Notification template for measures to be taken under Article 458 of the Capital Requirements Regulation (CRR)

Template for notifying the European Central Bank (ECB), the European Systemic Risk Board (ESRB) and the European Commission of stricter national measures pursuant to Article 458(2) CRR and for requesting the ESRB to issue a recommendation to other Member States to reciprocate the measures pursuant to Article 458(8) CRR

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- macropru.notifications@ecb.europa.eu when notifying the ECB (under Article 5 of the Single Supervisory Mechanism Regulation (SSMR)[1]);
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The ESRB will forward this notification to the European Parliament, the European Council and the European Banking Authority (EBA) without delay. This notification will be made public by the ESRB after the relevant authorities have adopted and published the notified macroprudential measure[2].

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1. Notifying national authority and scope of the notification	
1.1 Name of the notifying authority	Finansinspektionen (FI), Swedish Financial Supervisory Authority
1.2 Country of the notifying authority	Sweden
1.3 Categorisation of the measure	FI, in its capacity as the designated authority for the purpose of Article 458 of Regulation (EU) No 575/2013 (Capital Requirements Regulation (CRR), intends to extend the period of application for its current stricter national measure for credit institutions using the internal ratings based (IRB) approach for calculating regulatory capital requirements applicable to retail exposures in Sweden secured by immovable property. The extension would run for two years. The possibility of an extension of this type of measure is provided for in Article 458(9) of the CRR. The stricter national measure concerns risk weights for targeting asset bubbles in the residential property sector and their potential spillover effects (Article 458(2)(d)(iv) of the CRR). This national measure enables FI to continue to apply the current risk weight floor of 25% for Swedish mortgages for IRB banks. More specifically, the measure is defined as:

[1] Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (*OJ L 287, 29.10.2013, p. 63).*
[2] On request by the notifying authority, it may be agreed with the Head of the ESRB Secretariat that this notification, or a part thereof, should not be published for reasons of confidentiality or financial stability.

	A credit institution-specific minimum level of 25% for the average risk weight on Swedish housing loans applicable to credit institutions that have adopted the internal ratings based approach. For the purpose of this notification, the term "bank" has the same meaning as "credit institution" as defined in Article 4 of the CRR.
1.4 Request to extend the period of application of an existing measure for up to two additional years **(Article 458(9) CRR)**	The proposed measure is a two-year extension of the existing measure in accordance with Article 458(9) of the CRR. The Article 458 measure was introduced in December 2018 and was extended in December 2020 and again in December 2021. The current extension will expire in December 2023.
1.5 Notification of a measure to which Article 458(10) CRR applies ('notification only procedure')	Not applicable.
2. Description of the measure	
2.1 Draft national measure **(Article 458(2)(d) CRR)**	The risk weight floor for Swedish mortgage exposures constitutes an important element of FI's capital requirements. It applies to banks that have permission to use the IRB approach.[3] FI made the assessment when the floor was introduced in 2018 that it was crucial for the stability of the Swedish financial system that these banks had own funds that fully covered the risks in the Swedish mortgage portfolios from a wider, more systemic perspective than was the result of the IRB model estimations. The level of the floor, applicable at the portfolio level, was set with the argument that the banks' IRB approaches are unlikely to be able to fully capture the current credit loss risk of Swedish mortgages in a severe downturn which could lead to severe spillover effects for the Swedish and regional economies.[4] In addition, credit risk models on Swedish mortgage exposures often generate risk weights that from a broader perspective can be considered to be relatively low since credit losses in the mortgage portfolios have been virtually non-existent for a long period of time, with concerns about unjustified variability in modelled risk weights between banks. To account for the broader systemic risks that could arise from the Swedish mortgages portfolio of individual banks, the floor was set at 25% in 2014 as a Pillar 2 measure and was changed to an Article 458 CRR measure in December 2018. Since these risks persist, it is proposed that the current measure is extended. The measure will therefore comprise:

[3] Swedish mortgages in the standardised approach receive a higher average portfolio risk weight than 25% and therefore there is no need to include banks using the standardised approach in the scope of this measure.
[4] The risk weights resulting from the IRB models range from 2.9% to 8.1%, for the largest nine IRB banks. The average risk weight for all IRB banks is 5.0% as of Q2 2023.

	• An average risk weight floor of 25% on the Swedish mortgage exposures of the IRB banks. The proposed measure refers to the exposure-weighted average risk weight. It is calculated by dividing the portfolio's risk-weighted exposure amount by the exposure amount (EAD).[5] The additional risk-weighted exposure amount according to Article 458 = EAD*(25% - current RW) The measure constitutes an average risk weight floor at the portfolio level of the concerned IRB banks covered by the measure. The measure affects the total risk exposure amount (TREA) and, therefore, the minimum Pillar 1 capital requirements that IRB banks have to meet at all times according to Article 92 of the CRR but also Pillar 2 Requirement, Combined Buffer Requirement and Pillar 2 Guidance. The measure thus increases the overall REA of the affected IRB banks compared to a baseline without this measure in place. There will however be no direct additional impact on total capital requirements as a result of this extension since the banks are already subject to this measure. According to Chapter 1, section 6, second paragraph of the Special Supervision of Credit Institutions and Investment Firms Act (2014:968), FI is the competent authority in Sweden to decide on special macroprudential measures in accordance with Article 458 of the CRR. Article 458(2)(d)(iv) of the CRR is the legal basis for the measure.
2.2 Scope of the measure **(Article 458(2)(d) CRR)**	The scope of the measure, in terms of both exposures covered and banks concerned, is the same as in the current measure. More specifically, the measure applies to: • Exposures in Sweden secured by immovable property within the exposure class 'retail exposures'.[6] This approach does not create burdensome additional work for the affected banks since it uses an already existing definition in the CRR. In accordance with the current calculation of the risk weight floor, the calculation will be based on reported data in the COREP template based on the following cells: ○ C 09.02 – Geographical breakdown of exposures by residence of the obligor: IRB exposures (CR GB 2), Sweden. ▪ Row 0070, columns 0105 and 0125 For banks that are subject to the measure but do not report in accordance with C 09.02, the following is proposed: ○ C 08.01– Credit and counterparty credit risks and free deliveries: IRB approach to own funds requirements (CR IRB 1), IRB Exposure class: Retail – Secured by immovable property SME and non-SME ▪ Row 0010, columns 0110 and 0260 • Banks that have permission to use the IRB approach and have an exposure to Swedish mortgages. The measure focuses on IRB banks as their model-implied

[5] Risk-weighted exposure amount for retail exposures calculated in accordance with Article 154 of the CRR.
[6] For retail exposures see CRR Article 147(5).

	risk weights are relatively low, compared to those implied by the standardised approach.[7] These are also typically the banks with the largest share of mortgage exposures in Sweden. Their aggregate mortgages account for around 94% of the total mortgage market in Sweden. o The measure applies to the individual banks on a solo and a consolidated basis. There are 18 banks that currently fall within the scope of the measure, including Nordea Bank's Swedish Subsidiary (Nordea Hypotek AB) and Danske Bank's Swedish subsidiary (Danske Hypotek AB) which together account for about 14% of Swedish mortgage lending. Both Nordea Bank and Danske Bank also operate in the Swedish mortgage market through their Swedish branches to a limited extent, currently accounting for less than 1% of Swedish mortgage lending.
2.3 Calibration of the measure	Since this measure is an extension, the calibrated level of the proposed measure will be the same as it is currently, that is 25%. This calibration is set so that the minimum level for the average risk weight floor covers future loss levels in Swedish residential mortgages in a severe downturn with high financial stress, taking into account the broader systemic risks that could arise from spillovers. FI assesses that the systemic risks remain more or less the same, while risk weights have remained relatively stable, so a risk weight floor of 25% is assessed to continue to be adequate. For more information on the prior calibration of the measure and assessments related to it, please see Risk Weight Floor for Swedish Mortgages, May 2013, FI (in particular pages 14-19) and Increase to the Risk Weight Floor for Swedish Mortgages, Chapter 4 (in particular pages 62-63) of Capital Requirements for Swedish Banks, September 2014, FI.[8] The measure increases the implied risk weights on Swedish mortgage exposures from 5.0% on average (exposure-weighted) to 25%. Thus, the risk weight floor has increased the capital levels required in the affected banks. The additional capital requirement, in nominal terms, stemming from the 25% risk weight floor for Swedish mortgages, is SEK 123 billion at the consolidated level (data from Q2 2023) or about 23% of the total capital requirement for the largest Swedish banks.[9]
2.4 Suitability, effectiveness and proportionality of the measure **(Article 458(2)(e) CRR)**	**FI considers the proposed measure to be necessary, suitable, effective and proportionate on the basis of a number of considerations.** **First, the proposed measure is intended to ensure that important mortgage banks are fully resilient** and can withstand a potentially severe downturn in the housing market without restricting the supply of credit. This can be achieved by imposing a sufficiently high capital requirement for residential real estate exposures. The necessity of this is stressed by the elevated household indebtedness in Sweden, mainly consisting of mortgage loans, which has increased significantly. This development has occurred at the same time as substantial increases in house prices over the past 25 years. Studies by international bodies such as the International Monetary Fund (IMF), the ESRB and the European Commission indicate long-standing vulnerabilities and

[7] Swedish banks applying the standardised approach assign risk weights of 35% to their exposures fully and completely secured by mortgage on residential property in Sweden. Their total share of the Swedish mortgage market is about 5%.
[8] Links to the two decisions on introducing and revising the Swedish risk weight floor in 2013 and 2014, respectively, can be found in section 7.2.
[9] Capital requirements of Swedish banks as of Q2 2023, August 2023, FI. https://www.fi.se/contentassets/e408ca6a944a4cc8865289d569116bb8/kapitalkrav-sv-banker-kv2-2023-eng.pdf.

	overvaluation in the Swedish residential real estate market[10,11,12]. These international bodies have repeatedly highlighted the systemic risks posed by Swedish mortgages and the developments on the Swedish housing market. These risks remain elevated, despite a fall in house prices and a slowdown in household credit growth in 2022 (see section 4.1). The elevated vulnerabilities at the macro level and the resulting systemic risks are however not reflected in the modelled risk weights for mortgage exposures. Banks' IRB approaches are unlikely to be able to fully capture the current credit loss risk of Swedish mortgages in a severe downturn which could lead to severe spillover effects for the Swedish and regional economies. In addition, credit risk models on Swedish mortgage exposures often generate risk weights that from a broader perspective can be considered to be relatively low since credit losses in the mortgage portfolios have been virtually non-existent for a long period of time, with concerns about unjustified variability in modelled risk weights between banks (see also the comment on IRB models in section 4.4). Therefore, there is a need to target the systemic risks associated with high household indebtedness and high house prices through having a sufficiently strong bank capital position for mortgage exposures. **Second, the measure is effective and proportionate in that it targets the exposures that give rise to the identified risks linked to Swedish mortgages and residential real estate.** The proportionality of the measure is ensured by its scope and design. By targeting mortgage exposures, it avoids any direct impact on other types of lending (such as credit to the non-financial corporate sector). By applying only to IRB banks, it does not affect banks that use the standardised approach and therefore already apply higher risk weights on mortgage exposures. **Third, the measure is suitable and effective as it intends to ensure a level-playing field** for all banks that operate in the Swedish mortgage market **and, in turn, also upholds resilience and safeguards financial stability**. Article 458 of the CRR contains a structured and pre-defined process for requesting reciprocity by the designated authorities in the EU Member States. Thus, through reciprocity the macroprudential risks identified in the mortgage and housing markets can be addressed for all relevant lenders in the Swedish market, contributing to a level playing field. The requirement constitutes today on average about 23% of the nominal total capital requirement for the largest Swedish banks at the consolidated level, which confirms the effectiveness of the measure in increasing resilience. At the same time, the measure seems not to have restricted households' access to mortgages since the average growth rate of mortgages has remained positive since the introduction of the risk-weight floor. **Furthermore, the measure is "appropriate for addressing the vulnerabilities related to the overvaluation of house prices, the stock of loans and household**

[10] https://www.imf.org/en/News/Articles/2023/01/26/mcs012723-sweden-staff-concluding-statement-of-the-2023-article-iv-mission .

[11] https://www.esrb.europa.eu/pub/pdf/reports/esrb.report220211_vulnerabilities_eea_countries~27e571112b.en.pdf.

[12] https://economy-finance.ec.europa.eu/system/files/2022-05/sweden_swd_2022_639_10_en_autre_document_travail_service_part1_v1.pdf.

	indebtedness" according to the ESRB's assessment in February 2022.[13] The ESRB noted that: • "The vulnerabilities related to residential real estate markets remained high." • "Household indebtedness in Sweden has increased substantially since 2019 and remains at one of the highest levels in Europe." • "Residential property is still significantly overvalued based on some estimates, eroding the affordability of housing for households." • "The current policy measures are assessed as being appropriate and partially sufficient. … In order to address flow vulnerabilities sufficiently the Swedish authorities should consider complementing these measures through the addition of policy measures that would limit borrowing by overindebted households. … There is also a need to continue to consider further policy actions aimed at addressing the underlying factors which have contributed to generate these vulnerabilities."
2.5 Other relevant information	FI has taken measures over time to mitigate the vulnerabilities posed by high household debt. Thus, in addition to supply-side measures, such as the introduction of a risk weight floor for mortgages to strengthen the resilience of banks, FI has also taken a number of borrower-based measures with the objective of increasing households' resilience: • In 2010, FI introduced a mortgage cap, according to which new loans collateralised by a home should not exceed 85% of the market value of the home.[14] • In June 2016, FI introduced an amortisation requirement following approval by the Government. According to this requirement, households borrowing more than 50% of the residential property's value must amortise at least 1% of their mortgage a year, while households borrowing more than 70% must amortise at least 2%.[15] • In March 2018, FI introduced a stricter amortisation requirement following approval by the Government.[16] According to this stricter requirement, households borrowing more than 4.5 times their annual income before tax must amortise an additional 1% of their mortgage per year.[17] These measures have been deemed necessary and appropriate to strengthen the resilience of households and possibly curb household indebtedness. FI's evaluations show that these measures have resulted in new mortgagors borrowing less, buying less expensive homes than they otherwise would have done, and

13
https://www.esrb.europa.eu/pub/pdf/reports/esrb.report220211_vulnerabilities_eea_countries~27e571112b.en.pdf?cb8132dc3e0f0f53a4fce3292a690bd6.
The ESRB's 2022 assessment follows on from the ESRB warning to Sweden in November 2016 and the ESRB recommendation in June 2019 about the vulnerabilities in the residential real estate sector as a source of systemic risk to financial stability.

14 It is possible to be granted an unsecured loan to finance the purchase of a home. For more information about the mortgage cap, see Finansinspektionen's general guidelines (FFFS 2010:2) regarding limitations to the size of loans collateralised by homes.

15 Finansinspektionen's regulations regarding amortisation of loans collateralised by residential property (FFFS 2016:16).

16 Regulations amending Finansinspektionen's regulations (FFFS 2016:16) regarding amortisation of loans collateralised by residential property (FFFS 2017:23).

17 Both amortisation requirements apply to new mortgages.

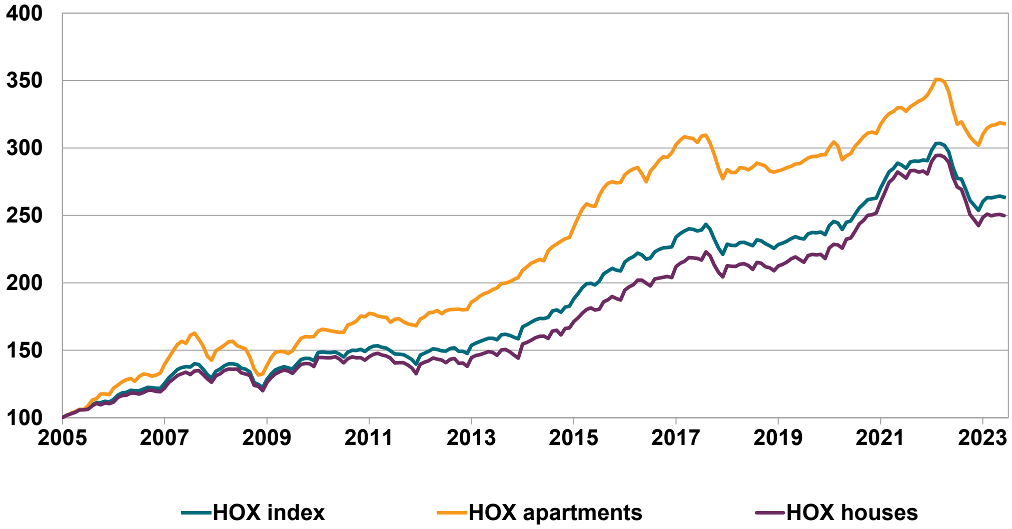
	amortising more. In particular, the percentage of new mortgagors taking large loans relative to their income or the value of their home has slowed.[18] Overall, FI assesses that the measures have strengthened households' resilience and increased stability in the financial system. In September 2022 the Swedish Government tasked FI with reviewing the effectiveness of the borrower-based macroprudential measures. FI published its findings in October 2022, concluding that changing or pausing the requirements would not be appropriate in the current circumstances.[19] In April 2023 the Swedish Government announced that it was setting up a committee to review the borrower-based macroprudential measures, noting that the framework should be effective and proportional.[20] The findings of this review are expected to be published by October 2024 at the latest.
3. Timing for the measure	
3.1 Timing for the decision on the measure	14 December 2023
3.2 Timing for publication	15 December 2023
3.3 Disclosure	The decision on the extension of the measure will be published on FI's website. This will include justification for the measure.
3.4 Timing for application (Article 458(4) CRR)	31 December 2023
3.5 Duration of the measure **(Article 458(4) CRR)**	The measure will be extended for a period of two years, or until the macroprudential or systemic risk ceases to exist. FI will consider deactivation before the measure's two year expiration limit if the risks cease to exist.
3.6 Review **(Article 458(9) CRR)**	FI will continue to monitor the measure regularly based on its overall macroprudential (mitigating) impact on the observed systemic risks in the Swedish residential real estate sector and take actions if required. The necessity and appropriateness of the measure will be reviewed in line with the requirements in Article 458 of the CRR, with possible amendments of the measure implemented as soon as possible after identification.

[18] Overall assessment of macroprudential measures, FI, June 2021 (summary in English; https://www.fi.se/contentassets/a4a57058f9684015a801db0bb1527fa4/samlad-utvardering-makrotillsynsatgarder-eng-summary.pdf).
[19] Borrower-based measures amid high inflation and rising interest rates, FI, October 2022, https://www.fi.se/en/published/reports/reports/2022/borrower-based-measures-following-high-inflation-and-rising-interest-rates/.
[20] https://www.fi.se/en/published/news/2023/fi-welcomes-inquiry-into-macroprudential-policy/

4. Reason for the activation of the stricter national measure	
4.1 Description of the macroprudential or systemic risk in the financial system **(Article 458(2)(a) CRR)**	**Sweden has experienced a significant and prolonged build-up of systemic risks linked to Swedish mortgages and residential real estate.** **Swedish banks are increasingly exposed to the residential property sector.** Today, the banking sector supplies essentially all mortgage loans in Sweden. IRB banks constitute around 94% of the total mortgage market, making them fundamental for the supply of mortgages to households. Mortgages account for 83% of monetary financial institutions' total lending to households and about 65% of Swedish GDP. For the three major banks (SEB, Handelsbanken, Swedbank), mortgage loans to households constitute almost 50% of their total lending, making them particularly sensitive to a negative development in the housing market. **Residential real estate prices have increased substantially over the past two decades** (Figure 1) **supported by the low interest rate environment, strong economic growth, rising real wages, a well-functioning mortgage lending market** (though not driven by any material watering down of origination lending standards, according to FI's mortgage supervision) **and a limited supply of housing.** Despite a fall in house prices during 2022, they remained more than two and a half times their level in 2005. At the beginning of 2023 prices started to tick up again and have been stable for the past few months. Several international bodies have made the assessment that residential properties in Sweden may be overvalued. For example, the European Commission (2022) pointed out that the price-to-income ratio is still about 40% above the historical average.[21] The ESRB's econometric valuation model also indicates that homes in Sweden are overvalued by around 51%, the highest in Europe.[22] Given the evolution of house prices during 2022, the degree to which house prices are overvalued might have lessened somewhat since the publication of the above-mentioned reports. Nonetheless, FI assesses in our latest report on the Swedish mortgage market that there remains an elevated risk for a substantial price correction in the housing market.[23]

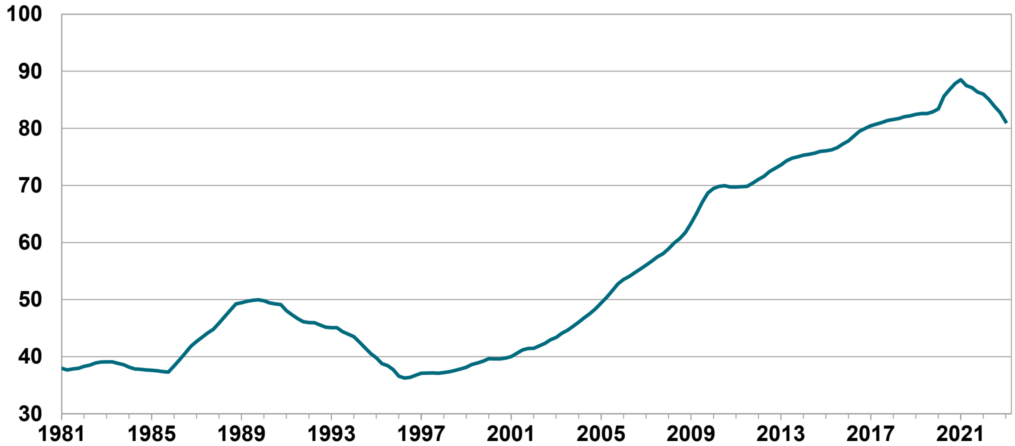
[21] In-depth review for Sweden 2022, European Commission, May 2022. https://economy-finance.ec.europa.eu/system/files/2022-05/sweden_swd_2022_639_10_en_autre_document_travail_service_part1_v1.pdf
[22] Vulnerabilities in the residential real estate sector of the EEA countries, ESRB Scoreboard, February 2022, Table 1. https://www.esrb.europa.eu/pub/pdf/reports/esrb.report220211_vulnerabilities_eea_countries~27e571112b.en.pdf
[23] The Swedish Mortgage Market, FI, March 2023. https://www.fi.se/en/published/reports/swedish-mortgage-reports/the-swedish-mortgage-market-2023/.

1. House prices in Sweden
Index, January 2005 = 100, seasonally adjusted



Source: Valueguard-KTH Housing Index (HOX).

2. Household debt as a share of GDP
Per cent



Source: SCB.

Household debt has increased much faster than both household disposable income and GDP for a prolonged period (Figure 2). Household debt has increased on average by 7.7 % in annual terms over the period 1997-2022. By contrast, average disposable income has only increased by 4.5% in the same period. Household credit growth has however slowed over the past year, with an annual growth rate of 0.9% in July 2023. Mortgages are the primary driver behind the development in household debt

	with an annual growth rate of 1.3% in July 2023.[24] Households' aggregate debt to income ratio (DTI) was almost 190% of disposable income in July 2023, up from under 100% in 1997. The new interest rate environment and current stabilisation in house prices might lead to a corresponding stabilisation in aggregate DTI, reflecting also in part the stricter amortisation requirement introduced by FI in 2018. The level is nonetheless high in a historical perspective. **Many Swedish households are also relatively highly leveraged in relation to the value of the home.** Approximately 76% of new mortgages taken out in 2022 were at a loan to value ratio of 50% or more, while about 49% of new mortgages comprised loans with a loan to value ratio of 70% or more. Across the stock of Swedish mortgages, the loan to value ratio was about 53% in Q3 2022 (volume-weighted). Until the introduction of the amortisation requirement by FI in 2016, incentives to amortise had long been weak, leaving many households highly indebted over time after the purchase of a new home. **Most mortgages (56% as of July 2023) have variable interest rates.** In combination with high DTI, this makes Swedish households sensitive to rising interest rates. The increases in interest rates in 2022-23 and the more challenging macroeconomic environment have been accompanied by falls in real consumption and house prices. The Riksbank assesses however that, despite a well-functioning monetary policy transmission mechanism, the policy rate increases implemented so far have not fully impacted all households with mortgages. There is therefore a risk that household demand may be dampened more than expected by the interest rate increases implemented so far once their full impact has been felt.[25] **A limited supply of housing, reflecting suppressed levels of new home building over a long period time, has contributed to elevated house prices.** After a pickup in homebuilding in the past decade, there is now expected to be a sharp decrease in 2023 and beyond in the current economic environment.[26] In any case, although an increased supply of housing may dampen house price growth, it can also exacerbate the current systemic risks. A greater supply of new residential properties may contribute to an increase in household mortgages since ownership of new homes is largely financed through loans to households. It also contributes to an increase in the aggregate DTI ratio in the short term. **In summary, a combination of vulnerabilities and elevated risks remain in Sweden.** The large and concentrated Swedish banking sector is highly exposed to the residential real estate market and is also vulnerable to funding risks related to this

[24] Around 83% of household lending consists of mortgages.
[25] Monetary Policy Report. Riksbanken, June 2023. https://www.riksbank.se/globalassets/media/rapporter/ppr/engelska/2023/230629/monetary-policy-report-june-2023.pdf.
[26] Stability in the Financial System, FI, May 2023. https://www.fi.se/contentassets/9fd2ee7f9b2c4d02beb53fa0e21d5582/stabiliteten-finansiella-systemet-20230530-eng.pdf.

	market through the issuance of covered bonds backed by residential mortgage pools. Cyclical vulnerabilities reflected in the high housing prices and high and still rising household indebtedness can additionally exacerbate and intensify the identified systemic risks. If risks spill over from the residential real estate market, credit provision could be affected.
4.2 Analysis of the serious negative consequences or threat to financial stability **(Article 458(2)(b) CRR)**	**Swedish mortgages account for a large share of the balance sheet of Swedish banks, and developments in the housing market have a considerable effect on household finances.** In the event of a severe downturn in the Swedish economy or turbulence in the financial system, a negative dynamic may arise between the residential real estate market, the macroeconomic situation and bank behaviour in Sweden. This could have negative repercussions for the Swedish real economy and in the long run pose a threat to the stability of the banking system. Due to the rapid increase in house prices and household indebtedness in recent years, **FI assesses that households and the housing market have over the years become more sensitive to adverse shocks.** The very high percentage of variable rate mortgages means that potential transmission effects will spread swiftly, in particular through reduced household consumption. Because household consumption constitutes over 42% of Swedish GDP, any adjustments would have a material impact on the economy at large. **A severe downturn in the Swedish residential real estate market could lead to credit losses for banks and reduce their capital.** If banks were to respond by generally restricting the supply of credit to the economy to try to improve their financial position – including to credit-worthy households and businesses – this would further exacerbate the economic downturn. Banks' financial position and ability to supply credit to the economy could also be affected if investors become reluctant to fund banks' covered bonds – a key source of funding for banks that is backed by residential mortgage pools. It should also be noted that there may be cross-border impacts as Swedish banks are also heavily interlinked with other countries in the Nordic and Baltic region, having significant market shares in some of the countries.
4.3 Indicators prompting the use of the measure	The main indicators are: • Assessment of banks' exposures to real estate risks • Assessment of residential mortgages' systemic importance. • Development of household indebtedness, in levels and growth rates • Development of house prices • Developments of risk profiles, i.e. LTV, DTI/LTI, DSTI, total risk weights, banks' margins on mortgages, variable vs fixed interest rates etc.
4.4 Justification for the stricter national measure **(Article 458(2)(c) CRR)**	**The objective of the measure is to increase and strengthen resilience in the Swedish banking sector to the prolonged and elevated systemic risk linked to Swedish mortgages and residential real estate.** Today, the additional capital in the banking system due to the risk weight floor for Swedish mortgages amounts to SEK 123 billion or about 23% of the total capital requirement for the largest Swedish banks at the consolidated level.

	By extending the current risk weight floor within the framework of Article 458 of the CRR, it makes it possible for the capital built up to remain in place in order to be available to address and manage potential future credit losses in the housing market. This is crucial given that the vulnerabilities and systemic risks stemming from Swedish mortgages and the developments in the housing market remain elevated. Moreover, the implementation of the measure through Article 458 and with reciprocation aims to ensure a level playing field for all banks that operate in the Swedish mortgage market and, thereby, uphold resilience and safeguard financial stability. Capital add-ons that address risks linked to high household indebtedness and high house prices in Sweden are crucial to maintain the market's confidence in the ability of the Swedish banking sector to withstand a severe downturn in the housing market or in the Swedish real economy in general. Banks operating in the Swedish mortgage market rely extensively on issuing covered bonds to finance mortgage lending. Deterioration in the banks' capital position or decreased capital requirements could lead to diminished market confidence and negative consequences for households, banks and the entire Swedish economy. Last, but not least, the measure is important from the perspective of the Nordic-Baltic region. The Swedish financial system is characterised by a high degree of interconnectedness with the financial systems of other Nordic and Baltic countries. This is particularly the case in the Baltic countries, where multiple Swedish banks have been identified as O-SIIs. Therefore, measures that ensure the resilience of the Swedish banking system also act to support financial stability in the Nordic-Baltic countries and thereby the stability of a substantial part of the EU financial system. <u>Specific comments on the IRB models</u> The Swedish banks' IRB estimates are modelled by using time series of internal historical data from their Swedish mortgage portfolios and as a result the low risk weights reflect the extremely low credit losses from Swedish mortgages that the banks have experienced since the financial crisis in the beginning of the 1990s. Currently, the banks' internal models are under review. Finansinspektionen has assessed that the review is important to make sure that Swedish banks' institution-specific estimates reflect the likely range of variability and downturn conditions. The review follows the EBA roadmap set out to handle concerns about unjustified variability of own funds requirements for credit risk stemming from the application of internal models. Banks have, as a result, identified a need for changes in their models and have applied for essential model changes for almost all their credit risk models. The review is complex and a relatively large part of the applications have not met the required standards and have been withdrawn to be revised by the banks. At present it is difficult to assess an end time for the review – though it is expected to run past the point where an extension of the current Article 458 measure would need to be implemented to cover the systemic risks – or what the review will exactly lead to in terms of level of risk weights for mortgage exposures. This implies that the underlying risk weights, as of now, are not comparable between banks and not an appropriate starting point, for example, for additional systemic risk buffers.

As noted earlier, the elevated vulnerabilities at the macro level and the resulting systemic risks are not reflected in the historical modelled risk weights for mortgage exposures. Even though the banks' IRB models will reflect, after the review is completed, the institution-specific likely range of variability and downturn conditions, internal models are not designed to tackle systemic risk. The banks' IRB approaches are unlikely to be able to fully capture the current credit loss risk of Swedish mortgages in a severe downturn which could lead to severe spillover effects for the Swedish and regional economies.

The resilience that the current Article 458 risk weight floor contributes to remains important for the financial system given the high level of systemic risks related to Swedish mortgages. Article 458 is, in addition, straightforward in design when it comes to reciprocity, which is important as the risks apply also to foreign institutions.

Why other measures or legal bases are still not adequate

<u>Article 124 of the CRR: Risk weights for standardised approach</u>

Article 124 enables the competent authority to increase the risk weights of banks that apply the standardised approach to their mortgage exposures. FI assesses that this would not be effective as its scope would be severely limited. About 5% of the relevant Swedish residential mortgage market exposures are held by banks applying the standardised approach, whereas exposures that are risk-weighted according to the IRB approach constitute around 94% of the total mortgage market.

Swedish banks applying the standardised approach must assign a minimum risk weight of 35% to their residential mortgage exposures in Sweden, which is considered to be sufficient. In contrast, the average (exposure-weighted) risk weight is around 5.0% for IRB banks.

<u>Article 164 of the CRR: Loss-given default floor</u>

Article 164 enables the competent authority to increase the exposure-weighted average LGD floor applied by IRB banks on their mortgage exposures. FI assesses that this would not adequately and effectively address the identified systemic risks.

Increasing the LGD floor for mortgages would serve to widen the differences in risk weights between IRB banks and result in a disproportionate increase in risk weights for the banks with the highest initial PDs. In addition, an increase in the average LGD floor under Article 164 would have implications beyond the calculation of risk-weighted exposure amounts and would, for example, also apply to the calculation of expected loss amounts as per Articles 158-159 of the CRR. The use of Article 164 would add further complexity to the determination of capital requirements and could reduce the transparency of IRB risk weights for market participants.

<u>Article 133 of Directive 2013/36/EU: Systemic risk buffer</u>

Article 133 enables FI to set a systemic risk buffer. FI already applies a systemic risk buffer of 3%, applicable to the three major banks, which addresses the structural risks

	associated with the large, similar, and concentrated banking sector in Sweden.[27] FI assesses it would not be effective or appropriate to further increase the systemic risk buffer to address the systemic risks linked to Swedish mortgages and the residential real estate sector. The systemic risk buffer is designed so as to apply to all exposures of a credit institution. Applying this instrument, therefore, risks penalising other types of exposures, including the corporate ones, which do not give rise to the identified systemic risk. It is also possible to apply a sectoral systemic risk buffer, including for residential exposures. FI assesses that a sectoral systemic risk buffer could target the identified systemic risks but it would be less appropriate and effective than the proposed measure. As noted above, banks' internal models are currently under review, with concerns about unjustified variability between modelled risk weights. The sectoral systemic risk buffer would not act as a floor, but rather as a multiplier in terms of nominal capital requirements, impacting most heavily IRB banks with the highest risk weights and least heavily IRB banks with the lowest risk weights. The size of the buffer required to generate the equivalent capital impact would also be extremely high and therefore challenging from both a communication and reciprocity perspective. <u>Article 136 of Directive 2013/36/EU: Countercyclical capital buffer</u> Article 136 enables the use of a countercyclical capital buffer to address broad-based cyclical systemic risks. The buffer is a time-varying capital requirement and applies to all credit exposures to the non-financial private sector located in the concerned Member State. FI currently applies a countercyclical buffer rate in Sweden of 2%, effective as of 22 June 2023.[28] FI assesses it would not be effective or appropriate to further increase the countercyclical buffer to address the systemic risks linked to Swedish mortgages and the residential real estate sector. The countercyclical buffer rate set by FI is applied to all Swedish credit exposures and not just the mortgage exposures. In much the same way as the systemic risk buffer, using the countercyclical buffer to specifically target the systemic risks linked to the Swedish mortgage and housing markets, would penalise other exposures which are not the target of the measure. Moreover, it would penalise most the banks with the lowest share of relevant exposures in mortgage loans. In addition, a very high buffer rate would need to be applied to achieve a corresponding capital requirement to a risk weight floor of 25%. <u>Other Measures</u> The introduction of the output floor will be an important factor to consider in the future, in particular whether its impact would be sufficient to address the risks currently targeted by the 458 measure. This is not currently an issue, however, as the implementation of the output floor will not occur during the two-year extension period. <u>Summary</u>

[27] SEB, Handelsbanken and Swedbank.

[28] FI lowered the buffer to 0% in March 2020 in response to the Covid-19 pandemic. A buffer of 1% then applied from 29 September 2022 before it was raised further to return to the neutral rate of 2%.

	As such, and on balance, the assessment is made that the 458 measure is most appropriate and effective at this time.
5. Sufficiency, consistency and non-overlap of the policy response	
5.1 Sufficiency of the policy response	The Article 458 measure provides more loss-absorbing capital than would result from the banks' own internal credit risk models, which strengthens the resilience of the banking sector against negative developments in the residential real estate market or shocks to the macroeconomy at large. As noted in section 4.4, the additional capital from the measure currently amounts to about SEK 123 billion. Further, as explained in section 2.4, the proposed measure is deemed to be effective as it straightforwardly targets banks' exposures that are linked to the systemic risks in the residential real estate sector. As noted in section 2.4, the ESRB assessed in 2022 that the current policy measures in Sweden are "appropriate and partially sufficient to address the vulnerabilities related to residential real estate markets" – noting "there is also a need to continue to consider further policy actions aimed at addressing the underlying factors which have contributed to generate these vulnerabilities". This recognises that it may also be necessary to take other measures that lie outside of FI's field of responsibility to deal with the risks linked to household indebtedness in Sweden. The measure does not appear to have had a material unintended impact on the general economy. As explained in section 2.4, the measure does not seem to have affected households' access to mortgage lending, which has continued to grow since the introduction of the risk-weight floor. As also noted, the measure is well targeted at the residential housing sector, thereby avoiding impact on other types of lending or the general economy.
5.2 Consistency of application of the policy response	In line with ESRB Recommendation 2013/1, the ultimate objective of macroprudential policy is to contribute to the safeguard of the financial system as a whole, including by strengthening the resilience of the financial system and decreasing the build-up of systemic risks, thereby ensuring a sustainable contribution of the financial sector to economic growth. As explained in section 4.4, FI assesses that the Article 458 risk weight floor promotes resilience against the prolonged and elevated systemic risks linked to Swedish mortgages and residential real estate. In addition, as discussed in section 4.4 and in line with ESRB Recommendation 2013/1, FI assesses the current risk weight floor to be most appropriate and effective macroprudential tool for this purpose. Finally, FI adhered to the common principles set out in the relevant legal texts when imposing the risk weight floor measure.
5.3 Non-overlap of the policy response	The Article 458 risk-weight floor for mortgages is the only macroprudential tool used to address specifically the systemic risks related to the Swedish housing market. As noted in section 2.5, however, FI has also taken a number of complementary borrower-based measures with the objective of increasing the resilience of households and thereby mitigating the vulnerabilities posed by high household debt. As noted in section 2.4, the ESRB assessed in 2022 that the current policy measures in Sweden are appropriate.

6. Cross-border and cross-sector impact of the measure	
6.1 Assessment of cross-border effects and the likely impact on the Internal Market **(Article 458(2)(f) CRR and Recommendation ESRB/2015/2[29])**	FI does not expect the measure to have a negative impact on the internal market that would outweigh the financial stability benefits resulting from the increased bank resilience. The measure is considered to have positive internal spillover effects in Sweden as the measure not only supports the resilience of the Swedish banking sector but also supports greater stability in the Swedish housing market which itself has further links to the Swedish financial system and economy such as through household debt and consumption. The measure is also considered to have positive outward spillover effects in other countries. As the measure supports the resilience of the Swedish banking sector, those Swedish banks with operations in other countries are better able to continue lending to the real economy in those countries, thereby supporting financial and economic stability. In addition, reciprocation of the measure by authorities in other countries may have a positive impact in those countries, as it could increase the loss-absorbing capacity of institutions with exposures to the Swedish residential real estate sector, thereby supporting financial and economic stability in those countries. The proposed measure would apply to all IRB banks with Swedish residential real estate exposures. All significant lenders in the Swedish residential real estate sector are consolidated in Sweden, though some lending occurs via branches of foreign banks. Reciprocity in the application of the proposed measure is important in order to avoid leakages and regulatory arbitrage. The fact that the proposed measure would apply to all IRB banks active in the Swedish mortgage market is in fact an important direct benefit to the Internal Market relative to certain other possible measures that would only apply to specific, targeted banks. Such alternative measures could provide a competitive advantage to banks that were not subject to the measures and allow them to gain market share, thereby enabling systemic risks to grow via these banks. In this context, FI emphasises that a Memorandum of Understanding (MoU) on prudential supervision of significant branches applies to the Nordic-Baltic macroprudential network.[30] The competent authorities in the region acknowledge the importance of reciprocity of macroprudential measures in general, and in particular as a means to prevent banks from circumventing the measures by transferring operations to other countries. The authorities, thereby, recognise the importance of reciprocity as a means of ensuring a level playing field and a well-functioning internal market. The authorities also acknowledge Recommendation ESRB/2015/2 as a minimum standard for reciprocity in macroprudential matters. Note also that an additional MoU on cooperation and coordination on cross-border financial stability was signed in 2018 by

[29] Recommendation of the European Systemic Risk Board of 15 December 2015 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures (ESRB/2015/3) (OJ C 97, 12.3.2016, p. 9).
[30] See https://www.fi.se/contentassets/dbde31519a7543a18808d3db1deacb4e/mou-filialer-nordiska-lander-2016-12-19n.pdf and https://www.fi.se/contentassets/282187c73694429cbfddce78f001d556/mou_ecb_2017-05-29ny3.pdf.

	the ministries of finance, financial supervisory authorities, central banks and resolution authorities of the Nordic-Baltic countries.[31] The Nordic and Baltic countries have common financial stability interests stemming from inter-linkages in the financial system in the region. This has resulted in a close cooperation between the countries to facilitate and support measures taken by reciprocating them even long before there was a MoU in place. FI assesses that the measure will have a positive impact on the Internal Market. The positive consequences are the direct result of the financial stability benefits in terms of reducing and mitigating the macroprudential or systemic risk identified. This is increasingly important in the context of the financial interlinkages in the Nordic-Baltic region and the enhanced cross-border dimension of the Swedish financial sector.
6.2 Assessment of leakages and regulatory arbitrage within the notifying Member State	FI will monitor closely the impact of the measure on other sectors of the Swedish financial system. The mortgage market in Sweden has begun to experience change in recent years. These changes concern both the traditional financing model and the actors involved in the mortgage lending chain. Insurance companies and pension funds have, for instance, shown interest in investing directly in mortgages through mortgage funds alongside their traditional role as investors for the covered bonds issued by banks. Such a shift in the value chain in the Swedish mortgage market could mean that non-bank companies could take on a larger role, although we have yet to see significant changes. However, there is a need to monitor these developments closely in order to continuously assess the effectiveness of the measure.
6.3 Request for reciprocation by other Member States **(Article 458(8) CRR and Recommendation ESRB/2015/2)**	Do you intend to ask the ESRB to issue a recommendation to other Member States to reciprocate the measure in accordance with Article 458(8) CRR? Yes

[31] See https://www.fi.se/en/published/news/2018/new-nordic-baltic-memorandum-of-understanding.

6.4 Justification for the request for reciprocation by other Member States **(Article 458(8) CRR and Recommendation ESRB/2015/2)**	FI requests that the ESRB recommends that other Member States continue to reciprocate the measure, as their banking sector may be exposed directly or indirectly (through their branches) to the risks related to the residential real estate market in Sweden. Reciprocity requests will also be sent directly to the relevant macroprudential authorities of the most affected Member States where needed. FI proposes retaining the current institution-level materiality threshold of SEK 5 billion. Continued reciprocation will ensure the effectiveness of the measure in achieving the macroprudential goal of safeguarding the resilience of the Swedish banking sector with regard to risks in the residential real estate and mortgage markets.
7. Miscellaneous	
7.1 Contact person(s)/mailbox at notifying authority	Richard Williams +46 8 408 980 81 richard.williams@fi.se Sara Ehnlund Martinussen +46 8 408 984 09 sara.ehnlundmartinussen@fi.se
7.2 Any other relevant information	Links to other relevant documents Risk Weight Floor for Swedish Mortgages, May 2013, FI. https://www.fi.se/contentassets/bf9750a907a14f9aac761bb28f0975db/riskviktsgolv-svenska-bolan-12-11920-21maj2014-eng.pdf Capital Requirements for Swedish Banks, September 2014, FI. https://www.fi.se/contentassets/fe6819ea1106490cb986a85bff6dd03d/kapitalkrav-svenska-banker-140910enny.pdf
7.3 Date of the notification	Please provide the date on which this notification was uploaded/sent. 12/09/2023