



### Household debt in Scandinavia

Household debt and Moody's ratings

# How is household debt incorporated into Moody's ratings?

The level of household debt is not a direct input into the sovereign rating as it is not part of the scorecard used by sovereign analysts and committees

It is however an integral part of the "considerations" as it indirectly impacts several ratios:

- » Economic stability as evidenced in study by Nationalbanken
- Government access to funding competition with households
- "Investor sentiment effects"

Our assessment of risks in the banking sector is also (and more directly) impacted by household debt.

- » Again the level of household debt is not directly incorporated into the scorecard we use\*
  - \*We recently sent out a request for comment on a proposed revised banking methodology where household debt <u>is</u> a direct input to the "macro score" incorporating both level and trend in private sector-debt/GDP (See appendix)

However, also under our current methodology, the level and trend in household debt is a key discussion point as it has clear implications for the banking sector through:

- Debt servicing burden a bit like Debt/EBITDA is an indicator for corporates
- Interest rate sensitivity
- Funding risks how is the household debt funded by the banks (refinancing risk)?
- Economic volatility again as evidenced in study by Nationalbanken



## Things we consider when assessing the risk posed by household debt

Our ratings are essentially relative, so we are in effect considering the relative risk to sovereigns and banks stemming from the level and trend in household debt.

We rate banks in 96 different countries and know that the "simple" measure of privatesector debt/DGP is inconsistent between countries and does not lend it self to a high degree of precision in determining the relative impact.

In addition for each country a number of things need to be considered:

- » The debt split mortgage vs. consumer
- The level of house ownership on vs. off-balance sheet liability
- » Household assets asset liquidity, correlation between debt and assets
- Funding e.g. domestic vs. international, savings patterns, investor profile (e.g. long term savings vs. liquidity)
- The distribution around the average (remember our focus is on the negative side of the distribution and a few standard deviations from the mean)

In conclusion: We can not isolate the impact of the relatively high household debt level in Denmark on the Danish bank's ratings, but the level of household debt matters to the financial strength of the banking sector and therefore also to our ratings. However, assessing the impact both absolute and relative is complex. We place as much importance on the trend in household debt for each system.



### Also the trend needs some interpretation

The trend tends to be correlated with house prices, so a positive i.e. falling trend will often be a result of falling house prices, which has negative implications on other parts of the economy and hence the bank's operating environment.

Also more general deleveraging can be "pro-cyclical" in economic downturns and have negative implications elsewhere in the economy.

That being said, a falling trend does signal reducing household leverage and hence debt servicing burden and interest rate sensitivity – all else being equal.

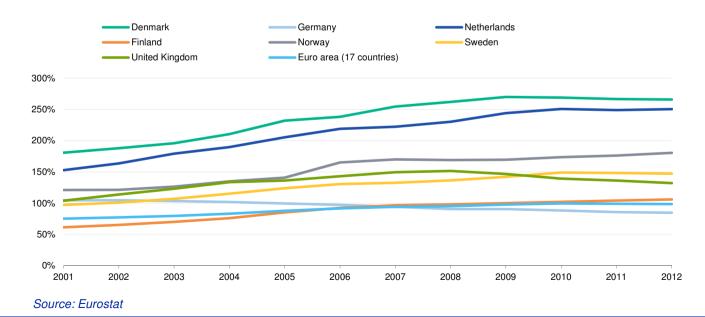
Does it matter how the level is reduced?

• In principle no, the high level measure (household-debt/GDP) or the long term trend does not distinguish between e.g. interest-only loans or amortizing loans that are "topped up" keeping the outstanding loan amount stable. The difference to us is more related to the demonstrated ability to amortize in the latter case.

Again the conclusion is that the level and trend in household debt it matters, but the effect can not be isolated and changes in the debt level needs to be considered against the impact it has on other factors impacting the financial strength of banks.

### From our recent Danish banking system outlook

- » .... the high household debt level in Denmark combined with a high share of variable-rate lending means that Danish households on average remain very sensitive to increases in interest rates.
- » The debt-to-income ratio has shown a modest fall in Denmark since the start of the crisis, in contrast to the increasing trend in the other Nordic countries (see Exhibit 16). We attribute the trend in Denmark largely to falling property prices and the general deleveraging trend in the Danish economy. Lending statistics to June 2014 show continued flat year-on-year lending to households from the banks and MCIs combined, pointing to a continued modestly falling debt-to-income trend.
- » Danish households also have relatively high levels of assets, e.g. pension assets, but these assets do not typically provide regular income to households until retirement, meaning that returns on these assets will not compensate for higher debt-servicing costs as a result of increasing interest rates. An analysis by the Danish central bank in 2011 did, however, indicate that most households will be capable of coping with a more than 5% percentage point increase in interest rates. Our central interest-rate scenario is for rates to remain low during the outlook period.





## **Appendix** (From our request for comment for proposed new banking methodology)

#### Level of private-sector credit/GDP

The level of private-sector credit/GDP is a basic measure of leverage. The greater the stock of debt in relation to national income, the harder borrowers are likely to find it to repay that debt, other things being equal, and the more debtors are exposed to economic activity or shock. This is borne out by academic studies, which demonstrate that the credit/GDP ratio can be correlated with whether a subsequent boom turns into a credit bust with damaging consequences. The ratio requires careful interpretation: higher levels of debt are the natural consequence of financial deepening as economies develop and, hence, may be more sustainable for some mature economies than for others. (19) We score this ratio along the same scale as other factors considered in the Sovereign Scorecard, using data collected by our Sovereign Risk Group.

#### Growth in private sector credit/GDP

Rapid growth in private-sector credit is a classic indicator of an economic boom because it marks a deviation between credit and economic activity and this indicator is significant in our study of recent bank failures. Moreover, much academic literature concurs that it is an important indicator of greater risk-taking, which often precedes a crisis. We score this factor using the scale below, using data collected by our Sovereign Risk Group. Once again, the accumulation of debt is sometimes associated with the natural process of financial deepening in developing economies, or sustainable increases in asset prices, and rapid growth does not necessarily signal the same risks in different economies.

(19) See IMF Staff Discussion Note, Policies for Macrofinancial Stability: How to Deal with Credit Booms, June 7, 2012.







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