

29.3.2023

Public

Appendix to the 29 March 2023 decision by the FIN-FSA Board: Basis for imposing the systemic risk buffer, values of related indicators and information to be provided on the decision

1 Basis for imposing the requirement

Under Article 133 of the Capital Requirements Directive (CRD), a Member State may introduce a systemic risk buffer in order to prevent and mitigate long term non-cyclical systemic or macroprudential risks not covered by the Capital Requirements Regulation (CRR) or other macroprudential instruments in the meaning of a risk of disruption in the financial system with the potential to have serious negative consequences to the financial system and the real economy in a specific Member State.

Under chapter 10, section 4b, subsection 2 of the Act on Credit Institutions, this additional capital requirement may be imposed if the risk arising from long-term, non-cyclical factors threatening the financial system or the macroeconomy call for higher capital buffers and this risk threatens or has the potential of threatening the smooth operation and stability of the financial system at the national level. In addition, the imposition of the requirement may only have a minimal negative impact on the operation of the financial systems in other countries, and the risks in question may not have already been covered by other additional capital requirements.

In imposing the additional capital requirement (systemic risk buffer), the FIN-FSA shall take into account at least:

- the credit institutions sector's risk concentrations in lending, funding and other key banking activities;
- interconnectedness of domestic credit institutions in lending, payment transfers and other banking functions important to financial stability;
- interconnectedness of the credit institutions sector with foreign banking and financial systems, central counterparties and other financial market actors;
- interconnectedness of the credit institutions sector with risks to the financial systems of EU Member States and of other countries;
- size and concentration of the credit institutions sector as measured by the total assets of credit institutions, and concentration in lending and in acceptance of retail deposits;
- importance of the credit institutions sector in the intermediation of finance to the domestic private sector;
- indebtedness of credit institutions' largest customer groups;
- measures and facts mitigating the probability of severe disruptions in the financial system.

2 Values of indicators guiding the imposition of the requirement

The indicators on grounds of which the requirement to maintain a systemic risk buffer (SyRB) is imposed are specified in section 3 of the Ministry of Finance Decree on the Systemic Risk Buffer Requirement for the Credit Institutions Sector and Investment Firms. The values of the indicators for the risk factors considered are presented in the table below.

Table. Comparison of SyRB risk indicators with other EU countries and Finnish historical averages

29.3.2023

Public

Structural indicators – comparison of Finnish findings with the median for EU countries and the average of Finnish findings

Indicator	Median of EU countries	Finnish historical averages
1. Housing loans granted to domestic households as a share of total loans granted by the credit institutions sector to the private sector	Higher	Not higher
2. Credit institution's claims on construction and real estate companies as a share of credit institutions' total assets	Higher	Not higher
3. Credit institutions' domestic government bond assets relative to credit institutions' total assets	Not higher	Not higher
4. Domestic MFIs' share of ownership of bonds issued by domestic credit institutions	Not higher	Not higher
5. Credit institutions sector funding gap	Higher	Not higher
6. Aggregate balance sheet of subsidiaries and branches of foreign banks relative to GDP	Not higher	Not higher
7. Balance sheet of the credit institutions sector relative to nominal GDP	Higher	Higher
8. Loans granted by domestic credit institutions to households and non-financial corporation as a share of households' and non-financial corporations' total liabilities	Not higher	Higher
9. Household sector liabilities relative to household disposable income	Higher	Higher
10. Non-financial corporations' indebtedness relative to GDP	Higher	Higher

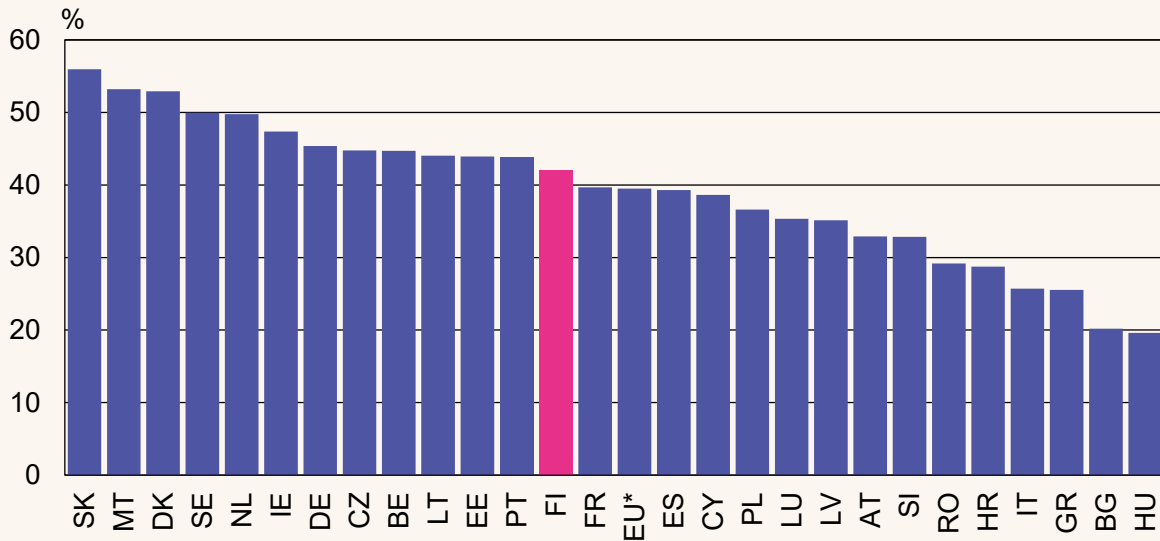
Based on data available on 2 March 2023.

Source: European Central Bank.

29.3.2023

Public

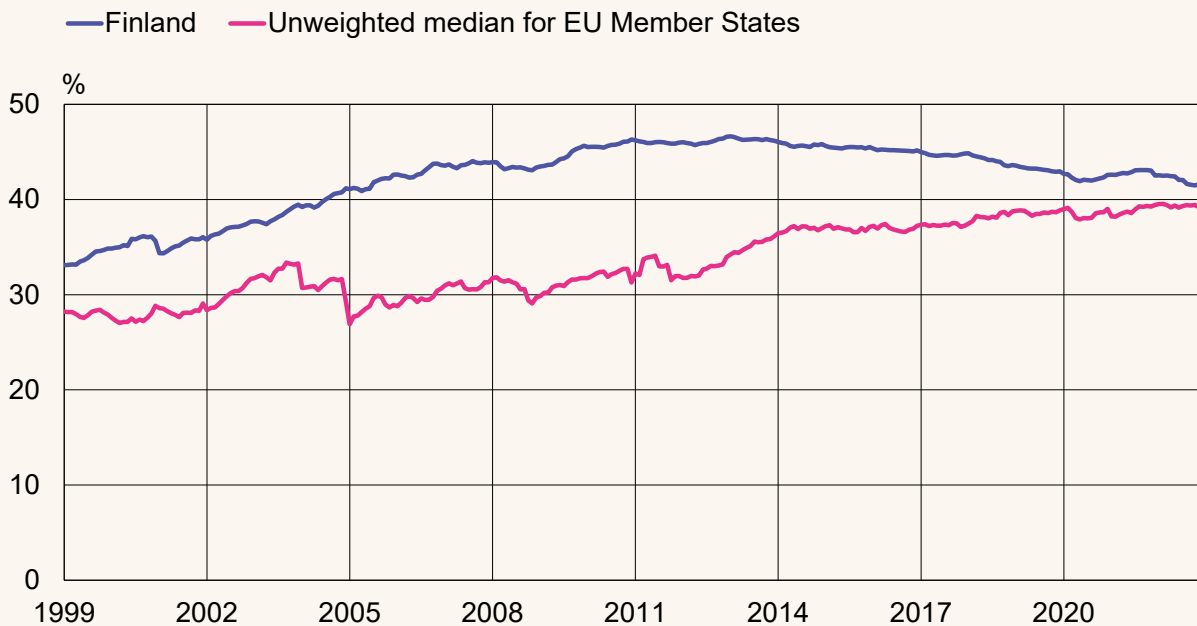
Housing loans granted to the domestic households as a share of total loans granted by the credit institutions sector to the private sector: EU countries



* Unweighted median.
Source: European Central Bank.

2.3.2023

Housing loans granted to domestic households as a share of total loans granted by the credit institutions sector to the private sector



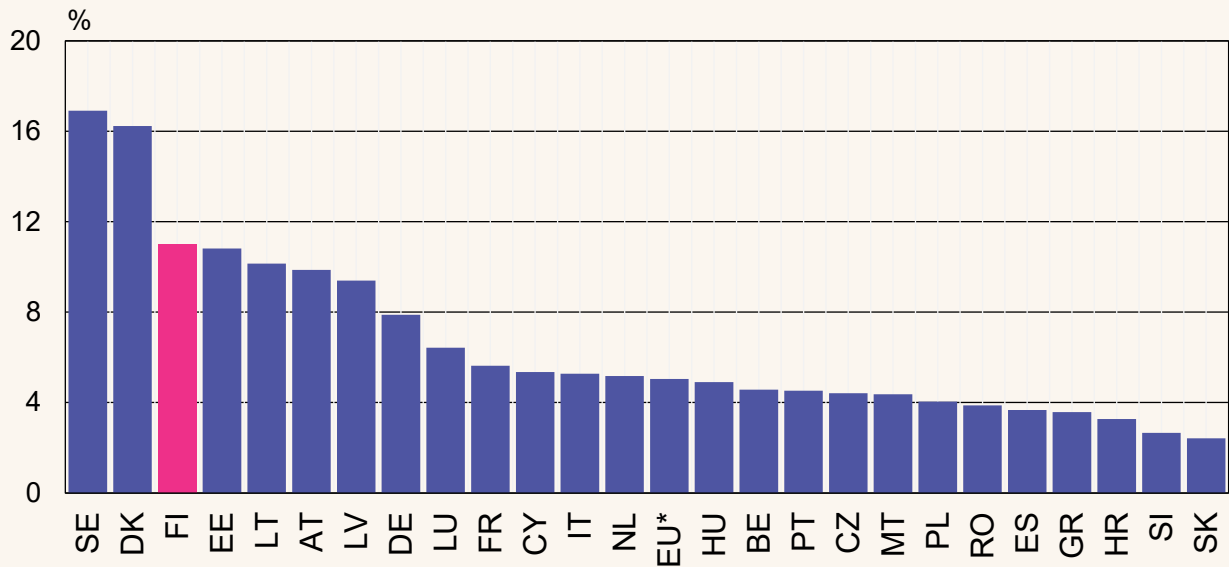
Source: European Central Bank.

2.3.2023

29.3.2023

Public

Credit institutions' claims on construction and real estate companies as a share of credit institutions' total assets: EU countries

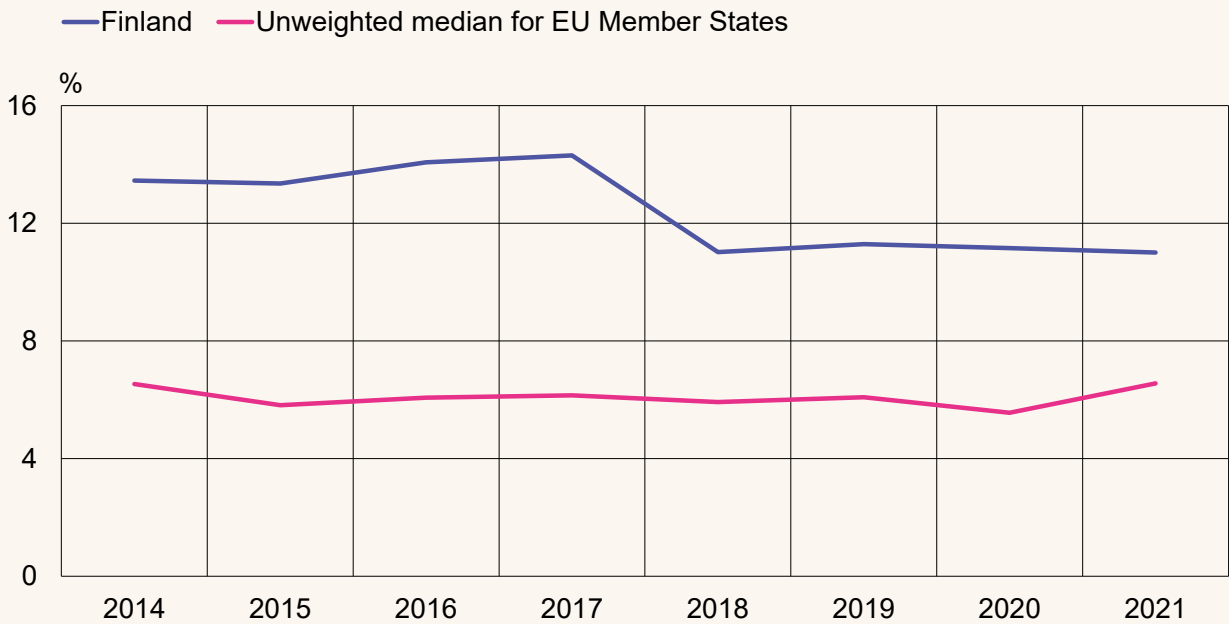


* Unweighted median.

Source: European Central Bank.

1.3.2023

Credit institutions' claims on construction and real estate companies as a share of credit institutions' total assets



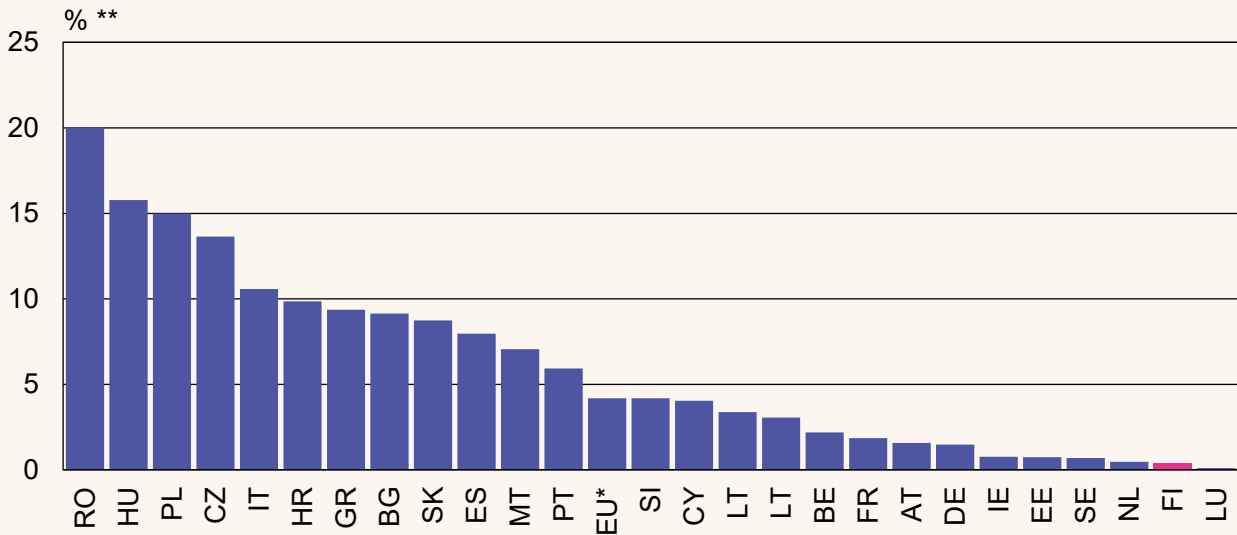
Source: European Central Bank.

1.3.2023

29.3.2023

Public

Credit institutions' domestic government bond assets relative to credit institutions' total assets: EU countries



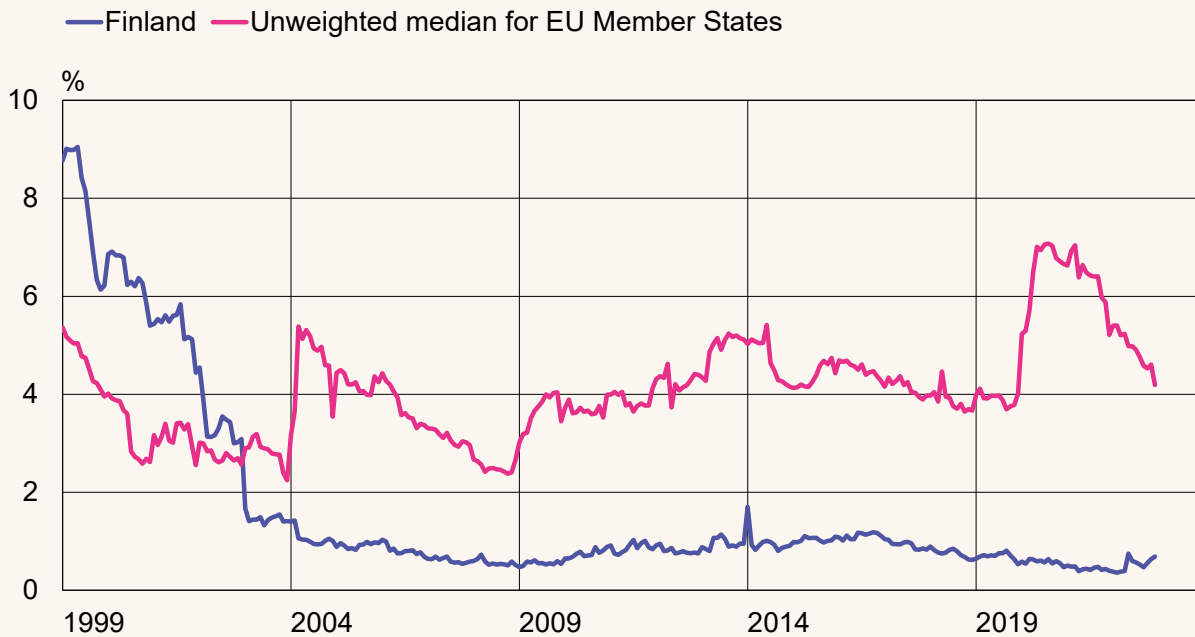
* Unweighted median.

** Of the balance sheet (excl. other claims incl. derivatives).

Source: European Central Bank.

1.3.2023

Credit institutions' domestic government bond assets relative to credit institutions' total assets



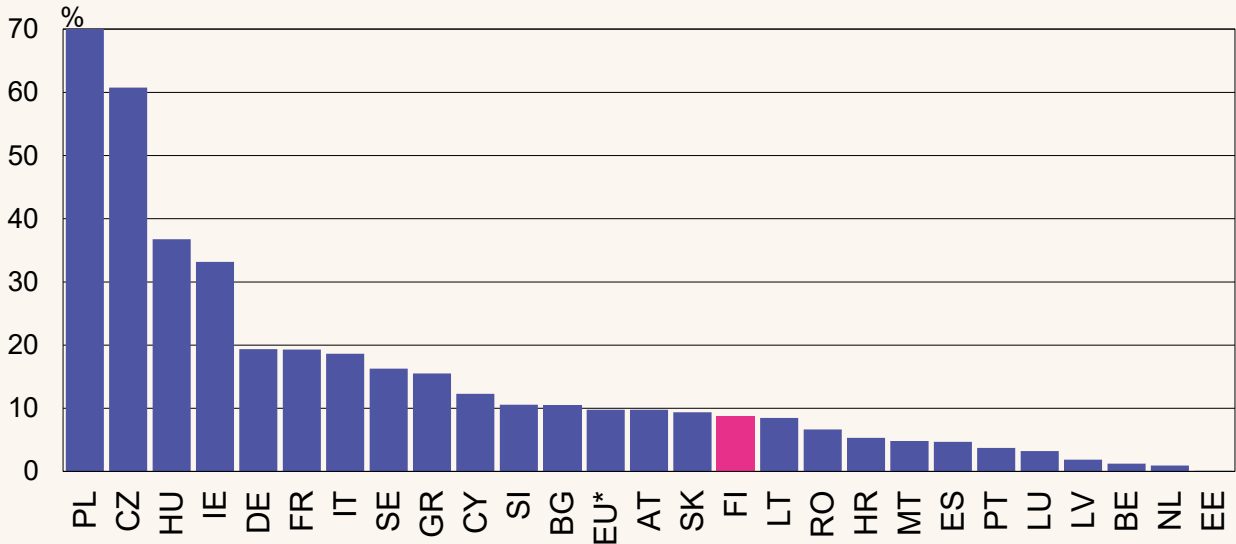
Source: European Central Bank.

1.3.2023

29.3.2023

Public

Domestic MFIs' share of ownership of bonds issued by domestic credit institutions: EU countries

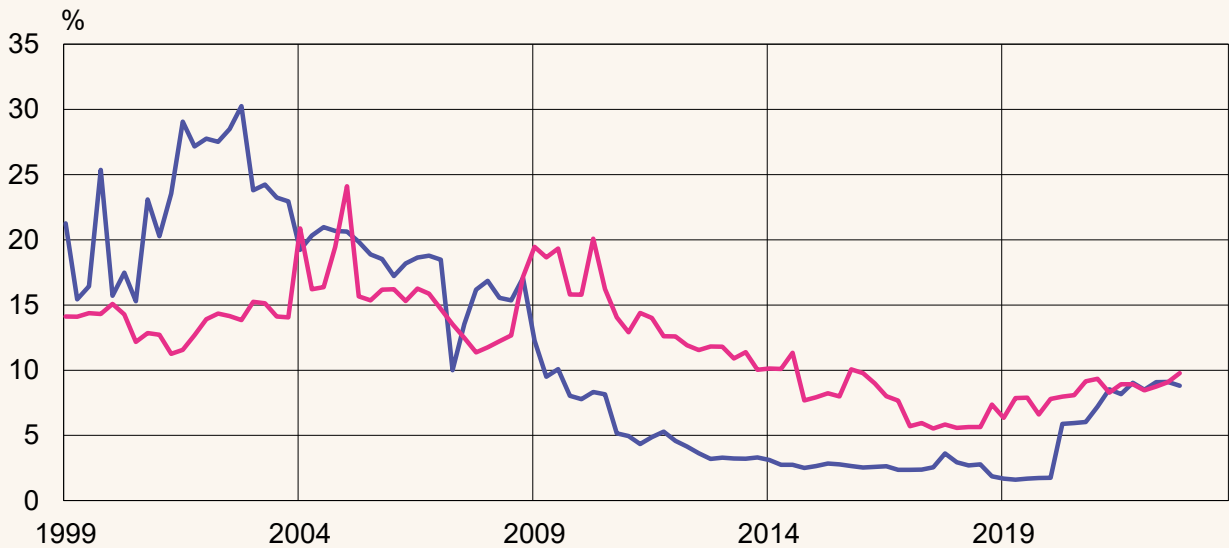


* Unweighted median.

Source: European Central Bank.

Domestic MFIs' share of ownership of bonds issued by domestic credit institutions

— Finland — Unweighted media for EU Member States

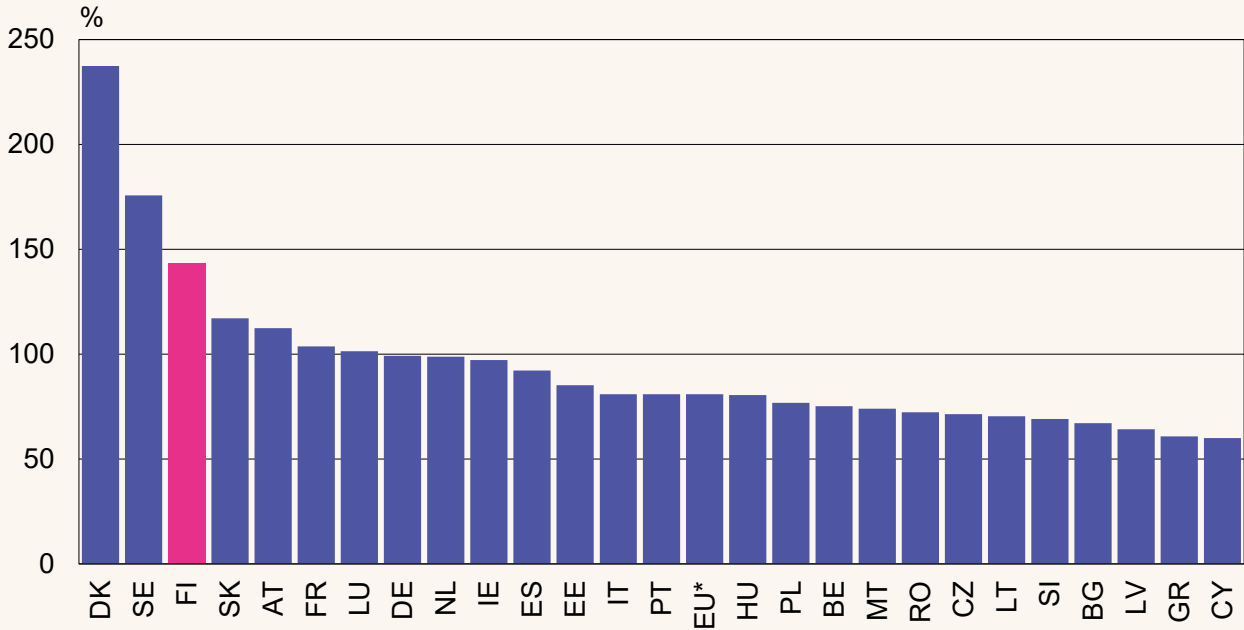


Source: European Central Bank.

29.3.2023

Public

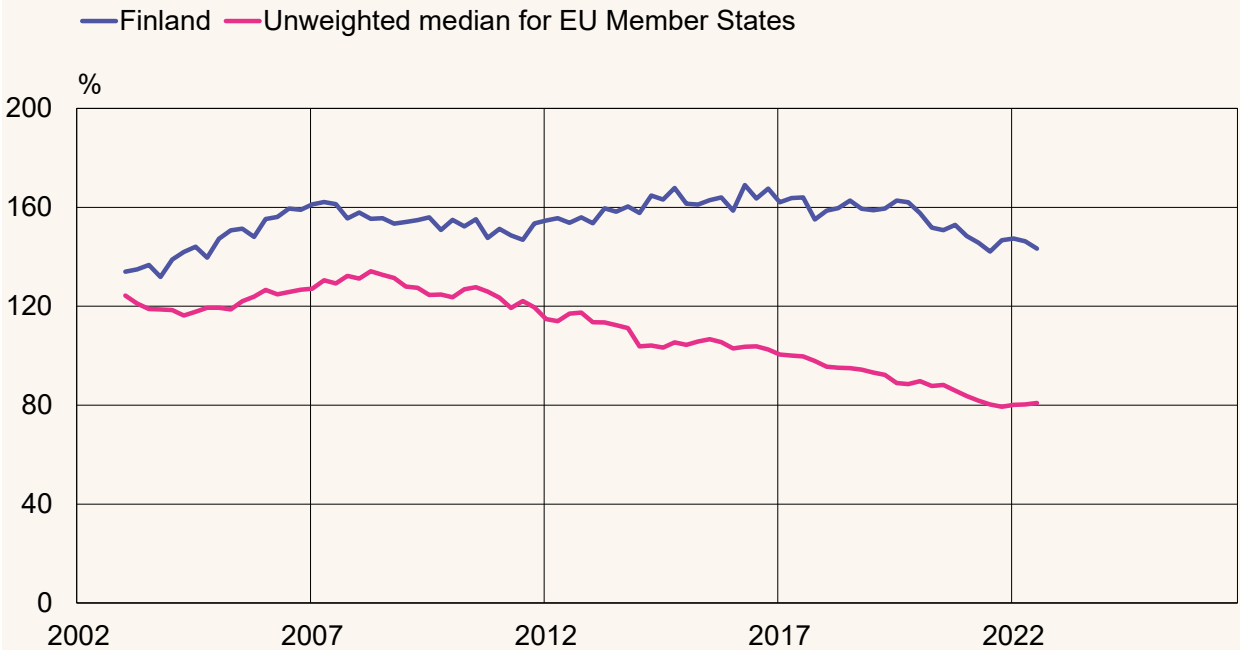
Credit institutions sector's funding gap: EU countries



* Unweighted median.
Source: European Central Bank.

2.3.2023

Credit institutions sector's funding gap



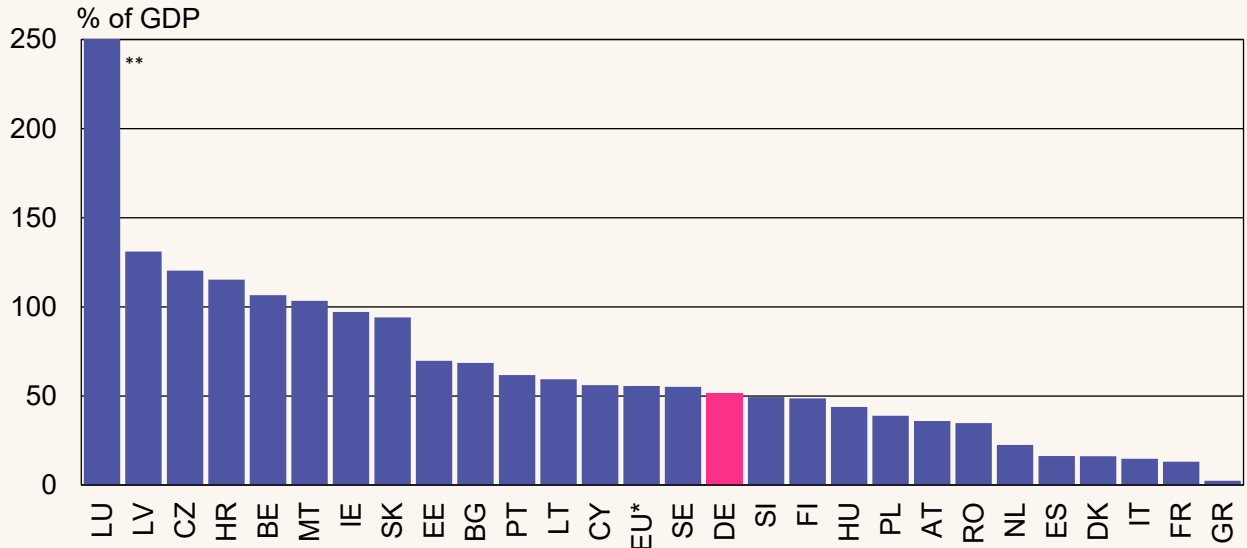
Lähde: Euroopan keskuspankki.

2.3.2023

29.3.2023

Public

Aggregate balance sheet of subsidiaries and branches of foreign banks relative to GDP: EU countries



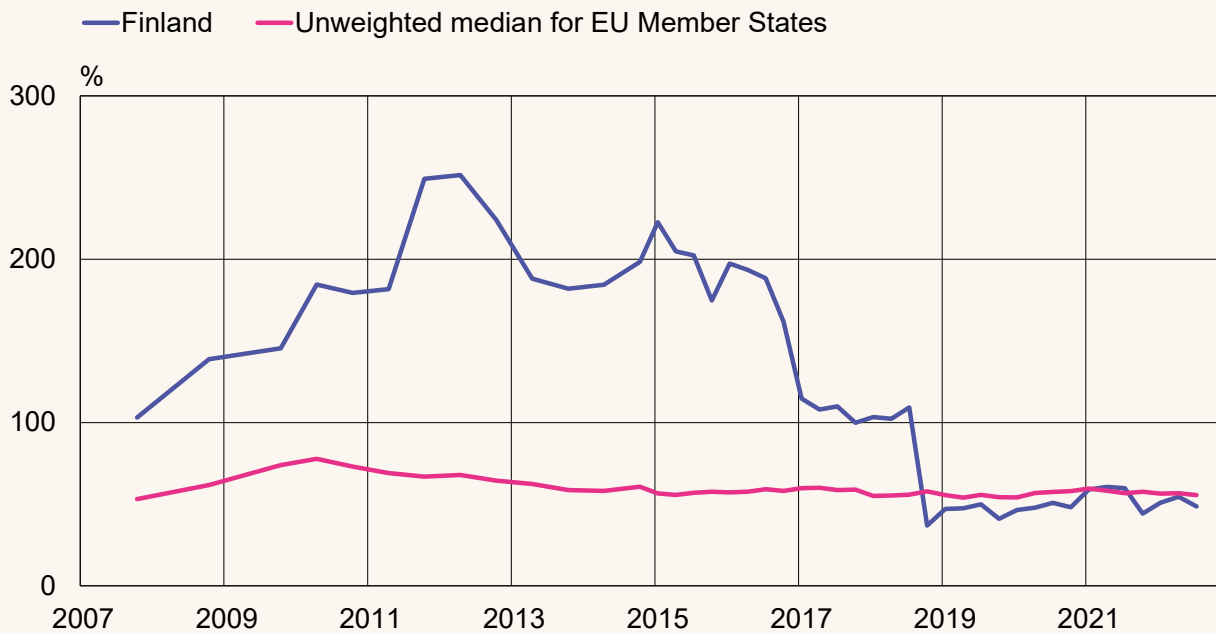
* Unweighted median.

** LU = 1 090.7 OF GDP.

Source: European Central Bank.

1.3.2023

Aggregate balance sheet of subsidiaries and branches of foreign banks' relative to GDP



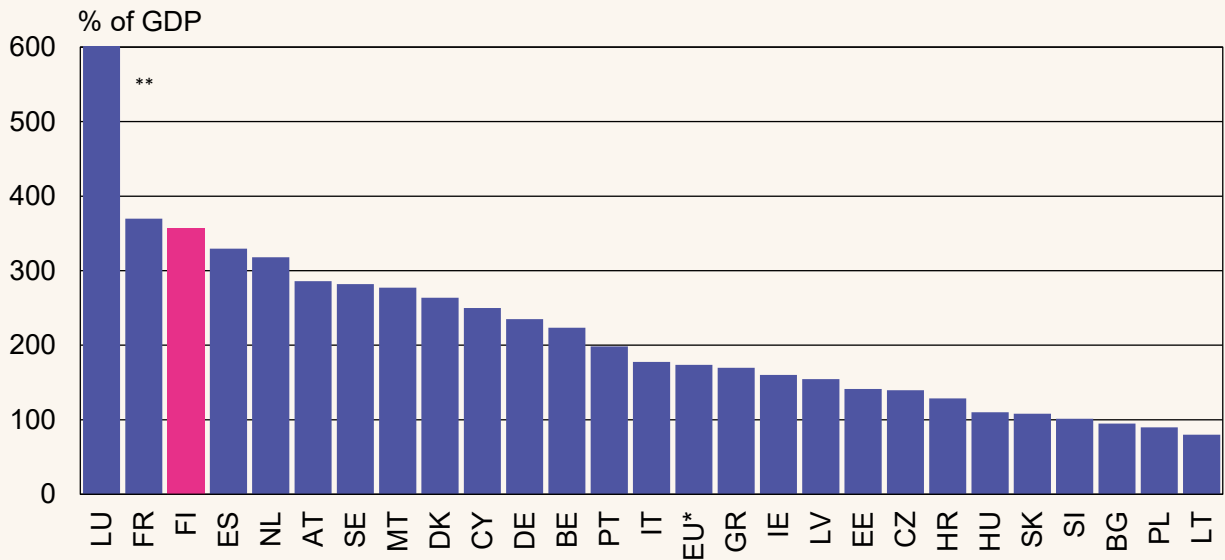
Source: European Central Bank.

1.3.2023

29.3.2023

Public

Balance sheet of the credit institutions sector relative to nominal GDP: EU countries



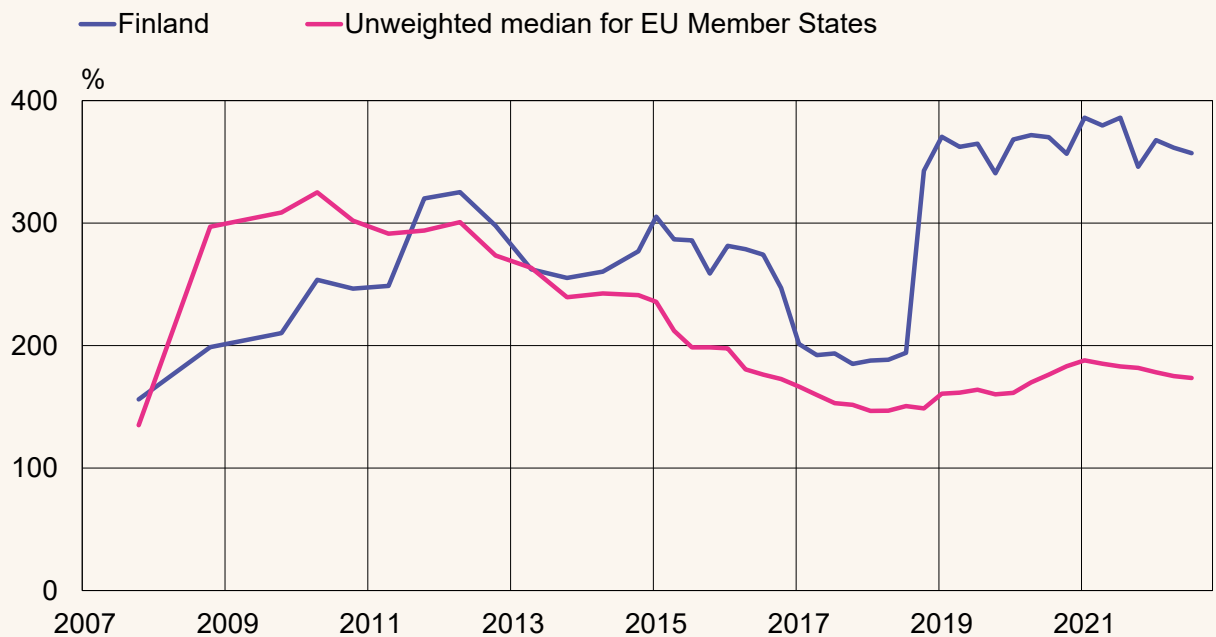
* Unweighted median.

** LU 1,260.2 of GDP.

Source: European Central Bank.

1.3.2023

Balance sheet of the credit institutions sector relative to nominal GDP



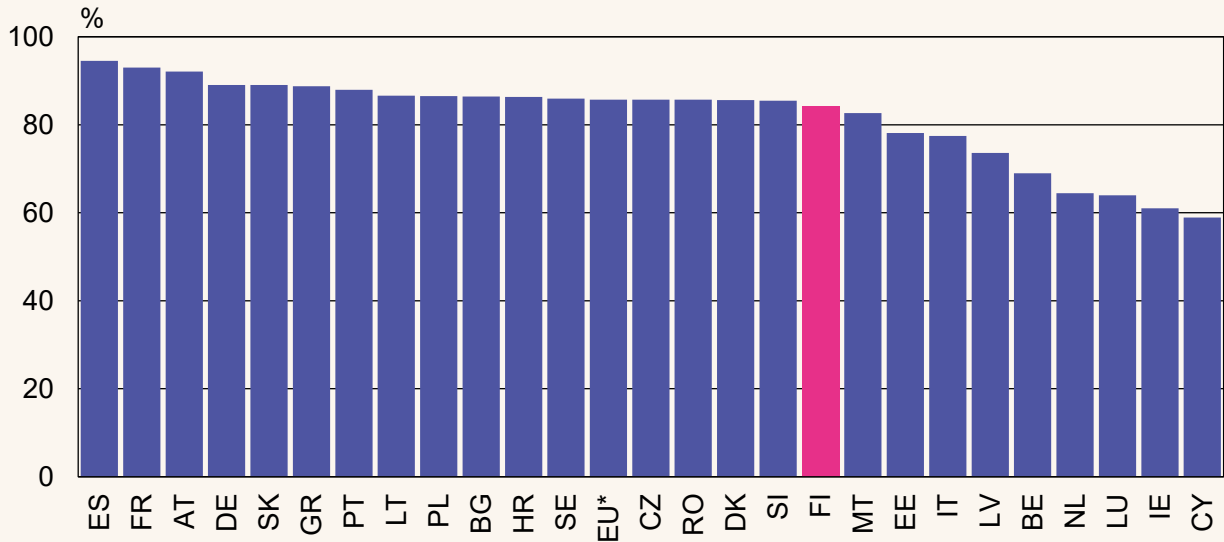
Source: European Central Bank.

1.3.2023

29.3.2023

Public

Loans granted by domestic credit institutions to households and non-financial corporation as a share of households' and non-financial corporations' total liabilities: EU countries

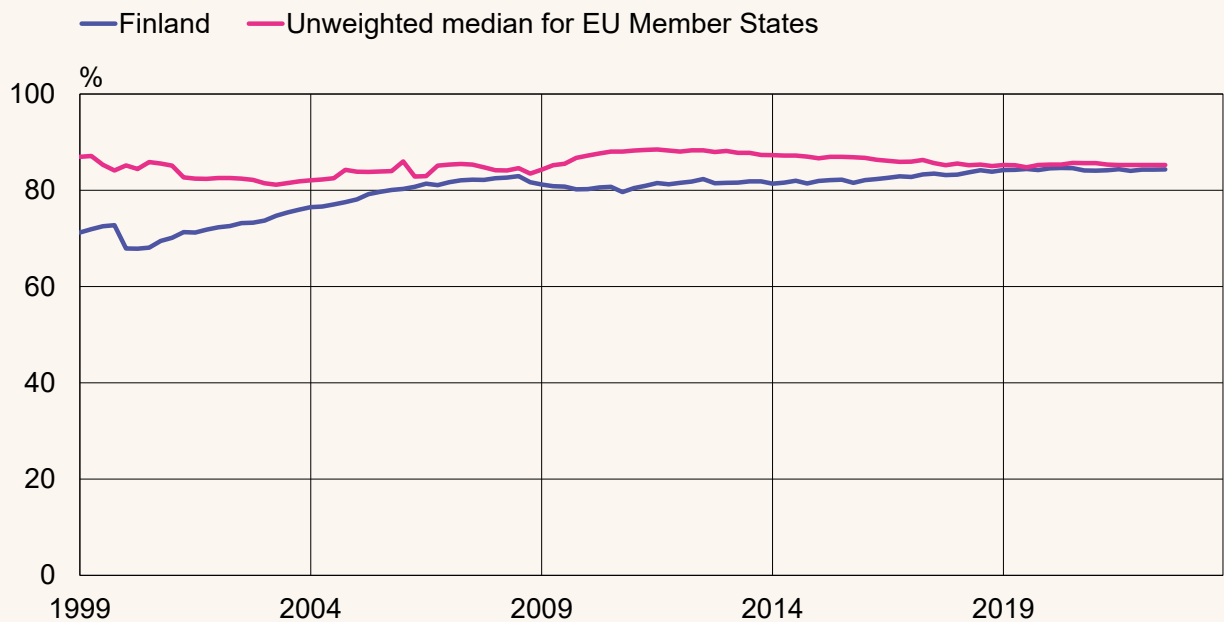


* Unweighted median.

Source: European Central Bank.

1.3.2023

Loans granted by domestic credit institutions to households and non-financial corporations as a share of households' and non-financial corporations' total liabilities



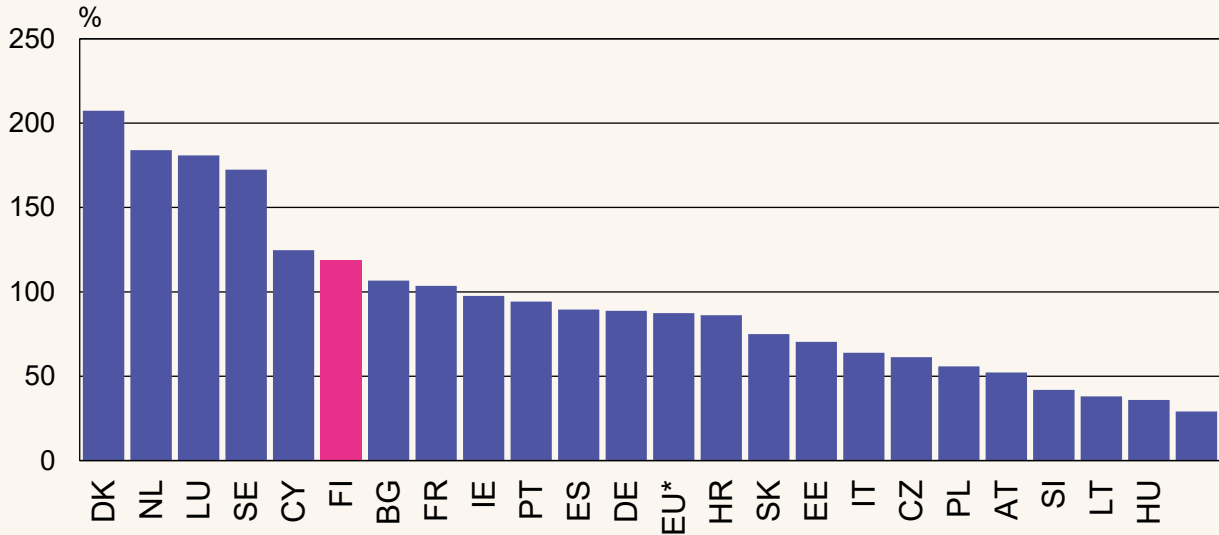
Source: European Central Bank.

1.3.2023

29.3.2023

Public

Household sector liabilities relative to households' disposable income: EU countries

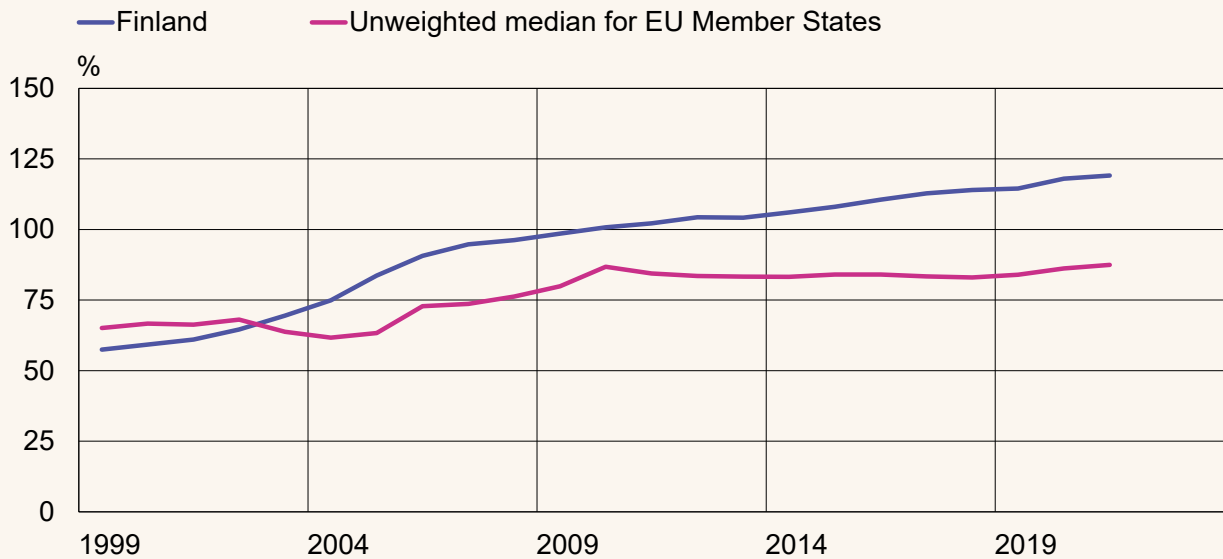


* Unweighted median.

Loans held by households' and non-profit institutions serving households, relative to the adjusted disposable gross income for these sectors.

Source: European Central Bank.

Household sector liabilities relative to households' disposable income



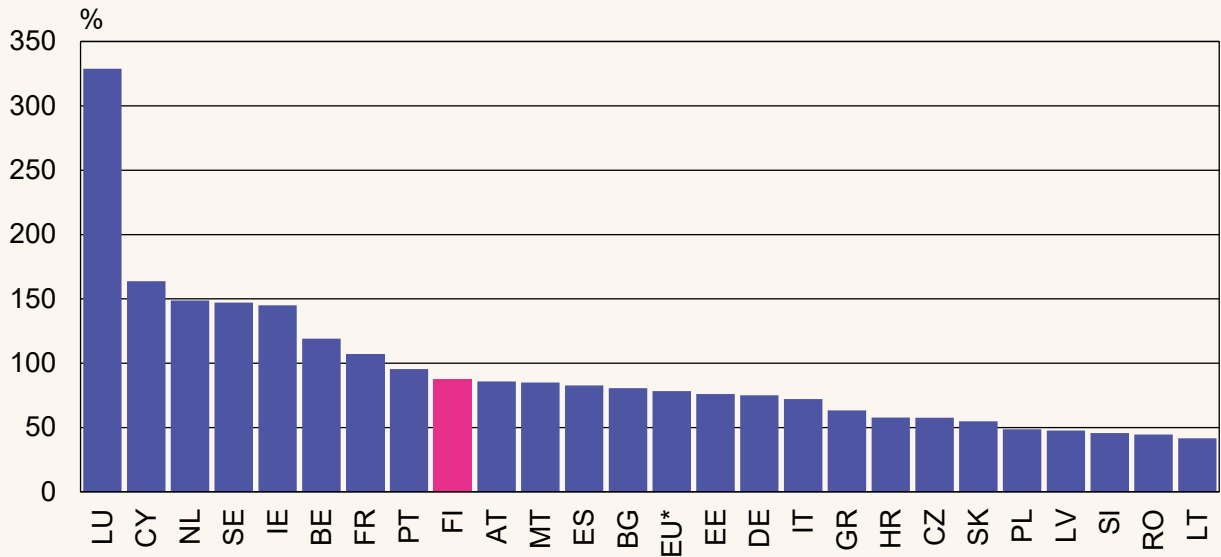
Loans held by households' and non-profit institutions serving households, relative to the adjusted disposable gross income for these sectors.

Source: European Central Bank.

29.3.2023

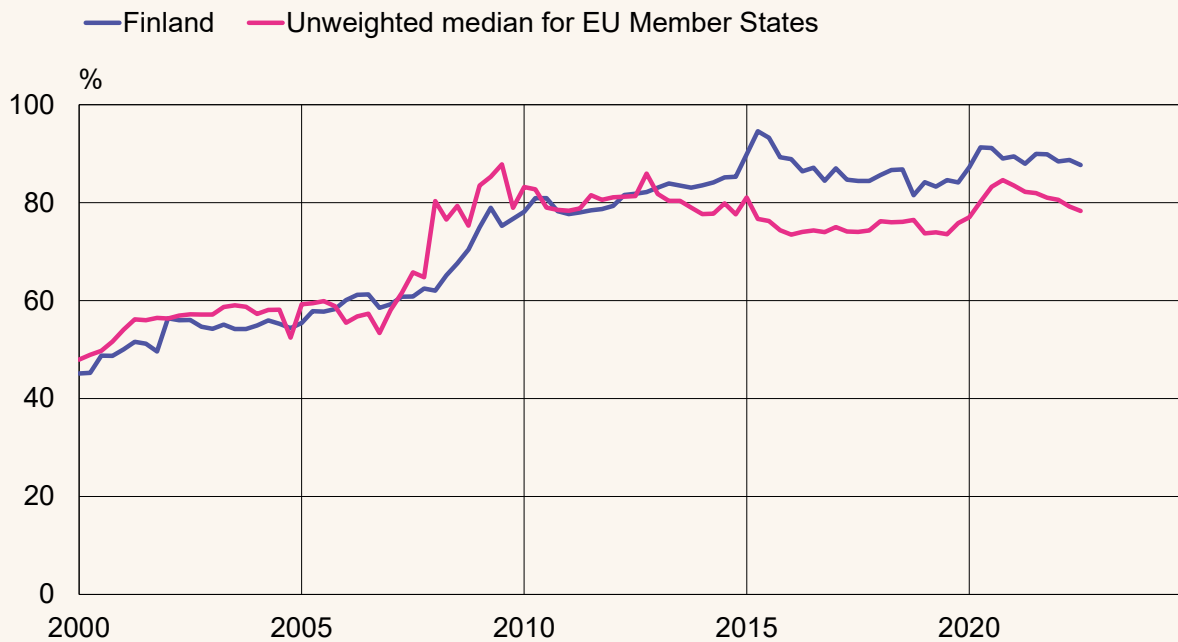
Public

Non-financial corporations' indebtedness relative to GDP: EU countries



* Unweighted median.
Source: European Central Bank.

Non-financial corporations' indebtedness relative to GDP



Source: European Central Bank.

29.3.2023

Public

Further information on the risk indicators for the SyRB requirement and their definitions, and on the criteria, statistical data sources and related time series-keys used in their calculation, is available on the Bank of Finland website: [Microsoft Power BI](#).

3 Information to be published on the decision

Section 4 of the Ministry of Finance Decree on the Systemic Risk Buffer Requirement for the Credit Institutions Sector and Investment Firms specifies the information to be published on the decision regarding the SyRB requirement.

Size of buffer requirement, changes on previous decision, effective date and period of validity (section 4, subsection 1, paragraphs 1 and 6)

The size of the SyRB requirement to be imposed (buffer rate) is 1.0%, i.e. the requirement will increase from the current 0.0% by 1.0 percentage points. As a result of the pandemic, the SyRB requirement was removed from all credit institutions on 6 April 2020. The decision sought to mitigate the negative effects of the pandemic on the stability of the financial markets and credit institutions' ability to finance the economy. The decision of the Board of the Financial Supervisory Authority (FIN-FSA) of 29 March 2023 will enter into force on 1 April 2024 and will be valid indefinitely.

Assessment of risk factors supporting buffer imposition, their significance and changes since the previous decision (section 4, subsection 1, paragraphs 2 and 3)

An assessment of the risk factors supporting the imposition of the SyRB requirement, of related risk levels, and of changes therein is provided in the decision of the FIN-FSA Board of 29 March 2023. A comparison of the risk factor-specific indicator values with peer countries and previous observations is presented in section 2 of this document.

The Finnish credit institutions sector is subject to many significant structural vulnerabilities which may lead to severe problems and crisis situations in the sector, thereby threatening the stability of the financial system as a whole. The risks posed by these threats require a sufficient level of capitalisation from the credit institutions sector, which constitutes a key criterion for setting the SyRB rate at above 0%. On the basis of the updated values of the risk indicators specified in the Ministry of Finance Decree and used in the quantitative assessment of the risk factors laid down in the Act on Credit Institutions, the Finnish credit institutions sector remains more vulnerable in terms of its structure than the credit institutions sectors of EU countries on average. The sector is structurally vulnerable especially because of its

- large size;
- cross-country interconnectedness;
- large risk concentrations relating to residential mortgage and real estate lending; and
- among its key customer groups, the high indebtedness of households in particular.

In addition, both in Finland and the peer countries, the credit institutions sector plays a major role in the provision of credit to the private sector. Out of the ten Finnish risk indicators, the values of six are above the median of the EU as a whole.

29.3.2023

Public

Of the particularly significant risk factors for structural vulnerability, the indicators suggest that the risks stemming from household indebtedness have increased since the previous decision of the FIN-FSA Board taken in 2020. As regards the risk factors concerning the size of the credit institutions sector, risk concentrations in residential mortgage and real estate lending, and the importance of the sector in the intermediation of finance to the private sector, the risks from these have remained roughly unchanged. The risks from the interconnectedness of the credit institutions sector with foreign banking and financial systems have decreased slightly since the previous decision.

As a whole, changes in the risk factors and their indicator values suggest that the systemic risks related to the structural vulnerability of the Finnish credit institutions sector are at the same level as before the pandemic in 2020. As a result of the pandemic, the SyRB was removed from credit institutions in spring 2020 to support their lending capacity.

As regards the risk factors that are especially conducive to increasing structural vulnerabilities

- The *large size of the credit institutions sector* increases the costs of banking crises and other severe financial system disruptions for the real economy and general government. This increases systemic risks and the need to guard against shocks with capital buffers.
- The *interconnectedness of the credit institutions sector with foreign* financial systems is partly due to the fact that credit institutions cover their large funding gaps mainly by raising debt funding in the international financial markets. In the event of crises and severe shocks, market funding typically dries up faster than deposits, which increases systemic risks. Solid capital adequacy of the credit institutions sector reduces the risk that market funding dries up.
- The *credit institutions sector's large risk concentrations in residential mortgage and real estate lending* expose credit institutions to credit losses from housing loans and loans to construction and real estate companies. This increases systemic risks. Sharp fluctuations in the housing market and mortgage lending have been among the factors underlying many financial crises. Sharp housing market downturns have in many crisis situations caused large credit losses to banks from loans granted to non-financial corporations in the construction and real estate industries. Therefore, in the event of severe shocks, large exposures to these firms can substantially weaken credit institutions' capital adequacy and lending.
- *High household indebtedness* exposes credit institutions to high direct and indirect (via other borrower sectors) risks of credit losses in the event of crises and other severe shocks. This increases systemic risks because of the higher probability of banking crises and their effects.

Account of buffer calibration and other qualitative and quantitative grounds for the decision (section 4, subsection 1, paragraphs 4 and 5)

An overall assessment of the risk factors and risk indicators suggests that financial crises can be more severe in Finland than in other countries. This supports the imposition of the SyRB requirement. The calibration of the SyRB is founded on estimating the sufficient level of required macroprudential capital buffers. According to the FIN-FSA's analysis, in an environment of average cyclical risks, the sufficient level of the credit institutions sector's additional capital requirements set for

29.3.2023

Public

macroprudential reasons is close to the pre-pandemic level or slightly above it (6–7% of risk-weighted assets). The estimate of the sufficient level of required macroprudential capital buffers is based on stress tests of the Bank of Finland (BoF) and the FIN-FSA and on the research literature on the sufficient level of credit institutions' capital requirements. The estimate is in line with the one implied by the Financial Sector Assessment Program (FSAP) for Finland, which was published by the International Monetary Fund (IMF) in January 2023.¹ The sufficient level means the level of capital that the credit institutions sector should hold to cover losses from serious disruptions in the economy or the financial system in order to remain operational and continue supplying credit to the real economy even after loss absorption.

In the stress scenario of the BoF–FIN-FSA stress tests², the Finnish credit institutions sector faces a broad-based financial market disruption and a global recession. These will lead to a severe housing market-driven crisis in the Nordic countries. The stress scenario is based on the adverse scenario of the European Banking Authority (EBA). As the EBA's original scenario does not take into account financial market interlinkages and related channels of crisis contagion between the Nordic countries, the scenario has been adjusted to better account for the strong interconnectedness of the Finnish economy and financial system with the other Nordic countries, and for other structural vulnerabilities (particularly household indebtedness). In practice, the GDP paths for Finland, Denmark and Norway under the original scenario have been adjusted downwards to better correspond with that of Sweden. Nordic households have high debt-to-income ratios on average and debt levels have also risen sharply. There is evidence that an exuberant accumulation of household debt predicts financial crises.³ In addition, an analysis by the Bank of Finland implies that an increase in household indebtedness and other financial stability vulnerabilities in other Nordic countries also increases the risk of a deeper-than-normal recession in Finland.⁴ The adjustments to the BoF–FIN-FSA stress scenario seek to better account for these vulnerabilities and channels that amplify and propagate the effects of shocks. In addition to economic variables, risk premia on Nordic government bonds and corporate market funding have been adjusted upwards from the original scenario. This serves to account for the assumption that a housing market crisis and a deep recession in all Nordic countries leads to weaker confidence among international investors and to doubts about the Nordic countries' safe-haven status.

The BoF–FIN-FSA stress tests imply that Finnish banks' CET1 ratio weakens at most by 4.7 percentage points over the time horizon of the adverse scenario. The stress test results are contingent on credit loss modelling assumptions related to input data and the length of the time horizon, as well as to the assumption of the banks' approach to recognising credit losses on non-performing assets. Most of the estimated decline in capital adequacy is due to a substantial growth of credit losses and a rise in the risk weights on assets. The materialisation of market risk (e.g. a fall in stock prices and widening bond yield spreads), lower returns and expected profit distribution also weaken banks' capital adequacy.

¹ IMF (2023) [Finland: Financial Sector Assessment Program – Technical Note on Macroprudential Policy Framework and Tools](#).

² Bank of Finland Bulletin 1/2022: [Large structural risks require banks to hold buffers for a rainy day](#).

³ See e.g. Nyholm and Voutilainen (2021) [Quantiles of growth – household debt and growth vulnerabilities in Finland](#).

⁴ Bank of Finland Bulletin 1/2022: [Nordic housing market risks can affect Finland's economy](#).

29.3.2023

Public

The losses to credit institutions in the stress scenario stem from external shocks to the Finnish credit institutions sector, the effects of which are amplified by the sector's structural vulnerabilities. The stress test does not include an assessment of the magnitude of losses to the system from potential problems or shocks of individual Finnish credit institutions. In the event of a severe financial crisis, both of these risks could materialise simultaneously. For this reason, in estimating the total level of required macroprudential capital buffers, account should be taken of both the losses implied by the stress tests and the risks arising from individual systemically important credit institutions (O-SIIs), which are covered by O-SII buffers. O-SII buffers have been calibrated on the basis of the dedicated principles⁵ published by the FIN-FSA. As of 1 January 2023, the O-SII buffer is 2.5% for Nordea, 1.5% for OP Financial Group and 0.5% for Municipality Finance. In practice, the estimated sufficient level of required buffers is derived by adding the banking sector's average O-SII level (approx. 2.0%) to the estimated decline in capital adequacy ratio implied by the stress tests (at most 4.7 percentage points).

In addition to stress tests, the sufficient level of required macroprudential capital buffers is estimated based on the research literature on the sufficient level of capital requirements. Estimates for the required buffers have been obtained by subtracting Pillar 1 minimum requirements and the average level of Finnish banks' Pillar 2 requirements from the sufficient level of capital requirements identified in the literature. The resulting estimates are presented in the table below. In comparing individual research findings, it should be noted that the findings are partly based on divergent regulatory frameworks, methods and assumptions and are therefore not necessarily directly comparable.

Research paper ⁶	Appropriate capital level ⁷ (quality of capital)	Derived estimate of required buffers
Miles et. al. (2013)	18% (CET1)	12.5%
BoE (2015)	12% (Tier 1)	4.6%
BIS (2016)	10.5% (CET1)	5.0%
IMF (2016)	19% (total assets)	9.2%
FED (2017)	19% (Tier 1)	11.6%
ECB (2020)	15% (total assets)	5.2%
IMF (2023)	-	7.4%

⁵ Financial Supervisory Authority (2022) [Principles for identifying other systemically important credit institutions \(O-SIIs\) and setting additional capital requirements](#).

⁶ Miles, Yang & Marcheggiano (2013) [Optimal bank capital](#); Bank of England (2015) [Measuring the macroeconomic costs and benefits of higher UK bank capital requirements](#); BIS (2016) [Adding it all up: the macroeconomic impact of Basel III and outstanding reform issues](#); IMF (2016) [Benefits and costs of Bank Capital](#); FED (2017) [An Empirical Economic Assessment of the Costs and Benefits of Bank Capital in the US](#); ECB (2020) [Twin default crises](#); IMF (2023) [Finland: Financial Sector Assessment Program – Technical Note on Macroprudential Policy Framework and Tools](#).

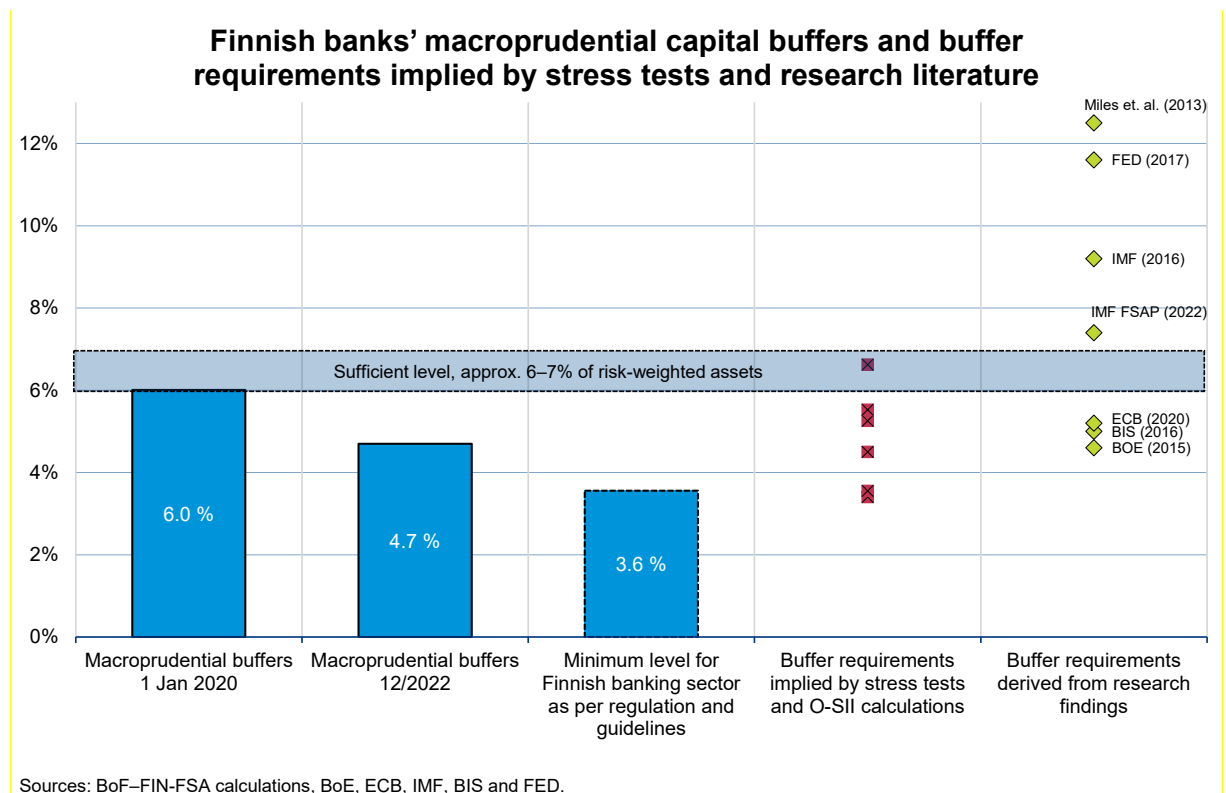
⁷ Where the appropriate capital level has been presented as a range, the table shows the midpoint of the range.

29.3.2023

Public

In the light of an overall assessment based on stress tests and research findings, in an environment of average cyclical risks, the sufficient level of macroprudential capital buffers for the Finnish banking sector is approximately 6–7% of risk weighted assets. Due to methodological differences and uncertainty relating to the calculations, it is appropriate to determine the estimated sufficient level as a range rather than a point estimate. The level corresponds to the level of capital requirements implied by BoF–FIN-FSA stress tests and O-SII buffers, and roughly to the average level of required buffers derived from research findings.⁸ In the event of an increase in cyclical or other severe stability threats, it might be justified to apply higher buffer requirements.

The following chart presents an overview of macroprudential buffers and the buffer requirements implied by stress tests and research findings. The chart also shows the minimum level of average macroprudential capital requirements for the Finnish banking sector determined by regulation and EU-level guidelines. The minimum level has been calculated as the sum of the capital conservation buffer (2.5%) and the average level of O-SII buffers under the ECB’s floor methodology for O-SII buffer rates.⁹



⁸ The median of required buffers implied by research findings is 7.4% and the average is 7.7%, if outliers (lowest and highest) are excluded.

⁹ The ECB floor methodology establishes a minimum level for the additional capital buffer requirements of individual O-SIIs, which is determined based on each institution’s O-SII score. When applying Article 5 of the SSM Regulation, the capital requirements set by the national macroprudential authority are assessed against this minimum level. If an O-SII buffer falls below the minimum level indicated by the floor methodology, the ECB may raise the O-SII buffer requirement set by the national macroprudential authority. For Finnish O-SIIs, the minimum buffer level indicated by the floor methodology is 1.5% for Nordea and 0.5% for OP Financial Group and Municipality Finance. Calculated based on these minimum levels, the average level of the Finnish banking sector’s O-SII buffers is approximately 1.1%.

29.3.2023

Public

In determining the benchmark buffer rate for the SyRB, the FIN-FSA has substracted other macroprudential buffer requirements in effect or announced from the estimated sufficient level of required macroprudential capital buffers. The reason for this is that other macroprudential buffer requirements can also be used in addition to the SyRB to cover losses posed by severe economic or systemic disruptions.¹⁰ Consequently, the SyRB only covers the part of systemic risks that is not covered by other additional capital requirements. Based on the calculation presented in the following table, for ensuring sufficient resilience of the Finnish banking sector, the SyRB rate should be set at 0.2–1.2% of risk-weighted assets. Considering that the significant systemic risks in the Finnish financial system justify setting the SyRB rate above 0% and that, under the Act on Credit Institutions, the SyRB may be calibrated in steps of 0.5 percentage points, in practise a more appropriate benchmark rate would be 0.5%–1.5% of risk-weighted assets. Hence, an SyRB rate calibrated at 1.0% corresponds to the midpoint of the range of the benchmark rates. The calculation also takes into account the possible average impact on Finnish banks of the recognition of Norway's SyRB requirement, even though the decision on the recognition of the requirement will be taken at a later stage.

Capital requirement	Calibration (% of risk-weighted assets)
(1) Estimated sufficient level	6–7
Capital conservation buffer	2.5
O-SII buffers (average)	2.0
(4) Institution-specific countercyclical capital buffer (average)	0.9
(5) Norwegian systemic risk buffer (average impact on Finnish banks) ¹¹	0.4
(6) Benchmark rate for the systemic risk buffer ((6) = (1)-(2)-(3)-(4)-(5))	0.2–1.2

Long-term non-cyclical risks may impose serious consequences for the financial system and the real economy in Finland in the immediate years ahead. Based on stress tests and the values of the risk indicators specified in the Ministry of Finance Degree, the risk threatening the financial system or the macroeconomy is so high that it justifies setting the SyRB rate at 1.0% instead of the 0.5% proposed by the Director General of the FIN-FSA. The Finnish credit institutions sector is one of the largest relative to the national economy in the EU. Individual Finnish multinationals have significant cross-country interlinkages. Credit institutions' risk concentrations are significantly from mortgage and real estate lending in an environment where household indebtedness is historically high. Pursuant to the Act on Credit Institutions, the SyRB requirement may amount to no more than 5% of the consolidated total risk

¹⁰ Capital conservation buffer, the impact of the countercyclical capital buffers set by other Nordic countries on credit institution-specific countercyclical capital buffer requirements, O-SII buffers effective as of 1 January 2023 and the SyRB applicable to Finnish banks' exposures in Norway.

¹¹ Due to the overlap of the risks covered by the Norwegian SyRB (4.5% of exposures in Norway) and the Finnish national SyRB (1.0% of all exposures), in applying the SyRB requirement, only the higher one of the two will be considered. Therefore, instead of 4.5 percentage points, the Norwegian SyRB will increase Finnish banks' capital requirements for exposures in Norway by 3.5 percentage points. Relative to the total amount of risk-weighted assets, the increase is approximately 0.4%.

29.3.2023

Public

exposure amount of the highest Finnish parent company in the credit institution's consolidation group or of the amalgamation of deposit banks.

The calibration of the SyRB at 1.0% instead of 0.5% is also supported by the fact that the most conservative estimate for the banking sector's capital requirements indicated by the BoF–FIN-FSA stress tests, and also the research findings-derived average estimate for the sufficient level of buffer requirements, is closer to 7% than 6%. A further factor in support of the SyRB rate of 1.0% is that the systemic risks stemming from the structural vulnerability of the Finnish credit institutions sector are at least at the same level as before the pandemic in 2020, when an SyRB rate of 1.0% was applicable to credit institutions other than the largest ones. An SyRB requirement of 1.0% is estimated to raise the total level of the Finnish banking sector's macroprudential capital buffers to about 6.8%.

Recommendations, guidelines and warnings of the European Systemic Risk Board and the European Banking Authority considered in the decision (section 4, subsection 1, paragraphs 6 and 7)

In September 2022, the European Systemic Risk Board (ESRB) issued a general warning on vulnerabilities in the EU financial system and emphasised the need to preserve and enhance the resilience of the financial systems in the EU countries. In November 2022, the Governing Council of the ECB issued a statement on macroprudential policies, endorsing the ESRB's warning and highlighting the need to ensure the banking sector's resilience with macroprudential measures. Furthermore, in autumn 2022, the International Monetary Fund (IMF) issued a recommendation in the context of the Financial Sector Assessment Program (FSAP) analysing Finland's financial system and related risk, stating that Finland's SyRB should be increased once circumstances allow.

Relationship between the SyRB and other macroprudential tools and measures (section 4, subsection 1, paragraph 9)

Borrower-based macroprudential tools (maximum LTC ratio) primarily affect new agreements (new loans) and do not therefore prevent or limit systemic risks. Of the additional capital requirements, the O-SII buffer for other systemically important credit institutions primarily covers risks to the financial system arising from the systemic importance of individual credit institutions. The SyRB primarily covers risks to individual credit institutions arising from vulnerabilities in the financial system.

The countercyclical capital buffer (CCyB) is intended for mitigating cyclical systemic risks stemming from excessive growth in credit to the private sector and its consequences. Therefore, the CCyB is not appropriate for mitigating systemic risks arising from structural vulnerabilities in the banking system, which are typically long-term in nature.

The maximum LTC ratio, risk-weight floors on housing loans referred to in Article 458 of the Capital Requirements Regulation (CRR) and measures of the Capital Requirements Directive (CRD) to raise the risk-weight floors only address credit institutions' mortgage lending. Hence, they do not sufficiently cover the additional capital requirements related to the Finnish credit institutions sector's large size, cross-border interconnectedness, indebtedness of the key customer groups and the sector's importance.

29.3.2023

Public

The supervisory measures available for the FIN-FSA and the ECB enable the imposition of requirements on credit institutions to cover institution-specific risks and remedy shortcomings in their operations, for example (Pillar 2 requirement). However, the primary purpose of these measures is not to limit financial stability-related systemic risks.

The supervisory measures available for the FIN-FSA and the ECB enable the imposition of requirements on credit institutions to cover institution-specific risks and remedy shortcomings in their operations, for example (Pillar 2 requirement, P2R). However, the P2R is not meant primarily for limiting financial stability-related systemic risks.

In addition to the actual capital requirements, Pillar 2 guidance (P2G) can be set for credit institutions. The P2G is a credit institution-specific recommendation on the level of capital expected to be maintained in addition to binding capital requirements. Its purpose is to cover for losses in stress situations, taking into account the credit institution's risk profile. Unlike the Pillar 2 requirement and macroprudential capital buffers, the Pillar 2 guidance is not a legally binding capital requirement. The P2G level of an individual credit institution is determined on the basis of its results in EU-wide stress tests carried out by the FIN-FSA. Hence, particular attention is given to institution-specific risk factors and profiles. In the stress tests applied by the FIN-FSA and the Bank of Finland for calibrating macroprudential buffers, credit institutions' ability to bear losses and the sufficiency of their buffer levels are evaluated at the level of the entire financial system. The stress test framework considers system-wide vulnerabilities (particularly household indebtedness and credit institutions' interconnectedness with the other Nordic countries) which can amplify disruptions in the economy or the financial system. The credit institution-specific, non-binding Pillar 2 guidance does not cover these risks that threaten the stability of the financial system. Therefore, the SyRB and the P2G cannot be regarded as overlapping requirements that cover the same risks.

Assessment of the impact of the decision on credit institutions' credit supply (section 4, subsection 1, paragraph 11)

The FIN-FSA has assessed the impact of the SyRB requirement of 1.0% and other announced changes in capital requirements¹² on credit institutions' lending capacity over a two-year period 2023–2024 by analysing how the requirements affect the amount of own funds in excess of capital adequacy requirements. This own funds surplus denotes the extent to which credit institutions can cover losses, increase credit supply and risk taking and distribute profits before falling short of their macroprudential buffer requirements. In addition, the FIN-FSA has also assessed the impact of the credit institutions sector's estimated performance and capital adequacy positions on the own funds surplus under a baseline macro-financial scenario. This assessment was made using the BoF–FIN-FSA stress test framework, on the basis of the baseline scenario of the EBA 2023 EU-wide stress test.

As a result of the anticipated and announced changes in capital requirements and the estimated performance and capital adequacy positions, the Finnish banking sector's

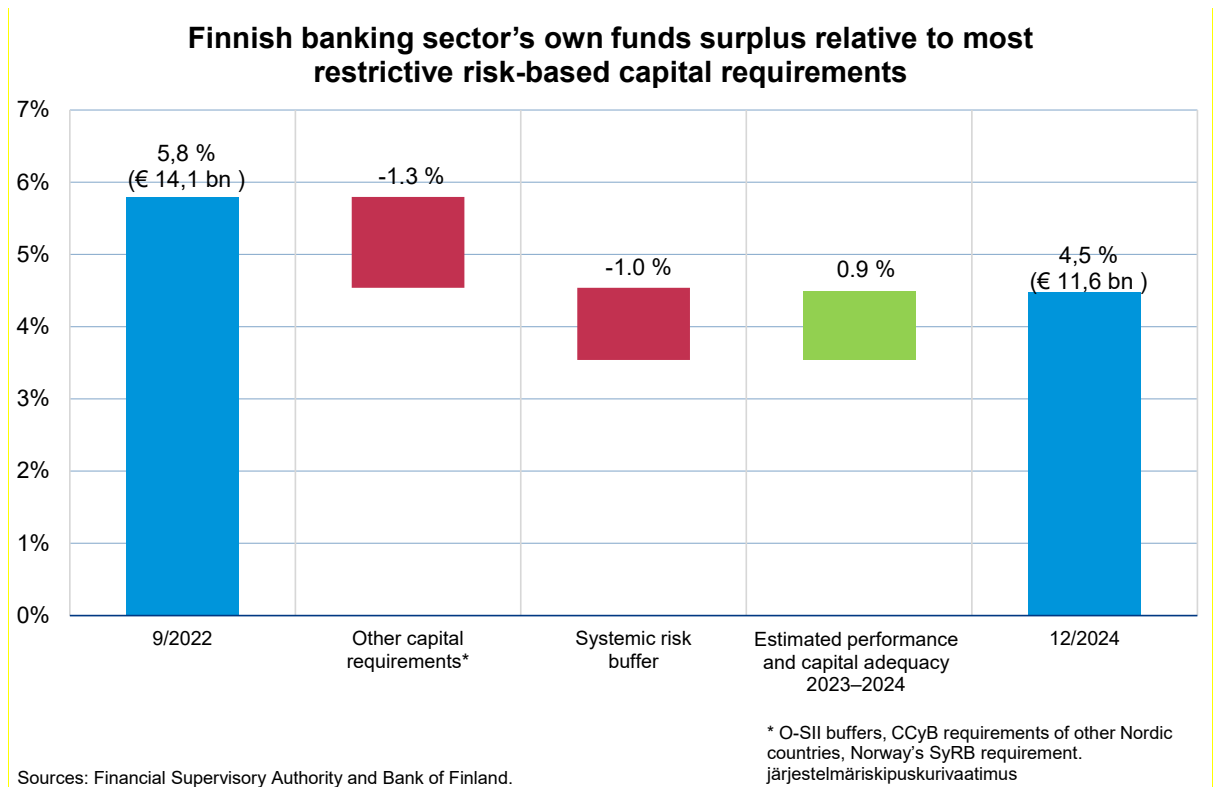
¹² Increase in the countercyclical capital buffers of other Nordic countries in accordance with the macroprudential decisions already taken (Sweden 2.0%; Denmark 2.5%; Norway 2.5%), an increase of 0.5 percentage points in Nordea's and OP Financial Group's O-SII-buffers as of 1 January 2023 and application of the Norwegian SyRB requirement to Finnish credit institutions in respect of their exposures in Norway.

29.3.2023

Public

average own funds surplus in relation to risk-weighted assets is estimated to contract by 1.3 percentage points, to 4.5%, by the end of 2024. The tighter O-SII buffer requirements effective as of 1 January 2023, the countercyclical capital buffers set by other Nordic countries and effective in the course of 2023, and the full application of the Norwegian SyRB to Finnish banks will reduce the sector’s own funds surplus by a total of 1.3 percentage points. This calculation also takes into account the possible impact on Finnish banks of the recognition of Norway’s SyRB requirement, even though the decision on the recognition of the requirement will be taken at a later stage. Without the impact of the reciprocation of Norway’s SyRB requirement, the combined effect of the changes in the requirements described above is smaller than estimated in the calculation Finnish banks’ performance and capital adequacy positions are estimated to strengthen the own funds surplus by just under a percentage point. The estimated evolution of the own funds surplus is presented in the chart below.

For all Finnish banks, the current level of own funds (9/2022) is sufficient for covering the estimated higher capital requirements. Finnish banks’ net interest income is estimated to grow markedly in 2023–2024 as a result of rising interest rates and their higher levels compared to the previous years, and only moderate losses are expected on loans granted in Finland. Hence, in general, the capital adequacy of Finnish banks is assessed to strengthen in 2023–2024, which will compensate for the impact of the higher capital requirements and will, for the majority of banks, strengthen the own funds surplus compared to the current situation.



For some Finnish banks, the leverage ratio requirement or the MREL requirements are more binding than the risk-based capital requirements. As a result, banks’ flexibilities regarding breaches of the statutory limits triggering macroprudential supervisory measures may be smaller than suggested by the size of the additional capital buffers relative to the risk-based capital requirements. The impact assessment

29.3.2023

Public

calculations therefore take into account the impact of the buffer requirements and the estimated developments in capital ratios also on the leverage ratio as well as on the amount of surplus with regard to the MREL and subordination requirements.

If the calculations take into account, in addition to the risk-based capital requirements, also Finnish banks' flexibility as regards the leverage ratio and the MREL and subordination requirements, the banking sector's average surplus relative to the most binding capital or MREL requirement would increase from 3.5% to approximately 4.2% of risk-weighted assets by the end of 2024. The chart below describes an estimate of the development of the surplus relative to the banking sector's most restrictive capital or MREL requirement.

The tightening of buffer requirements already announced or anticipated other than the SyRB hardly have an impact on the banking sector's flexibility relative to the most binding capital or MREL requirement. This calculation, too, takes into account the possible impact on Finnish banks of the recognition of Norway's SyRB requirement, even though the decision on the recognition of the requirement will be taken at a later stage. This is based on the fact that initially, the leverage ratio requirement based on the non-risk-weighted exposures or the MREL or subordination requirement calibrated on the basis of non-risk-weighted exposures is in the case of some banks tighter than the risk-based requirements. Changes in the buffer requirements do not have an impact on these non-risk-based requirements. When the buffer requirements reach a sufficient level, the risk-based requirements become more binding than the non-risk-based requirements. Therefore, Finnish banks' average surplus relative to the capital or MREL requirements will shrink only as a result of the SyRB requirement.

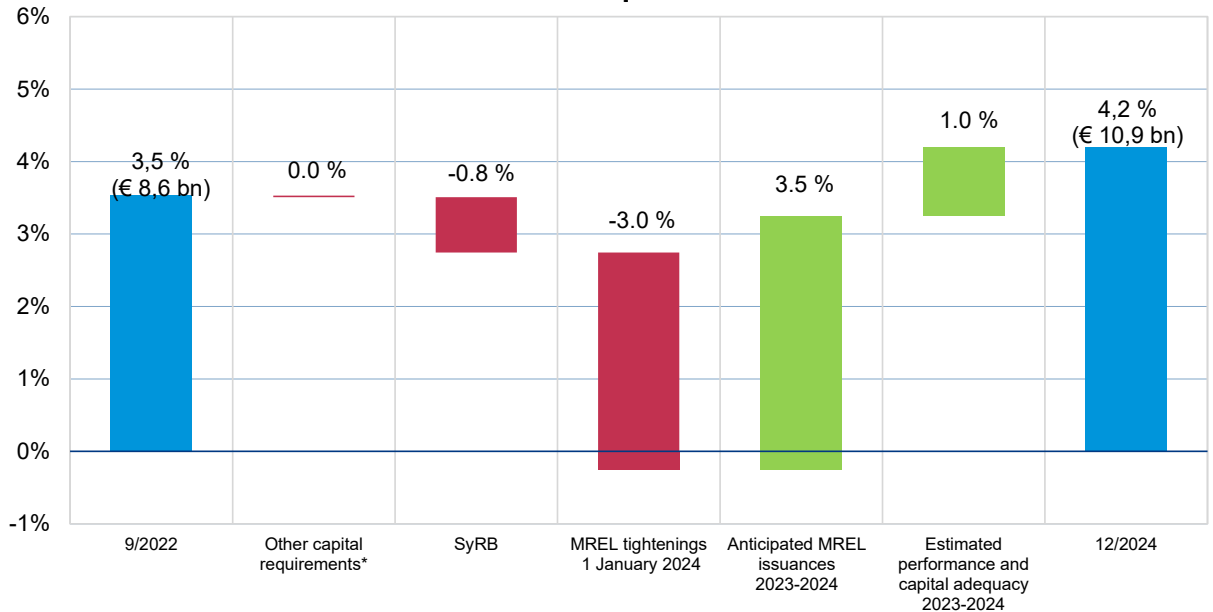
In addition to the SyRB requirement, the already announced tightening of the MREL requirements, entering into force at the beginning of 2024, will decrease Finnish banks' average surplus relative to the most binding requirement. The impact of the tightening requirements is compensated by the estimated issuances in 2023–2024 by banks of debt instruments eligible for MREL and subordination. Banks' surplus relative to the requirements is bolstered also by retained earnings, which build up the banks' capital base.

In the case of all the banking groups, the current amount of own funds and MREL eligible debt instruments as well as the issuances estimated for 2023–2024 and retained earnings would be sufficient for covering the estimated higher requirements.

29.3.2023

Public

Finnish banking sector’s surplus relative to most restrictive capital or MREL requirement



Sources: Financial Supervisory Authority, Bank of Finland, Financial Stability Authority and bank disclosures.

*O-SII additional capital requirements, CCyB requirements of other Nordic countries, Norway’s SyRB requirement.

Based on impact assessment calculations, a SyRB rate of 1% is not estimated to markedly weaken Finnish credit institutions’ lending capacity under the projected economic conditions. The calculations show that Finnish credit institutions are able to cover their capital needs and their need for MREL-eligible debt instruments arising from the CyRB requirement and other anticipated changes in requirements with their current own funds and MREL-eligible debt instruments and the estimated retained earnings in the coming years, and with the already planned issuances of MREL-eligible debt instruments. The significantly higher interest rates than in previous years and the continued rise in interest rates are estimated to increase Finnish credit institutions net interest income notably in the years ahead, which will support credit institutions’ profitability and ability to build up their capital base.

The FIN-FSA however takes into account that developments in the economy and the operating environment remain subject to significant downside risks, the materialisation of which could increase Finnish banks’ credit losses significantly more than estimated. In such a situation, the imposition of the SyRB could have a negative impact on credit institutions’ lending capacity and on financial intermediation in the short term. The FIN-FSA will monitor banks and their lending capacity and will update its impact assessments in the event of unexpected changes in economic conditions or the credit cycle. The assessments will take into account the results of the forthcoming stress tests by the EBA and the FIN-FSA. The decision on the SyRB may be changed if available data indicate that the buffer requirement would markedly increase the risk of a contraction in credit supply.

An estimate of the impact of the approach applied by credit institutions in capital adequacy calculations on the capital requirement (Section 4, subsection 1, paragraph 12)

29.3.2023

Public

The approach applied by credit institutions in capital adequacy calculations determines the risk weights of their assets. The average risk weights of Finnish credit institutions that have adopted the IRB Approach are typically lower than those of credit institutions applying the Standardised Approach. The level of the risk weights, in turn, determines the euro impact of the SyRB requirement on each credit institution. As a result, the euro impact of a buffer requirement of a given percentage is larger for credit institutions that have larger risk weights. On the other hand, the risk weights have an impact on the euro level of macroprudential additional capital requirements relative to risk-weighted assets for all other credit institutions, too.

A 1% SyRB requirement is estimated to increase the capital requirements of credit institutions applying the IRB Approach by some EUR 1.5 billion and those of credit institutions applying the Standardised Approach by some EUR 0.9 billion. If the differences in the average risk weights of these credit institutions are taken into account, the SyRB requirement results in a relatively higher increase, in euro terms, for credit institutions applying the Standardised Approach (see Table).

If also the other macroprudential buffer requirements in effect or announced are taken into account, credit institutions applying the IRB Approach are required to hold relatively more capital for fulfilling the macroprudential buffer requirements than credit institutions applying the Standardised Approach. This is due to the fact that the macroprudential buffer requirements for credit institutions applying the IRB Approach are on average higher. In practice, for fulfilling the macroprudential buffer requirements, credit institutions applying the IRB Approach have to hold approximately EUR 2.2 in capital for each EUR 100 asset item, compared to EUR 1.8 in the case of credit institutions applying the Standardised Approach.

Type of credit institution	1% systemic risk buffer		Total macroprudential buffer requirements	
	EUR million	% of non-risk-weighted assets	EUR million	% of non-risk-weighted assets
IRB approach	1,509	0.3%	11,982	2.2,%
Standardised approach	896	0.4%	4,269	1.8%
TOTAL	2,405	0.4%	16,251	2.1%