

DANMARKS NATIONALBANK

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Danish homeowners' interest-rate sensitivity has fallen

Limited interest-rate sensitivity amongst homeowners

The interest-rate sensitivity of Danish homeowners has decreased in the period from 2009 to 2019. This is mainly due to a decrease in the number of variable-rate mortgages and thus an increase in the number of fixed-rate mortgages. An increase in interest rates will affect households in at least two dimensions – homeowners' cash flows and balance sheets. The cash flow reflects the homeowner's current payments and income, while the balance sheet is a statement of the homeowner's debt and assets.

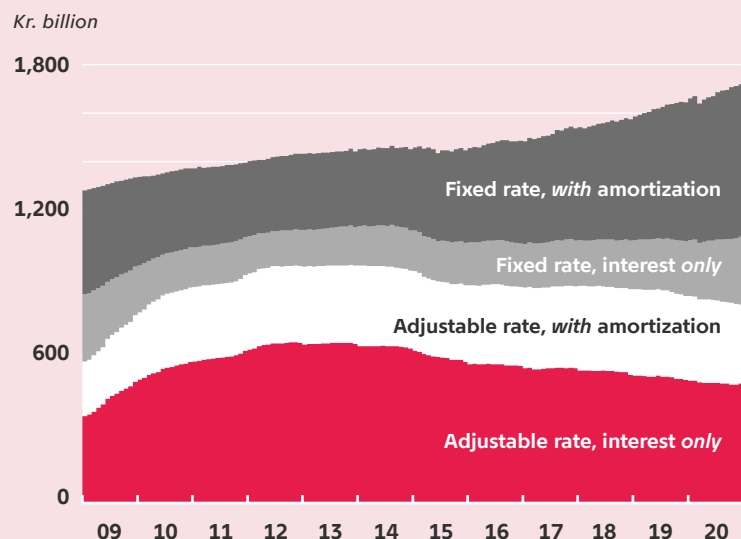
These are some of the conclusions drawn by economists Stine Ludvig Bech, Simon Juul Hviid and Jakob

Guldbæk Mikkelsen from Danmarks Nationalbank in their Working Paper. The Working Paper focuses on homeowners' finances, highlighting how homeowners will be affected by an interest-rate increase of 1 percentage point. Interest-rate developments affect both households and businesses, and decreases in interest rates are therefore of importance to the Danish economy. Interest rates have recently increased from a very low level.

Overall, the economists conclude that homeowners are resilient to a relatively modest interest-rate rise of 1 percentage point, but that some households will

Fewer adjustable-rate mortgages since 2013

Note: Mortgage credit to Danish households.
Source: Danmarks Nationalbank.



be particularly sensitive, especially highly leveraged homeowners that have opted for adjustable-rate and interest-only mortgages. Homeowners with these types of mortgages are exposed to rising interest rates, both through their cash flows and balance sheets.

The new Working Paper uses information from a number of Danish registers, which include household incomes, mortgages, housing wealth and interest and instalment payments.

Two measures are set for homeowners' cash flow and balance sheet: debt service-to-income and debt-to-assets ratios. If interest rates rise, both measures will be affected for most homeowners. Cash flow will be affected by a larger share of income being spent on servicing the debt, and the balance sheet will be affected by the interest-rate increase, all else being equal, reducing the housing wealth. At the same time, the market value of especially the outstanding fixed-rate part of the mortgage debt will decrease.

The latter is particularly interesting for Danish homeowners, as Danish fixed-rate mortgages can always be repurchased at market price if interest rates rise, as is the case here. This provides substantial insurance against interest-rate rises for households with fixed-rate mortgages on their balance sheets.

Danish mortgages are so-called annuity loans, i.e. loans with fixed total service costs. The determination of the annuity is important for the cash flow, given the fact that increasing interest payments on adjustable-rate mortgages reduce instalment payments slightly when the total service costs are determined. However, this does not apply to households having adjustable-rate and interest-only mortgages, where interest rate rises will have full effect.

Find the new Working Paper on homeowners' interest-rate sensitivity on Danmarks Nationalbank's website ([link](#)).

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The news article consists of a Danish and an English version. In case of doubt regarding the correctness of the translation the Danish version is considered to be binding.

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