



EUROSÜSTEEM

# RISK WEIGHT FLOOR FOR MORTGAGE LOANS

September 2019

## SUMMARY

Eesti Pank decided to introduce a requirement that a risk weight of at least 15% should be applied to the portfolio of mortgage loans issued to residents of Estonia when risk-weighted assets are calculated for assessing capital requirements. The requirement applies for credit institutions established in Estonia that use the Internal Ratings Based (IRB) Approach. The requirement will apply from 30 September 2019.

**Aim and reasoning.** The reason for introducing the requirement is that at a time when the risks related to housing loans have remained above the average level, the weighted average risk weight for mortgage loans used by the IRB banks has come down quite substantially. The aim of the measure is to limit pre-emptively any further falls in the average risk weight of mortgage loans and to ensure the resilience of the banks to the risks associated with housing loans. If risks weights were to continue falling while the economic climate remains favourable, this could lead to insufficient capital being held to cover the risks from housing loans. As the IRB banks account for a substantial part of the banking market in Estonia, a further fall in the risk weights could increase the risks to financial stability in Estonia.

**The average risk weight floor rate.** Eesti Pank is introducing a floor of 15% for the average risk weight. The floor will apply for the portfolio of

mortgage loans issued to residents of Estonia, which means that the risk weights of individual loans may be below the floor rate. Eesti Pank calibrated the rate using the stress tests, which used a scenario of a similar economic decline to that of 2009.

**Expected impact.** Eesti Pank's measure is pre-emptive in nature and its immediate impact on the current capitalisation or lending conditions of the banks will be small. The measure is expected to reduce the weighted average own funds ratio of the IRB banks by 0.8 percentage point. As all the IRB banks operating in Estonia met the own funds minimum requirements and buffer requirements with sufficient margin at the end of 2018, the additional impact of the measure on capitalisation will be small. Neither will the measure significantly impact loan margins or growth in credit or the economy.

**Date of entry into force and duration.** The IRB banks in Estonia will have to meet the requirement from 30 September 2019. The requirement will apply for two years and before it expires, Eesti Pank will assess whether it is appropriate to extend the requirement for another year.

**Legal basis.** The requirement is introduced under Articles 458(2(d)(vi)) and 458(4) of Regulation (EU) no 575/2013.

The risk weight floor rate	15%
Applies to	Retail exposures secured by real estate to obligors residing in Estonia
Scope	Banks that have adopted the Internal Ratings Based Approach
Entry into force	30.09.2019
Legal basis	Regulation (EU) no 575/2013 Article 458

## 1. DESCRIPTION AND SCOPE OF THE MEASURE

Eesti Pank decided to introduce from 30 September 2019 a requirement for IRB banks established in Estonia to use the risk weight of at least 15% for retail exposures secured by real estate, or mortgage loans, to residents of Estonia when calculating risk-weighted assets. The floor has been set for the average of the portfolio, which means that the risk weights of individual loans may be below that floor rate.

Retail exposures are defined in accordance with Article 147(2)(d) of the European Union Capital Requirements Regulation (CRR)<sup>1</sup>, and so cover loans to natural persons and also under certain conditions loans to small and medium-sized enterprises<sup>2</sup>. The Eesti Pank measure covers retail exposures secured by real estate where the borrower from the credit institution is a resident of Estonia. The size of the exposures in Estonia is declared in row 070 “Retail exposures – secured by real estate property” of COREP Form C 09.02 “Geographical breakdown of exposures by residence of the obligor: IRB exposures (CR GB 2)” in Annex I to Commission Implementing Regulation (EU) No 680/2014.

Credit institutions that use the Internal Ratings Based Approach for calculating capital requirements must comply with the requirement. The requirement must be met on an individual and a consolidated basis.

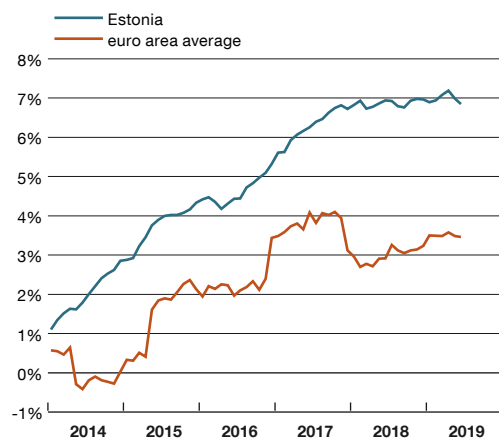
## 2. THE REASONING AND AIM OF THE MEASURE

One of the key vulnerabilities for financial stability in Estonia comes from the relatively fast and constant growth in housing loans. **Growth in housing loans** has been at around 7% a year in the past two years, a rate which is faster than in most other countries in the euro area, and which

<sup>1</sup> Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.06.2013, p 1-337).

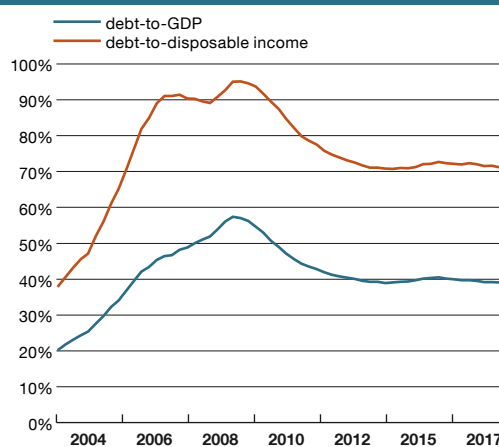
<sup>2</sup> The classification criteria for retail exposures are given in Regulation (EU) no 575/2013 article 147(5).

Figure 1. Annual growth of household lending for house purchases



Source: European Central Bank

Figure 2. Household indebtedness



Sources: Statistics Estonia, Eesti Pank

is around double the average for the euro area (see Figure 1).

Despite the rapid growth in housing loans, the **indebtedness of households** has not increased in recent years. The rapid growth in incomes and GDP meant the ratio of household debt to disposable income was at 71% at the end of 2018, and the ratio of debt to GDP was close to 39% (see Figure 2). Households in Estonia are less indebted than the average for the European Union, but in

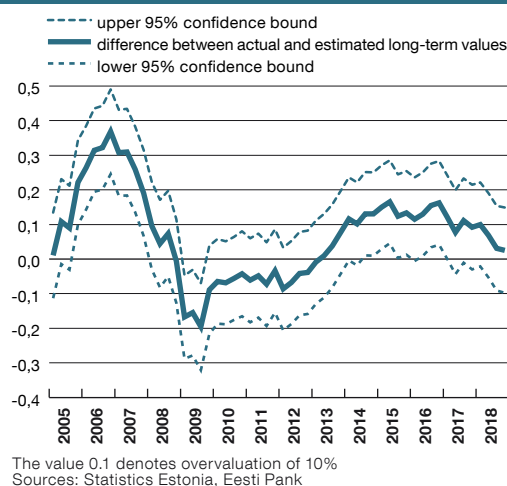
assessing the risks to sustainability of the debt, it must be remembered that GDP growth in Estonia has in the past been much more volatile than the European Union average. The volatile nature of incomes means there is a greater danger of indebtedness being underestimated during periods of rapid growth in the economy.

**Housing prices** rose strongly in 2013-2014, by more than 12% on average, which was substantially more than the growth in household incomes. Prices have risen much more slowly in the past couple of years, at 5-6%, which is better aligned with the growth in incomes. The Eesti Pank models used to estimate over or undervaluation in the real estate market show that housing prices were probably not on average overvalued in 2018 (see Figure 3). Although the growth in real estate prices has been more moderate than earlier, low unemployment, strong wage growth and low interest rates mean there is a risk of growth accelerating again.

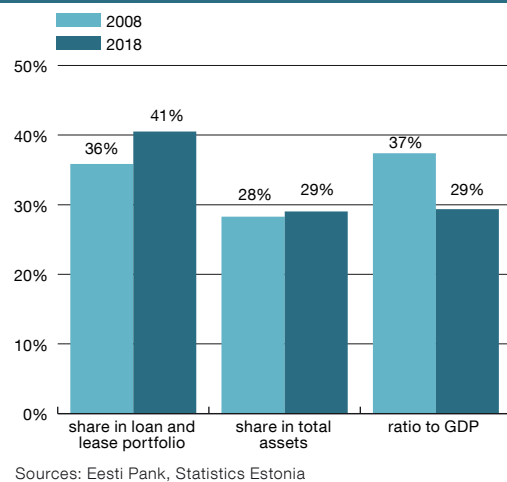
**The large share of housing loans in the assets of the banks** makes them sensitive to any negative change affecting loan servicing by households or the real estate market. Housing loans were 41% of the non-financial sector loan and lease portfolio of the banks at the end of 2018, and 29% of the total assets of the banking sector, and were equal to 29% of GDP (see Figure 4). The volume of housing loans is eight percentage points of GDP smaller than it was 10 years ago, but they are a larger share of the non-financial sector loan portfolio and of the total assets of the banking sector. The share of housing loans in the loan portfolios of the banks operating in Estonia is one and a half times the average level in the European Union, and twice the average level in total assets.

**The housing loan market in Estonia is highly concentrated.** Housing loans are mainly provided by banks in Estonia, and lending has become concentrated at individual large market participants. Swedbank and SEB, the two IRB banks, had 75% market share for the housing loan portfolio by volume at the end of 2018, which was four percentage points higher than five years ago

**Figure 3. Residential real estate market over or undervaluation in the baseline model of Eesti Pank**

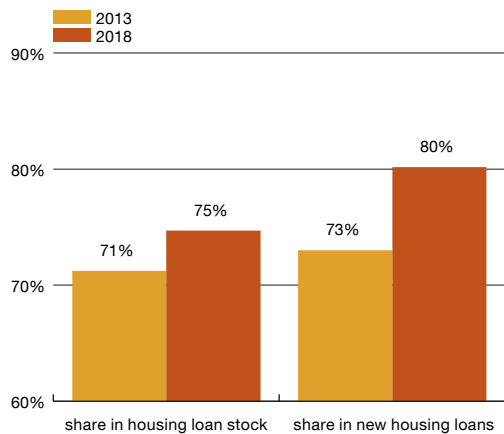


**Figure 4. Share of housing loans in total lending and assets of banks, and ratio to GDP**



(see Figure 5). The joint market share of those two banks for new loans issued over the year was 80% in 2018. If the IRB banks with the large market share were to underestimate the systemic risks associated with lending to households or with the real estate market, their capital buffers could prove insufficient in the event of a negative shock. This could then threaten the functioning of the entire banking system.

**Figure 5. Share of IRB-banks in the housing loans market**



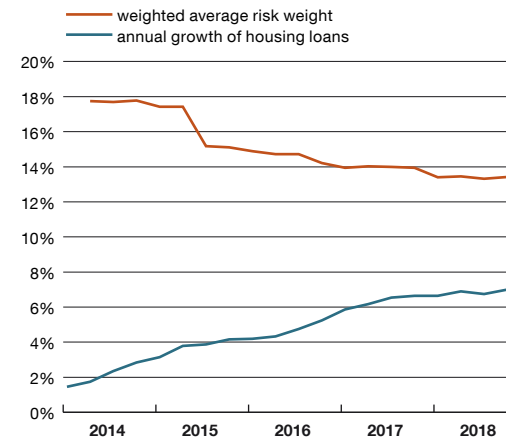
Source: Eesti Pank

The model-implied **weighted average risk weight on retail exposures secured by real estate** of the IRB banks has fallen in the past five years by a quarter, from 18% to 13% (see Figure 6). This means the average risk weighting applied by those banks is at the average level for the European Union.

Sweden, Belgium and Finland have introduced measures to ensure that the banks hold more capital against risks related to mortgage loans than their risk assessment based on internal models would suggest (see Figure 7). Given the minimum floors imposed by Sweden and Finland for risk weights, the average risk weight for housing loans at the Estonian IRB banks is the lowest in the Baltic and Nordic states. However, there is no reason to believe that the risks from real estate are smaller in Estonia than in those other countries.

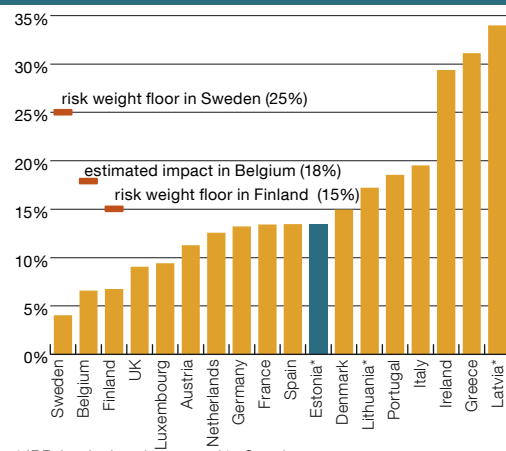
The fall in the average risk weight of the Estonian IRB banks reflects the favourable economic climate of the recent past, which has seen the volume of overdue loans fall (see Figure 8). However, indicators for the real estate market, the credit market and the economy as a whole do not show that systemic risk levels have fallen in the same way. So if the downward trend in risk weights continues, the danger emerges of banks being insufficiently conservative in their calcula-

**Figure 6. Weighted average RW of the retail mortgage loans of the IRB banks and annual growth of housing loans**



Sources: Finantsinspeksioon, Eesti Pank

**Figure 7. Average risk weight of IRB-banks' domestic retail exposures secured by real estate property (as at 30.06.2018)**

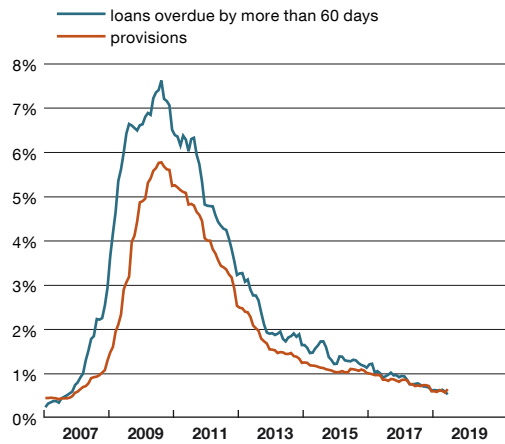


\* IRB-banks headquartered in Sweden  
Sources: EBA 2018 EU-wide transparency exercise, ESRB, Eesti Pank

tions for risk-weighted assets, and so not being sufficiently capitalised against possible risks.

**Setting the floor for the weighted average risk weight of the mortgage portfolio helps to limit any further decline in risk weights, and ensures the resilience of the banks to the risks associated with housing loans.** Eesti Pank considers it necessary to introduce the measure, as the misalignment between the systemic risks of the housing loan market and the risk weights for

**Figure 8. Share of overdue loans and provisions in the loan portfolio of banks**



Source: Eesti Pank

mortgage loans has increased. If the calculations for risk-weighted assets of the banks underestimate the systemic risks from household borrowing and the real estate market, the capital buffers of the banks could prove insufficient for them to cope with potentially large loan losses that could arise from a negative shock to the economy. Given the importance of the banks in financing households and companies and the high levels of concentration in the banking sector, it is important to be sure that the banks have sufficient capital to ensure that the provision of loans can be

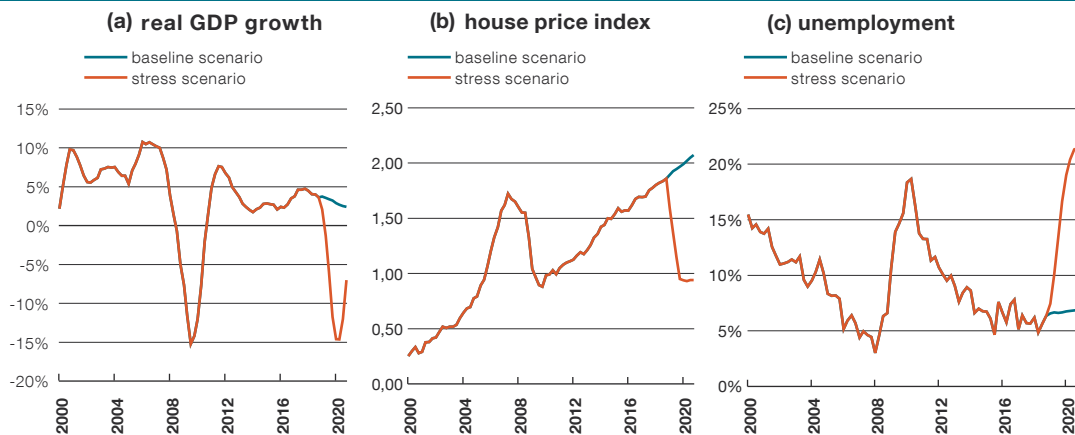
maintained and that any negative impact on the stability of the economy and the banking system is avoided.

Setting the floor for risk weights makes the various macroprudential buffer requirements, which are the systemic risk buffer, the other systemically important institutions buffer, and the countercyclical capital buffer, more effective, as the buffer requirements are applied to risk-weighted exposures, and the risk weight floor will affect how they are calculated. If no minimum floor is set, a continued decline in risk weights would make the buffer requirements less effective and so the buffers that are built up could prove insufficient if a systemic risk were to be realised.

### 3. CALIBRATION OF THE REQUIREMENT

Eesti Pank used its macro model and the credit risk model of the banking sector to assess the appropriate level of risk weights. The scenario used in the assessment is of a negative shock to the economy of the same size as that a decade ago in the global financial crisis, with a cumulative fall in GDP of around 20%, a fall in house prices of around 50%, and a rise in unemployment in the short term to around 20% (see Figure 9). No rise in base interest rates of the sort seen in the previous decade was assumed. The growth

**Figure 9. Assumptions for the stress scenario**



Sources: Statistics Estonia, Eesti Pank

in problem loans did however raise the interest margins on new loans.

In such a scenario, the loan losses on housing loans would be around 100 million euros, or some 1.4% of the housing loan portfolio (see Figure 10). Given the size of the housing loan portfolio and the minimum requirements for total own funds set by the European Union regulation, a minimum risk weight of around 16% would be needed to ensure sufficient capital to cover the loan losses. The confidence bounds in the estimate of loan losses are relatively wide though, showing that at the 95% confidence level the optimal risk weight may fall in the range of 10-25%.

Given the wide confidence bounds and the current economic climate, Eesti Pank considers it appropriate to set the average risk weight floor for mortgage loans at 15%. The choice of instrument and the calibration of the rate are focused on the aim of limiting any further fall in risk weights.

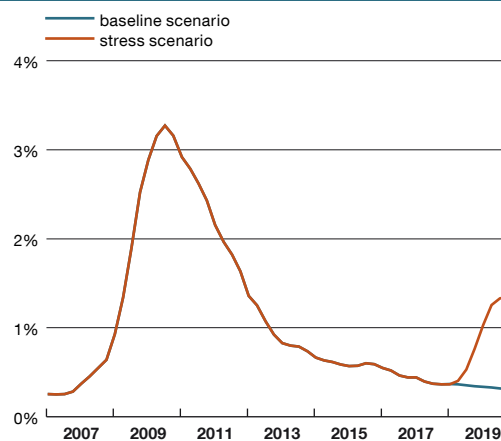
#### 4. THE IMPACT OF THE MEASURE

Setting a floor of 15% for the weighted average risk weight for mortgage loans will not greatly affect the current capitalisation of the banks. Introducing the measure will increase the risk exposures of the IRB banks by around 140 million euros, or 2.2%. The Core Equity Tier 1 capital (CET1) of those banks will fall on average by 0.8 percentage point. The capital buffers of both IRB banks are substantially larger than required<sup>3</sup>, and so the measure will not leave them needing any additional capital. The introduction of the measure will impact the capital indicators for the banks differently, as the risk weight levels derived from the internal models of the banks are different.

The direct negative side-effects of the measure on the Estonian economy will be limited as it applies only to mortgage loans that are issued to retail clients in Estonia. This means that the measure will not have a significant impact on the other activities of the banks, such as corporate lending.

<sup>3</sup> The average CET1 figure for the IRB banks was 39.2% at the end of 2018.

Figure 10. Loan loss provision ratio of housing loans



Source: Eesti Pank

Equally, the impact of the measure on the loan margins of the banks or on growth in credit and the economy are estimated to be small. The measures applied to the IRB banks in Estonia are not expected to have an impact on the activities of other lenders. Banks dominate lending for housing loans in Estonia, and the role of non-bank loan providers in issuing such loans is very small.

The requirement does not apply to branches operating in Estonia, or to the direct cross-border lending provided by banks from other countries. At the end of 2018 there were eight branches of foreign banks operating in the Estonian market, and they had issued around 8% of all the housing loans. Most of these loans were issued by a branch that must cease its activities by October 2019 following a precept issued by Finantsinspektsioon. The parent banks of other branches with a market share of more than 1% use the standard approach for calculating regulatory capital requirements. In 2018, branches issued only 3% of all housing loans. **Eesti Pank does not consider it necessary for the requirement to be reciprocated in the home country of branches**, as the activity of the branches in the Estonian housing market has declined in recent years and is currently quite minor. Eesti Pank will however continue monitoring developments closely, and may reconsider the need for



reciprocity should the share of residential mortgage loans issued by branches increase substantially. The direct cross-border provision of housing loans from other European Union member states has so far been very subdued in Estonia, and so it has had no particular impact on the local lending market.

## 5. LEGAL BASIS

Eesti Pank has the right to apply macroprudential measures under the Eesti Pank Act §24<sup>1</sup>(2)6), which states that Eesti Pank “implements measures to reduce systemic risks as provided for in legislation”. The requirements for the banks are set by a decree of the Governor of Eesti Pank.

This macroprudential measure is applied under Article 458 of the Regulation (EU) no 575/2013 (or CRR). This allows member states to set stricter requirements in their jurisdiction if necessary for macroprudential purposes than those that are in general uniformly applied to all credit institutions in the European Union. As part of this, member states can set stricter measures for risk weights. Applying the measures in Article 458 of the CRR requires thorough consideration and a justification of why no other micro or macroprudential tool would be more appropriate for reducing the risk<sup>4</sup>. When considering the measure, Eesti Pank first consulted the European Central Bank, which supervises the two IRB banks currently operating in Estonia. The introduction of the measure was also preceded by a thorough procedure for informing and coordinating with the institutions of the European Union. The ESRB and the EBA gave their opinions on the Eesti Pank measure to the European Commission, which decided not to propose to the Council of the European Union an implementing act to reject the measure<sup>5</sup>.

Article 458(4) of the CRR allows a member state to introduce a measure under that article for up

to two years if there is no opposition from the Council. Before the two-year deadline expires, the member state must again assess the need for the measure in consultation with the ESRB and EBA. If the systemic risk remains, the member state may extend the measure for another year. After that the need for the measure must be assessed every year.

<sup>4</sup> See the explanations given by Eesti Pank in *Template for notifying intended measures to be taken under Article 458 of the Capital Requirements Regulation (CRR)*.

<sup>5</sup> See the description of the procedure in Article 458(4) of the Regulation (EU) no 575/2013.