



Assessment Team on national macroprudential measures

Assessment of the Dutch notification in accordance with Article 458 of Regulation (EU) No 575/2013 concerning application of a stricter national measure for residential mortgage lending

Background note

Introduction

On 8 August 2022 De Nederlandsche Bank (DNB) notified the European Systemic Risk Board (ESRB) of its intention to extend a stricter national measure concerning risk weights under Article 458(2)(d)(vi) of the Capital Requirements Regulation (CRR).¹ DNB is the designated authority responsible for the application of Article 458 of the CRR in the Netherlands.² Pursuant to Article 458(4) of the CRR, the ESRB must provide the EU Council, the European Commission and the Netherlands with an opinion within one month of receiving the notification. The opinion must be accompanied by an assessment of the national measure in terms of the points mentioned under Article 458(2) of the CRR. The procedural framework for providing opinions under Article 458 of the CRR is clarified in Decision ESRB/2015/4.³

The ESRB's assessment focuses on the net benefits of the national measure for maintaining financial stability. In particular, the ESRB has assessed the rationale and merit of the measure against the following criteria:

- **Justification:** has there been a change in the intensity of systemic risk and does it pose a threat to financial stability at the national level? Can alternative instruments provided for under the Capital Requirements Directive (CRD)⁴ and the CRR adequately and appropriately address the risk, taking into account their relative effectiveness?
- **Effectiveness:** is the measure likely to achieve its intended objective?

¹ **Regulation (EU) No 575/2013** of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1).

² In accordance with Section 3:66 of the Dutch Financial Supervision Act, De Nederlandsche Bank has the power to take measures related to Article 458 of the CRR.

³ **Decision of the European Systemic Risk Board of 16 December 2015** on a coordination framework for the notification of national macroprudential policy measures by relevant authorities, the issuing of opinions and recommendations by the ESRB, and repealing Decision ESRB/2014/2.

⁴ **Directive 2013/36/EU** of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (OJ L 176, 27.6.2013, p. 338).

- Efficiency and suitability: will the measure achieve its objective in a cost-efficient way, i.e. have the appropriate instrument and calibration been used?
- Proportionality and impact on the internal market: is there an appropriate balance between the costs resulting from the measure and the problem it aims to address, taking into account any potential cross-border spillover effects?

The ESRB's assessment draws on the information provided by DNB in its notification, in addition to discussions with DNB and its staff. The ESRB has also relied on the compliance assessment⁵ carried out with respect to ESRB Recommendation (ESRB/2019/7) on medium-term vulnerabilities in the residential real estate sector in the Netherlands,⁶ and on the analysis of vulnerabilities in the residential real estate sectors of European Economic Area (EEA) countries conducted by the ESRB in 2021.⁷

Section 1: Description of and background to the measure

1.1 Description of the measure

The draft measure is an extension of the current measure under Article 458 of the CRR, which has been in place since 1 January 2022, for an additional two years. The extension would not alter the design of the current measure, which imposes a minimum average risk weight for IRB banks' portfolios of exposures to natural persons secured by mortgages on residential property in the Netherlands. The minimum average risk weight of these portfolios is the exposure-weighted average of the risk weights of the individual loans. The risk weight of each individual exposure item in scope of the measure is calculated as follows: (i) a 12% risk weight is assigned to the portion of the loan not exceeding 55% of the market value of the property that serves as a collateral, and (ii) a 45% risk weight is assigned to the remaining portion of the loan.

The measure provides a risk-sensitive floor to risk weights, as it differentiates the average minimum risk weight of the portfolio based on the loan-to-value (LTV) of the mortgage. The risk weights of individual loans increase with their LTV ratio, from 12% for loans with an LTV ratio of less than 55% up to 26.85% for loans with an LTV ratio of 100%. The LTV ratio to be used in this calculation is to be determined in accordance with the applicable provisions of the CRR. The average risk weight floor is updated by banks on a quarterly basis.

⁵ See Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in the Netherlands (ESRB/2019/7) 2019/C 366/04 OJ C 366, 30.10.2019, p. 22-28.

⁶ See ESRB (2022): Compliance report of Country-specific Recommendations of the European Systemic Risk Board of 27 June 2019 - part II February 2022.

⁷ See ESRB (2022): Vulnerabilities in the residential real estate sectors of the EEA countries.

The measure applies to exposures of IRB banks to natural persons secured by mortgages on residential property in the Netherlands, excluding loans wholly or partly covered by the NHG.⁸ The measure targets only IRB banks' portfolios, because (i) IRB banks account for 92% of all mortgage lending by banks in the Netherlands (96% in 2019, before the current measure was notified), and (ii) risk weights under the standardised approach are higher than the average risk weight resulting from the intended risk weight floor and are considered adequate by DNB. NHG mortgages benefit from a guarantee by a government-backed foundation, so DNB considers them to be safer than non-NHG mortgages. They have therefore been excluded from the scope of the proposed measure, even though they account for 20-25% of banks' mortgage portfolios and therefore are sufficiently material to contribute significantly to systemic risk (owing to both indirect effects on consumer spending and a potential sovereign-bank nexus⁹). To indirectly take account for this DNB took all average risk weights, including for mortgages covered by the NHG, into account when calibrating the measure.

The extension does not alter the calibration of the measure currently in place and is therefore already fully phased-in. On aggregate, extending the measure is expected to increase the average risk weights of IRB banks from 8% without the current measure to between 13% and 14%, retaining the €4.5 billion capital buffer accumulated by Dutch IRB banks under the current measure. The difference between the €3 billion of additional capital buffer estimated in 2019 and €4.5 billion in 2022 (compared to a situation without the current measure) is mainly the result of the declining IRB risk weights of mortgage portfolios. Given that the average risk weight floor stipulated by the measure is recalculated every quarter, the additional capital required from IRB banks has increased gradually as IRB risk weights have declined.

The extension is intended to enter into force on 1 December 2022 (after the initial application period of the current measure expires). The final decision by DNB to extend the current measure will be communicated in the Financial Stability Report scheduled for publication on 10 October 2022. DNB has already published its intention to extend the measure on 8 July for public consultation.

DNB requested reciprocation of the existing measure by other Member States under Article 458(8) of the CRR and the General Board of the ESRB decided to recommend this.¹⁰ The ESRB's recommendation for reciprocation will continue to apply to the measure in its extended form. DNB has noted that reciprocity remains relevant in order to avoid leakages and regulatory arbitrage.¹¹

⁸ The NHG scheme is a guarantee provided by a government-backed foundation, the Homeownership Guarantee Fund (Waarborgfonds Eigen Woningen, WEW), which covers 90% of the residual debt if a forced sale of the house is inevitable owing to circumstances beyond the control of the borrower (job loss, becoming disabled, divorce). The amount guaranteed under the NHG decreases over time on the basis of an annuity scheme.

⁹ In general, the risks related to the nexus between banks and sovereigns are increased sovereign contingent liabilities and higher funding costs (see [IMF \(2013\): Global Financial Stability Report - Transition Challenges to Stability, October 2013](#)).

¹⁰ See [Recommendation of the European Systemic Risk Board of 16 February 2022 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures \(ESRB/2022/1\), 2022/C 174/01 OJ C 174, 28.4.2022, p. 1-15](#).

¹¹ DNB has provided guidelines to other EU Member States to approximate the size of their exposures in the scope of the measure under existing reporting requirements. See [ESRB/2022/1](#) for further details.

Article 458(10) of the CRR does not apply to the measure, as the increase in average risk weights is expected to be higher than 25%. According to DNB's calculations, the proposed measure is expected to increase targeted banks' average risk weights from 8% without the current measure to between 13% and 14% on aggregate (compared with raising them from 11% to between 14% and 15% when the measure was originally notified).

1.2 Background to the measure

The current measure was originally notified on 8 January 2020, with the intention it would enter into force by September 2020. On 17 March 2020, DNB announced the postponement of the measure owing to the pandemic. On 23 September 2021, DNB notified the ESRB the measure would be activated as of 1 January 2022.

The proposed measure primarily aims to enhance Dutch banks' resilience to a potential severe downturn in the housing market after the sustained increases in RRE prices seen in recent years. The current risk weights assigned to Dutch mortgage loans are among the lowest in the EU. DNB finds that this does not accurately reflect the high and steadily increasing systemic risk in the housing market. Since 2020, when the current measure was originally notified, risk weights on the relevant exposures have decreased further. If no further action were taken this would result in a lower capital requirement for the IRB banks affected, even though the systemic vulnerabilities related to Dutch mortgage loans observed by DNB have increased over that period.

Section 2: Analysis of the underlying systemic risks

In recent years the ESRB has been monitoring risks related to the residential real estate (RRE) sector in the Netherlands and all other EEA countries. In 2016 the ESRB issued a warning to the Netherlands,¹² mainly over high mortgage loan indebtedness, very high LTV ratios and the significant share of borrowers who would have total debt exceeding the value of their home if house prices declined (commonly referred to as "underwater mortgages").

In September 2019 the ESRB issued a recommendation to the Dutch authorities to take further measures aimed at mitigating risks in the housing market. The ESRB pointed out that despite the measures taken, risks had increased as a result of sharp house price rises in recent years and further action was still warranted. House prices had continued to increase since 2016, leading to pockets of overvaluation in the major cities. The LTV ratios on new mortgage loans had remained high, however, largely because the regulatory limit of 100% that applies to LTV ratios did not require additional collateral if house prices decrease. The vulnerabilities posed by these financial stability developments had not been reflected in the risk weights on mortgage loans in the Netherlands, which were among the lowest in the EEA. The ESRB therefore recommended that the Netherlands (i) establish an "act or explain" mechanism in Dutch law in relation to recommendations issued by the macroprudential authority on activating legally binding borrower-based measures, (ii) tighten the existing legally binding limit on the LTV ratio, (iii) amend the methodology for determining the maximum limit applicable to the debt-service-to-income ratio, and (iv) activate capital-based measures to ensure the resilience of credit institutions authorised in the Netherlands in

¹² See [Warning of the European Systemic Risk Board of 22 September 2016 on medium-term vulnerabilities in the residential real estate sector of the Netherlands \(ESRB/2016/10\)](#).

the face of potential materialisation of systemic risk related to RRE. The aim of this recommendation was also to emphasise the need for broader policy action to curb factors facilitating or promoting increasing household indebtedness.

In 2021 the ESRB assessed compliance by the Netherlands with the ESRB recommendation from 2019 and conducted another review of RRE vulnerabilities in EEA countries, including the Netherlands. It found that the Netherlands was fully compliant with the sub-recommendation concerning capital-based measures, taking into account the current risk-weight measure which was about to enter into force on 1 January 2022.¹³ At the same time, the ESRB concluded that overall, the macroprudential policy mix was only partially sufficient given the intensity of the vulnerabilities related to RRE in the Netherlands.

In addition to the current risk weight measure, for which an extension is under consideration, the Netherlands has borrower-based measures in place targeting RRE and capital measures focused on systemically important banks. In particular, the LTV limit for mortgages in the Netherlands is currently at 100%, which is considered very high in absolute terms, relative to the degree of potential overvaluation and when compared with that of other countries.¹⁴ The loan-to-income (LTI) limit for mortgages in the Netherlands is a function of household income and the mortgage interest rate; it may behave procyclically, as changes in household income influence the limit. Even as vulnerabilities related to Dutch mortgage loans have been increasing according to DNB, the LTI limit has been increasing, and therefore loosening. Five banks identified as systemically important, including four IRB banks, need to comply with the other systemically important institutions (O-SII) buffer of 1% to 2.5%.¹⁵ Compared with 2019, before the current risk weight measure was notified, the systemic risk buffers (SyRB) of the largest three banks have been reduced from 3% to 0%¹⁶ to support lending to the real economy during the coronavirus (COVID-19) crisis. It is DNB's declared intention to build up a 2% countercyclical capital buffer (CCyB) in a standard risk environment (a situation in which cyclical risks are not particularly high, but not particularly low either).¹⁷ On 25 May 2022, DNB announced it would increase the CCyB from 0% to 1% with effect from 25 May 2023 (provided that the current risk profile does not change significantly). This marks a first step towards the intended 2% CCyB target in a standard risk environment.

The following sections provide further details on the assessment of vulnerabilities, including those affecting the RRE sector (Section 2.1), the household sector (Section 2.2) and the banking sector (Section 2.3).

¹³ Apart from that, the Netherlands was assessed as partially compliant with the sub-recommendation concerning the legal framework for borrower-based measures, and non-compliant with the sub-recommendations related to tightening borrower-based measures and the approach to calibration. The sub-recommendation concerning broader policy action to curb factors which facilitate or promote increasing household indebtedness will only be assessed at the end of 2022.

¹⁴ The LTV limit was gradually reduced from 106% in 2012 to 100% in 2018 but, despite a recommendation from the Dutch Financial Stability Committee, there is currently no expectation that the Government, the holder of the legally binding powers to implement such measures, intends to lower it further.

¹⁵ The five systemically important Dutch banks and their O-SII buffer rates are: ING Bank (2.5%); Rabobank (2%); ABN Amro Bank (1.5%); Volksbank (1%); BNG Bank (1%). The first four of these are IRB banks.

¹⁶ The SyRB was lowered for ING Bank, Rabobank and ABN Amro Bank in 2020.

¹⁷ See, for example, [DNB Bulletin](#), 27 May 2022.

2.1 Vulnerabilities in the RRE sector

The Dutch housing market has regained its momentum in recent years, with a significant acceleration since 2021. After a phase of correction to the exuberance seen between 2008 and 2013, house prices have gone up sharply for several years in a row. Between 2018 and 2020, house prices grew by an average of 8% year-on-year according to Statistics Netherlands. Most recently, annual price growth has been above 15% since July 2021, peaking at 21% in January and still at nearly 17% in June 2022, according to the same source. This has been fuelled by low interest rates, which declined over the past few years, as well as structural factors, such as supply constraints and the tax deductibility of interest paid on mortgages, which may incentivise households to over-borrow. At the same time, strict zoning regulations and scarcity of space (mainly in and around cities) have resulted in a low elasticity of the housing supply.

House price growth has been outpacing growth in household income, leading to pockets of overvaluation. Steep house price growth was initially a trend in big cities, but has recently spread country-wide. Symptoms of overvaluation can also be observed in riskier behaviour, such as overbidding on the part of buyers. As DNB reports, the share of transactions in which the purchase price exceeded the asking price has increased further to 80%, up from 40% in 2020 when the measure was originally notified. Cumulative house price growth over the past seven years has substantially surpassed growth in household income. As a result, the house price-to-income ratio stood at 7.8 at the end of 2021, exceeding its previous peak from 2005-07.

Against this background of potential overvaluation, the share of new mortgage loans with high LTV ratios has been declining but remains substantial. Although the average LTV ratios have been declining for existing as well as newly issued mortgages, they remain high. In particular, 47% of new loans to first-time buyers have an LTV ratio of 90% or over. The declining trend in LTV ratios has been partially the result of collateral revaluations and equity gains made by home movers, possibly reflecting increasing house price overvaluation. In the event of a downward correction in house prices, borrowers with highly leveraged loans may end up owing more than the market value of their home and cut down on consumption for precautionary reasons. This may, in turn, have negative effects on the real economy and the financial system. Borrowers who are not able to continue servicing their debt may default on their loans, resulting in credit losses for mortgage providers.

2.2 Vulnerabilities in the household sector

Dutch household indebtedness is among the highest in Europe and the share of new loans with LTI ratios close to the regulatory limit has continued to increase. The indebtedness of Dutch households remains over 100% of GDP, of which 95% is mortgage debt. As growth in house prices has been higher than the growth in incomes, borrowers are becoming increasingly leveraged. The share of new loans with an LTI close to the limit for borrowers has risen steadily over the past few years. At the end of 2021, more than 50% of new mortgage loans to first-time buyers and 40% of new mortgage loans to home movers were at or above 90% of the limit. This is a further deterioration of about 5 percentage points compared with mid-2019, before the current measure was

originally notified.¹⁸ The LTI limit in the Netherlands is primarily a consumer protection instrument. Thresholds, which are regularly recalculated according to a given methodology, have been loosened despite the rising vulnerabilities related to Dutch RRE, meaning that the measure has been procyclical.

Vulnerabilities related to household indebtedness may be amplified by the current circumstances of high inflation and rising interest rates, especially taking into account a large share of interest-only loans. Around 44% of outstanding mortgage loans are interest-only. Even though their share in the stock of loans has decreased over the past few years, interest-only loans have been regaining popularity among new borrowers. They carry a larger refinancing risk than amortising loans. In the event of a significant increase in interest rates coupled with rising inflation, households may be forced to reduce consumption to continue servicing their debt. This would have negative effects on the real economy and the financial system. Even though new mortgage loans in total have relatively long fixed periods (over 60% of new mortgages in 2021 had their interest rate fixed for more than ten years), 21% of existing mortgage loans will face interest rate renewal in the next three years and 25% within five years. 20% of loans expiring in three years have a debt-service-to-income (DSTI) ratio above 25%, a threshold which is considered by DNB to signal vulnerable homeowners.¹⁹

While credit risk related to loans covered by the NHG scheme is considered low by DNB, the share of such loans as a percentage of total lending has been decreasing. The NHG covers 90% of the residual debt if a forced sale of the house is inevitable owing to circumstances beyond the control of the borrower. Loans under NHG still have to satisfy the standard affordability tests at origination. In 2022 the maximum purchasing price of a property needs to be below €355,000 (without energy-saving measures, up to an LTV of 100%) and €376,300 (with energy-saving measures, up to an LTV of 106%) in order to qualify. The average transaction price had increased to €430,000 by the beginning of this year. The widening gap between the NHG maximum price and the average price on the market means that the share of mortgages under the NHG scheme has been decreasing.

2.3 Vulnerabilities in the banking sector

Stress tests run by DNB in 2019 showed that, in an adverse scenario, banks' mortgage loan losses could surge. A large proportion of banks' assets are Dutch-originated mortgage loans (21%, compared with 23% in 2019, before the current measure was introduced). Stress tests conducted in 2019 showed that a combination of higher default rates and lower collateral values would put banks under strain. Dutch banks could be impacted both directly, through credit losses from loan defaults, as well as indirectly, through reduced consumption by borrowers and second-round effects from the real economy. High household indebtedness, pockets of house price overvaluation and relaxed lending standards for mortgage loans are the main vulnerabilities which could materialise in credit losses in the Dutch banking system.

¹⁸ In 2014 the share of new mortgage loans at or above 90% of the limit was about 40% for the first-time buyers and some 25% for home movers.

¹⁹ Taking the trend in wages since loans were originated into account, the share of mortgages where the current DSTI ratio is above 25% would probably be lower.

The vulnerabilities posed by these developments have not been reflected in risk weights for mortgage loans at IRB banks, which are among the lowest in the EU and have been gradually decreasing. The vast majority of exposures to domestic mortgage loans in the Dutch banking sector (92%, compared with 95% in 2019, before the current measure was introduced) pertains to IRB banks. Their average risk weight for domestic mortgage loans decreased from 13.2% in the first quarter of 2014 to 9.7% in the third quarter of 2019 and 7.3% in the first quarter of 2021. In the third quarter of 2022 it stood at 8.3%. To some extent, risk weights could be decreasing owing to declining LTV ratios. As these were partially the result of collateral revaluations and equity gains made by home movers, in light of the potential overvaluation this would imply that risk weights have been decreasing while the underlying systemic risks have not diminished. By way of comparison, for banks that follow the standardised approach, the average risk weight for domestic mortgage loans was 38% in the third quarter of 2019 – more than four times higher than that of IRB banks.

Section 3: Effectiveness and efficiency of the measure

3.1 How the measure addresses the risk identified

The measure proposed for extension primarily aims to enhance Dutch banks' resilience to a potential severe downturn in the housing market. DNB sees high and steadily increasing systemic risk in the housing market, with sustained price increases in real estate in recent years. Therefore, from a macroprudential perspective, risk weights assigned on Dutch mortgage loans are deemed low in the light of increasing systemic vulnerabilities. The ESRB also argued this in its recommendation from 2019, as well as in its latest analysis of RRE vulnerabilities from 2021.

Dutch banks are highly exposed to high LTV loans, which are riskier both in terms of credit risk and from a systemic perspective. High LTV loans are more likely to end up with the remaining size of the loan exceeding the value of the collateral following a bust in the housing market, which in the past has induced households to reduce consumption, prolonging the bust. As a result, the impact of a housing market correction is expected to be larger when the share of high LTV loans is greater. The measure reflects this negative externality, as the additional capital to be held for mortgage exposures increases as the share of high LTV loans rises. In addition, as the measure imposes a higher floor on banks with a larger share of high LTV loans, it disincentivises banks from granting new such loans.

The design of the measure is risk-sensitive, in the sense that the floor increases with the LTV ratio of the underlying mortgage loans. Exposure to high LTV loans is regarded as a major concern, but in the Netherlands the macroprudential authority does not have legally binding powers to reduce the LTV limit through borrower-based measures. The specific way in which LTV is mapped to risk weights is motivated by several considerations: (i) it leads to a substantial difference between the risk weights of high and low LTV loans, which strengthens the risk-sensitivity of the measure; (ii) risk weights increase gradually with the LTV ratio, preventing potential distortions through cliff-edge effects; and (iii) by using a constant risk weight for part of the loan (up to 55% LTV), mapping also ensures that risk weights for low LTV loans are not too low from a macroprudential perspective.

DNB considers that a floor dependent on the LTV ratio is a better option than using a fixed add-on. Imposing a fixed add-on could potentially lead to distorting effects by reducing the incentive for IRB banks to estimate conservative parameters, given that more conservative parameters would result in a higher sum of IRB risk weight plus the add-on. A floor dependent on the LTV ratio, by contrast, means the capital impact of the measure is larger for more risky (higher LTV) loan portfolios, which should reduce the attractiveness of these loans for IRB banks.

The measure may induce procyclicality if not regularly re-assessed. Using an LTV ratio that is updated on a quarterly basis might imply some kind of procyclicality, because rising housing prices would induce lower LTV ratios (and therefore lower risk weights), and vice versa. As a result, the measure could become less stringent in a situation where house prices are rising, and more stringent when they are falling. DNB considered this effect when calibrating the measure before its first introduction and has emphasised that it will monitor the impact of the measure on the observed build-up of systemic risks in RRE and adjust its calibration if a sustained reversal is observed. Materialisation of the risk would be a reason to withdraw the measure, according to DNB, so the capital can be used to absorb any losses.

Before the current measure was first notified in 2020, DNB ran a number of exercises that helped inform its calibration. In particular, it ran a top-down stress test using the adverse scenario from the 2018 European Banking Authority (EBA) EU-wide stress test, under which Dutch house prices were around 25% lower after three years compared with the baseline scenario. At the same time, DNB explicitly took losses observed at the national level in this exercise into account, while also ensuring that the results for individual banks were consistent at the macro level. This top-down stress test found that the average risk weight for mortgage loans could increase by as much as 8-11 percentage points in an adverse scenario. These results were substantially larger than those from the EBA stress test in 2018 (which were used as input to the Supervisory Review and Evaluation Process), implying that the capital requirements at the time of initial notification, including Pillar 2 Guidance, did not fully reflect systemic risk. The additional macroprudential requirements on top of Pillar 2 requirements were therefore considered justified at the time of initial notification. In a second analysis, DNB projected potential credit losses in a stress scenario for the housing market.²⁰ It found that banks would incur sizeable losses on their mortgage portfolios and would need to increase their capital by around €3 billion over a three-year period to maintain current capital levels. DNB believes the assumptions used in the stress test still hold, and there would be little added value in adjusting the scenarios due to the highly uncertain economic outlook.

Keeping a risk weight floor in place also helps ensure that macroprudential buffers remain effective. Capital buffers such as the O-SII buffer and the CCyB use risk-weighted assets as a denominator. If risk weights were to decline further, these buffers would become less effective. A similar consideration may apply to the current measure, should the declining risk weights be driven by rising house prices and lowering LTV ratios. However, the effect of lowering LTV ratios on effectiveness of the current measure would be limited due to the “constant” component (the 12% risk weight up to an LTV of 55%), which constitutes an “absolute” risk weight floor on Dutch mortgages.

²⁰ DNB performed a sensitivity analysis where probability of default (PD) and loss given default (LGD) increased over a three-year period in line with the maximum increases observed during the previous housing market correction.

3.2 How the measure relates to possible alternatives

As required under Article 458 of the CRR, this section assesses whether other macroprudential instruments available under the CRD and the CRR could adequately address the increase in systemic risk, taking into account their relative effectiveness. These instruments need to be considered before resorting to stricter national measures under Article 458 of the CRR. The ESRB's assessment of the existing measure has already considered this question. The main reasons why these other measures are not deemed to be appropriate alternatives to the envisaged extension of the measure under Article 458 CRR remain the same.

a) Increasing the risk weights for banks applying the standardised approach to credit risk (Article 124 of the CRR)

Relevant authorities can impose higher risk weights for exposures secured by mortgages on credit institutions that apply the standardised approach on the basis of financial stability considerations. Relevant authorities can set a risk weight for exposures secured by mortgages on residential immovable property from 35% to up to 150%. In addition, they can apply stricter criteria for the application of the 35% risk weight.

Article 124 of the CRR would not be effective in addressing the systemic risk identified, given that banks applying the standardised approach account for only a small fraction of mortgage lending by banks in the Netherlands (around 7%). Moreover, the average risk weights of banks using the standardised approach are considerably higher than those of IRB banks, and are considered sufficiently high by DNB in relation to systemic risk.

b) Increasing the loss given default floor for banks applying the IRB approach for credit risk (Article 164 of the CRR)

Relevant authorities can set higher minimum values of exposure-weighted average loss given default (LGD) for exposures secured by immovable property on the basis of financial stability considerations. The exposure-weighted average LGD for all retail exposures secured by residential property and not benefiting from guarantees from central governments must not be lower than 10%.²¹ LGD is one of the parameters used in the risk-weight function. Increasing the LGD indirectly increases the risk weight and the resulting capital requirements.

The ESRB is of the view that, given the narrower focus of Article 164 of the CRR, which only targets LGD, such a measure would not sufficiently address the intended purpose of the draft measure and could even have unintended results. Increasing the LGD would affect mainly loans with lower LGD, but these are typically the ones that have lower LTV and therefore should potentially have lower risk. Also, assuming internal models are correctly calibrated, these would penalise more conservative banks. Furthermore, acting through the LGD would also affect other microprudential parameters, such as the calculation of expected loss amounts under Articles 158 and 159 of the CRR, which is not the intended purpose of the measure.

²¹ Article 164(4) of the CRR.

c) Using the systemic risk buffer (Article 133 of the CRD)

Member States may introduce an SyRB to address systemic or macroprudential risks not covered by the CRR or by Articles 130 and 131 of the CRD, meaning 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. The SyRB can be applied to all banks or to a subset of banks. It can also be applied to a subset of exposures, exposures in third countries or exposures in other Member States.

A sectoral SyRB would be less effective and efficient in addressing the systemic risk identified than the measure proposed for extension, given that its effects could be mitigated by declining and, from a macroprudential perspective, inappropriately low IRB risk weights for mortgage loans. A sectoral SyRB can only be imposed as a percentage of the current risk-weighted assets. Declining risk weights could therefore lead to a lower capital requirement for a given SyRB rate, even when RRE vulnerabilities may be increasing. Moreover, DNB considers that it would be much more complex to achieve the risk-sensitive approach of the measure proposed for extension (linked to LTV ratios) using a sectoral SyRB.

d) Using the countercyclical capital buffer (Article 136 of the CRD)

The CCyB addresses some of the procyclicality in the financial system. It is a requirement applicable to domestic exposures. The rate for the CCyB is assessed on a quarterly basis by the designated authority. Designated authorities follow a specific methodology based on an ESRB recommendation.²² DNB's current analytical framework for setting the CCyB aims for 2% in a standard risk environment (a situation in which cyclical systemic risks are neither particularly high nor particularly low).

The CCyB is not an appropriate tool for addressing systemic risk linked to a subset of exposures and is not applicable to a subset of institutions. The CCyB rate is applied as a percentage of the total risk exposure amount calculated in accordance with Article 92(3) of the CRR. Therefore it is not possible to apply the CCyB requirement to specific subsets of exposures, such as mortgage loans. Moreover, the CCyB would apply to all institutions, whereas the proposed measure targets only IRB credit institutions.

Section 4: Analysis of the net benefits of the measure

4.1 Effects on financial stability, financial system resilience and economic growth

The measure proposed for extension is expected to continue contributing to the resilience of the Dutch banking system, and thus to potentially enhance the overall resilience of the economy as a whole. The Dutch economy has a high sensitivity to house price shocks, with banks and households especially vulnerable to a downward correction (see Section 2). Banks would be particularly affected, not only because of their direct exposure

²² Recommendation of the European Systemic Risk Board of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB/2014/1) (OJ C 293, 2.9.2014, p.1).

to mortgages, but also through indirect effects stemming from the high indebtedness of Dutch households, which makes them vulnerable to a downward correction in the housing market. If prices drop, high LTV mortgage loans would end up having values exceeding those of the underlying properties. Homeowners with total debt exceeding the value of their home tend to consume less, as was observed during the last crisis.²³ Before the measure currently in place was notified, stress tests had shown that banks' expected mortgage loan losses could surge in an adverse scenario (see Section 3.1).

The ESRB is of the opinion that keeping the calibration of the proposed measure unchanged is suitable amid increasing vulnerabilities related to Dutch RRE but a deteriorating economic outlook. On the one hand, increasing vulnerabilities related to Dutch RRE, especially the rapid growth in house prices and the increasing leverage of borrowers, might require macroprudential tightening. The current measure is, to some extent, actually becoming less restrictive, as LTV ratios of mortgage portfolios are decreasing, possibly reflecting greater overvaluation of house prices. On the other hand, the economic outlook has been deteriorating, bringing the potentially procyclical effects of macroprudential policy tightening into play in the short term. As a result, the ESRB is of the view that keeping the calibration of the measure unchanged is suitable in the current circumstances.

The targeted nature and risk-sensitivity of the measure is aimed at avoiding spillovers to overall lending and the real economy, contributing to its proportionality. Because RRE is one of the main domestic sources of systemic risk in the Netherlands, the measure targets exposures secured against this asset class. It affects banks only, for whom resilience to the indirect effect of a housing bust is likely to be more of a concern than for insurers and pension funds. The measure aims to strengthen banks' resilience and is not meant to influence house prices.

4.2 Effects on both domestic and cross-border lending

DNB does not expect the measure to have a significant negative impact on cross-border lending. The role of EU foreign lenders in the Dutch mortgage market is currently small. Nevertheless, DNB requests the ESRB to recommend that other Member States continue to reciprocate the measure, as their banking sectors may be or become exposed to the systemic risk in the Dutch housing market directly or indirectly through their branches. Reciprocation will contribute to maintaining a level playing field.

Risk weights of Dutch banks are expected to remain relatively low compared with other Member States. Even though the measure substantially increases risk weights for mortgage loans of Dutch IRB banks, these are expected to remain relatively low compared with other Member States. Spillovers to other Member States are therefore expected to be limited.

²³ Analysis from CPB Netherlands Bureau for Economic Policy Analysis shows that households whose mortgage loan ended up underwater during the crisis consumed 17% less of their average disposable income in 2014 than in 2007. Had they not moderated their consumption, nationwide consumption would have been four percentage points higher in 2014.

Contagion risk to other Member States is expected to be mitigated by increasing the resilience of the Dutch banking sector. The Dutch financial sector is highly interconnected with the European and global financial system; this measure is expected to reduce potential contagion to other Member States by strengthening its resilience.

4.3 Effects on intragroup behaviour of credit institutions

Banks have limited opportunities to reduce the impact of the draft measure through model optimisation.

This is because calibration depends on the LTV ratio of the underlying mortgage loans, not on model outcomes. The incentive for risk shifting is also limited, since risk weights increase as the LTV ratio increases.

Insurers and pension funds have been active in mortgage lending, as well as banks. Non-banks, especially insurers, have been increasing their mortgage lending over the past few years. Even though DNB has not observed any acceleration in this since the current measure was introduced, the share of non-bank lending should continue to be monitored.

Conclusions

The measure proposed for extension primarily aims at continuing to enhance the resilience of Dutch banks to a potential severe downturn in the housing market. Dutch banks are highly exposed to the Dutch mortgage market. The ESRB has drawn attention to high mortgage loan indebtedness, high LTV ratios and the significant share of borrowers with total debt exceeding the value of their home three times in recent years. At the same time, the ESRB has found that the IRB risk weights assigned to Dutch mortgage loans, which are among the lowest in the EU, do not accurately reflect the high and steadily increasing systemic risk in the housing market. On the basis of these vulnerabilities, the ESRB issued a warning to the Netherlands in 2016 and a recommendation in 2019. A 2021 assessment by the ESRB concluded that the Netherlands was fully compliant with the sub-recommendation concerning capital-based measures, given that the current risk-weight measure was scheduled to enter into force on 1 January 2022. At the same time, the latest analysis conducted by the ESRB in 2021 showed that house price growth was picking up amid partially improving but still relaxed lending standards for new mortgages, persistently high household indebtedness and a further decrease in IRB mortgage risk weights. The ESRB is therefore of the view that extension of the current measure is necessary to ensure the resilience of Dutch banks to a possible materialisation of systemic risk in the real estate market.

Dutch banks are exposed to RRE risks both directly and indirectly, with a significant share of mortgage loans bearing high LTV ratios. High LTV loans are more likely to end up with the remaining size of the loan exceeding the value of the collateral in the event of a contraction in the housing market. In the past this has induced households to reduce consumption and prolonged the downturn. As a result, the impact of a housing market correction is expected to be greater if the share of high LTV loans is large. Although average LTV ratios have been declining in the Netherlands for both existing and new mortgages, they remain high. Moreover, declining LTV ratios have partly been the result of collateral revaluations and equity gains made by home movers, possibly reflecting increasing house price overvaluation. Declining LTV ratios may be contributing to the decrease in IRB risk weights,

even though the underlying systemic risks are not diminishing. The measure proposed for extension seeks to tackle these negative externalities, as the additional capital to be held by Dutch IRB banks for mortgage exposures increases as the share of high LTV loans rises. In addition, as the measure will impose a higher floor on banks with more loans with high LTV ratios, it gives disincentives to granting new high LTV loans.

Extension of the measure is intended to retain the €4.5 billion capital buffer accumulated by Dutch IRB banks under the current measure. On aggregate, DNB estimates the proposed measure will increase the average risk weight of IRB banks' mortgage portfolios on aggregate from 8% without the current measure to between 13% and 14%. Extension does not alter the calibration of the measure currently in place and is therefore already fully phased-in.

The extension of the floor on IRB risk weights will also help to ensure that macroprudential buffers remain effective. Capital buffers such as the O-SII buffer and the CCyB use risk-weighted assets as a denominator. If risk weights were to decline further, these buffers would become less effective. A similar consideration may apply to the current measure, should the declining risk weights be driven by rising house prices and lowering LTV ratios. However, the effect of lowering LTV ratios on effectiveness of the current measure would be limited due to the "constant" component (the 12% risk weight up to an LTV of 55%), which constitutes an "absolute" risk weight floor on Dutch mortgages.

The ESRB is of the view that the systemic vulnerabilities stemming from the RRE market are still not fully reflected in estimated IRB risk weights for mortgage loans in the Netherlands. The measure proposed for extension, which imposes a floor on risk weights linked to LTV ratios, will therefore help to increase the resilience of Dutch banks to a possible materialisation of systemic risk in the RRE market. Because all macroprudential buffers are based on risk-weighted assets, it is essential the risk weights applied reflect the systemic risk profile of underlying assets. The ESRB is therefore of the view that the current measure should be extended.

The ESRB is of the opinion that keeping the calibration of the measure unchanged is suitable amid increasing vulnerabilities related to Dutch RRE, given that the overall economic outlook is deteriorating. This rise in vulnerabilities might require macroprudential measures to be tightened. However, given the deteriorating economic outlook, policy tightening may potentially bring procyclical effects in the short term. The ESRB is therefore of the view that keeping the calibration of the measures unchanged is suitable at the current juncture. Nevertheless, the ESRB notes that the calibration of the measure was derived using stress tests which did not take the current risks of higher household vulnerability due to inflation risks and increasing mortgage interest rates into account. In addition, the ESRB notes that the measure may become less stringent as RRE vulnerabilities continue to increase. DNB should continue to monitor the resilience of both the household and banking sectors and take appropriate policy action if needed to mitigate risks related to the RRE market in the Netherlands, while avoiding procyclical effects on the real economy and the financial system.