13 March 2017

Assessment 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

Introduction

On 14 February 2017 the European Systemic Risk Board (ESRB), in accordance with Article 458 of the Capital Requirements Regulation (CRR)[1], received an official notification from Belgium 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/2015/4[2], 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)[3]/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?
- **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 proposed measure consists of an additional macroprudential capital buffer. The two components of the buffer are calculated on the basis of a direct and indirect (via higher loss given default (LGD) floors) increase in risk-weighted assets (RWA) compared to the RWA 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] 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.

[3] 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.

for microprudential purposes. It should be emphasised that there will be no change in the microprudential risk parameters (i.e. LGDs and probability of default (PD)) used for the calculation of RWA.

The macroprudential buffer is calculated on the basis of a change (increase) in RWA consisting of the following two components.

- **A general 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 risk-sensitive risk weight add-on** that targets aforementioned exposures with an indexed loan-to-value (LTV) ratio higher than 80% at the time of the buffer calculation. More specifically, a higher LGD floor than the microprudential LGD floor of 10% is used to calculate the additional buffer requirement at the individual loan level:
    - if the indexed LTV is greater than 80% but less than or equal to 90%, the LGD floor used for the buffer calculation is 20%;
    - if the indexed LTV is greater than 90%, or unknown, the LGD floor used for the buffer calculation is 30%.

The concept of "indexed LTV" is based on the concept of "current LTV" as defined in Recommendation ESRB/2016/14[4], with some adaptations to the Belgian market. It refers to the sum of all loans or loan tranches secured by the borrower at the reporting date relative to the current value of the property. The Nationale Bank van België/Banque Nationale de Belgique (NBB/BNB) provides guidance to the banks on how to calculate this indexed LTV, taking also into account the various criteria mentioned in the ESRB Recommendation for the calculation of the current (indexed) LTV (e.g. an independent and sufficiently granular assessment of the current value of the property).

The proposed measure is scheduled to be introduced as a regulation by the NBB/BNB and legally adopted by a Royal Decree. It would enter into force in May 2017, following the expiration of a macroprudential measure that is currently in place, also taken under Article 458 of the CRR, consisting of a general risk weight add-on of 5 percentage points and hence corresponding to the first component of the proposed measure, as described above. At the press conference of June 2016 on the presentation of its Financial Stability Report (FSR)[5], the NBB/BNB highlighted the increased financial stability risks emanating from the residential real estate (RRE) sector and announced its intention to introduce the proposed measure, conditional upon approval by the European authorities.

The NBB/BNB and the ESRB 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. Considering the proposed measure as a single new measure, rather than as a combination of a new measure and an extension of an existing measure (corresponding to the second and first components of the measure respectively), reduces the procedural complexity of the assessment under the rules of Article 458 of the CRR and facilitates the assessment and communication of the measure.

[4] Recommendation of the European Systemic Risk Board of 31 October 2016 on closing real estate data gaps.

[5] The FSR carried an article entitled "Review and assessment of recent developments in the Belgian mortgage market".

The ESRB has also received a request by the NBB/BNB to recommend the reciprocation of the measure by other Member States under Recommendation ESRB/2015/2[6]. This request will only be considered by the ESRB following completion of the notification and approval procedure and if and when the measure has been effectively adopted by the Belgian authorities. A possible ESRB Recommendation for reciprocation is therefore not considered further in this opinion, although the ESRB would be open to it in principle.

In its assessment of the measure, the ESRB has drawn extensively on information provided by the NBB/BNB and discussions with NBB/BNB staff, input provided by the European Central Bank (ECB), and the assessment performed by the ESRB in the context of its warning of 22 September 2016[7].

Section 1: Analysis of the underlying systemic risks

In its warning of 22 September 2016[8], 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.

1.1 Vulnerabilities in the residential property sector

There are still indications of a significant degree of overvaluation of residential property prices in Belgium. This view is supported by NBB/BNB expert judgement. RRE prices have significantly increased since 2000, with only minor price corrections during the financial crisis.[9] In the first quarter of 2016, RRE prices increased by 2.3% annually and 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.

ECB real estate valuation methods suggest that RRE prices are overvalued in Belgium, ranging from 4% to 31% depending on the model used. Widely-used indicators, such as PTI and interest-rate-adjusted affordability indicators, point to a substantial overvaluation of more than 25%. According to NBB/BNB model-based estimates, the degree of overvaluation ranges from 0% to 10%. It should be noted, though, that such model-based estimates demonstrate 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.

1.2 Vulnerabilities in the household sector

The level of household debt has significantly increased and there are specific groups of households which are particularly indebted. Household debt vis-à-vis GDP increased from 37.4% in the first quarter of 2002 to 59.1% in the third quarter of 2016. Compared to other euro area countries, Belgium is one of the countries with the strongest increases in household indebtedness over that period. The debt ratio now exceeds the euro area average and is expected to increase further in the coming years.

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[6] 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.

[7] See also the ESRB report entitled "Vulnerabilities in the EU residential real estate sector", November 2016.

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

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

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 2015 and 2016, despite a further reduction in (client) interest rates. The share of loans with a DSTI ratio above 50% remains high. Furthermore, one third of outstanding loans have LTV ratios of more than 90% at origination. A substantial part of the total stock combines high DSTI and LTV ratios. At the end of 2015, 26% of the outstanding loans had at origination both a DSTI ratio higher than 30% and an LTV ratio higher than 90%. The most recent figures do not point to any further tightening of banks' credit policies.

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.

1.3 Vulnerabilities in the banking sector

Overall, the solvency and liquidity position of Belgian banks is sound and has further improved. In the first quarter of 2016, the CET1 ratio of the sector was 14.8% compared to an EU average of 13.9%; the loan-to-deposit ratio was 88%, which is lower than the EU average.

The Belgian banking sector has a relatively high amount of real estate loan exposures[10]. The share of these exposures in the banks' total loan portfolios was 44% at the end of 2015 (1 percentage point up on the previous year), compared to 38% for the euro area (down by 0.4 percentage point). Mortgage loans now make up approximately 18% of the Belgian banks' balance sheets. 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 may intensify competition and also increase 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 existing Article 458 CRR measure) is 9.6% compared with an EU unweighted average of 16% and a risk weight floor of 35% under the standardised approach.[11] This low level is explained 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 LGDs) or high defaults on mortgage loans (which would be reflected in the 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. The NBB/BNB has not observed any further improvements in LTV and DSTI ratios since end-2014.

Section 2: Effectiveness and efficiency of the measure

2.1 How the measure addresses the identified risk

The proposed measure is part of a wider set of initiatives that have been introduced over several years to address concerns about developments in the Belgian RRE sector. In the

[10] Mortgage loans and loans for construction and to real estate companies.

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

course of 2011, the NBB/BNB launched a survey of banks' mortgage loan portfolios, the results of which were discussed in its 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 were published in the FSRs of June 2014 and of June 2016, warning of increasing risks from RRE.

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. 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 the IRB banks effectively increased to about 15% at the end of 2013. This buffer, calculated on the basis of an 8% capital requirement, was equivalent to around €0.6 billion of additional required capital at the time.

On the microprudential front, the NBB/BNB also took several initiatives at the end of 2013. First, it conducted a horizontal review of the banks' internal models to evaluate whether the parameters were adequately calibrated. This review did not raise any general concerns on the adequacy of the internal models. Where individual and specific weaknesses were observed, the bank concerned was required to review its internal models. A further in-depth horizontal review of banks' internal models by the SSM is taking place in 2017/2018. 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.

The primary objective of the current and proposed macroprudential measures 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. The NBB/BNB is willing to start releasing the capital buffers 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 risk weight add-on and the risk-sensitive element seems, at this juncture, to be effective and efficient in addressing the systemic risk that the 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. If the alternative of a risk weight floor had been chosen, banks would have had an incentive to rebalance their mortgage loans portfolio towards the riskier segments.

Second, the risk-sensitive element of the measure provides banks with an incentive to reduce the high risk segments in their mortgage portfolio, i.e. the high LTV loans. Because of the two LTV thresholds used in the measure and the linear relationship between LGDs and risk-weighted assets, the additional complexity resulting from the risk-sensitive element of the measure remains limited. The use of indexed LTVs ensures that higher capital requirements for higher LTV mortgages should be transitory. Indeed, given the fully-amortising nature of the Belgian mortgage market, high LTV loans (at origination) should only incur the LTV-indexed risk weight add-on for a short period of time. However, if the reduction in LTV is driven by rapid increases in house prices, the effect of the buffer could be reduced, potentially at times of rising systemic risks.

The measure affects seven banks (on a consolidated basis). The CET1 ratio of the affected banks was 14.5% on average at the end of September 2016, ranging from 13.4% to 23.9%. Their required **CET1 capital** would increase in total by €1.4 billion. None of the banks

concerned would be required to increase capital to meet the additional requirements. The total figure can be decomposed into an increase of €0.8 billion as a result of the general risk weight add-on (which is currently in place) and an increase of €0.6 billion as a result of the additional risk-sensitive element.

In terms of required **CET1 ratio**, the figure represents on average a decrease of 0.63 percentage point. This figure can be split into 0.38 percentage point for the first component of the measure and 0.25 percentage point for the second component.

The **average risk weight of IRB banks' mortgage loans** would increase from 9.6% to 18%. This can again be decomposed into an increase of 5 percentage points for the first component and 3.4 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.** The 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, the NBB/BNB assessed the impact on the IRB banks' loss-absorbing capacity 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 scenario additionally imposes a minimal default rate per institution by using a floor on default rates of 4%.

  The stressed LGD corresponds to a price drop in RRE prices of 25%. This figure for a stress scenario is substantially higher than the 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. 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. The NBB/BNB conducted some further sensitivity analysis on the impact of changes in key parameters, but the order of magnitude of the results did not change.[12]

- **International comparison.** According to EBA figures for the end of 2012, IRB banks in Belgium have an average risk weight of around 10%, whereas for its neighbouring countries (with the exception of the Netherlands, for which the figure is comparable to that for Belgium) the figure is around 15%.[13] 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 buffer by a relatively small amount, the NBB/BNB aims to avoid unsettling the market, while at the same time signalling continued concerns. The NBB/BNB finds 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, the NBB/BNB favours a gradual approach.

[12] 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 87% to 111% of the estimated effective impact of the measure under the benchmark stress scenario.

[13] See also Chart 31 in ESRB (2015), "Residential real estate and financial stability in the EU", December, p. 49.

The NBB/BNB also considers the measure to be an important signal of impending risks to financial stability. The 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. As it falls under Pillar 1 of the CRD IV/CRR, the measure is public. The NBB/BNB has also announced it to the press at the presentation of its FSR of June 2016.

The risk-sensitive add-on increases banks' incentives to maintain appropriate lending standards by making high LTV loans more costly for banks. This may have an effect on either the pricing or the volume (or both) of higher LTV loans. In a low interest rate environment, however, 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 high LTV loans, the reduction in the volume of such loans may be limited. Nevertheless, households on the elastic part of the demand curve may still have a stronger incentive to opt for loans with a lower LTV, given the increased price differentiation between high and low LTV loans. In addition to the (discouraging) impact on banks' and households' incentives for new loans with high LTVs, the measure also aims to signal the importance of maintaining sound credit standards and to appropriately price the implied risks.

While NBB/BNB highlights the risk from increasing household indebtedness, the measures does not primarily seek to address this risk. The planned measure increases the resilience of the banking sector to risks from the RRE market and provides a strong signalling effect that the NBB/BNB is concerned about high LTV 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.

2.2 How the measure relates to possible alternatives

As required under Article 458 of the CRR, this section assesses whether other available macroprudential instruments under 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 (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 IRB banks). 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 IRB banks (Article 164 of the CRR)

On the basis of financial stability considerations, the competent authority is allowed, under Pillar 1 of the CRD/CRR, to increase the exposure-weighted average LGD floor of IRB banks 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 capital requirements increase indirectly.

The NBB/BNB emphasises that the proposed 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 the 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).

Article 164 of the CRR only allows for setting higher minimum values for the (exposure-weighted) average LGD floor. It is unclear whether the average LGD floor can be increased for subsets of exposures. In addition, the use of the average LGD floor, which allows both lower and higher LGDs on individual loans, could lead to a risk that banks may try to offset the impact of a higher average LGD floor by imposing higher LGDs on those high LTV loans with the lowest estimated PDs.

Finally, according to the 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 measure is being introduced 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 proposed macroprudential measures can be seen as tightening measures being taken by the NBB/BNB in response to increasing cyclical risks in the residential real estate market.

In addition, the 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 exposures, not just RRE exposures. Again, this measure would not appropriately target the risk identified by the NBB/BNB and would affect all other exposures. In addition, the 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 CRDIV/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). It should also be flagged that 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 supervisor.

In the case of Belgium, the 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 measure.** The 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.
- **Timing and frequency of the Supervisory Review and Evaluation Process (SREP).** The SREP decisions for 2017 have already been approved by the Supervisory Board of the SSM and, according to the NBB/BNB, do not include any capital buffer for RRE risks.
- **Transparency.** According to the NBB/BNB, the previous SREP decisions by the Supervisory Board of the ECB referring to specific 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.
- **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. A further disadvantage of a Pillar 2 approach is that any increase in the required Pillar 2 CET1 ratio to reflect the amount of capital needed to cover risks in the mortgage market would also affect the capital requirements related to credit exposures other than mortgage loans. This would result in a blunter measure than the proposed one under Article 458 of the CRR.
- **Lack of justification for using Articles 101 and 102 of the CRD.** The NBB/BNB has determined that the banks using internal models comply with the requirements of the CRR and they have found no breach of the Regulation. 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. The NBB/BNB further notes that the targeted review of banks' internal models (TRIM) by the Single Supervisory Mechanism (SSM) will take place in 2017/2018. The low risk weights arise due to the backward looking nature of these 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 formula of 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[14], the ECB, not the NBB/BNB, is the competent authority for Belgian significant institutions, which are those using internal models for credit risk. The shift of responsibilities underlines the point that Pillar 2 is not predominantly 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 more directly address this vulnerability. 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 current policy stance may not be sufficient to contain the rising vulnerabilities in the household stretch.

Measures directly addressing the vulnerabilities related to highly indebted households have not been adopted up to now. While the NBB/BNB notes that the proposed measure could somewhat slow down rising household debt by reducing the share of new loans with high LTVs, a measure limiting the amount of debt that households can take relative to their income would be a more direct approach. The NBB/BNB notes that such measures would target only 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 and are presently not in the toolkit of the 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 such instruments. Indeed, such instruments may have distributional consequences restricting the access of certain segments of the population to credit. It should, however, be pointed out that the materialisation of risk is also likely to have strong distributional consequences. Moreover, if hard limits on loan-to-income (LTI), debt-to-income (DTI) or debt service to income (DSTI) ratios were considered to be too sensitive, then a proportionate or "speed limit" approach[16] could be an alternative.

Section 3: Net benefits analysis of the measure

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

[14] 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.

[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 the National Bank. The draft measure of the Federal Government shall be submitted to the NBB/BNB for advice, unless the draft measure is entirely consistent with the NBB/BNB's Recommendation. In its Recommendation, the NBB/BNB can request that the cap be adopted within a certain time frame. However, the government is free to decide whether or not to follow the Recommendation. If the Federal Government decides not to act upon the NBB/BNB's Recommendation within the prescribed timeframe, or not to act at all, it must duly motivate such decision in writing to the NBB/BNB.

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

Increasing the required capital will further improve, albeit to a limited extent, the resilience of the Belgian banking sector. The total increase in required capital is around €1.4 billion, compared to a total CET1 capital base of €48.2 billion (for the affected banks) and an average CET1 ratio (for the affected banks) of more than 14.5% (all figures at the end of September 2016). As mentioned above, it 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 sector,[17] 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.

3.2 Effects on both domestic and cross-border lending

It is still too early to assess the effective impact of the measure on banks' credit standards and pricing behaviour. While the measure was already announced in June 2016, it is still 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 riskier 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%, non-banks (e.g. insurance companies, public housing companies, 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 2016 the mortgage lending activity of foreign branches totalled €1.4 billion, or 0.75% of the total market.

3.3 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 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, BNPP Fortis, Record Bank and Axa Bank Europe) are IRB banks. 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 possible reciprocation of the measure, the possible rebooking of mortgage loans from Belgian subsidiaries to Belgian branches or the transformation of subsidiaries into branches should continue to be monitored by the ECB, the NBB/BNB and the EBA. In its notification of the measure, the NBB/BNB requested that it would like to ask the ESRB to

[17] See, for example, IMF, "*Integrating stability assessments under the financial sector assessment program into Article IV surveillance*", 27 August 2010, pp. 13-14.

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 while the ESRB is in principle open to it.

With this in mind, mortgage lending through cross-border lending or branches in general should be monitored over time. A further investigation of developments at the institution level (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 the 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 recent warning to Belgium. Vulnerabilities have been building up in recent years in this market. These macroprudential vulnerabilities are not adequately reflected in the low risk weights that are used by the IRB banks for their mortgage lending activity. 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 provide the wrong 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, transparency and disclosure, and the impact on other capital requirements. Moreover, under the SSM set-up, the NBB/BNB is no longer the competent authority for Pillar 2 measures for significant institutions. The ESRB also found that the 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 juncture, the stricter measure is justified, proportionate, effective and efficient. However, the ESRB would also like to flag a number of issues that require further follow-up.

First, **the measure addresses only indirectly 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 these vulnerabilities do not abate or continue to increase, more direct measures may be warranted. The ESRB understands that the NBB/BNB does not have direct control over borrower-based instruments, such as limits on LTV, LTI, DTI or DSTI. However, some of these instruments exist under Belgian law, and NBB/BNB can issue a recommendation to the Federal Government to activate them.

Second**, the measure may have to be reviewed in light of the outcome of the review of banks' internal models** by the SSM scheduled for 2017/2018, which will also include a number of Belgian banks covered by the measure, in particular if more general 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 the NBB/BNB would be **more specific in clarifying the criteria it would apply or indicators used for such decisions.** This point was already raised by the ESRB in its Opinion ESRB/2016/1[18].

Fourth, given the cyclical and portfolio-specific nature of the risk, **a close and continued monitoring of the evolution over time is needed,** also to assess the impact of the measure. Particular areas of such monitoring should include the evolution of the riskiest segments of banks' mortgage loan portfolio (high LTV, high DSTI, long maturity loans), the impact of the measure on bank behaviour (in particular on loan pricing and their credit standards), possible cliff effects around the two LTV thresholds of the measure 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.

[18] 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.