

### Handling the refinancing risk

By law it will be required that the term on adjustable-rate mortgage bonds under certain circumstances may be extended in accordance with the underlying loans. The term extension will take place if the interest rate at the refinancing date is more than 5 percentage points higher than the coupon yield of the bond that is going to be refinanced, or if the auction fails.

This initiative removes the mortgage-credit institutions' refinancing risk.

When the extension is activated the existing bonds are transformed to convertible long bonds with an interest coupon yield equal to the existing coupon yield plus 5 percentage points.

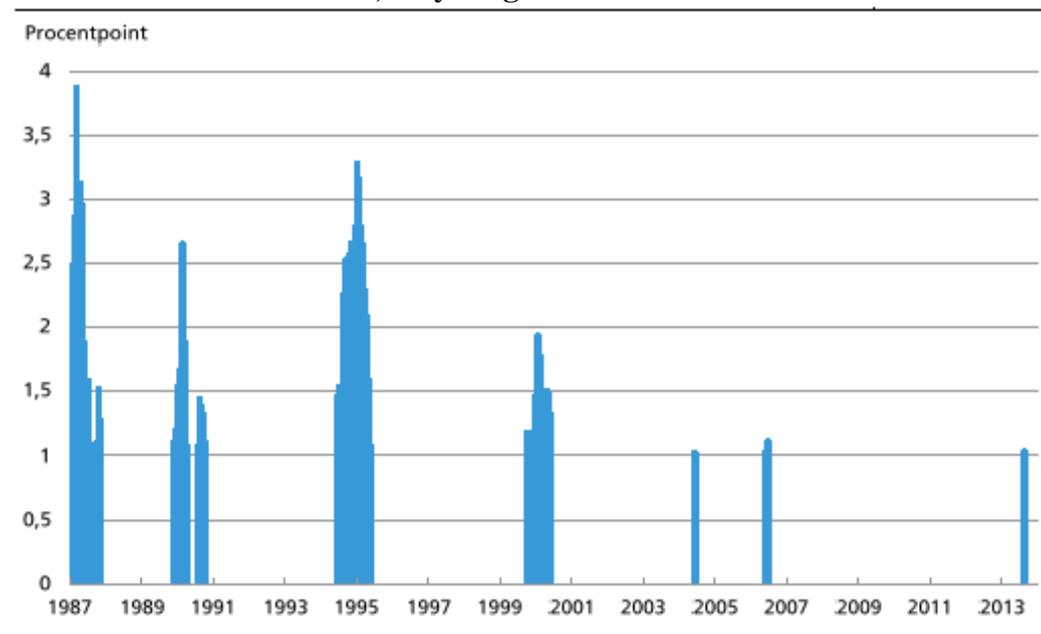
The bond's series of payments are in accordance with the underlying loan and can be published by the mortgage-credit institutions for investors to price the bond.

If the new bond's price exceeds 100 the borrower may redeem the bond and raise a new loan. The change will be market standard as it is introduced by law.

If the term extension is activated the mortgage-credit institution still has access to issuance of new loans if they can be financed on market terms.

An increase in the interest rate of 5 percentage points rarely happens, cf. figure 1.

**Figure 1. Positive changes over 1 percentage point within 12 months to the interest rate since 1987, 10-year government bond**



Source: Nationalbanken (The Danish Central Bank)

In a longer time perspective the interest rate on mortgage bonds increased by slightly more than 5 percentage points from 1973 to 1974 during the oil crisis. Looking back to 1839 quarterly numbers show that interest rates on long government bonds increased by 5 percentage points from the second quarter 1979 to the second quarter 1980. During this period Denmark was running very large

budget deficits. Interest rates on mortgage bonds increased by about 2.5 percentage points during this period.

Looking back 150 years the average of the interest rate has not changed by 5 percentage points from one year to another, apart from the decrease in the interest rate in 1983.

The model implies that investors will carry the risk of a term extension. In the light of the rarity of a 5 percentage points increase in the interest rate between two refinancing dates, and also the fact that a refinancing auction never has failed, the assessment is that the investors' risk of a term extension will be low. Therefore, the assessment is that the interest rate on the relevant mortgage bonds will not be significantly affected. Danmarks Nationalbank (the central bank) has on that background announced that it will not alter its borrowing rules.

The intention is that the bill will come into force from the 1<sup>st</sup> of January 2014 in order to swiftly ensure clarity in the market. The bill does not have implications for loans which are going to be refinanced by the end of 2013. The intention is that the bill shall apply to newly issued mortgage loans as well as to existing loans at the time of the next refinancing. This means that i.e. CITA-based loans issued before 1<sup>st</sup> January 2014 will not be affected until refinancing of the underlying bonds.

The model is based on a proposal from a working group consisting of members from The Ministry of Business and Growth, Danmarks Nationalbank, The Danish FSA, The Ministry of Finance and The Ministry of Economics and the Interior.