.2: MREL targets (of which subordinated), % TREA – BU G-SIIs



Indicator 8: MREL-eligible liabilities

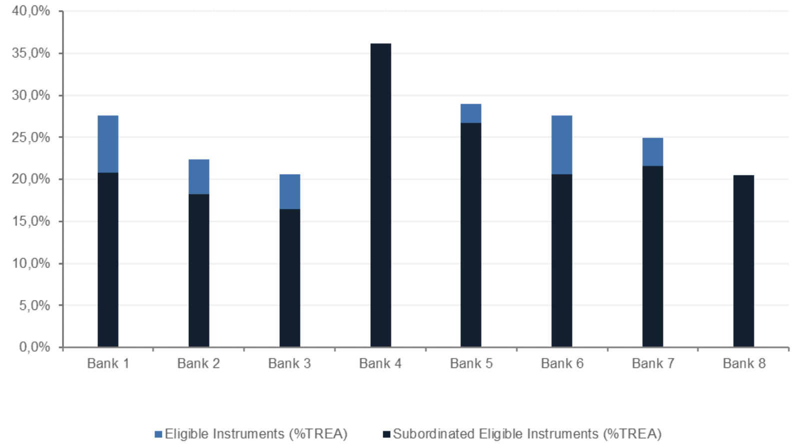
Chart 8.1: MREL-eligible liabilities (of which subordinated), % TREA



Source: SRB staff contribution and SRB calculations. See methodological notes in Annex III.

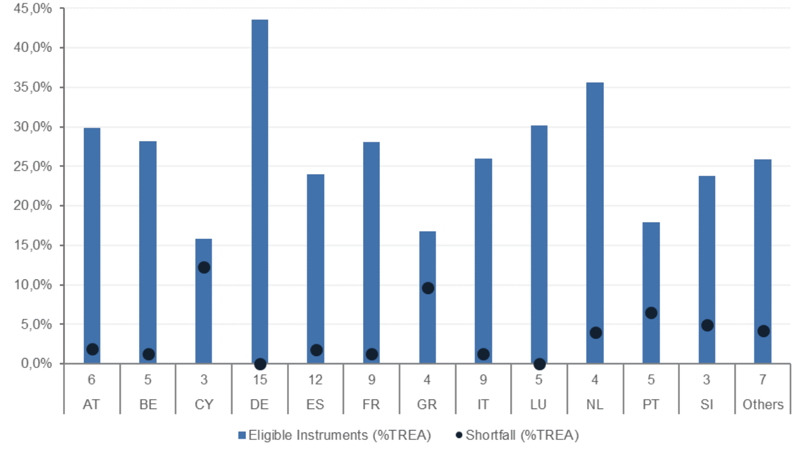
Indicator 8: MREL-eligible liabilities

Chart 8.2: MREL-eligible liabilities (of which subordinated), % TREA – BU G-SIIs



Indicator 9: MREL shortfalls

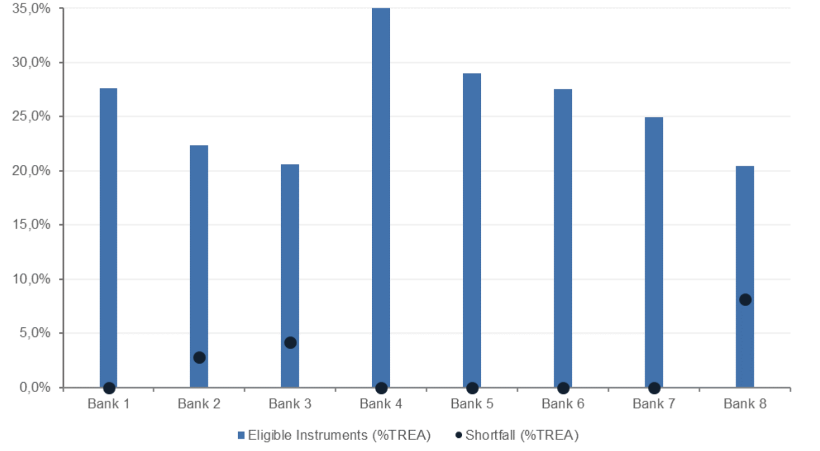
Chart 9.1: MREL shortfalls, % TREA



Source: SRB staff contribution and SRB calculations. See methodological notes in Annex III.

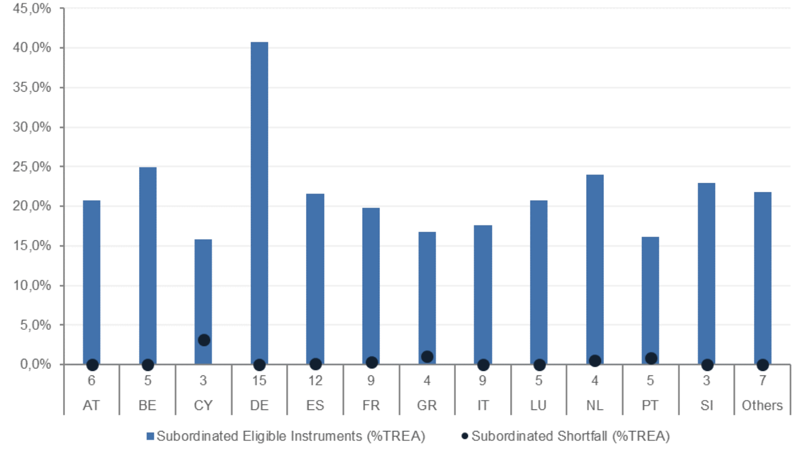
Indicator 9: MREL shortfalls

Chart 9.2: MREL shortfalls, % TREA – BU G-SIIs



Indicator 10: MREL subordinated shortfalls

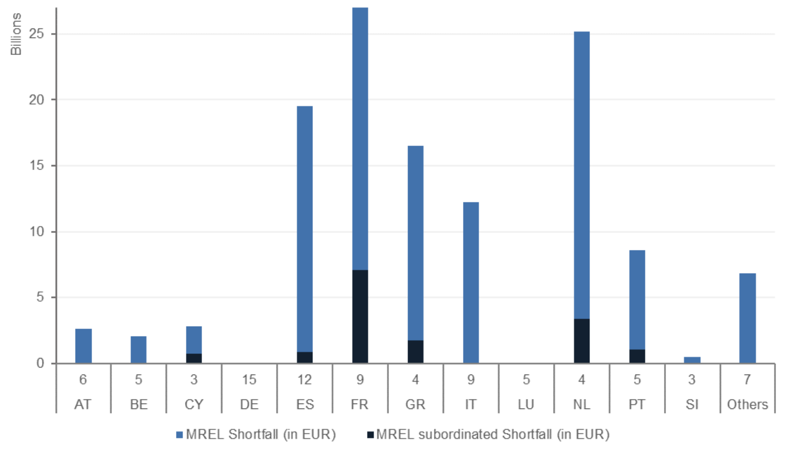
Chart 10.1: MREL subordinated shortfalls, % TREA



Source: SRB staff contribution and SRB calculations. See methodological notes in Annex III.

Indicator 10: MREL subordinated shortfalls

Chart 10.2: MREL shortfalls (of which subordinated), EUR bn



5. NPLs

Structural measures

- **Legislative proposals ("NPL package")**. In March 2018 the Commission proposed legislative measures on NPLs that aim to speed up progress already made in reducing NPLs and prevent their renewed build-up.
    - The proposal for a **regulation introducing common minimum coverage levels for newly originated exposures that become non-performing ("prudential backstop")** was adopted in April 2019[20]. It requires banks to set aside sufficient funds to cover the risks associated with future non-performing exposures. To ensure legal certainty and consistency in the prudential framework, the Regulation also introduces a common definition of non-performing exposures (NPE), in line with the one already used for supervisory reporting purposes.
    - The proposal for a **directive on credit servicers, credit purchasers and the recovery of collateral** will provide banks with an efficient out-of-court value recovery mechanism for secured loans and will encourage the development of secondary markets where banks can sell their NPLs to investors and make use of specialist credit servicers. Deliberations in the European Parliament (regarding secondary markets and the recovery of collateral) and negotiations in Council Working Parties (regarding the recovery of collateral) are ongoing.
- **National legislative measures**. Several EU MSs have adopted or amended legislation with the aim of reducing NPLs (see Annex II). About half of the MSs have implemented legal reforms relating to insolvency and foreclosure (Cyprus, Greece, Spain, Italy, Ireland, Latvia, Hungary, Portugal and Slovakia), the cooperative or savings bank sectors (Spain, Italy and Lithuania), legislation governing new sales of loans legislation (Ireland and Cyprus) or the introduction of a subsidy scheme (Cyprus).

Other measures

- **Asset Management Companies (AMC) blueprint**. As part of the March 2018 NPL package the Commission published a staff working document providing non-binding technical guidance (a so-called "blueprint") on how national asset management companies (AMCs) can be set up.
- **EU-wide NPE guidelines**. Based on the ECB's guidance to SSM banks on NPLs the EBA issued guidelines on the management of non-performing and forborne exposures in October 2018. The objective of these guidelines is to achieve effective and efficient management of exposures, as well as a sustainable reduction in the amount of NPLs in banks' balance sheets.
- **Supervisory expectations on NPL provisioning**. In March 2018 the ECB published an Addendum to its qualitative NPL guidance specifying the ECB's supervisory expectations as regards prudent levels of provisions for exposures that become non-performing after 1 April 2018. Moreover, the ECB announced in July 2018 that it would engage with each supervised institution to define its supervisory expectations

[20] Regulation (EU) 2019/630 of the European Parliament and of the Council of 17 April 2019 amending Regulation (EU) No 575/2013 as regards minimum loss coverage for non-performing exposures.

with regard to the stock of NPLs with the aim of achieving consistent coverage of NPL stock and flow over the medium term.

- **Enhanced disclosure requirements on asset quality and NPEs for all EU banks**. Based on the ECB's NPL guidance, the EBA has developed guidelines specifying a common content and uniform disclosure formats on information on NPEs, forborne exposures and foreclosed assets that banks should disclose.
- **Improved loan tape information**. In order to strengthen data infrastructure with regard to uniform and standardised data for NPLs, the EBA issued templates on loan tape monitoring in December 2017 and updated them in September 2018. These standardised NPL templates are not part of supervisory reporting, but banks and investors are encouraged to use them in their transactions.
- **Union-wide NPL transaction platform**. As a follow-up to the ECOFIN Council's "Action plan to tackle non-performing loans in Europe"[21], in November 2018 the Commission published a staff working document, drafted jointly with staff from the ECB and the EBA, on the potential setting-up of an NPL transaction platform in order to stimulate the development of secondary markets.

Quantitative indicators

- **Gross NPE ratio:** Ratio of gross NPEs[22]/total gross loans, advances and debt securities (**Indicator 11: Charts 11.1** and **11.2**)
- **Gross NPL ratio:** Ratio of gross NPLs and advances[23]/total gross loans and advances (**Indicator 12: Charts 12.1** and **12.2**)
- **Net NPL ratio:** Ratio of NPLs and advances net of allowances and credit risk adjustments to total net loans and advances (**Indicator 13: Charts 13.1** and **13.2**)
- **NPL coverage ratio:** Ratio of accumulated allowances and credit risk adjustments/total gross NPLs[24] (**Indicator 14: Charts 14.1** and **14.2**)
- **Collateral coverage ratio:** Ratio of collateral received for non-performing loans and advances to total gross NPLs[25] (**Indicator 15: Charts 15.1** and **15.2**)

Commentary

- **NPE, NPL and net NPL ratio.** There has been progress on NPE, NPL and the net NPL ratio both in terms of weighted average and all across the distribution since Q4 2014.[26]
- **MS-specific developments for NPEs, NPLs and net NPL ratios.** There has been further progress in most MSs, with larger decreases for countries with high levels of NPEs (Cyprus, Ireland, Italy and Portugal). In Greece, compared to Q4 2014, NPL stocks decreased but the impact on the ratio was offset by a decline in total loans.

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[21] See https://www.consilium.europa.eu/en/press/press-releases/2017/07/11/conclusions-non-performing-loans/.
[22] The gross NPE ratio indicates the credit risk arising from loans, advances and debt securities. Loans, advances and debt securities are reported gross of allowances and credit risk adjustments.
[23] The gross NPL ratio indicates the credit risk arising from loans and advances. Non-performing loans and advances are reported gross of allowances and credit risk adjustments.
[24] The NPL coverage ratio indicates the extent to which losses on NPLs are covered by provisions.
[25] The collateral coverage ratio indicates the extent to which NPLs are secured by collateral such as movable and immovable property, amongst others.
[26] In particular, the interquartile range (25th to 75th percentiles) has narrowed for all three measures, which was mainly attributable to the large decrease observed for the 75th percentile.

- **Weighted average NPL coverage ratio.** The weighted average NPL coverage ratio improved slightly.[27] After peaking in Q1 2018 (due to both an increase in allowances and a decrease in NPLs with respect to previous quarter), the value slightly reduced during the calendar year, while still being 2.3 pp higher than the Q4 2014 value.
- **MS-specific developments for average NPL coverage ratio.** Out of the 14 MSs in the sample in Q4 2014, there were improvements in coverage for eight over the period ending in Q4 2018, including several high-NPL countries (Cyprus, Greece, Italy and Portugal), while Ireland and the Netherlands recorded the largest declines in average coverage.
- **Collateral coverage ratio.** The percentage of NPLs covered by collateral decreased from 40.0% in Q4 2014 to 34.4% in Q4 2018, which in turn led to a larger percentage of unsecured NPL exposures.
- **MS-specific developments for the collateral coverage ratio.** Out of the 14 MS in the sample in Q4 2014, five have seen an increase in collateral coverage over the period ending in Q4 2018, while the other nine have seen declines.

Qualitative assessment

- **NPL reduction initiatives.** More than half of the MSs have taken steps to reduce NPLs – e.g. by means of sales of NPLs (Denmark, Greece, Spain, Italy, Ireland, Cyprus and Portugal), transfers of legacy assets to external AMCs (Cyprus, Denmark, Spain, Ireland and Hungary), securitisation schemes supported by state guarantees (Italy), and improved arrears management and NPL workouts in banks (Germany, Ireland, Estonia, Spain, Cyprus, Lithuania and Latvia).
- **Recent developments.** Since October 2018, there has been ongoing supervisory focus on reducing NPLs (particularly in Ireland and Portugal), a further prolongation of the existing NPL securitisation scheme (Italy), and effective transfer of NPLs to a newly created AMC (Cyprus).
- **Secondary markets.** Activity on secondary markets for NPLs has been growing recently in some MSs (Italy, Ireland, Spain, Greece, Cyprus and Portugal). Interest from investors is rising and the volume of NPL-related transactions is increasing.

[27] Across the distribution, the interquartile range has widened over the last year, driven by both a decrease in the 25th percentile and an increase in the 75th percentile.

Indicator 11: Gross NPE ratio

Chart 11.1: NPE ratio – evolution in the BU

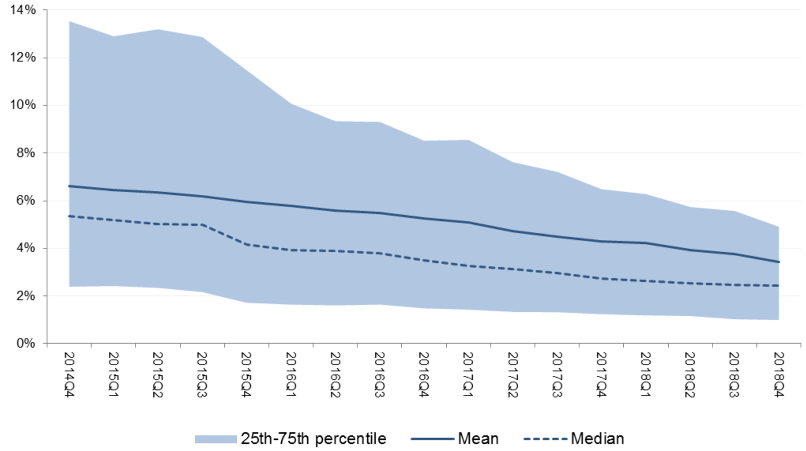
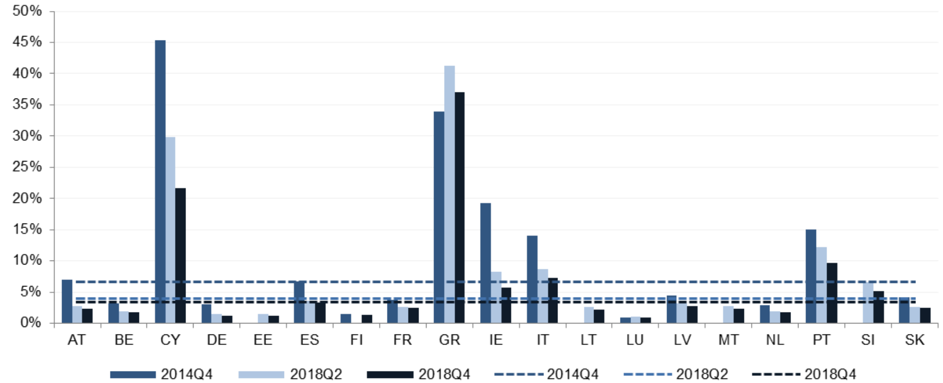


Chart 11.2: NPE ratio by MS



Source: ECB staff contribution, FINREP and ECB calculations.

Indicator 12: Gross NPL ratio

Chart 12.1: NPL ratio – evolution in the BU

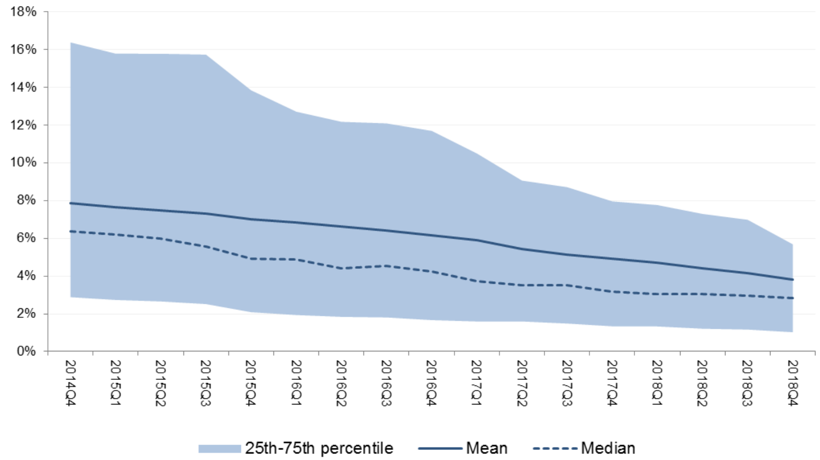
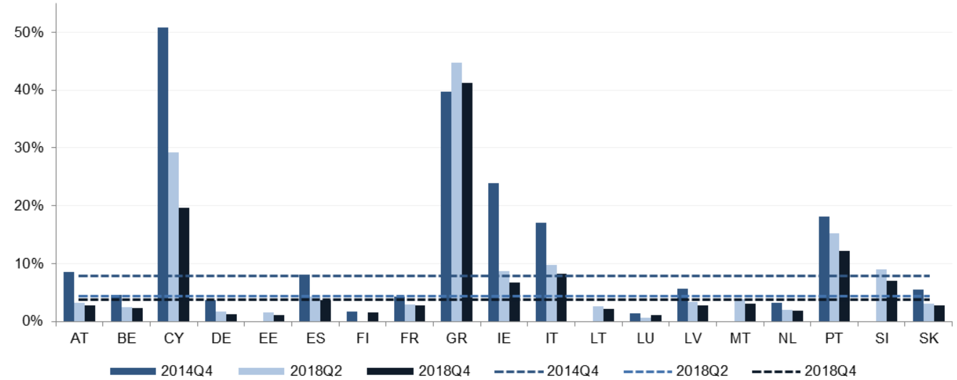


Chart 12.2: NPL ratio by MS



Source: ECB staff contribution, FINREP and ECB calculations. NPLs and advances gross of allowances and credit risk adjustments to total gross loans and adjustments.

Indicator 13: Net NPL ratio

Chart 13.1: Net NPL ratio – evolution in the BU

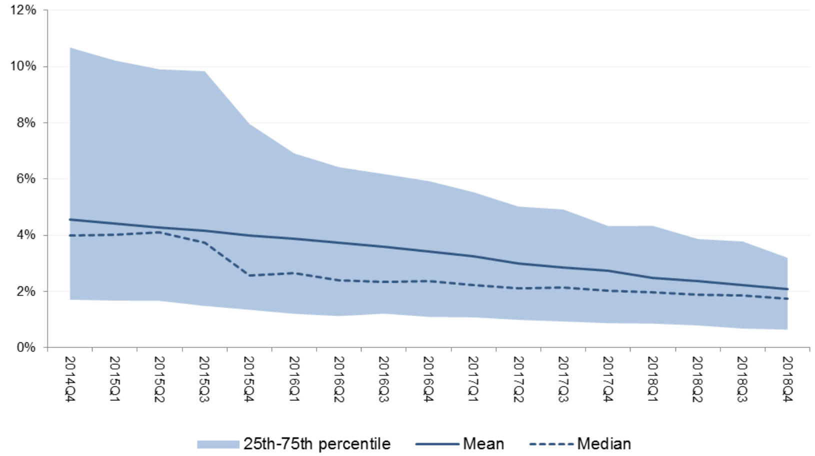
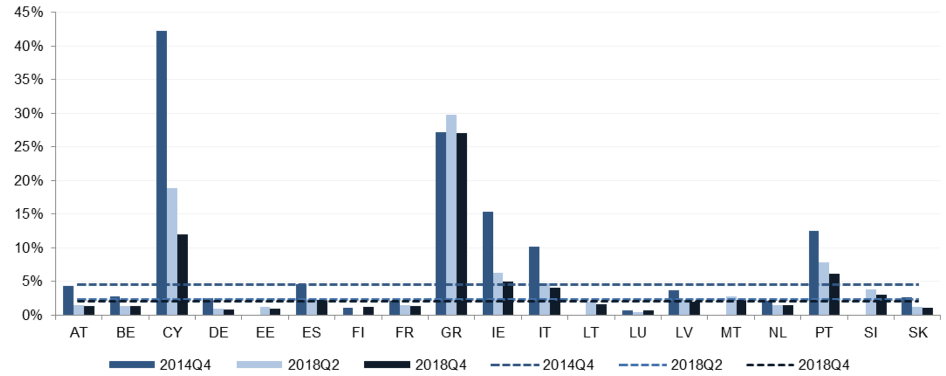


Chart 13.2: Net NPL ratio by MS



Source: ECB staff contribution, FINREP and ECB calculations. Ratio of on-performing loans and advances net of allowances and other adjustments to total net loans and advances.

Indicator 14: NPL coverage ratio

Chart 14.1: NPL coverage ratio – evolution in the BU

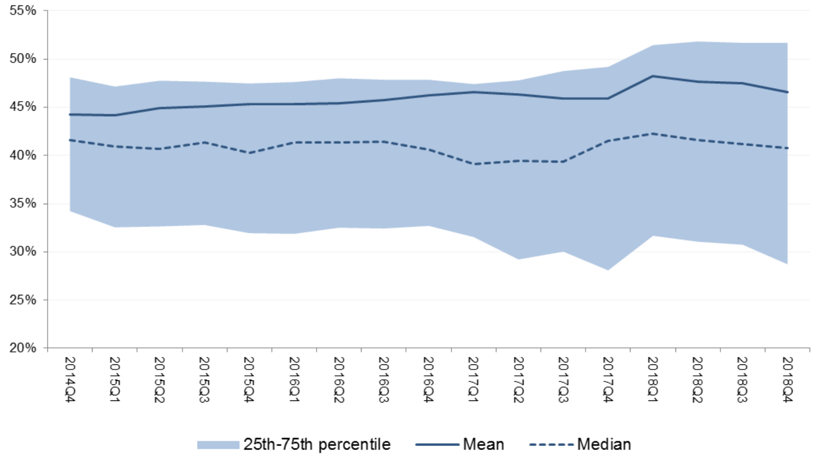
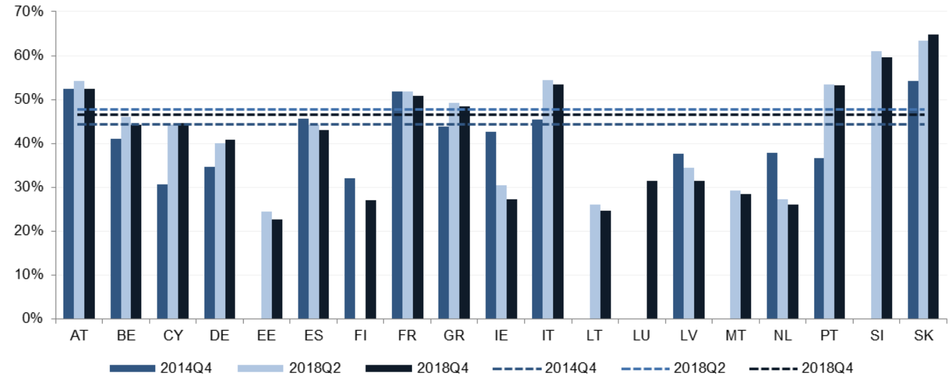


Chart 14.2: NPL coverage ratio by MS



Source: ECB staff contribution, FINREP and ECB calculations. Accumulated allowances and credit risk adjustments to total gross NPLs. Source: FINREP, ECB calculations.

Indicator 15: Collateral coverage ratio

Chart 15.1: Collateral coverage ratio – evolution in the BU

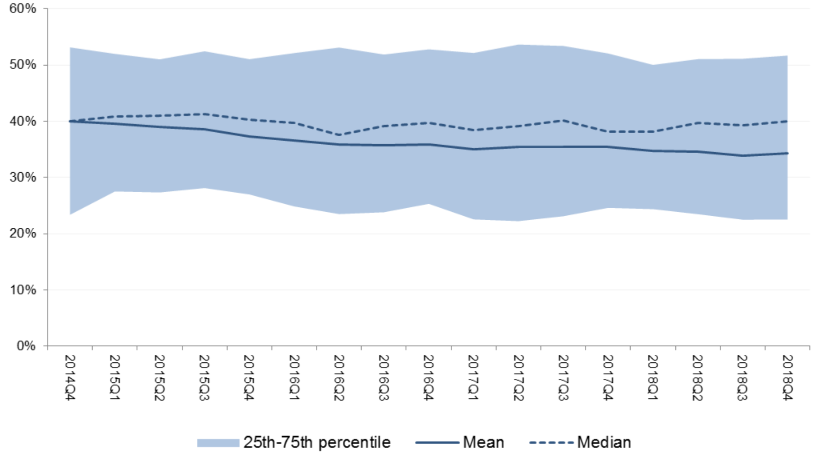
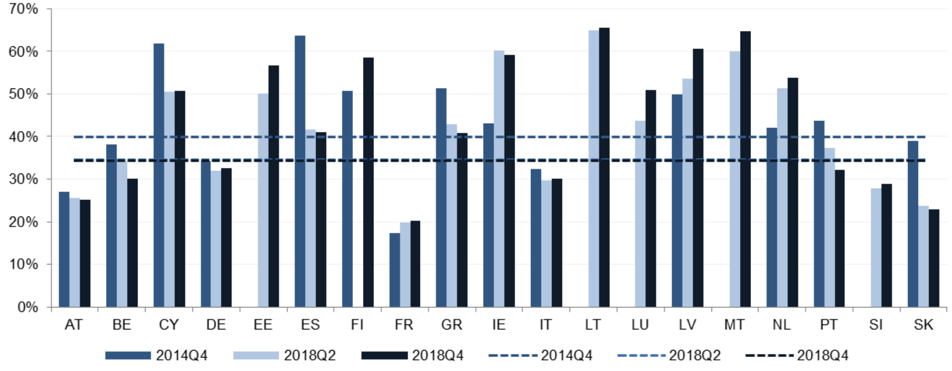


Chart 15.2: Collateral coverage ratio by MS



Source: ECB staff contribution, FINREP and ECB calculations. Collateral received on non-performing loans and advances to total gross NPLs.

Overview of annexes

Annex I provides an update on relevant legislative measures. This list includes both risk reduction and risk sharing measures which are already in force or under negotiation.

Annex II presents details of other national measures that have been adopted in addition to transposing agreed EU legislation. This list of national measures, which is not exhaustive, provides details of some of the key measures covered by the semester country surveillance reports.

Annex III contains the methodological notes covering data sources, the scope of the analysis, time series samples, the metrics used, confidentiality criteria applied, the treatment of missing data and caveats applied to the charts displayed.

Annex IV presents formulae with reference to the ITS data points used to compute the different indicators.

Annex I: State of play as regards selected EU banking legislative measures relevant for risk reduction and risk sharing

Measure	Description
Already agreed and in force	
CRR/CRD IV including technical standards	Introduces new definition of capital, credit valuation adjustment surcharge, capital buffers, liquidity requirements, leverage ratio reporting and disclosure requirements, stricter governance requirements (including limits on bonuses) and benchmarking of internal models for calculating capital requirements.
Single Supervisory Mechanism Regulation (SSMR)	A single supervisory mechanism has been established, in order to (i) ensure supervision of the highest quality, (ii) implement EU policy on prudential supervision of credit institutions in a coherent and effective manner, and (iii) apply the single rulebook in a consistent manner.
Single Supervisory Mechanism (SSM)	The SSM became fully operational in 2014, with the ECB taking responsibility for supervising the most important banks in the euro area. The SSM adopts measures aimed at addressing risks in the euro area banking system and seeks to further reduce financial fragmentation.
Bank Recovery and Resolution Directive (BRRD)	New rules to manage the orderly recovery and restructuring of banks that are failing or at risk of failing.
BRRD delegated acts (level 2 legislation)	Specifies the content of recovery plans, resolution plans and group resolution plans, critical functions and core business lines/ex post contributions, exclusions from the application of write-down or conversion powers, MREL calibration methodology, methodologies and principles governing valuations, and minimum elements of a business reorganisation plan. Implementing Regulation on standardised formats and templates for reporting.
Single Resolution Mechanism Regulation (SRMR)	New rules to manage the orderly recovery and restructuring of banks that are failing or at risk of failing in the euro area. The legal provisions for the creation of a Single Resolution Fund are in place. So far, €24.9 billion has been collected in contributions from the banking industry. (In December 2013, the expected target level was €55 billion.) In 2018, 67% of the funds in all national compartments are mutualised. Those compartments will progressively be merged, with that process being completed in 2023.
Deposit Guarantee Scheme Directive (DGSD)	New rules for the funding of deposit guarantee schemes.
CRR/CRD delegated acts on leverage ratio and LCR	Delegated acts amending the methodology for calculating the leverage ratio and introducing an LCR requirement.
Single Resolution Mechanism (SRM)	The SRM has become operational, with a new EU agency, the SRB, assuming responsibility for dealing with failing banks in the euro area.
Partial harmonisation of bank creditor hierarchy	Adopted in December 2017; transposition ongoing. Creation of a new class of senior non-preferred debt to facilitate compliance with subordinated total loss absorbing capacity (TLAC)/MREL requirements achieved through modifications to Article 108 of the BRRD.
Measures to address NPLs	Interpretation of existing supervisory powers aimed at addressing potential under-provisioning of NPLs.
	Blueprint on the setting-up of national AMCs.
	Fostering of transparency and improvements to data infrastructure on NPLs.
	Statutory prudential backstop. The amending Regulation was adopted and entered into force in April

Measure	Description
	2019. Introduction of a statutory prudential backstop to prevent the build-up of future NPLs without sufficient loan loss coverage and a common definition of NPEs.
Already agreed and not yet in force	
Risk reduction package – resolution (TLAC/MREL and moratorium tool)	Adopted in May 2019; publication in OJEU forthcoming in June 2019. Amendments to the BRRD/SRMR/CRR/CRD with a view to implementing the TLAC standard and reviewing the MREL, implementing the MREL allocation within groups (internal MREL). Amendments to the BRRD with a view to harmonising moratorium tools and ensuring more proportionate recognition of bail-in powers in third countries.
Risk reduction package – prudential (CRR/CRD review)	Adopted in May 2019; publication in OJEU forthcoming in June 2019. Amendments to the CRR/CRD IV to, inter alia, implement and finalise remaining Basel reforms, including the introduction of: - a binding leverage ratio; - a binding NSFR; - more risk-sensitive capital requirements, particularly in the area of market risk, counterparty credit risk and exposures to central counterparties; - more stringent large exposure limits for G-SIIs. Amendments to enhance consolidated supervision (requirement for third-country groups to set up an EU-based intermediate parent undertaking (IPU) or authorisation requirements for (mixed) financial holding companies). Amendments to allow for cross-border capital and liquidity waivers, subject to safeguards. Proportionality-enhancing amendments, which are intended to reduce undue administrative burdens and improve banks' lending capacity.
Insolvency law	Provisional text adopted in March 2019; final adoption and publication in OJEU forthcoming in May/June 2019. Directive on preventive restructuring framework, second chances and measures to increase the efficiency of restructuring, insolvency and discharge procedures.
Investment firms	Provisional text adopted in April 2019; final adoption and publication in OJEU forthcoming in autumn 2019. Prudential banking supervision for large investment firms.
Proposed by the Commission	
Measures to address NPLs	Proposal for a directive on credit servicers, credit purchasers and the recovery of collateral; negotiations ongoing.
	Benchmarking of national loan enforcement (including insolvency) systems from a bank creditor perspective.
Sovereign bond-backed securities (SBBSs)	An enabling framework for securities that allows for pooling and possibly tranching of sovereign bonds from different MSs.

Annex II: Other national risk reducing Initiatives

Disclaimer: The summary and table below provide a non-exhaustive overview of the key national measures adopted by MSs in order to reduce risks on the basis of the semester country surveillance reports. Where appropriate, MSs are invited to provide comments in order to update the table.

Key points

- **Legal/judicial, tax or other reforms**. Over time, about half of the MSs have implemented reforms in the following areas:
    - legal frameworks governing insolvency and foreclosure (Cyprus, Greece, Spain, Italy, Latvia, Hungary, Malta, Portugal and Slovakia);
    - cooperative or savings bank sectors (Cyprus, Spain, Italy and Lithuania);
    - strengthening of limits on related-party exposures (Bulgaria);
    - aid or protection schemes for distressed borrowers (Ireland, Cyprus and Greece);
    - tax changes (Croatia and the Netherlands);
    - new legislation on sales of loans (Cyprus);
    - improvements to financial consumer protection (Spain).

  Since October 2018 reforms have been adopted or implemented in relation to insolvency (Cyprus and Hungary) and debt recovery laws, as well as out-of-court settlements (Malta), pensions (Cyprus), credit register (Cyprus and Finland), e-auctions (Cyprus), aid (Cyprus) and borrower protection schemes (Greece), recovery and resolution framework (the Netherlands), tax deductibility of interest including on mortgages (the Netherlands).

- **Prudential supervisory actions**. More than half of the MSs have undertaken reforms in relation to the implementation of banking sector asset quality reviews (AQRs)/stress tests and non-banking balance sheet reviews (Bulgaria and the United Kingdom) and other supervisory measures aimed at increasing provisioning for NPLs (Ireland, Spain, Croatia, Cyprus, Romania and Slovenia), introducing bank-specific NPL reduction targets (Greece, Cyprus, Ireland, Malta, Portugal and Slovenia), raising minimum risk weights for residential mortgages (Finland), and strengthening banking and non-banking supervision (Bulgaria, Spain and Portugal).
  Since October 2018 additional supervisory measures related to potential losses from non-housing consumer loans and to management bonuses (Croatia) while the scope of supervisory oversight for consumer protection purposes was broadened (Ireland).

- **NPL management initiatives**. More than half of the MSs have implemented reforms in this area, with measures relating to, for example, sales of NPLs (Denmark, Greece, Spain, Italy, Cyprus, Romania and the United Kingdom), transfers of legacy assets to external AMCs (Cyprus, Denmark, Spain, Ireland and Hungary), and improvements to arrears management and NPL workouts in banks (Bulgaria, Germany, Estonia, Spain, Cyprus, Lithuania, Latvia, Romania and the United Kingdom).
Since October 2018 there has been ongoing supervisory focus on reducing NPLs (Ireland and Portugal), a further prolongation of an existing NPL securitisation scheme (*Garanzia Cartolarizzazione Sofferenze* – GACS) (Italy), and effective transfer of NPLs to a newly created AMC (Cyprus).

- **Macroprudential measures**. More than half of the MSs have implemented reforms in this area. Reform measures have included stricter rules limiting high loan-to-value (LTV) and loan-to-income (LTI) ratios and increasing risk weights including for mortgages, etc. (Belgium, Czech Republic, Germany, Ireland, France, Cyprus, Luxembourg, the Netherlands, Slovakia and Sweden), and the introduction of countercyclical and systemic risk buffers (Cyprus, Denmark, Hungary, Sweden, Romania and the United Kingdom).
Additional measures have been adopted in a number of MSs since June 2018 (Austria, Bulgaria, Czech Republic, Cyprus, Finland, France, Poland, Romania and Slovakia). Additional measures since October 2018 were either announced or introduced by 15 MSs (Belgium, Bulgaria, Czech Republic, Cyprus, Germany, Denmark, Spain, France, Croatia, Hungary, Luxembourg, Malta, Romania, Slovenia and the United Kingdom).

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
BE	None	None	None	- A macroprudential measure addressing financial stability risks originating in the residential real estate sector was implemented in Belgium in 2014. That measure was based on Article 458 of the CRR and consisted of a general 5 pp addition to risk weights for mortgage exposures. In the light of increasing residential real estate risks, the Nationale Bank

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
				van België/Banque Nationale de Belgique proposed replacing that measure, following its expiry in May 2017 with a more stringent measure. The latter was rejected by the Belgian government, effectively resulting in the absence of a formal macroprudential measure to address residential real estate risk. The Nationale Bank van België/Banque Nationale de Belgique proposed a new macroprudential measure in November 2017 consisting of a flat 5 pp addition (prolongation of the original measure) and a multiplier of 1.33 for mortgage risk weights. This measure entered into force in April 2018.
BG	- Amendments to the Law on Българска народна банка (Bulgarian National Bank), transferring to the Governing Council banking and payment supervision competencies previously held by the Deputy Governors responsible. - Extension of the scope of Article 45 of the Law on Credit Institutions, which sets limits on related-party exposures. - Stronger requirements for managing and reporting related-party transactions. - Important legal amendments improving the independence and governance of the Financial Securities Commission were	- Independent banking sector AQR/stress test in 2016 - Independent balance sheet review of the insurance and pension fund sectors in 2016 - Several actions to strengthen banking and non-banking supervision. - Българска народна банка (Bulgarian National Bank) will align its prudential guidance with the forthcoming implementation of the EBA guidelines.	- Strengthening of vulnerable bank capital buffers allowing better provisioning for NPLs. - Improvement of risk management practices in vulnerable banks.	- In September 2018 Българска народна банка (Bulgarian National Bank) decided to set the countercyclical capital buffer (CCyB) at 0.5% as of October 2019. In March 2019 Българска народна банка (Bulgarian National Bank decided to set the CCyB at 1% as of April 2020. The reference indicator (deviation of the credit-to-GDP ratio from the long-term trend) would support keeping the buffer at zero. However, following buoyant economic activity, growth in bank credit to the private sector has recently accelerated, particularly in the household loans segment. - The Bulgarian authorities also envisage legislative amendments to the Law on Credit Institutions, which would introduce borrower-

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	passed in 2017. - The insolvency regime has been amended and improved.			based requirements (caps on LTV and debt service-to-income (DSTI) ratios, etc.), in addition to existing capital-based measures.
CZ	None	None	None	- Česká národní banka would like to be able, by law, to set LTV, LTI, debt-to-income (DTI) and DSTI ratios. The relevant draft legislation failed to be approved by parliament in summer 2017 given the elections in October 2017. The central bank continues to make recommendations and has issued two which have been effective since 1 October 2018: a DTI ratio of 9 and a DSTI ratio of 45% (both based on the applicant's net annual income). Banks may exceed either ratio for 5% of newly granted mortgages. - Česká národní banka is currently considering setting stricter limits on DTI and DSTI ratios as it continues to regard loans with DSTIs of over 40 % and DTIs of over 8 to be risky.
DK	None	- Slow reduction of NPLs in agribusiness, concentrated in small and midsized local banks, with support from the Danish Financial Supervisory Authority (Danish FSA). - The Danish FSA has introduced guidelines ("Seven Best Practices") on	- Finansiel Stabilitet is a state-owned company set up in 2008 that is charged with winding up exposures and activities taken over from distressed banks, including by offering portfolios for sale at market price.	- The Danish government has decided to set the CCyB at a rate of 1.0% of credit institutions' total risk exposures in Denmark from 30 September 2019 (previously, the buffer was set at 0.5%). - Using a consumer protection clause, a 5% down payment requirement for residential real

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
		good mortgage lending in areas with large price increases: assessment of borrower's repayment capacity under interest rate stress, amortisation requirement for negative net wealth customers, net wealth requirement for customers with high LTI ratios, etc. - The Danish FSA has also introduced a Supervisory Diamond for Mortgage Credit Institutions supplementing the existing Supervisory Diamond for Danish Banks. This is a supervisory tool covering key risk areas for Danish mortgage credit institutions: lending growth, borrower interest rate risk, interest-only lending, large exposures and short-term funding.	In 2014 Finansiel Stabilitet carried out an open and transparent sales process targeting qualified investors with the aim of divesting a portfolio consisting of about 10,000 unsecured NPEs with a total outstanding debt of approximately DKK 3 billion. The exposures in the offered portfolio were taken over under the bank rescue packages implemented in 2008-11.	estate purchases has been implemented. - The government has adopted lending restrictions for households with LTI ratios greater than 4 and LTV ratios in excess of 60%: (a) interest rate fixation for floating rate mortgages needs to last at least five years; and (b) deferred amortisation is only applicable on 30-year fixed rate loans.
DE	None	None	- The NPL ratio in the shipping segment increased to 37% in 2016. The lenders concerned have reacted, with shipping loans granted by the top five German lenders declining significantly in 2017 to stand at 29% of Tier 1 capital. - At the moment, banks have sold most of their shipping NPLs.	- Since June 2017 legislation has enabled supervisors to impose minimum standards and thresholds on mortgage-granting institutions if they see financial stability being endangered (BGBl. I S. 1495).

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
EE	None	None	- NPLs, which peaked after 2009, have been partially resolved and partially written-off, with substantial support from Scandinavian parent banks.	None
IE	- A mortgage-to-rent scheme has been announced, which allows qualifying homeowners in arrears to remain in their homes as social tenants of a housing association which buys the property from the lender. - Code of Conduct on Mortgage Arrears (CCMA) established to provide statutory safeguards for financially distressed borrowers in arrears or at risk of falling into arrears. A review of the CCMA was concluded recently. - Personal insolvency legislation introduced in 2012 significantly modernised the regime by providing a range of debt resolution options which balance the rights of creditors and debtors. - Enhanced money advice and budgeting service introduced for distressed	- Mortgage Arrears Restructuring Targets (MART) encouraged restructuring efforts by banks to move from a short-term forbearance model to one where longer-term sustainable restructuring products were offered to borrowers. These targets have been a contributing factor to the reversal in the Irish banks' NPL ratio since 2013. - Legislation designed to regulate credit servicing firms in 2015 introduced a new regulatory regime for credit servicing firms to clarify that consumers maintained the same protections when their loans are sold to an unregulated purchaser. - Consumer Protection (Regulation of Credit Servicing Firms) Act 2018, which was adopted in December 2018, extends the scope of supervisory oversight for consumer protection purposes to credit acquiring companies.	- Centralised credit register introduced in 2017. - AMC established (NAMA) - Dedicated NPL work out units established by banks.	- Authorities introduced macroprudential measures to limit the high LTVs and LTIs on new residential mortgage loans in February 2015. The aims were to lower risks to vulnerable borrowers and to dampen cyclical dynamics between house prices and lending volumes. The rules were revised in 2016 (i.e. introduction of a sliding LTV limits) and in 2017 (i.e. stricter rules for second and subsequent buyers). Another review of the measures will be concluded in 2018.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	borrowers.	The original regulatory regime, introduced in 2015, was only applicable for credit servicing firms. - A review of the CCMA was published by the Central Bank of Ireland in November 2018 and found that the consumer protection rules remained applicable in the context of sale of loans. The CCMA was issued by the Central Bank of Ireland in 2009 with the aim of providing safeguards for defaulted borrowers or those at risk of falling into arrears. - Ongoing supervisory focus on addressing NPL levels in Irish banks.		
GR	- Reform of the insolvency regime for corporates and households in December 2016/May 2017 (corporates) and November 2015 (households) - Introduction of an out-of-court debt workout mechanism for restructuring arrears to both the Government and banks, operational since September 2017 - Introduction of e-auctions	- Introduction of bank-specific operational NPL reduction targets for the period Q2 2016 to Q4 2019, in place since Q3 2016.	- Adoption of a new law on the sale of loans. - Liberalisation of the licensing regime for NPL service providers in Q2 2017. *Since October 2018:* - a primary residence protection scheme has been approved. Besides its social dimension, it may help to reduce the stock of NPLs by incentivising the servicing of loans	- In February 2015 authorities introduced macroprudential measures to limit high LTV and LTI ratios on new residential mortgage loans. The aim was to reduce risks for vulnerable borrowers and dampen procyclical dynamics linking house prices and lending volumes. Those rules have since been revised in both 2016 (introduction of sliding LTV limits) and 2017 (stricter rules for non-first-time buyers). - Bank of Greece decided on the activation of the other systemically important institutions (O-SII) buffer, applicable to the four Greek O-SIIs (Alpha

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	Since October 2018: - a major revision of the insolvency code has been recently introduced under the European Stability Mechanism (ESM) programme and the profession of insolvency administrator has been created; - some progress has been recorded with respect to enhancing the case-processing capacity of courts through new staff appointments and training of judges on financial topics; - the uptake of the out-of-court workout mechanism is showing some progress, though more in bilateral restructuring and markedly less in multilateral restructuring, while infrastructure is being upgraded to ensure unhindered and increasingly automated operation.		that currently are non-performing; - technical work is ongoing by the Greek authorities on an asset protection scheme with which the sovereign will provide a guarantee to securitised NPL portfolios of banks; and - a working group has been established by the Greek authorities to explore the possibility of complementing the asset protection scheme by the creation, at a later stage, of an AMC – the AMC would receive NPLs currently held by Greek banks along with part(s) of their deferred tax credits.	Bank, Eurobank Ergasias Bank, National Bank of Greece and Piraeus Bank). The date of activation was 1 January 2019 with the O-SII buffer set at 0.25% for 2019 and a phasing-in period until reaching 1% in 2022 for the four O-SIIs identified.
ES	- Establishment of a new legal framework for savings banks and banking foundations. - Introduction of new personal and company insolvency regimes. - Enhancement of consumer protection	- Spain implemented a financial assistance programme between July 2012 and January 2014 which resulted in former savings banks' legacy assets being cleaned up and transferred to an AMC, and to those entities being restructured and recapitalised.	- NPLs remain on a solid downward trend, supported by the announcement of large portfolio disposals by the two largest banks, Santander and BBVA. In addition, smaller operations for the sale of NPLs and foreclosed assets have	- Creditors' preferential claim on secured collateral increased to 70% in 2015 and 90% in 2018. - In March 2019 the Spanish Macroprudential Authority Financial Stability Board (*Autoridad Macroprudencial Consejo de Estabilidad Financiera* – AMCESFI) was created to help

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	legislation for financial instruments.		already been finalised or are ongoing. - Following the resolution of Banco Popular, other banks have accelerated the cleaning-up of their balance sheets.	prevent and mitigate systemic risk to financial stability. The AMCESFI is tasked with the regular monitoring and analysis of sources of systemic risk. Within its powers, AMCESFI can issue warnings and recommendations on any matters pertaining to financial stability, as well as opinions on proposals of macroprudential measures previously notified to the AMCESFI by the sectoral authorities. On an annual basis, the new authority shall submit a public report to the Spanish Parliament, analysing the main risks to financial stability, the binding measures adopted and the recommendations and warnings issued. In addition, sectoral supervisors (the Banco de España, the Spanish National Securities Market Commission (*Comisión Nacional del Mercado de Valores* – CNMV) and the Directorate General for Insurance and Pension Funds (*Dirección General de Seguros y Fondos de Pensiones* – DGFSP)) are equipped with new macroprudential tools to facilitate the prevention of possible systemic risks. These include, inter alia, the possibility of establishing CCyBs, limits on the sectoral concentration of risks and the granting of loans depending on the value of the guarantee or the borrowing capacity of companies and individuals.
FR	None	None	None	The High Council for Financial Stability (*Haut Conseil de Stabilité Financière* – HCSF)

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
				introduced a macroprudential measure under Article 458(d)(ii) CRR in July 2018. That measure lowers the large exposure limit set out in Article 395(1) to 5% of a bank's eligible capital for exposures incurred by French systemically important credit institutions to large resident highly indebted non-financial corporations (NFCs) at the highest level of consolidation. The objective is to limit French systemically important banks' exposure to highly indebted NFCs, thereby enhancing the resilience of the financial system, and to limit increases in excessive NFC debt in a forward-looking and preventive way – i.e. by limiting their bank funding opportunities and sending a signal to the markets regarding the increased leverage of large French NFCs. In March 2019 given the continued favourable phase of the financial cycle, the High Council approved the Banque de France's proposal to raise the CCyB rate by 0.25 pp of RWAs on French exposures, to a level of 0.5%.
HR	- In January 2017 the Croatian authorities introduced a temporary rule (applicable until end-2017) that allowed banks to deduct losses resulting from NPL write-offs from the tax base, which was not previously possible. - In August 2017 the Government	- In 2013 Hrvatska narodna banka introduced provisioning backstops for all domestic banks, with minimum coverage ratios progressively increasing with the number of delinquency days. In March 2017 the authorities introduced a cap of 80% on the maximum coverage ratio for any	None	In February 2019 Hrvatska narodna banka issued a recommendation on granting non-housing consumer loans: - In determining consumers creditworthiness for all non-housing consumer loans with original maturity higher than 60 months, credit

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	proposed amendments to the existing asset sales framework, requiring banks to inform borrowers about the details of the sale, including the owed amount, the maturity and the identity of the buyer. Those amendments are currently being considered by parliament. - In July 2018 the Government proposed legislation that would write off the debts of individuals with past-due obligations to public authorities and state-owned enterprises. That measure applies to borrowers with bank accounts that were blocked due to their past-due debt as of end-2017, providing around HRK 1.4 billion in relief.	specific portfolio. - In 2013 the central bank introduced rules to restrict the transformation of forborne NPLs to performing status, requiring full payments to be made for a probation period of two or more years. These rules were amended in March 2017, aligning them with the uniform forbearance rules that are in place across the EU. - In February 2019 Hrvatska narodna bank a enacted two supervisory measures: - Potential losses arising from non-housing consumer loans should be accounted for in credit institutions' Internal Capital Adequacy Assessment Processes (ICAAPs). - Credit institutions are expected to define in their internal regulations clear return mechanisms ("clawback clause") with respect to management bonuses in the event of excessive losses related to		institutions should take into consideration minimum costs of living that may not be less than the amount prescribed by the act governing a part of salary exempted from foreclosure. - Credit institutions are recommended to establish records of all non-housing consumer loans with all the information on credit, collateral and consumer, and to calculate LTI, DTI, LSTI, DSTI and LTV (where applicable) for all housing and non-housing consumer loans.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
		these		
IT	- Reform of the insolvency and foreclosure frameworks in 2015 and 2016 to shorten the recovery period for collateral and foster the repossession of collateral. - Reform of large cooperative banks (*banche popolari*) and small mutual banks (*banche di credito cooperativo* – BCCs); once fully implemented, these reforms are expected to have a positive impact on the arrears management capacity of those banks. - Introduction of immediate tax deductibility for loan loss provisions.	- Enhanced reporting by all banks on NPEs and collateral – reporting template introduced in 2016 by the Banca d'Italia.	- Establishment of an NPL securitisation scheme with state guarantees (GACS) to support banks' resolution of NPLs. That scheme, which was introduced in 2016, was extended in September 2018 for a period of six months, and further prolonged in March 2019 for a period of two years. The recent prolongation of the GACS, however, remains subject to prior confirmation by the European Commission of its ongoing compatibility with EU state aid rules. - Establishment of a private sector backstop facility to invest in NPLs sold or securitised by banks (i.e. Atlante II Fund, renamed the Italian Recovery Fund in 2017).	None

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
CY	- In July 2018, as part of a three-pillar NPL reduction strategy, the Cypriot authorities adopted a package of legal amendments (comprising amendments to the Personal Insolvency Law, the Companies Law, the Insolvency Practitioners' Regulations, the Bankruptcy Law, the Law for the Sale of Loans and the Immovable Property Law). - The Securitisation Law was approved by parliament in July 2018. - Work to improve the Insolvency Service of Cyprus' effectiveness and efficiency and strengthen the regulatory framework for insolvency practitioners is ongoing, although progress is slow. - A government-supported subsidy scheme (ESTIA) has been established with the aim of providing a 33% debt reduction for eligible borrowers with NPLs that are backed by primary residences. - By September 2019 the authorities expect to enact two decrees regarding e-auctions, which would establish an electronic auction system, help set up the auctioning platform, and regulate the profession of auctioneers in relation to the	- Supervisory pressure in late 2016 and early 2017 through the Supervisory Review and Evaluation Process (SREP) led to an increase in levels of provisioning.	- NPLs declined further in 2018, continuing the downward trend seen since end-2015. Indeed, stronger declines are expected in the second half of the year, owing (i) to the transfer of the Cooperative Bank's sizeable NPL portfolio (about €3.1 billion) from the banking system to a legacy entity and (ii) to the large volume of NPLs that are expected to be sold by one of the most important Cypriot banks (about €2.7 billion). - The sale by another bank of an NPL portfolio with a value of €140 million to a distressed investment fund was also a positive development. - In December 2018, following the agreement of 25 June 2018, the assets and liabilities of the Cooperative Bank were transferred to the acquirer, while the NPLs were transferred to a newly created AMC. However, the setting-up of the latter is still ongoing.	- In 2017 the Central Bank of Cyprus designated six credit institutions and four investment firms as O-SIIs, imposing capital buffers (to be phased in over the period 2019-22) ranging from 0.5% to 2%. - The Central Bank of Cyprus also introduced borrower-based measures in 2013, which were streamlined in March 2016. Those measures capped the total debt servicing amount at 80% of the borrower's net disposable income (65% for foreign currency loans) and capped the LTV ratio (first introduced in 2003) at 80% of financing for primary residences and 70% for all property financing. - Following the acquisition of the Cooperative Bank by another Cypriot bank, the authorities have launched a review of its O-SII buffer with a view to potentially increasing its size. The CCyB requirement has been kept at 0%. - The temporary macroprudential rules on liquidity requirements (the most important impact of which is the higher outflow rates applicable to covered deposits), which were introduced in January 2018, are easily being met by all local banks owing to excess liquidity. - In December 2018 the Central Bank of Cyprus, following consultation with the Cyprus Securities

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	conduct of e-auctions. - The authorities are designing a uniform framework for the three authorities that licence insolvency practitioners in Cyprus (the Cyprus Bar Association, the Institute of Chartered Public Accountants of Cyprus and the Insolvency Service of Cyprus). The reorganisation of the procedures, and the restructuring of the personnel and departments of the Insolvency Service are underway. To ensure organisational independence, the service is expected to be separated from the Department of Registrar of Companies. - In late 2018 regulatory amendments were introduced, requiring credit acquiring firms to use and report to the credit register. - The eligibility criteria for the ESTIA scheme were finalised in November 2018, but its launch has been delayed. - The integration of the supervisors of the pension funds and insurance companies is slowly progressing, the aim being to have the new body operational by early 2020.			and Exchange Commission, designated five investment firms as O-SIIs. The additional O-SII capital buffer requirements applicable from 1 April 2019 range from 1% to 1.5%. At the same time, the central bank revised the buffer rates applicable to the credit institutions designated as O-SII. As regards the relevant capital buffers to be phased in over 2019-22, only the buffer for Hellenic Bank increased (from 1% to 1.5%), while the rest remained unchanged.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
LV	- The government has strengthened the supervision of insolvency administrators. The Insolvency Policy Development Guidelines for 2016 to 2020 contain specific measures to improve the insolvency framework and the regulation of insolvency administrators. They aim to increase the number of restructurings and the insolvency recovery rate, and to strengthen trust in the profession. With regard to the latter, the profession's regulatory framework has been overhauled, with closer oversight, stricter conflict of interest provisions and harsher penalties for misconduct. The court system has also been reformed by reducing the number of courts; this should improve the overall quality of decisions and improve the functioning of random case allocation to judges.	None	- NPLs, which peaked after 2009, have been partially resolved and partially written-off, with substantial support from Scandinavian parent banks.	None

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
LT	None	- A reform of credit unions – small financial cooperatives serving local people in rural areas – is under way. Many smaller credit unions were facing financial difficulties, which prompted Lietuvos bankas to launch a programme restructuring and consolidating the sector. In January 2018 two central credit unions took over the management of 20 and 14 small institutions respectively, thus improving the sector's viability. The remaining seven credit unions will become banks by 2023.	- NPLs, which peaked after 2009, have been partially resolved and partially written-off, with substantial support from Scandinavian parent banks.	None
LU	None	None	None	- Parliament is currently debating thresholds for LTV, LTI, DTI and DSTI ratios, as well as mortgage maturity limits.
HU	- The Personal Bankruptcy Act was adopted in 2015, providing for a debt settlement procedure for overindebted households.	- A central bank recommendation for credit institutions has set out an expected minimum framework for cooperation between debtors and creditors. - A central bank recommendation has set out best practice guidelines on out-of-court restructuring and consensual settlement of NPLs in the corporate	- MARK, the AMC established in 2016 by the Magyar Nemzeti Bank, is tackling the sizeable amounts of commercial real estate distressed loans. It cleans up banks' balance sheets by selling their NPL portfolios on the market. - The National Asset Management Company (NAMA), which was set up	- The systemic risks generated by the considerable stock of loans denominated in foreign currencies (mainly Swiss francs) on banks' balance sheets were tackled by converting forex credit into Hungarian forints in 2015. - In 2016 the Magyar Nemzeti Bank identified nine domestic systemically important financial institutions and introduced relevant risk buffers,

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
		sector.	by the Government in 2015, has the capacity to purchase a total of 35,000 dwellings and targets non-performing household debtors facing the most difficult financial situations.	applicable from 2017. - It also introduced institution-specific systemic risk buffers linked to the risks posed by commercial real estate NPLs. - In October 2018 the mortgage funding adequacy ratio (MFAR) was introduced, requiring that at least 20% of residential mortgage loans with maturities over one year are to be financed through eligible mortgage-backed funds. In January 2019 the MFAR Regulation was amended with effect from 1 October 2019, whereby the required minimum maturity of accepted funds was extended to three years, and the required minimum level of long-term funds in proportion to residential mortgage loans was increased to 25%.
MT	- Work is under way for the implementation of insolvency and debt recovery laws and amendments have been implemented in the Companies Act to expedite out-of-court settlements.	- The amended Banking Act (December 2016) requires credit institutions with a two-year average NPL ratio above 6% to draw up a concrete plan to bring NPLs below this ceiling over a five-year period. When set targets are missed, automatic sanctions apply (including higher capital requirements) through retained profits.	None	- In March 2019 the Central Bank of Malta published a Directive on the Regulation on Borrower-Based Measures to be effective from 1 July where both resident and non-resident borrowers entering into residential real estate loans within the domestic territory are subject to the Directive. The limits of the Directive apply to all domestic lenders granting domestic residential real estate loans.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	(ii) prudential supervisory actions	(iii) NPL management initiatives	(iv) macroprudential measures
				- For category I borrowers ((i) first-time borrowers (FTBs); (ii) non-FTBs purchasing their primary residence with no outstanding loans; (iii) borrowers who already own or have owned a primary residence and at the origination of the mortgage loan the pre-existing primary residence has either been sold or a promise of sale agreement has been entered into; (iv) borrowers who have pending proceedings before the Civil Court (Family Section) which hinder the sale of the primary residence): - 90% loan-to-value at origination (LTV-O) cap with a "speed limit" of 10% on the volume of loans, for loans with a market value in excess of €175,000. - A stressed debt-service-to-income at origination (DSTI-O) of 40% for loans with a market in excess of €175,000. - A stressed DSTI-O of 40% for loans with a market in excess of €175,000 with a shock to interest rate of 150 bps. - A maturity term of 40 years or the official retirement age – whichever occurs first. - For category II borrowers (defined as those for whom any other loan to purchase residential real estate excluding category I borrowers such as buy-to-let borrowers): - Gradual phasing-in: 1st year: 85% LTV-

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	(ii) prudential supervisory actions	(iii) NPL management initiatives	(iv) macroprudential measures
				O cap with a "speed limit" of 20% on the volume of loans. - 2nd year: 75% LTV-O cap with a "speed limit" of 20% on the volume of loans. - A stressed DSTI-O of 40% with a shock to interest rate of 150 bps. - A maturity term of 25 years or the official retirement age – whichever occurs first. - The adoption of the borrower-based measures is expected to continue strengthening the resilience of both lenders and borrowers to any potential shocks and preserve the current sound and prudent lending standards.
NL	- The tax deductibility of mortgage interest (MID) is gradually being reduced. It now stands at 50% and will be cut by 0.5 pp per year until 2020. From 2020 it will be reduced by 3 pp per year to reach a floor of 37% in 2023. MID is not available for interest-only mortgages. The announced acceleration of the reduction in MID between 2020 and 2023 has been turned into legislation (Belastingplan 2019). Nevertheless, the fiscal subsidy on home-ownership remains substantial. - In 2019 a limitation on the deductibility of interest payments ("earnings stripping")	None	None	- The LTV ratio for new mortgages has been gradually lowered and reached 100% in 2018. It will not be reduced further after 2018. - A cap on LTI ratios for mortgage loans was also introduced in 2013. - LTI rules are based on the residual purchasing capacity of a household, making the maximum loan value equal to about 400% of yearly gross income, excluding MID.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	was introduced as part of the implementation of the Anti-Tax Avoidance Directive. This reduces the incentive to take on debt for tax optimisation purposes and could help reduce corporate debt. - The recovery and resolution framework for insurance companies (the Act on Insurance Recovery and Resolution) was adopted on 27 November 2018 (in force from 1 January 2019), which should contribute to financial stability.			
AT	None	None	- Prudential standards for risk management and granting of foreign currency adopted since 2008 by banking supervisors (the Oesterreichische Nationalbank and Financial Market Authority) to curb foreign exchange lending to unhedged borrowers	- In September 2018 the Austrian Financial Market Stability Board issued a communication and quantitative guidance on sustainable real estate lending. The Board made the following recommendations: (i) the down payment by borrowers for real estate loans should not fall below a benchmark of 20%; (ii) newly originated mortgage loans should exceed 35 years only in exceptional cases; (iii) debt service should not exceed 30% to 40% of the net income of borrowers; and (iv) assessments of the creditworthiness of borrowers should be comprehensive and take account of all available information.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
PL	None	None	None	- A risk weight of 150% is applied to exposures secured by residential property where the principal or interest instalments depend on changes in exchange rates, provided the borrower's income is in a different currency. - LTV ratios: 80% as of 2017, down from 90% in 2015. Potential rate of 90% if the additional part (above 80%) is insured/collateralised using funds in bank accounts. - As of Q4 2017 loan maturities are capped at 25 years. However, a borrower may ask for a maturity of up to 35 years (although the lender must assess creditworthiness assuming a maturity of 25 years).
PT	- Expedited insolvency proceedings: technology used to (i) accelerate proceedings and (ii) ensure transparency in judicial sales procedures. - Flexibility for tax credit to be restructured and creation of a common decision-making body between social security and tax authority to participate in company restructuring negotiations. - Creation of an early warning mechanism for entrepreneurs – compares various	- In line with SSM recommendations, Portuguese banks have submitted five-year NPL reduction plans forecasting at least a 50% reduction in NPL stocks over the coming years. - On-site and off-site inspections to segment banks' NPL portfolios by type, vintage, size and sector of activity.	- Initiatives to promote coordination between creditors to accelerate credit restructuring and/or NPL sales; the flagship measure is a "coordination platform". - Financing lines/guarantees for viable companies that go through the restructuring process. - Creation of credit recovery funds, which allow banks to dispose of bad assets through dedicated marketable	- Recommendation on new credit agreements for consumers, which places limits on new credit relating to residential immovable property, credit secured by a mortgage or equivalent guarantee, and consumer credit agreements concluded as of July 2018; this measure aims to promote the adoption of prudent credit standards in order to enhance the resilience of the financial sector and the sustainability of households' financing, thereby minimising defaults. i. Maximum LTV ratios: a) 90% for credit for own permanent residence; b) 80% for credit for

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	indicators to past levels and industry benchmarks to create awareness and promote preventive approach. - Measures to facilitate the transfer of NPL portfolios – regime allowing mass registration of the transfer of collateral and mass communication to courts in insolvency proceedings. - Creation of new insolvency practitioners acting as mediators for companies in "recovery" mode and assisting debtors in both in-court and out-of-court restructuring procedures. - Framework allowing majority creditors (holding at least two-thirds of debtor's liabilities) to convert their credit into share capital without the consent of shareholders, outside of insolvency proceedings (in certain strictly specified situations). - Framework for voluntary out-of-court restructuring for recovery of companies (*Regime Extrajudicial de Recuperação de Empresas* – RERE). - Ability for banks to fiscally recognise write-offs (to a larger extent than before).		investment funds, boosting the secondary market for bad assets. - Creation of incentives to develop the secondary market for NPLs by enabling new servicing companies to enter the market.	purposes other than own permanent residence; c) 100% for credit for purchasing immovable property held by credit institutions and for property financial leasing agreements. ii. Maximum DSTI ratio of 50%, with the following exceptions: a) up to 20% of the total amount of credit granted by an institution in a year may have a maximum DSTI ratio of 60%; b) up to 5% of credit granted may exceed that 60% limit. For variable and mixed interest rate agreements, the impact of an interest rate rise should be taken into account, as should a reduction in the borrower's net income if the borrower will be aged 70 or over at the end of the contract. iii. Original maturity of loans: a) maximum of 40 years for new credit agreements secured by a mortgage; b) average maturity of new credit agreements should be 30 years by 2022; c) maximum of ten years for new consumer credit agreements. All credit agreements must have regular principal and interest payments. The relevant limits must be observed simultaneously. The recommendation follows the principle of "comply or explain", and its implementation will be monitored on at least an annual basis.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
RO	None	- Measures and recommendations adopted by the banking supervisor (the central bank) since 2013 to clean up bank balance sheets: - Removal of uncollectable NPLs fully covered by provisions - Full coverage with provisions for all NPLs for which repayment of principal and/or interest is overdue by more than 360 days and no legal action has been taken against borrowers - Up to 90% of NPLs covered with provisions for exposures to insolvent borrowers - Enhanced collateral valuations – several valuations since 2013 - Recommendation (adopted in 2016) calls for full coverage with provisions for unsecured NPLs where repayment of principal and/or interest is overdue by more than 180 days, followed by removal of exposure from balance sheet.	- Measures adopted by banks to improve their arrears management capacity and recovery of collateral.	- In October 2018 Banca Naţională a României adopted measures aimed at limiting household indebtedness. Under those new provisions, the maximum level of indebtedness is 40% of net income for RON-denominated loans and 20% for foreign currency loans. The maximum level of indebtedness can be raised by 5 pp for first-time homebuyer loans for borrower-occupied dwellings. The total level of indebtedness is measured as the ratio of monthly debt service to monthly net income. - The new systemic risk buffer thresholds, which was calibrated by taking into account the coverage ratios and non-performing loan ratios of individual credit institutions (i.e. compared to a benchmark NPL ratio of 5%), have been in use since January 2019. The applicable buffer rates range from 0% to 2% as follows: 0% for three banks, 1% for ten banks and 2% for 12 banks.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
SI	None	- In 2015 Banka Slovenije issued guidance asking banks to specify annual targets and strategies for NPL reduction, which are regularly revised. - Since 2015 the central bank's guidelines have recommended that banks derecognise assets within a specific time frame (i.e. time-dependent write-offs), which in turn depends on the type of asset and exposure.	None	- In October 2018 Banka Slovenije recommended that: - the LTV ratio does not exceed 80% when the credit agreement is concluded for new housing loans secured by residential real estate. - for new consumer and housing loans, the DSTI ratio does not exceed the following values when the credit agreement is concluded: (a) for borrowers with monthly income of €1,700 or less: 50%; (b) for borrowers with monthly income of more than €1,700: 50% for the portion of income up to €1,700 inclusive, and 67% for the portion of income exceeding €1,700. - the repayment period or maturity for new consumer loans does not exceed 120 months when the credit agreement is concluded.
SK	- In 2017 the Slovak Government took steps to improve the deficient insolvency framework. Slovakia is one of the EU countries with the slowest insolvency	None	None	- Národná banka Slovenska has legal powers to set borrower-based limits and used them extensively in 2017:

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
	resolution procedures. It is also one of the costliest as a percentage of the insolvency estate.			1) Maturity limits: new mortgages cannot have a maturity longer than 30 years; a maximum of 10% of new loans can have maturities longer than 25 years; and a maximum of 20% can have maturities longer than 20 years. Maturities on new consumer loans cannot exceed eight years. 2) Maximum LTV ratio of 90% and the number of new mortgages that can exceed 80% is to be phased down from 40% in June 2018 to 20% in July 2019. 3) Maximum DTI ratio of 8, and the amount of loans that can exceed that threshold is to be phased down from 20% in July 2018 to 10% in January 2019. 4) Maximum DSTI ratio of 80%: loan instalments (for both new and existing loans, subject to assumed interest rate increases of 2 pp per year if interest rate is not fixed) cannot exceed 80% of the borrower's disposable income, which is defined as net income minus the minimum subsistence amount.
FI	None	- Finnish Financial Supervisory Authority (FIN-FSA) has made a conditional decision on raising the minimum risk weight level for residential mortgage loans to 15%. That decision is applicable to banks that have	None	- FIN-FSA has raised the maximum loan-to-collateral (LTC) ratio for loans (other than for first-time homebuyers) by 5 pp to 85%. The maximum LTC ratio for residential mortgage loans to first-time homebuyers remains

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
		adopted the internal ratings-based approach for the calculation of capital requirements.		unchanged at 95%.
SE	None	- In 2018 the supervisor revised the conditions for imposing a risk weight floor on residential mortgages in Sweden for banks using internal risk models, with the aim of retaining the level of prudential requirements that applied prior to one of the major Swedish banks leaving Sweden. This was also aimed at maintaining a level playing field among banks in the domestic market for residential mortgages.	- Swedish banks benefit from high levels of asset quality. In recent years the average NPL ratio has been below 1%, making it one of the lowest in the EU. Borrowers' disposable income and payment discipline are not the only things that contribute to this phenomenon. A substantial role is also played by the very efficient public framework for debt enforcement, which centres around the Swedish Enforcement Authority (Kronofogden). Most impaired loans are resolved in less than 12 months and do not pile up in banks' balance sheets.	- Sweden has activated capital buffers (CCyB and systemic risk buffers), as well as specific pillar requirements, notably for real estate. - Macroprudential measures adopted to address the buoyancy in real estate markets and rising household debt include the introduction of a maximum LTV ratio of 85% for mortgages in 2010, the gradual raising of banks' risk weight floors for mortgages in 2013 and 2014, and the introduction of a formal mortgage amortisation requirement in June 2016. Additionally, at end-2017 Sweden adopted legislation to enhance the macroprudential authority's legal mandate. As of March 2018 heightened amortisation requirements have applied to households with an LTV ratio in excess of 70% and/or a DTI ratio in excess of 4.5. While these steps have improved the resilience of the banking sector, they have not been sufficient to rein in household debt growth.

	Overview of risk reducing measures adopted at national level			
	(i) legal/judicial, tax or other reforms	**(ii) prudential supervisory actions**	**(iii) NPL management initiatives**	**(iv) macroprudential measures**
UK	- The Bank of England and other regulators are working closely with banks and other financial sector institutions in order to ensure adequate contingency planning in relation to the UK's withdrawal from the EU. - The UK government plans to ensure an adequate legal and regulatory framework for financial services via the EU Withdrawal Bill and related secondary legislation.	- Regular bank stress tests performed by the Bank of England since 2014 have reinforced banks' capital buffers and provisioning levels. - In 2017 the Financial Policy Committee (FPC) announced measures to prevent excessive growth in the number of highly indebted households with mortgage loans. - In May 2017 the Bank of England continued its implementation of the bank resolution framework by publishing estimates of the MREL for bail-in for the largest UK banks.	- The Royal Bank of Scotland and Lloyds Banking Group, the two systemically important banks in which the state acquired major participations in the aftermath of the Great Recession, have been restructured and cleaned up in terms of legacy assets.	In 2017 the Bank of England's FPC increased the countercyclical buffer from 0% to 1%.

Annex III: Methodological notes and caveats

ECB-SSM indicators

Data sources

- The data used for the analysis in this report come from the EBA ITS on supervisory reporting (FINREP and COREP) and the SSM STE data collections.

Scope of the analysis

- The sample of institutions covered by this report (i) includes significant institutions (SIs) at the highest level of consolidation within the BU, (ii) excludes SIs that are branches of non-SSM banks (because only a subset of information is reported for these institutions) and (iii) excludes SIs that are subsidiaries of other SSM SIs to avoid double-counting.
- For the MS-specific analysis, SSM SIs that are subsidiaries of an SSM parent are included.

Time series

- Time series cover the Q4 2014-Q4 2018 reporting period.
- **Full sample approach**: The sample includes all banks meeting the above criteria.[28]
  The number of entities per reference period is reported in the table below and reflects changes resulting from amendments to the list of SIs following assessments by ECB Banking Supervision, in addition to mergers and acquisitions.

Reference period	Full sample (BU charts)
Q4 2018	110
Q3 2018	109
Q2 2018	109
Q1 2018	109
Q4 2017	111
Q3 2017	114
Q2 2017	114
Q1 2017	118
Q4 2016	121
Q3 2016	122
Q2 2016	124
Q1 2016	123
Q4 2015	117
Q3 2015	102
Q2 2015	102
Q1 2015	104
Q4 2014	101

For the MS-specific charts, which relate to Q4 2014, Q2 2018 and Q4 2018, the number of entities is higher than for the SSM as a whole (full sample) owing to the inclusion of SIs that

[28] Since Lithuania did not join the SSM until January 2015, there are no country data for Lithuania for Q4 2014.

are subsidiaries of an SSM parent. In those charts, data for Q4 2014 relate to 106 entities, for Q2 2018 relate to 114 entities and for Q4 2018 relate to 115 entities.

Charts metric

For each indicator, two types of graph are produced:

- **BU aggregate time series:** These charts show the weighted-average indicators for all SSM SIs as well as some measures of dispersion (the 25th, the 50th – median – and the 75th percentiles).
- **MS evolution since Q4 2014:** These charts report weighted-average indicators for each MS for the periods Q4 2014, Q2 2018 and Q4 2018.

Ratios are computed using a **composite bank approach**, meaning that numerators and denominators are summed up before calculating the ratios.

Confidentiality criteria

To ensure the confidentiality of the data displayed, MS-level data are only displayed when:

- there are at least three institutions in the MS; and
- no institution represents more than 85% of both the numerator and the denominator of the ratio, irrespective of the number of institutions per data value.

Treatment of missing data

- For the **solvency and liquidity ratios**, both the numerator and the denominator need to have values for a bank to be included in the analysis. For **NPLs,** missing values are treated as zeros.
- For the **liquidity ratios**, some SIs are excluded from the aggregation in periods when they have not reported the relevant variables.

General caveats

- Changes in the indicators from one reference period to another can be influenced by the changes in the sample of reporting institutions.
- The analysis presented in this document reflects the availability and quality of reported data at the time the analysis was conducted.
- In 2015 the calculation methodology for the Basel III leverage ratio was changed in the EU via Commission Delegated Regulation (EU) 2015/62. The quantitative impact of these definitional changes is, however, considered to be moderate on aggregate, as assessed by the EBA in its “Report on impact of differences in leverage ratio definitions” (4 March 2014).

SRB indicators

Data sources

- Calculations and charts are based on SRB data from the Liability Data Reports as of 31 December 2017 and correspond to the applicable SRB MREL policy for the relevant MREL decisions. The SRB collects the Liability Data Reports and updates MREL decisions on an annual basis. Computations based on data as of 31 December 2018 will be available for the next update of this report.

- Compared to the previous data transmitted by the SRB in the context of this report, it should be noted that these data are based on decisions taken or under finalisation while previous data were made on impact assessment, under a series of assumptions. The sample of banks (87 against 101) also differs since it is adjusted to the scope of 2019 MREL decisions and notably exclude host cases, promotional banks and banks under simplified obligations.

Scope of the analysis

- Data cover groups under the direct SRB remit that are either likely to go through resolution if they are declared to be failing or likely to fail, or may be subject to liquidation under national insolvency proceedings, for which a **MREL decision has been or is about to be adopted** as part of the 2018 resolution planning cycle.

- The sample is a subset of SRB banks and comprises a total of 87 banking groups and, where relevant, resolution groups in the case of multiple point of entry structures. Two MSs are excluded on the basis that either no points of entry – subject to external MREL – are located in these jurisdictions, or no binding decisions have been taken yet. Five MSs are excluded because the number of banks in the sample is less than three.

- Computations are based on the fully loaded TREA, in line with the SRB MREL policy, and take into account **bank-specific adjustments** to the target and the stock of eligible instruments to reflect the impact of the resolution strategy and the application of the SRB MREL policy (multiple point of entry strategy, resolution tools, liabilities governed by third-country law, structured notes, non-covered non-preferred deposits, etc.).

- MREL decisions are based on the applicable SRB MREL policy for each type of banks as part of the 2018 resolution planning cycle.

  For banking groups without resolution college:

  - Expected subordination is set at a level of 12% of the TREA plus combined buffer requirement for O-SIIs and existing prudential requirements for other banks, without prejudice to the effects of structural subordination.

  - MREL-eligible instruments are taken into account at a consolidated level.

  For banking groups with resolution college:

    - Required subordination is set at a level of 16% of the TREA plus combined buffer requirement for G-SIIs, and 14% of the TREA plus combined buffer requirement for other banks, without prejudice to the effects of structural subordination.

    - MREL-eligible liabilities are taken into account at the level of the point of entry only, in addition to the consolidated own funds instruments.

- All averages are weighted by the TREA.

Confidentiality criteria

To ensure the confidentiality of the data displayed, MS-level data are only displayed when:

- there are at least three institutions in the MS; and

- no institution represents more than 85% of both the numerator and the denominator of the ratio, irrespective of the number of institutions per data value.

MSs subject to these criteria have been regrouped and labelled in graphs as “others”.

General caveats

- Data refer to MREL decisions taken or under finalisation during the present resolution planning cycle.

- Individual MREL targets are not included in this exercise.

Annex IV: Formulae of ECB supervisory banking indicators

Indicator	Formula	Taxonomy
Fully loaded Common Equity Tier 1 (CET1) capital ratio	sum(C_01_00_r020_c010,-C_05_01_r010_c010,-C_01_00_r440_c010,MIN(sum(C_01_00_r530_c010,-C_01_00_r740_c010,-C_05_01_r010_c020,-C_01_00_r720_c010,MIN(sum(C_01_00_r750_c010,-C_01_00_r970_c010,-C_05_01_r010_c030),0)),0))/sum(C_02_00_r010_c010,-C_05_01_r010_c040)	All
Fully loaded Tier 1 (Tier 1) capital ratio	sum(C_01_00_r020_c010,-C_05_01_r010_c010,-C_01_00_r440_c010,C_01_00_r530_c010,-C_01_00_r740_c010,-C_05_01_r010_c020,-C_01_00_r720_c010,MIN(sum(C_01_00_r750_c010,-C_01_00_r970_c010,-C_05_01_r010_c030),0))/sum(C_02_00_r010_c010,-C_05_01_r010_c040)	All
Fully loaded total capital ratio	sum(C_01_00_r020_c010,-C_05_01_r010_c010,-C_01_00_r440_c010,C_01_00_r530_c010,-C_01_00_r740_c010,-C_05_01_r010_c020,-C_01_00_r720_c010,C_01_00_r750_c010,-C_01_00_r970_c010,-C_05_01_r010_c030)/sum(C_02_00_r010_c010,-C_05_01_r010_c040)	All
Fully loaded liquidity coverage Ratio (LCR)	Since Q3 2016: C7600a_r010_c010/C7600a_r020_c010	v 2.4 onward
	Before Q3 2016: STE template	N/A
Fully loaded leverage ratio	Since Q3 2016: C4700_r310_c010/C4700_r290_c010	v 2.4 onward
	Before Q3 2016: C4500a_r110_c030/ (sum (C4500a_r010_c030 to C4500a_r100_c030, C4500a_r130_c030, C4500a_r150_c030) - C4500_r160_c030)	v2.3 and earlier
Net stable funding ratio (NSFR)	STE template	N/A
Gross NPE ratio	F1800a_r330_c060 /F1800a_r330_c010	v2.6 and earlier
	sum(F1800a_r330_c060, F1800a_r335_c060) /sum(F1800a_r330_c010, F1800a_r335_c010)	v2.7
Gross NPL ratio	sum(F1800a_r070_c060, F1800a_r250_c060) /sum(F1800a_r070_c010, F1800a_r250_c010)	v2.6 and earlier
	sum(F1800a_r070_c060, F1800a_r191_c060, F1800a_r221_c060) / sum(F1800a_r070_c010, F1800a_r191_c010, F1800a_r221_c010)	v2.7
Net NPL ratio	sum(F1800a_r070_c060, F1800a_r250_c060,F1800b_r070_c150, F1800b_r250_c150)/sum(F1800a_r070_c010, F1800a_r250_c010,F1800b_r070_c130, F1800b_r250_c130)	v2.6 and earlier
	sum(F1800a_r070_c060, F1800a_r191_c060, F1800a_r221_c060, F1800b_r070_c150, F1800b_r191_c150, F1800b_r221_c150) / sum(F1800a_r070_c010, F1800a_r191_c010, F1800a_r221_c010, F1800b_r070_c130, F1800b_r191_c130, F1800b_r221_c130)	v2.7
NPL coverage ratio	-SUM(F1800b_r070_c150, F1800b_r250_c150) /SUM(F1800a_r070_c060, F1800a_r250_c060)	v2.6 and earlier
	-SUM(F1800b_r070_c150, F1800b_r191_c150, F1800b_r221_c150) / SUM(F1800a_r070_c060, F1800a_r191_c060, F1800a_r221_c060)	v2.7
Collateral coverage ratio	sum(F1800a_r070_c200,F1800a_r250_c200) /sum(F1800a_r070_c060, F1800a_r250_c060)	v2.6 and earlier
	sum(F1800a_r070_c200,F1800a_r191_c200,F1800a_r221_c200) / sum(F1800a_r070_c060, F1800a_r191_c060, F1800a_r221_c060)	v2.7