

# Higher risk weights for Swedish mortgages promote financial stability

**The Riksbank has on several occasions pointed out the need to raise the risk weights for Swedish mortgages. The models that the banks use to calculate the risk weights are based on historical data and therefore risk not taking important changes, such as the increased level of household debt in relation to disposable income, into account. The banks also lack incentives to fully take into account the risks that mortgage lending entails.**

## *The resilience of the banks and the impact of the risk weights*

In order for the financial system in Sweden to be stable, it is important that the Swedish banks are highly resilient to substantial falls in housing prices and the problems that could arise in such cases. A high level of resilience includes the banks being able to instil confidence in the market and the public even in such a situation. The banks' capital, and particularly their so-called Common Equity Tier 1 capital (CET 1), is a central element of this resilience. The statutory capital requirement therefore stipulates, among other things, the minimum level for a bank's CET 1 capital in relation to its risk-weighted assets.

When calculating the risk weighted assets, the value of each asset, for example a mortgage, is multiplied by a risk weight. The risk weights vary between different assets depending on how great the credit risk for each asset is deemed to be. The principle is that the higher the credit risk, the more capital the bank needs to hold.

The Basel II Accord, which was incorporated into Swedish legislation in 2007, allows the banks to calculate the risk weights for their credit exposures themselves, providing that their internal calculation models are approved by Finansinspektionen. The aim of introducing internal calculation models was to create a closer link between risks and capital requirements.

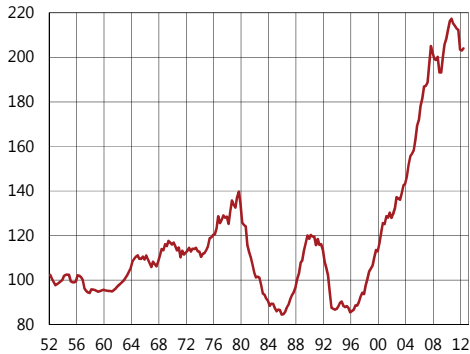
## *Low risk weights for mortgages in Sweden*

All of the major participants on the Swedish mortgage market use internal models based on historical loan losses to calculate their credit risks.<sup>1</sup> As the Swedish banks have a history of almost non-existent loan losses on mortgages, their risk weights for mortgages are very low.

Loan losses have been so low because over the last 20 years the debt-servicing ability of the Swedish households has been strong as a result of good economic development and a well-developed social

<sup>1</sup> The so-called internal rating based (IRB) approach.

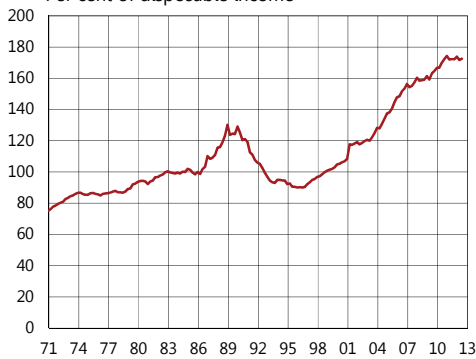
**Chart R1:1 Real house prices in Sweden**  
Index 1952=100



Note. Real house prices are defined as nominal prices deflated with CPI.

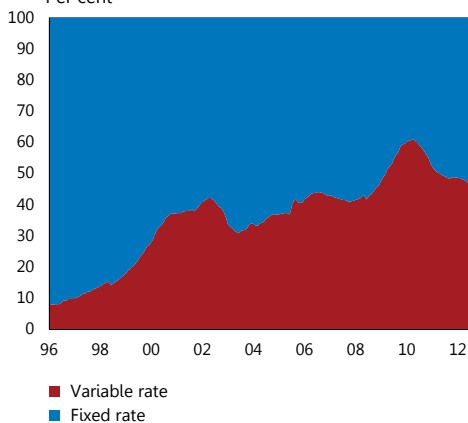
Sources: Statistics Sweden and the Riksbank

**Chart R1:2 Household debt**  
Per cent of disposable income



Sources: Statistics Sweden and the Riksbank

**Chart R1:3 Percentage of mortgages with variable or fixed rates in Sweden**  
Per cent



Source: Statistics Sweden

insurance system. It is also unusual in Sweden to purchase housing for speculative purposes, which is the case in a number of other countries. Furthermore, private individuals in Sweden have a far-reaching legal responsibility to make interest and amortisation payments on their loans, which means that bankruptcy is not a viable option for individuals who want to get rid of their debts.<sup>2</sup> Finally, the rising housing prices in Sweden have often led to a situation in which the value of the property concerned has covered the debts of households that have been forced to sell their homes (see Chart R1:1).

### *The risk weights do not fully take the risks into account*

Over the past 20 years, there have been structural changes that retrospective models do not take into account. For instance, indebtedness has increased (see Chart R1:2), a larger share of households pay variable interest (see Chart R1:3) and the share of interest-only mortgages has increased.<sup>3</sup> Furthermore, in recent years there have been reforms of the social safety nets, for instance, the unemployment insurance scheme, which may have weakened households' financial strength in the event of an economic downswing. There are also indications that the variation between banks' risk weights for mortgages can largely be explained by differences in the banks' internal models, rather than by the individual qualities of the loans.<sup>4</sup> This means, all in all, that there is reason to interpret the results of the banks' internal models with caution.<sup>5</sup>

Even if the low risk weights for Swedish mortgages are correctly calculated on the basis of the risk in the individual banks' mortgage lending, there are good reasons to question them on the basis of a broader, economic point of view. Due to the provisions of Swedish bankruptcy law and the structure of the Swedish welfare system, the households continue to make interest and amortisation payments on their mortgages even in strained financial situations but instead cut back other forms of expenditure, which may reinforce a downturn.

<sup>2</sup> For a longer discussion of the Swedish system, see the Riksbank's commission of inquiry into risks on the Swedish housing market, chapter 11:6, page 181, *The system in Sweden*.

<sup>3</sup> Demoskop survey commissioned by SEB bank. Of the 1,000 persons interviewed, 538 had mortgages and responded to questions on amortisation. The survey was carried out during the period 28 March to 4 April 2012.

<sup>4</sup> This observation is based on a simple regression analysis with risk weights as dependent variable based on more than nine thousand observations. The explanatory variables are bank-specific dummy variables, borrower's loan-to-value ratio, income and left-to-live on amount in relation to income. The bank-specific variables contribute just over 14 per cent of the entire regression's coefficient of determination (R<sup>2</sup>) of almost 16 per cent.

<sup>5</sup> For a European perspective, see *Two Hundred Million inputs, Can you trust risk weightings at European banks?* Barclays Capital Equity Research 6 April, 2011.

When the debt-servicing ability of the households weakens it is thus the finances of non-financial companies and public finances that are affected first, before the banks begin to make loan losses on their mortgage lending.<sup>6</sup> The risk weights for mortgages do not therefore fully take into account the external effects that follow from too generous mortgage lending. Current risk weights are therefore probably too low in a broader economic perspective.

*The risk weights need to be raised to strengthen the banks' resilience to future financial crises*

There is uncertainty about the risks associated with mortgage lending and how well the risk weights reflect these risks. For precautionary reasons the current risk weights for Swedish mortgages should be increased. Higher risk weights entail a higher capital requirement for the banks, which in turn would strengthen the banks' resilience and increase confidence in their capital strength. A high level of confidence is particularly important for the Swedish banks due to their large use of market funding, a large share of which is in foreign currencies.

The Riksbank has earlier pointed to the risk that a substantial fall in housing prices could lead to liquidity problems for the banks, even if the direct loan losses from mortgages would be small.<sup>7</sup> Higher risk weights help increase investors' confidence, which may reduce this risk. Higher risk weights would also to a greater extent take into account the costs borne by the public sector and companies when the debt-servicing ability of the households weakens, which would ultimately contribute to a healthier development of the housing market. The Riksbank's calculations in Financial Stability Report 2012:1 show that the banks are well able to adapt to higher risk weights.<sup>8</sup>

---

<sup>6</sup> See the *Riksbank's commission of inquiry into risks on the Swedish housing market*, chapter 11:4, page 148, "Indirect effects of household indebtedness".

<sup>7</sup> See *Financial Stability Report 2012:1*, Sveriges Riksbank.

<sup>8</sup> *Financial Stability Report 2012:1*, page 18, Table 1.3. Core equity Tier 1 capital ratios according to Basel III with different risk weights for Swedish mortgages, Sveriges Riksbank.