## The Belgian Mortgage Market: Recent Developments and Prudential Measures

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## **1** Introduction

The presentation at the workshop was based on two articles that appeared in the Financial Stability Review 2014 of the Nationale Bank van België (NBB). The articles, which are summarised in the sections below, are:

- "The Belgian mortgage market: recent developments and prudential measures"<sup>1</sup> and
- "Evaluating early warning indicators for real estate related risks"2.

## 2 The Belgian Mortgage Market: Recent Developments and Prudential Measures

The first article that appeared in the NBB's Financial Stability Review 2014 discusses recent developments in the Belgian mortgage market and presents the three prudential measures that the NBB took at the end of 2013 to bolster the resilience of the market and of those credit institutions with the largest exposures to Belgian mortgage loans.

As in many other countries, the Belgian residential property and mortgage market was characterised by strong growth of both housing prices and mortgage loans outstanding in the period up to 2007. Since then, experiences have varied significantly between countries. In Belgium, a marginal correction of housing prices and a temporary slowdown in mortgage loan growth in 2009 were followed by new increases in housing prices and mortgage debt, before both moderated again in the course of 2013 and 2014.

A large number of factors appear to have contributed to the dynamic growth of house prices in Belgium in the past 15 years, ranging from macroeconomic and

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<sup>&</sup>lt;sup>2</sup> Authors: Stijn Ferrari and Mara Pirovano.

demographic factors to key changes in the tax regime for mortgage loans and a trend towards higher rates of down payment. Crude and simple measures of housing price valuation nevertheless suggested that housing became less affordable for households with a limited amount of own funds for a down payment. For these households, the developments may thus have been associated with a need for increasingly large mortgage loans, contributing to upward pressures on debt service levels and/or longer loan maturities.

Against this background, the NBB introduced an ad-hoc reporting scheme in 2011 for 16 credit institutions on Belgian mortgage loans granted and held. This survey now collects information on outstanding totals and new business – whereby banks are asked to break down their outstanding stock and new annual production volumes for various mortgage loan characteristics – and data on the corresponding minimum capital requirements and underlying parameters.

The first extensive survey – commented on in an article in the NBB's Financial Stability Review 2012 – showed a trend towards longer loan maturities and a relatively high (although quite stable) share of loan-to-value ratios of more than 80% (including ratios higher than 100%) in new production, confirming that banks' credit standards had not been tightened in a countercyclical way to slow exuberant growth or to anticipate potentially less favourable market conditions. On the basis of this information, the 2012 article argued that a sizeable group of borrowers in recent vintages may have stretched their loan maturities, mortgage loan sizes and/or debt service ratios to levels that could entail a higher risk of future credit losses for banks, as compared to earlier vintages. The main conclusion of the article was therefore that more vigilance was required from banks and authorities alike to ensure the continuous application of sufficiently conservative credit standards and adequate risk-pricing in all new mortgage loans. It also called for a tightening of credit standards, where necessary, in order to maintain the current high asset quality of Belgian mortgage loan portfolios.

As a follow-up to this policy message, the NBB conducted new stock-taking exercises, devoting particular attention to assessments of the way in which the potential risks associated with mortgage loans were taken into account in calculating the minimum capital requirements for credit risk under the Pillar 1 rules. This fact-finding exercise focused mainly on the banks relying on internal risk models to compute the minimum regulatory capital buffers required for these exposures, as these calculations result in risk weights (10%, on average) that are significantly lower than those applied under the Basel II standardised approach (35%).

The risk weights calculated with these internal ratings-based (IRB) models for Belgian mortgages are not only considerably lower than those determined by the standardised approach for calculating the minimum capital requirements for credit risk, but they also vary widely between institutions. More detailed analysis has confirmed that these differences between institutions are largely attributable to variations in the risk profile – and, particularly, the relative importance of the riskier sub-segments – of different banks' mortgage loan portfolios in Belgium. It showed the heterogeneity of banks' credit standards and the importance of these standards in explaining the number of subsequent defaults in the portfolios. In particular, banks that generally tended to have less conservative credit standards (loans granted to more risky borrowers, with higher debt service ratios) were found to be the ones with the relatively higher default rates. The study also showed that differences in individual banks' IRB risk weights and parameters for Belgian mortgage loans seemed to be broadly consistent with the ranking of bank portfolios' (relative) risk profiles.

Another main conclusion of the fact-finding exercise was that these IRB risk weights for Belgian mortgages are generally relatively low and, on average, lower than in other countries. Data collected by the European Banking Authority has shown that the average IRB risk weight for mortgage loans in Belgium was one of the lowest in all the sample countries, with Sweden having the lowest weights. However, the Swedish authorities have enacted a measure in the course of 2013 aimed at putting a 15% floor on this risk weight and recently announced plans to raise the floor further to 25%. Belgium's neighbours report average risk weights of over 10 % (up to 18%). Echoing the developments in Sweden, Norway and Switzerland have also recently taken measures aimed at raising the average risk weight of IRB banks for domestic mortgage loans (up to 35%, as in the standardised approach).

Although the aggregate credit quality indicators for households do not so far point to any deterioration in default rates on recent mortgage loan vintages, the NBB and international institutions such as the European Central Bank (ECB), the European Systemic Risk Board (ESRB), the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF) have drawn attention to potential risks associated with the Belgian housing and mortgage market, partly on the basis of criteria measuring the over or undervaluation of property prices. If conditions in the Belgian housing market were to become less buoyant than they have been over the past 15 years, the riskier loan segments of the outstanding stock of mortgages could be the source of higher-than-expected credit losses for banks. In spite of the recent tightening of some credit standards for new mortgage loans, a sizeable group of borrowers may in recent years indeed have stretched their mortgage loan maturities, loan sizes and/or debt service ratios to levels that could entail a higher risk of future credit losses for banks than in the past. Here, it should be noted that the internal risk models are calibrated on historical credit loss data, so that these low risk weights can to some extent be explained by the absence of a major crisis on the Belgian housing market in the past and by the generally buoyant market conditions over the past 15 years. Risk weights calculated on the basis of IRB models could thus be too low for losses that may emerge in less

favourable market circumstances and from the materialisation of risks embedded in certain sub-segments of banks' Belgian mortgage loan portfolios.

In this context, and in view of the relatively large share of domestic mortgage loans in the balance sheets of Belgian credit institutions, the NBB considered it justified to take some prudential measures aimed at strengthening the banks' resilience and reducing the concentration risk.

The first measure that was taken in the last quarter of 2013 was macroprudential in nature and provided for a flat-rate increase of 5 percentage points in the risk weights calculated by the banks themselves, but only for banks calculating their minimum regulatory capital requirements for Belgian mortgage loans according to an IRB model. That measure took effect with the Royal Decree of 8 December 2013. This add-on did not apply to banks using the aforementioned standardised approach to calculate their capital requirements. In practice, if a bank using the IRB approach calculates an internal risk weight of 10% for Belgian mortgage loans, this measure requires the minimum capital requirements to be calculated on the basis of a 15% risk weight. The average risk weight of the IRB banks effectively increased from around 10% at the end of 2012 to about 15% at the end of 2013, as a result of the introduction of the add-on. The relatively moderate size of the add-on seemed appropriate in view of both Belgian banks' generally rather conservative policies on mortgage lending in the past and the historically low level of losses on such loans. However, given the cyclical character of this measure, the NBB will keep a close eve on market developments for the purpose of a continuous assessment of the appropriate level of that add-on.

The other two measures adopted by the NBB at the end of 2013 were microprudential in nature.

One involved launching a horizontal assessment of the IRB models on the basis of the results of the back-testing to be conducted by the institutions, followed by any necessary adjustments to those approaches. The goal of this measure is to address potential weaknesses of the risk parameters used in the IRB approach. To this end, the NBB will evaluate the adequacy of the calibration of the probability-of-default (PD) and loss-given-default (LGD) models used in the regulatory capital calculation within the IRB approach. Banks with unsatisfactory calibrations will be required to adapt their Pillar 1 models.

The other microprudential measure consisted in requesting credit institutions to carry out a self-assessment of the degree to which each bank conforms to the EBA's Opinion on Good Practices for Responsible Mortgage Lending and the EBA's Opinion on Good Practices for the Treatment of Borrowers in Mortgage Payment Difficulties. These self-assessments by banks of the degree of conservatism of their credit standards for residential mortgage loans will be analysed by the NBB and, if weaknesses are identified, banks will be asked to develop an action plan to redress identified weaknesses. This measure applies to all 16 banks.

Through these three prudential measures, the NBB aims to bolster the resilience of the market, and of those credit institutions with the largest exposures to Belgian mortgage loans, against potentially higher-than-expected credit losses on Belgian mortgage loans if conditions in the Belgian housing market were to become less buoyant than they have been over the past 15 years. The measures also aim to underscore once again the importance of maintaining sound credit standards at origination in mortgage lending, as these play an important role in the development of imbalances in residential property markets. As experience in several other countries has shown, such imbalances could then lead to severe macroeconomic (and social) outcomes and losses for banks, in the event of a bubble bursting.

## **3** Evaluating Early Warning Indicators for Real Estate Related Risks

The second article that appeared in the NBB's Financial Stability Review (FSR) 2014 presents a novel graphical methodology for identifying leading indicators of real estate-related banking crises using information on 15 EU Member States.

Adverse developments in the real estate sector can be an important source of systemic risk and financial instability. Addressing systemic concerns in the real estate sector is therefore one of the priorities on European authorities' macro-prudential agenda.

The European Systemic Risk Board (ESRB) strongly encourages countries to develop sound macroprudential policy strategies to frame actions aimed at dampening systemic risk in real estate markets. Such strategies involve linking the ultimate objectives of macro-prudential policy to instruments (for example, risk weights for real estate exposures, and limits to loan-to-value and debt service-to-income ratios) and indicators. The operationalisation of such instruments requires the identification of sound leading indicators and associated thresholds, which could serve as a basis for guided discretion in the activation of macroprudential instruments.

Accounting for the uncertainty surrounding the estimates of cross-country average levels of the indicator, the methodology presented in the FSR article provides a graphical tool for assessing the predictive power of an indicator for real estaterelated banking crises. The framework also enables identification of thresholds that determine zones that correspond to different intensities of the signal issued by each indicator for a given prediction horizon. As such, the framework can be applied as a monitoring tool for systemic risks stemming from the real estate sector.

The article highlights the relevance of the results for systemic risks emanating from the Belgian property markets. In particular, signals related to increasing levels of household indebtedness, in combination with a potential overvaluation of housing prices, suggest the need for a close monitoring of developments in the Belgian real estate market and Belgian banks' mortgage loan portfolios.

The methodology described in this article serves as input into the NBB's general framework for monitoring housing and mortgage market developments. However, signals obtained from early warning indicators and thresholds should not serve as automatic triggers for policy action. Uncertainty about threshold levels, country-specific factors driving developments in housing and mortgage markets, and heterogeneity in the risk profile of individual loans warrant caution in the policy application of such frameworks. Rather, they should be considered as input into the first stages of the systemic risk assessment process, indicating the potential need for a further in-depth assessment and monitoring of possible risk sources and triggers.