

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

Introduction

On 22 January 2018 the European Systemic Risk Board (ESRB), in accordance with Article 458(2)(d)(vi) of the Capital Requirements Regulation (CRR)¹, received an official notification from Nationale Bank van België/Banque Nationale de Belgique (NBB/BNB), acting as designated authority for the purpose of Article 458 of the CRR², that it intends to adopt a national measure aiming to address the increased systemic risk originating from the domestic market for residential mortgage loans. Under Article 458 of the CRR, the ESRB is required to provide the Council, the European Commission and Belgium 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 ESRB's assessment focuses on the net benefits of the national measure for maintaining financial stability. In Decision ESRB/2015/4³, the ESRB clarifies the procedural framework for the provision of opinions under Article 458 of the CRR. In particular, the ESRB has assessed the rationale and merit of the measure against the following criteria.

- **Justification:** Has there been an increase in 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 IV)⁴ and/or the CRR adequately address the risk, taking into account their relative effectiveness?
- **Effectiveness:** Is the measure likely to achieve its intended objective?
- **Efficiency:** Will the measure achieve its objective in a cost-efficient way, i.e. has the appropriate instrument and calibration been used?

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.

² Article 97 of the Belgian Banking Law (Wet op het statuut van en het toezicht op kredietinstellingen /Loi relative au statut et au contrôle des établissements de crédit) qualifies NBB/BNB as the national designated authority for the purposes of Article 458 of the CRR. The official notification prepared by NBB/BNB was formally transmitted to the ESRB by the Permanent Representative of Belgium to the European Union, Ambassador Roux.

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.

- **Proportionality and impact on the Single Market:** Is there an appropriate balance between the costs resulting from the measure and the problem it aims to address, also taking into account any potential cross-border spillover effects? Where appropriate, the ESRB may suggest amendments to the measure to mitigate potential negative spillover effects.

The ESRB's assessment builds to a large extent on a previous assessment by it of a draft measure notified by the Belgian authorities on 14 February 2017, but which was not adopted⁵. In many respects the context in which the present draft measure is proposed is similar to that of the draft measure notified in February 2017. Where appropriate, the ESRB's earlier assessment has been updated and incorporated into this assessment. The ESRB has also drawn extensively on information provided by NBB/BNB and discussions with NBB/BNB staff, as well as on the assessment performed by the ESRB in the context of its warning of 22 September 2016⁶.

Section 1: Description of and background to the measure

The draft measure consists of a risk weight add-on for residential mortgage exposures of banks⁷ applying the internal ratings-based (IRB) approach; the risk weight add-on is composed of a flat component and a proportionate component. The measure falls under Article 458(2)(d)(vi) of the CRR, i.e. the use of risk weights for targeting asset bubbles in the residential property sector. The risk weight add-on leads to an increase in risk-weighted assets (RWAs) for the individual banks, which in turn results in higher capital requirements. The difference between the capital requirements after the application of the draft measure and the capital requirements without the application of the draft measure can be viewed as an additional capital cushion.

The risk weight add-on is composed of:

- **A general, flat risk weight add-on** of 5 percentage points for banks using the internal ratings-based (IRB) approach for their retail mortgage exposures secured by residential immovable property, for which the collateral is located in Belgium.
- **An additional proportionate risk weight add-on** which is obtained as a fraction (33%) of the average microprudential risk weight of the bank's portfolio of retail mortgage exposures (i.e. before application of the general add-on referred to above). This average risk weight is the average of the risk weights of the individual loans weighted by the exposure at default (EAD) that they apply to.

The ESRB and NBB/BNB regard the two components as elements of a single macroprudential measure. Both components indeed contribute to the objective of increasing bank resilience and have been jointly calibrated. Since the impact of the measure is on average more than 25% of the risk weights for those banks concerned which use the IRB approach, Article 458(10) of the CRR does not apply.

⁵ Assessment by the ESRB dated 13 March 2017 of the notification by Belgium in accordance with Article 458 of Regulation (EU) No 575/2013 concerning the application of a stricter national measure for residential mortgage lending.

⁶ See the Warning of the European Systemic Risk Board of 22 September 2016 on medium-term vulnerabilities in the residential real estate sector of Belgium (ESRB/2016/06) and also the ESRB's report entitled *Vulnerabilities in the EU residential real estate sector*, November 2016.

⁷ For the purpose of this assessment the term "bank" has the same meaning as "credit institution" as defined in Article 4 of the CRR.

To enter into force under Belgian law, the draft measure must be introduced as a NBB/BNB regulation and adopted by a Royal Decree that is expected to take effect on 30 April 2018. NBB/BNB confirms that it has received the formal support for this from the Federal Government of Belgium and that the draft measure will indeed be adopted provided that the procedure under Article 458 of the CRR is successfully concluded.

The draft measure follows an earlier macroprudential measure that expired in May 2017. The expired measure consisted of a general risk weight add-on of 5 percentage points and was also based on Article 458(2)(d)(vi) of the CRR. It expired on 28 May 2017 and was scheduled to be replaced by a further measure under the same Article 458(2)(d)(vi) of the CRR. However, although the ESRB issued an assessment of it on 13 March 2017 and the European Commission adopted a decision not to propose to the Council an implementing act to reject it, this further measure was not adopted by the Federal Government. The Federal Government asked NBB/BNB to maintain the original measure and to reassess the vulnerabilities in the residential real estate (RRE) sector.

NBB/BNB gave a commitment to conduct an updated assessment and propose an appropriate measure should RRE risks persist. In the meantime, as a temporary solution, the original, expired measure was extended in the form of a non-binding bilateral recommendation to those banks using the IRB approach to maintain, on a voluntary basis, the capital buffers resulting from the 5 percentage points risk weight add-on. In November 2017 NBB/BNB announced that its updated assessment indicated the need for an additional measure and that it was considering a measure based on a credit institution's total mortgage portfolio rather than the risk profile of individual mortgage loans. The resulting measure is that now being proposed, which in terms of goals and impact (and also at the level of the individual banks) is broadly similar to the previous draft measure which was not adopted.

The ESRB has also received a preliminary request by NBB/BNB to recommend the reciprocation of the draft measure by other Member States under Recommendation ESRB/2015/2⁸. This request will only be considered by the ESRB following completion of the notification and approval procedure and provided that the draft measure has been effectively adopted by the Belgian authorities. A possible ESRB Recommendation for reciprocation is therefore not considered in this assessment, although the ESRB would be open to it in principle.

Section 2: Analysis of the underlying systemic risks

In its warning of 22 September 2016⁹, the ESRB considered the main medium-term vulnerabilities in the RRE sector in Belgium to be the fast increase in overall household indebtedness, combined with significant groups of already indebted households, against the background of a significant increase in RRE prices over the past two decades.

2.1 Vulnerabilities in the residential property sector

There are indications of a certain degree of overvaluation of residential property prices in Belgium. This view is supported by NBB/BNB expert judgement as reflected in the notification. RRE prices have significantly increased since 2000, with only minor price corrections during the

⁸ 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.

⁹ Warning of the European Systemic Risk Board of 22 September 2016 on medium-term vulnerabilities in the residential real estate sector of Belgium.

financial crisis.¹⁰ Figures for 2015 showed a 3.8% average annual increase, which decelerated to 0.9% in 2016. In the first quarter of 2017 the year-on-year growth rate increased again to 2.6%. These price increases seem to be broad-based across regions as well as type of real estate. RRE prices have also increased at a faster pace than income or rental prices. Since 2010, the price-to-income (PTI) and price-to-rent (PTR) indices have increased at a faster pace and are now respectively 10 percentage points and 8 percentage points higher than the euro area average.

Real estate valuation methods used by the European Central Bank (ECB) suggest that RRE prices are overvalued in Belgium, by up to 31% depending on the model used, with a cross-model average of 15%. By contrast, according to NBB/BNB model-based estimates the degree of overvaluation is in the range from 0% to 10%. Such model-based estimates are subject to some degree of uncertainty and are quite model-dependent. Moreover, the results are also influenced by current historically low interest rates and a return to higher rates is likely to result in substantial downward price pressures on house prices.

2.2 Vulnerabilities in the household sector

The level of household debt has significantly increased and there are specific groups of households which are highly indebted. Household debt vis-à-vis GDP has been steadily increasing by 1 to 1.5 percentage points per year and reached 60.1% in the second quarter of 2017 (up from 55.3% in 2012). Compared to other euro area countries, Belgium is one of the countries with the strongest increases in household indebtedness since the financial crisis and its debt ratio now exceeds the euro area average. Growth in mortgage lending remains high at around 5.4% in September 2017 on a year-on-year basis, compared with a euro area average of 3.4%.

These developments have increased concerns about the debt sustainability of households. While the share of loans with a debt service-to-income (DSTI) ratio higher than 50% decreased somewhat until 2014, mainly as a result of lower lending rates, this development did not continue throughout the subsequent years, despite a further reduction in mortgage interest rates. The share of loans with a DSTI ratio above 50% remains high (more than 20%). Furthermore, one third of outstanding mortgage loans have loan-to-value (LTV) ratios that were more than 90% at the time of their origination. A substantial part of the total stock of mortgage loans combines high DSTI and LTV ratios. At the end of 2016, 26% of the outstanding loans had at origination both a DSTI ratio higher than 30% and an LTV ratio higher than 90%.

However, there are also a number of mitigating factors. These include, in particular, (i) the high share of loans with a fixed interest rate, (ii) legal limits on the interest rate variability of mortgage loans, (iii) the fact that mortgage loans are generally amortising, with maturities of no more than 25 years at origination, and (iv) the high level of financial assets held by households relative to their debt.

2.3 Vulnerabilities in the banking sector

Overall, the solvency and liquidity position of Belgian banks is sound and has further improved. In the second quarter of 2017, the CET1 (Common Equity Tier 1) ratio of the sector was 15.6% compared with an EU average of 14.7%; the loan-to-deposit ratio was 83%, which is lower than the EU average.

The Belgian banking sector continues to expand its exposure to mortgage loans. Total outstanding mortgage loans granted by Belgian banks to Belgian households grew from €169 billion at the end of 2014 to €194 billion at the end of September 2017. Mortgage loans now

¹⁰ Nominal prices have more than doubled since 2000, while real prices have increased by more than 50%.

make up approximately 18% of the balance sheets of Belgian banks. Banks' business plans also indicate that sustained new mortgage lending can be further expected in the coming years. Against the backdrop of continued low interest rates, this has intensified competition and also increased risk-taking.

Risk weights for mortgage loans are low compared with other Member States. The average IRB risk weight for a mortgage loan (before the 5 percentage points add-on) is 9.7%, compared with an EU unweighted average of 16% and a risk weight floor of 35% under the standardised approach.¹¹ NBB/BNB explains this low level by the fact that IRB risk weights are calibrated in a backward-looking manner and on the basis of historical Belgian data. The Belgian banking sector did not experience periods of major drops in RRE prices (which would be reflected in the loss given default parameters - LGDs) or high defaults on mortgage loans (which would be reflected in the probabilities of default (PDs)) over the relevant sample period.

The share of the riskier exposures in banks' mortgage portfolios continues to be high. Overall, banks have focused their efforts on strengthening credit standards by shortening the maturities of mortgage loans, and the share of high-LTV/high-DSTI loans in the flow of new lending is still high. NBB/BNB has not observed any further improvements in LTV and DSTI ratios since the end of 2014. On the contrary, the most recent NBB/BNB figures indicate that the tightening of credit standards for mortgage loans has come to a halt and, in certain respects, has even reversed. The share of high-DSTI (above 50%) loans and loans with long maturities (beyond 20-25 years) has been increasing, while the reduction of high-LTV loans (above 90%) has slowed down. Margins on mortgage loans have also been decreasing, reflecting the continued intense competition in the market.

Section 3: Effectiveness and efficiency of the measure

3.1 How the measure addresses the identified risk

The draft measure is the latest in a wider set of initiatives that have been introduced over several years to address risks in the Belgian RRE sector. In the course of 2011, NBB/BNB launched a survey of banks' mortgage loan portfolios, the results of which were discussed in its Financial Stability Report (FSR) of June 2012. Since then, this survey has been conducted, and the results discussed by the NBB/BNB's Executive Board, on a semi-annual basis. Articles on recent developments in the Belgian mortgage market, highlighting the increasing risks posed by RRE, were published in the FSRs of June 2014 and of June 2016.

A macroprudential measure was introduced in 2013, consisting of a 5 percentage point add-on to risk weights calculated by the banks using the IRB approach to determine capital requirements in relation to residential mortgage loan exposures. This measure took effect with the Royal Decree of 8 December 2013 and was aligned with the CRR, on the basis of Article 458, on 28 May 2014 for a two-year period. It was extended for another year in May 2016. As a result of this add-on, the average risk weight of Belgian mortgage loans for those banks using the IRB approach effectively increased to about 15% at the end of 2013. The resulting buffer, calculated on the basis of an 8% capital requirement, was equivalent to around €0.6 billion of additional required capital. As mentioned in Section 1 above, NBB/BNB issued a non-binding bilateral recommendation to those banks using the IRB approach to maintain the expired measure on a voluntary basis.

NBB/BNB also took several microprudential initiatives at the end of 2013. First, it conducted a horizontal review of the banks' internal models to evaluate whether the parameters were

¹¹ Banks applying the standardised approach represent only about 5% of the total mortgage market in Belgium.

adequately calibrated. This review did not raise any general concerns about the adequacy of the internal models. Where individual and specific weaknesses were observed, the bank concerned was required to review its internal models. Second, banks were required to carry out a self-assessment of the degree to which each bank conformed to the EBA Opinion on Good Practices for Responsible Mortgage Lending and the EBA Opinion on Good Practices for the Treatment of Borrowers in Mortgage Payment Difficulties. In addition to those earlier initiatives, ECB Banking Supervision is currently conducting a targeted review of internal models (TRIM) used by significant credit institutions.

The primary objective of the draft macroprudential measure is to improve the resilience of banks exposed to systemic risk from the RRE sector by increasing their required capital. This will enable them to withstand potential losses on residential mortgage loans that are greater than those experienced in the past, as well as possible spillover effects on the commercial real estate sector and the real economy. NBB/BNB has indicated that it would be willing to release the capital cushion should banks start experiencing substantial losses following RRE price corrections and rising defaults. The release modalities would be based on the specific market developments.

The combination of the flat-rate and the proportionate risk weight add-on seems, at this point in time, to be appropriate in addressing the systemic risk that NBB/BNB is targeting.

First, the measure does not distort the models used by banks to estimate the PD and LGD of borrowers. Banks therefore continue to have an incentive to apply strict loan origination policies and adequately differentiate between different risks. As the risk weight add-on is applied at portfolio level, this is equivalent to applying the add-on to each individual loan in the portfolio.

Because it takes the form of a flat 5 percentage points risk weight add-on, the measure has a greater relative effect on mortgage loans with lower risk weights than on those with higher risk weights. This could potentially provide an incentive to banks to increase the riskier segments of mortgage lending compared to the safer segments.

NBB/BNB points out that when the 5 percentage points risk weight add-on was introduced in 2013 it was not intended to target high risk loans, but to take into account the fact that the Belgian data did not incorporate a sufficient number of crisis periods, which could bias the outcome of internal models even when correctly calibrated. Maintaining the flat risk weight add-on in the measure ensures continuity and therefore facilitates communication of this approach.

NBB/BNB is of the view that the risk of a portfolio rebalancing towards riskier loans is minimal because the 5 percentage points risk weight add-on can be considered as a lump sum tax that is independent of the loan's risk profile. The flat add-on is not expected to bias banks' incentives; since banks cannot change this capital add-on by their actions they have no reason to deviate from their previous optimal loan extension strategy. Moreover, it is the risk-sensitive component which is the new element introduced by the measure; the flat 5 percentage points add-on has been in place since 2013 and has not resulted in any observable shift in mortgage loan portfolios as described above. NBB/BNB considers that as a result of the proportionate part of the measure, banks will have the right incentives in place because the multiplier applied to a higher risk weight results in a higher capital requirement. Finally, NBB/BNB expects that the pricing of individual loans will continue to take place at individual loan level, reflecting the loan's specific risk characteristics.

Second, the proportionate component of the measure provides banks with an incentive to reduce the high risk segments in their mortgage portfolio, i.e. the high-LTV and high-DSTI loans. Because of the uniform multiplication factor of 1.33 applied to the risk weights, the

additional complexity resulting from the risk-sensitive element of the measure remains limited, while at the same time affecting mortgage loan portfolios in proportion to their overall level of risk.

The measure affects seven banks (on a consolidated basis). Six of these banks, representing 87% of the Belgian (banking) mortgage market, are significant credit institutions (or subsidiaries of significant credit institutions) and therefore directly supervised by the ECB under the Single Supervisory Mechanism (SSM) Regulation¹².

The CET1 ratio of the affected banks at the end of September 2017 ranged from 13.7% to 25.2%, with an average of 14.7%. Their **CET1 capital** requirement is estimated to increase in total by €1.5 billion. The total increase can be decomposed into an increase of €0.9 billion as a result of the first component of the add-on and an increase of €0.6 billion as a result of the second component. The estimate takes into account all the channels through which the risk-weight add-on affects RWAs and capital requirements (such as Pillar 2 requirements or the capital conservation buffer). The measure would have no binding effect as none of the banks concerned would be required to increase capital to meet the additional requirements. In terms of the required **CET1 ratio**, the figure represents on average a decrease of 0.62 percentage point. This figure can be split into 0.39 percentage point for the first component of the measure and 0.24 percentage point for the second component (the new element).

The **average risk weight for mortgage loans of banks using the IRB approach** would increase from 9.7% to 17.9%, compared with 45% for banks using the standardised approach. This increase can be decomposed into an increase of 5 percentage points for the first component and 3.2 percentage points for the second component. The impact on individual banks depends on the bank's business model (in particular the exposure to RRE risk) and the quality of its portfolio of mortgage loans.

The calibration of the measure seems justified for the following reasons:

- **Sensitivity of results.** NBB/BNB did not perform a broad macroeconomic stress test to calibrate the IRB risk parameters, partly because the absence of a major crisis in the past would most likely result in the parameters not being particularly sensitive to macroeconomic variables. Instead, NBB/BNB assessed the impact on the loss-absorbing capacity of banks using the IRB approach under different scenarios for PDs and LGDs. The benchmark scenario used for the calibration consists of a multiplication of the default rate by a factor of 5 and an increase in the LGD by 25 percentage points. A complementary adverse scenario additionally imposes a minimal default rate per institution by using a floor on default rates of 4% (and of 5% as an alternative scenario to gauge the sensitivity of the results). The scenario used by NBB/BNB was the same as that used for the calibration of the draft non-adopted measure on which the ESRB issued an opinion in March 2017. The scenario analysis does not include any quantitative forecasts of key variables.

The stressed LGD corresponds to a price drop in RRE prices of 25%. This figure for a stress scenario is substantially higher than NBB/BNB's estimated overvaluation of residential property prices (around 0%-10%) and accounts for the possible risk of overshooting in the event of a crisis. EBA stress tests are based on a fall of 29% in RRE prices for Belgium. The five-fold increase in PDs is comparable to a housing market downturn in which the default rate on mortgage loans rises from 1% to about 5% in the course of one year. NBB/BNB

¹² 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.

conducted some further sensitivity analysis on the impact of changes in key parameters, but the order of magnitude of the results did not change.¹³

- **International comparison.** Banks in Belgium using the IRB approach have an average risk weight of around 10%, whereas for neighbouring countries the figure is around 15%.¹⁴ After application of the measure, Belgian risk weights would be more in line with those of most of its neighbouring countries.
- **Desire for a soft landing.** By further increasing the macroprudential capital cushion by a relatively small amount, NBB/BNB aims to avoid unsettling the market, while at the same time signalling continued concerns. NBB/BNB considers that, although vulnerabilities have clearly built up over time, the financial position of banks and households does not warrant any immediate drastic action. Given the considerable uncertainty about (i) future developments in the economy and the housing market and (ii) the strength of the transmission mechanism of the measure, NBB/BNB favours a gradual approach.

Third, NBB/BNB also considers the draft measure to be an important signal of impending risks to financial stability. The draft measure signals to the banking sector and the public at large that concerns over developments in the RRE sector persist, particularly in the high risk segment. NBB/BNB announced the draft measure in a press release on 21 November 2017 and on the same day Febelfin (the Belgian banking federation) issued a statement in support.

The proportionate risk weight add-on increases banks' incentives to maintain appropriate lending standards by making riskier loans more costly for banks. This may have an effect on either the pricing or the volume (or both) of riskier mortgage loans. NBB/BNB only expects a mild price effect for new loans but that may be a sufficient deterrent to certain households; it is indeed the intention of the measure to prevent those households that are financially fragile from taking excessive risks. NBB/BNB does not expect the measure to result in a significant deterioration in the financial conditions of weaker households generally, given that current mortgage rates are at historically low levels. In the current low interest rate environment, borrowers' price sensitivity is likely to be low, potentially dampening the dissuasive effect of the measure. In other words, even if banks were to pass through the increased capital charge in the form of higher interest rates on riskier mortgage loans, the reduction in the volume of such loans may be limited.

While NBB/BNB highlights the risk from increasing household indebtedness, the measure does not primarily seek to address this risk. The draft measure increases the resilience of the banking sector to risks from the RRE market and provides a signalling effect that NBB/BNB is concerned about riskier mortgage lending. The measure could have the positive side effect of reducing the risk of rising household indebtedness, although this will be indirect and may be small. The ESRB has identified the fast increase in overall household indebtedness combined with significant groups of already highly indebted households as the main medium-term vulnerabilities in the Belgian RRE market. These vulnerabilities are not being addressed directly by the current measure. The ESRB will continue to monitor developments in household indebtedness in line with its warning.

¹³ Complementary scenarios additionally imposed floors of 4 percentage points and 5 percentage points on the PDs obtained in the benchmark stress scenario. The capital needs identified in these cases vary within the range of 79% to 113% of the estimated effective impact of the measure under the benchmark stress scenario.

¹⁴ See Table 2.3 on page 28 of the ESRB report entitled *Vulnerabilities in the EU residential real estate sector*, November 2016.

3.2 How the measure relates to possible alternatives

As required under Article 458 of the CRR, this section assesses whether other available macroprudential instruments under the CRD IV/CRR could adequately address the increase in systemic risk, taking into account their relative effectiveness. These instruments need to be considered before having recourse to Article 458 of the CRR to adopt stricter national measures.

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

On the basis of financial stability considerations, the competent authority is allowed, under Pillar 1 of the CRD IV/CRR, to increase the risk weights of banks that apply the standardised approach (SA) to their exposures secured by mortgages on immovable property from 35% to up to 150%, or to apply stricter criteria for the application of the 35% risk weight.

As only 5% of the relevant Belgian mortgage market exposures are held by banks applying the standardised approach, Article 124 of the CRR would not be effective in meeting the objectives of the measure. In addition, the SA risk weight floor of 35% is seen as sufficient (compared with an average risk weight of around 10% for banks using the IRB approach). The measure aims to address the relevant market segments exposed to the RRE risks, which are primarily based on IRB models. These risk weights from internal models are currently low in Belgium as they are calibrated based on data which reflect limited historical losses in the Belgian market. Addressing SA risk weights would therefore not be relevant in this market context.

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

On the basis of financial stability considerations, the competent authority is allowed, under Pillar 1 of the CRD IV/CRR, to increase the exposure-weighted average LGD floor of banks using the IRB approach for their retail exposures secured by residential property. The LGD is one of the parameters used in the risk weight function. By increasing the LGD, the risk weight and resulting capital requirements increase indirectly.

NBB/BNB emphasises that the draft measure is of a macroprudential nature, that it should consequently be seen as separate and additional to any microprudential requirements and that it should vary according to developments in the Belgian RRE market. According to NBB/BNB, Article 164 of the CRR is a microprudential measure and, as such, is to be implemented by the competent authority. Raising the average LGD floor under Article 164 of the CRR would imply interfering with the internal models of banks and would also have other microprudential implications (e.g. in the calculation of expected loss amounts in Articles 158 to 159 of the CRR).

NBB/BNB is also of the view that applying Article 164 of the CRR would have a significant perverse effect on banks' incentives. Banks may be induced to replace loans with low/conservative LGDs by loans with LGDs that are in line with the LGD floor, so that the higher risk weight would be compensated by the higher pricing of the loan. Moreover, imposing an LGD floor places the focus on only one risk parameter of the loan, while the draft measure takes into account the full risk profile of the loan as reflected in its risk weight. Although the measure is applied at portfolio level, each loan contributes to the portfolio's overall risk profile in proportion to its risk weight and EAD.

Finally, according to NBB/BNB the use of Article 458 of the CRR over Article 164 of the CRR would be consistent with the previous macroprudential measure.

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

Member States may introduce a systemic risk buffer to address long term non-cyclical systemic or macroprudential risks not covered by the CRR. The systemic risk buffer can be applied to all banks or to a subset of banks.

The draft measure aims to limit the risk of a severe cyclical downturn in the RRE market and thus the systemic risk buffer would not be applicable. The systemic risk buffer can only be used to address non-cyclical risks. The current and draft macroprudential measures can be seen as tightening measures being taken by NBB/BNB in response to increasing cyclical risks in the Belgian RRE market.

In addition, NBB/BNB wishes to directly target RRE exposures. Introducing a buffer which would be applied to all exposures in Belgium would neither be targeted nor effective.

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

The CRD provides for the introduction of a countercyclical capital buffer to address some of the procyclicality in the financial system. The countercyclical capital buffer is a requirement for domestic exposures. The rate for the countercyclical capital buffer is set on a quarterly basis by the designated authority and there is typically a twelve-month lead time from when an increase in the rate is announced to when banks have to apply it.

The countercyclical capital buffer rate would apply to all Belgian credit exposures, not just RRE exposures. Again, this measure would not appropriately target the risk identified by NBB/BNB and would affect all other exposures. In addition, NBB/BNB notes that there is currently no sign of excessive credit growth in the non-financial corporate sector.

e) Using Pillar 2 (Articles 101, 103, 104, 105 of the CRD)

Under the supervisory review process (Pillar 2 of the CRD IV/CRR), the competent authority can implement a wide range of supervisory measures to address (elements of) risk that are not sufficiently covered by Pillar 1 and provide incentives for banks to enhance their risk management (see Article 104 of the CRD). Furthermore, the CRD allows the use of Pillar 2 for macroprudential purposes (see Article 103 of the CRD). There is at least one precedent for the use of Pillar 2 in addressing the type of risk of concern to the Belgian authorities: in 2013 Sweden's financial supervisory authority *Finansinspektionen* introduced, under Pillar 2, a risk weight floor of 15% for Swedish mortgages. This measure was publicly disclosed by the Swedish supervisor.

In the case of Belgium, NBB/BNB has put forward several arguments in favour of using a Pillar 1 measure instead of a Pillar 2 measure, mainly relating to their relative effectiveness. The ESRB agrees with these arguments.

- **Macroprudential nature of the draft measure.** NBB/BNB is introducing this measure on the basis of concerns relating to the RRE market in Belgium and not based on the risk assessment made under Article 97 of the CRD, which requires an evaluation of the risks posed by institutions on an individual basis. The measure is being taken with the objective of addressing macroprudential risks arising from the real estate market and not to address microprudential risks such as a potential mis-calibration of internal models.
- **Effectiveness of the measure.** The common practice of NBB/BNB and the ECB as banking supervisors is to take decisions related to the Supervisory Review and Evaluation Process (SREP) or Pillar 2 once a year in the form of a general CET1 capital requirement. Any increase in the required Pillar 2 CET1 ratio to reflect the amount of capital needed to cover risks in the mortgage market would therefore also affect the capital requirements related to credit exposures other than mortgage loans. Moreover, a Pillar 2 capital add-on is more

static, based on a time-specific assessment of the outstanding stock of mortgage loans, whereas the draft measure applies to both the outstanding stock and the flow of new loans. Overall, the result would be a more blunt measure than the one proposed under Article 458 of the CRR.

- **Transparency.** According to NBB/BNB, the previous SREP decisions by the Supervisory Board of the ECB referring to specific significant credit institutions and under which Pillar 2 requirements may have been imposed, were not made public. In addition, unlike a Pillar 2 requirement, a higher Pillar 1 requirement will reduce banks' reported capital ratios and lower ratios will better highlight banks' capacities to absorb unexpected losses.
- **Continuity with the previous measure.** The draft measure is similar to the previous measure that consisted of a flat 5 percentage points risk weight-add on and which was also adopted under Article 458 of the CRR. Such continuity facilitates the communication and public understanding of the new measure.
- **Impact on other capital requirements.** Introducing the additional capital requirements via Pillar 1 and an increase in RWAs means that the higher requirements will also be taken into account when determining additional capital which needs to be held for other macroprudential capital buffers, such as the countercyclical capital buffer. This would not be the case under a Pillar 2 measure, unless it were calibrated so as to take this effect into account.
- **Lack of justification for using Articles 101 and 102 of the CRD.** NBB/BNB has determined that the banks using internal models comply with the requirements of the CRR. A review carried out in 2014 did not raise any general concerns regarding the internal models and in cases where individual weaknesses were identified, action was taken with the specific banks. NBB/BNB further notes that ECB Banking Supervision's TRIM exercise is presently underway. If need be, the outcome of this exercise will be taken into account in the (re)calibration of the measure, although there are at present no indications of any significant deficiencies in the models used by the banks concerned.

The low risk weights arise due to the backward-looking nature of the models and the lack of a major real estate market crisis in Belgium in recent decades. Furthermore, the current risk weight calculation based on the relevant standard issued by the Basel Committee on Banking Supervision does not account for the systemic risk dimension, as the asset correlation parameter for mortgage loans is low relative to that which could be observed during a real estate crisis. NBB/BNB considers that the risk weights correctly reflect the microprudential risks and that recalibrating the models is not the correct approach to addressing a risk that is clearly macroprudential in nature.

- **Institutional set-up.** Under the SSM Regulation, the ECB, not NBB/BNB, is the competent authority in the case of significant Belgian credit institutions, which are, by and large, those using internal models for assessing credit risk. The allocation of responsibilities conditions the use of Pillar 2 as a macroprudential instrument.

f) Addressing household indebtedness

Given the concerns expressed by the ESRB in its warning about the fast increase in overall household indebtedness as the main medium-term vulnerability for the RRE sector, Belgium might also consider introducing measures to address this identified vulnerability more directly. Against the backdrop of a continued presence of a risky group of households in both the stock and flow of mortgage lending, combined with a household debt level that has been generally increasing, rapid credit growth and a halt in the tightening of lending standards, the ESRB found in its 2016 assessment that the policy stance at the time may not have been sufficient to contain the rising vulnerabilities in the household stretch.

Measures directly addressing the vulnerabilities related to highly indebted households have not been adopted so far. While NBB/BNB notes that the draft measure could somewhat slow down rising household debt by reducing the share of new, more risky loans, a measure limiting the amount of debt that households can take relative to their income would be a more direct approach. NBB/BNB notes that such measures would only target the flow of new loans, thus leaving the risk embedded in the outstanding stock of loans unaddressed. Such borrower-based measures are the competence of the Federal Government of Belgium and are therefore not in the toolkit of NBB/BNB. The latter has, however, the power to recommend their use to the Federal Government.¹⁵

The ESRB understands that there is a certain political sensitivity related to the use of borrower-based instruments. This applies even where such instruments are only used in an indirect way, as in the case of the draft measure on which the ESRB issued an opinion in March 2017 and that was not adopted. Borrower-based instruments may indeed have distributional consequences restricting the access of certain segments of the population to credit. However, the materialisation of risk is also likely to have strong distributional consequences. If strict caps on LTI, DTI or DSTI ratios were considered to be too sensitive, then a proportionate or “speed limit” approach¹⁶ could be an alternative.

Section 4: Net benefits analysis of the measure

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

Increasing the required capital will further increase the resilience of the Belgian banking sector, albeit to a modest extent. The total increase in required capital is around €1.5 billion. The marginal effect, i.e. difference in the capital increases produced by the draft measure and the previous measure, is €0.6 billion. This should be compared to a total CET1 capital base of €51.1 billion (for the affected banks) and an average CET1 ratio (for the affected banks) of more than 14.7% (all figures are given as at the end of September 2017). As mentioned above, increasing the required capital will enable banks to withstand a shock in which default rates increase by a factor of 5 and LGDs rise by 25 percentage points. Owing to the high level of interconnectedness in the Belgian banking sector¹⁷, a more resilient Belgian banking sector would also be beneficial in terms of financial stability in the EU. It should also be noted that, under the procedure laid down in Article 4 of Decision ESRB/2015/4, no member of the General Board raised any material concerns regarding negative externalities of the measure, in terms of adverse cross-border spillover effects.

No information is available on the possible impact of the measure on economic growth, but given the limited change in capital requirements, the impact would be expected to be rather small. For the same reason, the impact on growth, if any, in other countries would also be expected to be minimal.

¹⁵ Article 36/38 of the Statute on the NBB/BNB contains an explicit legal basis for the adoption of an LTV and a DTI cap by means of a Royal Decree, to implement a recommendation of NBB/BNB. The draft measure of the Federal Government shall be submitted to NBB/BNB for advice, unless it is entirely consistent with NBB/BNB’s recommendation. In its recommendation, NBB/BNB can request that the cap be adopted within a certain time frame. However, the Federal Government is free to decide whether or not to follow the recommendation. If it decides not to act upon NBB/BNB’s recommendation within the prescribed timeframe, or not to act at all, it must duly justify such decision in writing to NBB/BNB.

¹⁶ Under this approach, a certain share of new loans is allowed to break the limit on the borrower-based instrument.

¹⁷ See, for example, pages 13-14 of the IMF’s report, *Integrating stability assessments under the financial sector assessment program into Article IV surveillance*, 27 August 2010.

4.2 Effects on both domestic and cross-border lending

It is still too early to assess the effective impact of the draft measure on banks' credit standards and pricing behaviour. The draft measure was only announced in November 2017; it is therefore too soon to observe any effective changes in bank behaviour. NBB/BNB expects, though, that the measure will be somewhat reflected in the pricing of mortgage loans for the more risky segments.

There are no signs that non-banks have been expanding their relative market share since the introduction of the 5 percentage points risk weight add-on in 2013, but NBB/BNB is monitoring the situation closely. With a share of around 10%, or €20 billion, non-banks (e.g. insurance companies, public housing companies and specialised mortgage lenders) are only small players in the mortgage loan market.

Foreign branches are very small players in the market and there have not been any significant new entrants in recent years. At the end of 2017 the mortgage lending activity of foreign branches totalled €1.8 billion, or 0.79% of the total market.

4.3 Effects on banking groups' intragroup behaviour

Given that the banks are able to meet the increased capital requirement with existing capital buffers, it is unlikely that this measure will cause a shift in capital from operations to other countries.

Belgian subsidiaries of EU banking groups are important market players. Among the 14 major players in the market for residential mortgage loans, five are Belgian subsidiaries of EU banking/insurance groups, with a market share of around 50%. The largest of these banks (ING Belgium, BNP Paribas Fortis, Record Bank and Axa Bank Europe) are banks using the IRB approach. Some of the EU banking groups with Belgian subsidiaries also have branches in Belgium, which opens up the possibility of shifting loan portfolios from subsidiaries to branches to avoid the measure. At the moment, these branches are not engaged in any mortgage lending activity in Belgium, but NBB/BNB is monitoring the situation closely.

In the light of a potential reciprocation of the measure, the possible rebooking of residential mortgage loans from Belgian subsidiaries to Belgian branches or the transformation of subsidiaries into branches should continue to be monitored by ECB Banking Supervision, NBB/BNB and the EBA. In its notification of the measure, NBB/BNB requested that it would like to ask the ESRB to recommend that other Member States reciprocate the measure. This request will only be considered by the ESRB if and when the measure has been effectively adopted by the Belgian authorities, although the ESRB is in principle open to it.

With this in mind, cross-border mortgage lending or lending through branches generally should be monitored over time. Further investigation of developments at the level of individual institutions (in particular by the supervisory colleges of the banking groups concerned) could take place if there were a significant pick-up in such activity.

Conclusions

According to the assessment by NBB/BNB, the continued upturn in the Belgian residential mortgage market does not seem to be sustainable in the medium to longer term, warranting the use of a macroprudential measure. This risk assessment is corroborated by the ESRB's warning to Belgium in 2016. Vulnerabilities have been building up in recent years in this market. These macroprudential vulnerabilities are not adequately reflected in the low risk weights of the banks using the IRB approach for their retail mortgage exposures. Mortgage lending has increased rapidly since 2000, at a pace largely exceeding nominal GDP growth, and

represents a large share of banks' loan portfolios. A significant share of these mortgage loans have a high LTV ratio at origination combined with a significant DSTI ratio at borrower level. As a result of the increase in mortgage indebtedness, vulnerabilities have increased in the household sector.

The ESRB is of the view that the alternative macroprudential instruments listed in Article 458 of the CRR, which must be considered before any stricter national measure can be taken, would not adequately address the risk in the Belgian RRE market. Measures such as those listed in Articles 124 and 164 of the CRR, as well as the systemic risk buffer or the countercyclical capital buffer are considered to be inadequate, either because they do not provide the intended incentives, are too broad-based, or do not address the relevant type of risk or bank. While Pillar 2 comes closest as a possible alternative in terms of adequacy and relative effectiveness, a national measure under Pillar 1 is preferable in the specific case of Belgium due to the macroprudential objective of the intervention, the timing and frequency of the SREP, reasons of transparency and disclosure, and the impact on other capital requirements. Moreover, under the SSM set-up, NBB/BNB is no longer the competent authority for Pillar 2 measures for significant credit institutions. The ESRB also finds that the draft measure does not entail disproportionate adverse effects on the internal market or other national financial systems.

The ESRB is therefore of the view that, at this point in time, the stricter measure is appropriate. However, the ESRB would also like to flag a number of issues that require further follow-up.

First, despite several measures which have been taken over the past years, there is evidence of increasing risk-taking by households and banks in the residential mortgage loan market. Moreover, the measure only indirectly addresses household indebtedness, which was identified by the ESRB in its warning as one of the main medium-term vulnerabilities in the Belgian RRE sector. If the levels of risk-taking continue to increase, stronger and more intrusive measures may be warranted in the future. In that context, the ESRB understands that NBB/BNB does not have direct control over borrower-based instruments, such as limits on LTV, LTI, DTI or DSTI. However, LTV and DTI caps are possible under Belgian law, and NBB/BNB can issue a recommendation to the Federal Government to put them into effect. It is important that instruments that are in the macroprudential toolkit can and will be effectively used when the need arises and that there is no inaction bias in this respect.

Second, the measure may have to be reviewed in light of the outcome of the ongoing targeted review of banks' internal models (TRIM) by ECB Banking Supervision that is currently underway and includes a number of Belgian banks covered by the draft measure, in particular if relevant deficiencies in the calibration of the models are detected.

Third, while the ESRB understands that it may not be possible or desirable to define strict criteria for the extension or the deactivation of the measure, for reasons of transparency and accountability it would be helpful if NBB/BNB would be **more specific in clarifying the criteria it would apply or indicators used for such decisions.** This point was also raised by the ESRB in its Opinions ESRB/2017/1¹⁸ and ESRB/2016/1¹⁹.

¹⁸ Opinion of the European Systemic Risk Board of 13 March 2017 regarding Belgian notification of a stricter national measure based on Article 458 of Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms.

¹⁹ Opinion of the European Systemic Risk Board of 18 February 2016 regarding Belgian notification of an extension of the period of application of a stricter measure based on Article 458 of Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms.

Fourth, given the cyclical and portfolio-specific nature of the risk, and to assess the impact of the measure, **a close and continued monitoring of the evolution over time is needed.** Particular areas for such monitoring should include the evolution of the riskiest segments of banks' mortgage loan portfolios (high-LTV loans, high-DSTI loans and long maturity loans), the impact of the measure on bank behaviour (in particular on loan pricing and credit standards) and the behaviour of mortgage loan providers that are not subject to the measure. Changes to economic policies that have an influence on the degree of price overvaluation should also be taken into consideration.