

## Notification template for Article 164 CRR

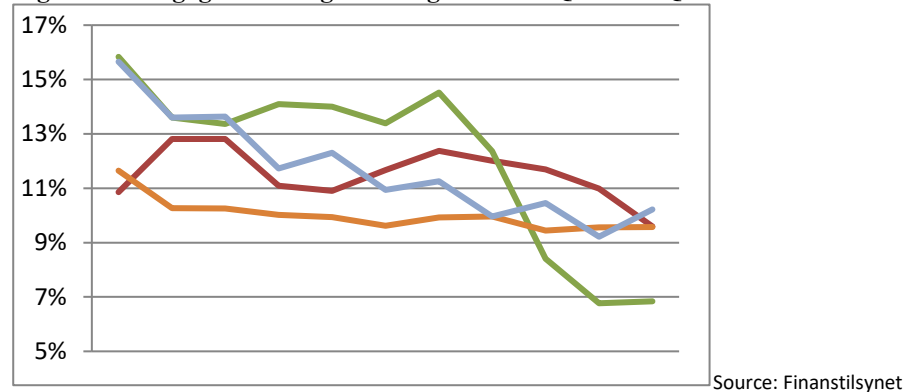
Template for notifying the EBA on setting higher minimum values of exposure weighted average LGD values

<b>1. Notifying national authority (If several designated authorities, please mention all of them)</b>	
<b>1.1 Name of the notifying authority</b>	The Financial Supervisory Authority of Norway (FSA of Norway)
<b>2. Application of higher minimum values of exposure weighted average LGD values</b>	
<b>2.1. Retail exposures secured by residential property</b>	<p>a) <i>Do you intend to set higher minimum values of exposure weighted average LGD values for retail exposures secured by residential property?</i></p> <p>Yes.</p> <p><i>If the answer to question a) is yes, which is the minimum LGD value for retail exposures secured by residential property?</i></p> <p>The minimum LGD value was increased from 10 to 20 per cent, as applied to the exposure weighted average of retail exposures secured by residential property.</p>
<b>2.2. Retail exposures secured by commercial immovable property</b>	<p>b) <i>Do you intend to set higher minimum values of exposure weighted average LGD values for retail exposures secured by commercial immovable property?</i></p> <p>No. At this point the FSA of Norway has not considered the opportunity to set higher minimum values for retail exposures secured by commercial immovable property.</p> <p>c) <i>If the answer to question c) is yes, which is the minimum LGD value for retail exposures secured by commercial immovable property?</i></p>
<b>3. Motivation for setting higher minimum values of exposure weighted average LGD values</b>	
<b>3.1. Regulatory context</b>	<p>- <i>What was the minimum value of exposure weighted average LGD value for residential and commercial immovable property before January 2014?</i></p> <p>The minimum value was 10 per cent before January 2014.</p> <p>- <i>Is the objective of setting higher minimum LGD values a continuation of the previous regulatory treatment of residential and commercial property exposures?</i></p> <p>No</p> <p>- <i>Do you apply a similar measure in the context of real estate exposures under Article 124 CRR?</i></p>

	100 per cent risk weight on commercial real estate
<p><b>3.2. Risk weights versus actual risks</b></p>	<p>- <i>Does the minimum LGD value for retail exposure secured by residential (10%) or commercial (15%) property segments reflect the actual risks related to these exposures?</i></p> <p>- <i>If not, specify the reasons and the property segments to which this applies, and put your answers in perspective to the real estate markets of other European countries.</i></p> <p><b>Actual risk level and the LGD floor for retail exposures secured by residential property</b></p> <p>It is the opinion of FSA Norway that the 10 per cent LGD floor is not sufficient to capture the actual risk level going forward for retail exposures secured by residential property in Norway. Residential property prices in Norway have grown substantially for an extended period of time and the potential drop in prices in a future economic downturn is considerable (c.f. discussion under 3.3-b forward looking market developments, and 3.3-c financial stability concerns). The FSA of Norway has developed a reference model that indicates that downturn LGD for a Norwegian IRB-bank with an average loan to value distribution should not be short of 20 per cent (c.f. discussion under 3.3-a loss experience - other indicators). Put in perspective of real estate markets in other European countries, there are certain risk factors that are particularly pronounced for Norway. Household sector debt burden is very high, price growth has been high and has continued after the financial crisis, the share of floating rate mortgages is high, and home ownership is widespread (c.f. closer description in 3.3-c financial stability concerns).</p> <p><b>Household sector credit risk and internal models</b></p> <p>The introduction of Basel II had a significant negative impact on residential mortgage risk weights, particularly for IRB banks in the Nordic countries, where the risk weight for mortgage loans declined from 50 per cent (Basel I) to a range between 6 to 18 per cent. The developments in housing prices and household debt are highlighted as a major concern for financial stability in the Nordic area, both by domestic authorities and international observers like the OECD and the IMF. However, mortgage risk weights tend to reflect that measured risk is rather low, and with little tendency to rise along with the growing macro-prudential concerns. In fact, risk weights have fallen markedly in Norway after the introduction of Basel II, see figure 1. In parallel with increasing the minimum LGD level, FSA Norway has also sharpened requirements for LGD models for retail exposures secured by residential property. However, the stricter model requirements apply only to Norwegian IRB banks that are solely under the supervisory review of FSA of Norway, whereas the LGD floor also applies to mortgage lending in</p>

Norway by foreign branches and Norwegian subsidiaries of foreign banks. Reciprocity is important considering that two of the largest issuers of Norwegian mortgage loans belong to the latter categories.

**Figure 1 mortgage risk weights 4 largest banks Q2 2008- Q4 2013**



**3.3. Motivation**

a) Loss experience

- Give details about the loss experience in the real estate market of the Member State that justify the setting of higher minimum LGD values.
- Which of the data mentioned in Article 101 CRR did you consider?
- Which other indicators have been taken into account?

**Historic loss experience:** After the banking crisis 1988-1992 household loan losses in Norway have been limited in Norway, and recent losses are particularly low. Also, during the banking crisis the economy recovered rather quickly and repossessed properties gained sufficient value. The FSA of Norway considers both (recent) historic and current loss experience in Norway to be of somewhat limited value in assessing the longer term loss potential for mortgages (c.f. discussion of house price cycles and household sector loan losses).

**The data mentioned in Article 101 CRR** are not available yet. Moreover, the data will refer to rather recent loss experience and will be of limited value when assessing appropriate LGD values for downturn conditions.

**Other indicators. Loss potential assessed according to a reference model:**

The FSA of Norway has collected data on the distribution of loan to value (LTV) of the stock of mortgages in each IRB bank. Using a benchmark model that employs a set of conservative but realistic assumptions for downturn values of house prices, recovery rates, residual payments and direct and indirect costs, FSA of Norway finds that portfolio LGD should be no less than 20 percent for a bank with an average LTV distribution. Details on the study and the data input can be made available to EBA on request.

b) Forward-looking real estate market developments

- Motivate the forward-looking real estate market developments which justify the setting of higher minimum LGD values.

**Rising interest rates are likely to lower house prices:** Exceptionally low interest rates are probably a major explanatory factor for the current house price level in Norway. Although some scholars have suggested that the "neutral rate of interest" may have fallen in recent years, interest rates are likely to eventually rise, with the potential to put a downward pressure on house prices (c.f. the effect of rising interest rates in the dividend discount model).

**House prices are likely to have overshoot:** Besides the effect of low interest rates, high income growth, extensive labor immigration and positive household expectations have also contributed to a demand push for private housing in Norway, and in particular in the larger cities. As the stock of available housing and land regulated for housing are fixed in the short term, house prices and land prices are known to overshoot long term prices in the face of a demand shock. It seems to be the consensus view that the current house price level in the larger Norwegian cities does not reflect the longer term supply cost for land in these areas (population is not very dense and city perimeters are expandable over time).

**Norwegian economy is vulnerable in face of a negative oil price shock:** The oil sector is currently a considerable growth factor for the Norwegian economy, and has probably also contributed to the house price growth. Currently oil prices are at historically high levels. Also, in the years to come the economy will need to restructure to reduce its dependency on the sector. This may be due to rising marginal costs in production, unfavorable market conditions, reduced demand, or simply just declining reserves. While it is difficult to foresee exactly when the challenges will arise they are likely to put significant downward pressure on house prices at some point.

**Historical data suggest there is a mean reverting element to real house prices:** Data on house prices are available nearly 200 years back for the three largest Norwegian cities. The data are of relatively high quality and based on the repeated sales method. The data illustrate that real house prices in Norway have been very cyclical, and with very little drift over time. High price levels have always been followed by corrections, and in real terms prices have bottomed out at levels that are surprisingly close.

c) Financial stability considerations

- Which are the financial stability considerations that were taken into account?

Mortgage lending constitutes a large share of total lending of Norwegian banks and associated mortgage companies issuing covered bonds. Furthermore, the household debt burden and housing prices have grown to

very high levels by historical and international standards, and most lending is made with floating interest rates – creating a vulnerability to interest rate increases. A significant fall in house prices may hit the banks directly through losses to the household sector, and indirectly through losses to the corporate sector as a result of a fall in household sector demand.

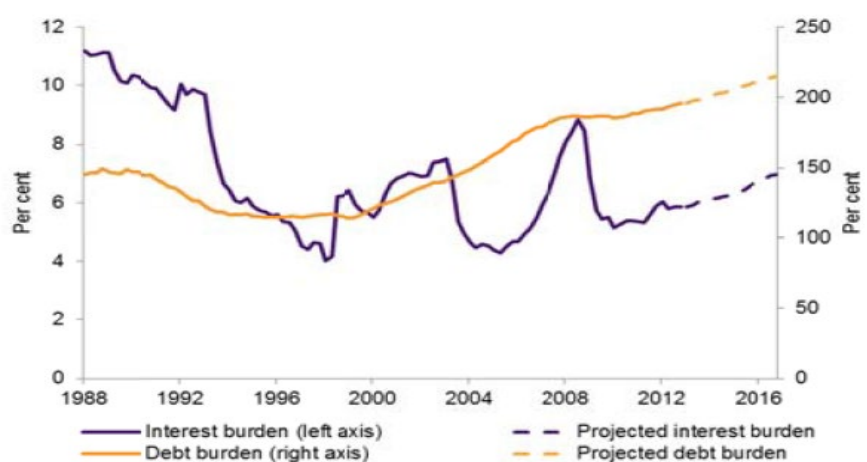
During the Norwegian banking crisis of the early 1990s the direct losses on banks' mortgage portfolios were moderate compared with losses on corporate portfolios. However, the current loss potential is likely to be larger than what was the case during the banking crisis, as the household sector debt burden is larger, house price growth has been stronger and more prolonged, and recovery is not likely to be as quick as experienced after the Norwegian banking crisis.

**Risk factors of particular relevance for Norway**

Prior to the financial crisis house prices and household sector credit growth developed similarly across many European countries and across the Nordic area. However, there are certain risk factors that are particularly pronounced for Norway:

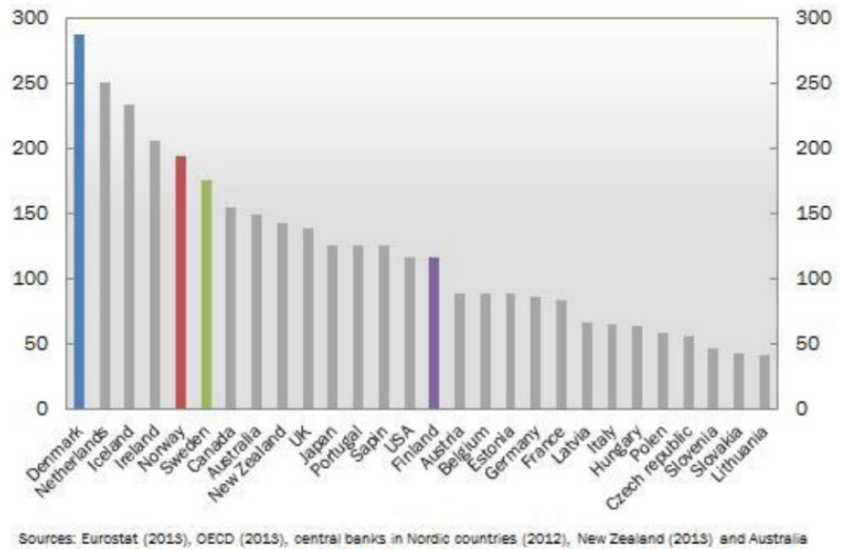
**Household sector debt burden is very high:** The household sector debt burden (total debt to disposable income) has risen from 120 per cent at the mid 1990's to around 200 per cent at present. It is projected to grow further and reach 220 per cent by 2016, see figure 2. The level is historically unprecedented for Norway, and is also very high in an international context, see figure 3. While it is difficult to assess precisely the levels compatible with financial stability for any given country, it should be noted that three of the four countries with debt burden in excess of Norway in figure 3 experienced significant house price falls and banking sector problems during the financial crisis.

**Figure 2: Households debt- and interest burden.**



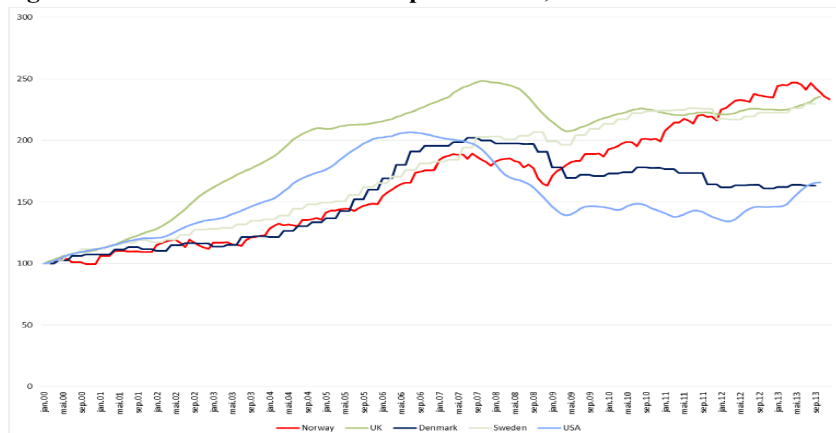
Projections for Q1 2013 to Q4 2016 Source: Norges Bank

**Figure 3: Household debt burden. International cross section**



**Extended period of substantial growth in house prices:** House prices in Norway have tripled in real terms since 1992. The price growth in the early 1990s may partially be attributed to a catch-up in prices after the Norwegian banking crisis in 1988-1992. However, the growth has been substantial also over the last 15 years, and – in contrast to most other countries – after the financial crisis, see figure 4. Extended periods with substantial growth in house prices and household credit have shown to be reliable leading indicators for financial crises, both historically for Norway and in larger cross sectional studies. It is the view of the FSA of Norway that the potential fall in house prices is not sufficiently covered in banks' IRB-models.

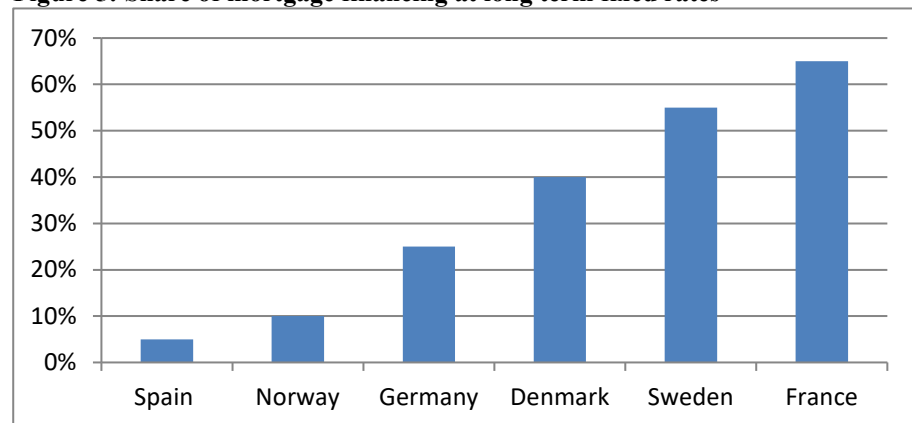
**Figure 4: Indexes of nominal house prices. USA, UK and Scandinavia.**



Source: Eiendomsverdi, S&P Case-Shiller Home Price Indices Composite 20, Realkreditrådet, Hometrack

**Large share of floating rate mortgages:** Less than 10 percent of mortgages in Norway are contracted on fixed interest rates, which is a very small share in an international context, see figure 5. The widespread use of floating rate means that the household sector interest burden reacts quickly to interest rate changes. In periods of low rates the interest burden is eased and households may take on more debt. However, as debt burden increases, the interest burden becomes very sensitive to increasing interest rates. Currently the interest burden is moderate, and is projected to grow only moderately, due to the expectation that interest rates will remain lower than average for an extended period of time, see figure 2. However, in the case of an increase of interest rates towards the level prior to the financial crisis, the interest burden will rise sharply to levels that can be challenging for a substantial part of the household sector.

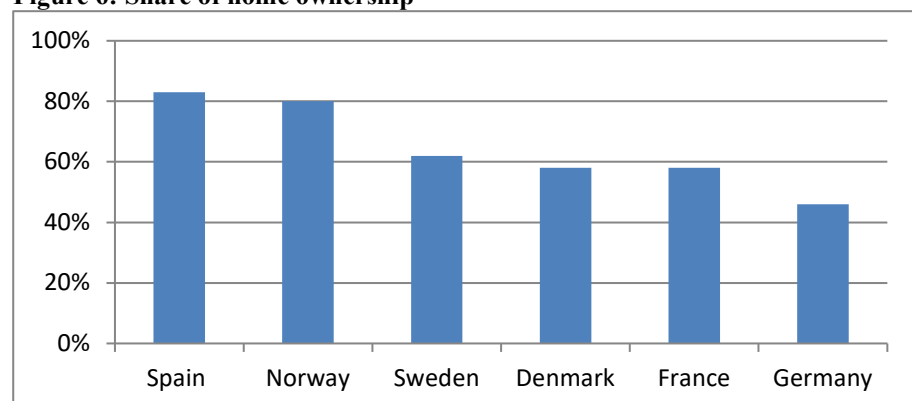
**Figure 5: Share of mortgage financing at long term fixed rates**



Source: Norges Bank

**High share of home ownership:** The share of home ownership in Norway is very high, see figure 6, and higher than in Sweden and Denmark. A large part of the net wealth of Norwegian households is tied up in housing. This suggests that knock-on effects on the wider economy of a fall in housing prices will be larger in Norway than in many other countries (c.f. the wealth effect in consumption).

**Figure 6: Share of home ownership**



Source: Eurostat

<b>3.4. Frequency</b>	<p>- <i>When did the Member State last change the minimum LGD values for exposures secured by mortgages on residential property? Which change has been applied?</i></p> <p>The FSA of Norway has not previously changed the minimum LGD values for exposures secured by mortgages on residential property.</p> <p>- <i>When did the Member State last change the minimum LGD values for exposures secured by mortgages on commercial immovable property? Which change has been applied?</i></p>
<b>4. Miscellaneous</b>	
<b>4.1. Contact person(s) at notifying authority</b>	<p>Contact person(s) for further inquiries (name, phone number and e-mail address)</p> <p>Contact person:</p> <p>Inga Baadshaug Eide</p> <p>+47 22 93 99 47</p> <p>IBE@finanstilsynet.no</p>
<b>4.2. Any other relevant information</b>	