DANMARKS NATIONALBANK Economics Jan Overgaard Olesen 20 March 2009

Memoranda on economic and financial- market issues

Household wealth in Denmark: stock-taking at a macro level

This note provides a stock-taking of household wealth at a macro level in a longer-term perspective. In brief, Danish households' debt has increased considerably in recent decades and amounted to approximately 3 times disposable income in 2008. However, the value of households' assets is much higher and has increased by even more over the same period. Households' wealth (i.e., total assets less total debt) amounted to more than 3.5 times disposable income in 2008. Due to falling house and share prices, asset values have been declining in recent years, but in a longer-term perspective wealth is at a high level. Household wealth is also higher than in 2003 when the most recent upswing in the Danish economy took momentum. On an average basis, households appear to be well consolidated. This favourable wealth position has been sustained by years of wealth accumulation through household savings.

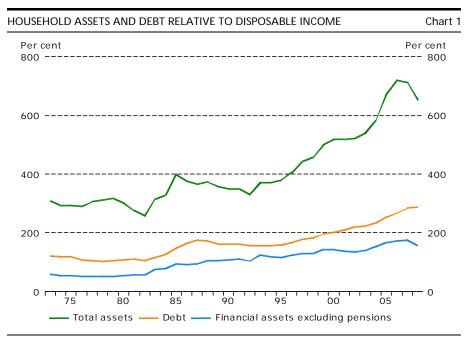
Household debt, assets and wealth ¹

Household debt which predominantly comprises loans from banks and mortgage credit institutes has increased almost continuously in recent decades. In 2008 debt accounted for approximately 3 times household disposable income (or 130 per cent of GDP).² This debt-to-income ratio is more than twice as high as in the beginning of the 1970s, cf. Chart 1.

At the same time, households have large asset holdings and the total value of these holdings has in absolute terms increased by even more over the same period. By 2008, total assets which include the market value of housing and financial assets amounted to more than 6 times disposable income, cf. Chart 1. This is also more than a doubling compared to the early 1970s corresponding to an increase in asset values by more than 3 times disposable income.

Data are available on request (author email: jao@nationalbanken.dk).

Throughout, 2008-data for financial assets, debt and total wealth relate to the end of 3rd quarter 2008. Data for housing wealth relate to the end of 4th quarter 2008.



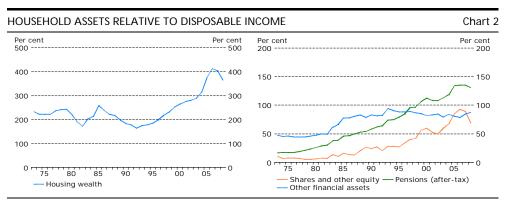
Note: Assets and debt at the end of the year. Household disposable income for 2008 is partly estimated. Source: Danmarks Nationalbank, Statistics Denmark and own calculations.

The major part (more than 50 per cent in 2008) of households' asset holdings consists of housing wealth, i.e., the market value of owner-occupied housing and rental housing owned by households, cf. Chart 2. Households also hold significant amounts of shares and other equity and other financial assets like bonds and bank deposits. Moreover, households have accumulated large holdings of pension assets with pension funds and insurance companies as the result of large and steadily increasing retirement savings. Pension funds and insurance companies typically invest in bonds and shares and, hence, pension assets represent indirect holdings by households of these types of assets. As a rough estimate, direct and indirect holdings of shares and other equity in total accounted for 15-20 per cent of household assets in 2008 while bonds and bank deposits accounted for 25-30 per cent.

The increase in asset values relative to the early 1970s has been widespread across asset components. In particular, the value of liquid assets, that is, assets which can be sold off by households at a relatively short notice, is at a high level despite recent declines in share prices, cf. Chart 1 (financial assets excluding pensions).

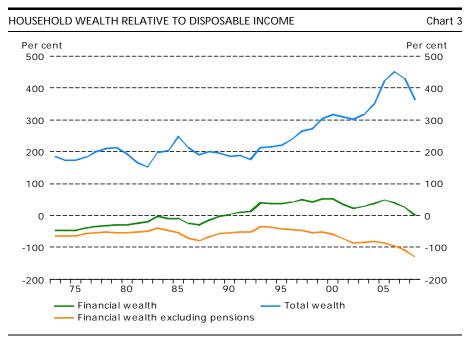
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Pension assets are included on an after-tax basis, since pension disbursements are due to income taxation.



Note: Assets at the end of the year. Household disposable income for 2008 is partly estimated Source: Danmarks Nationalbank, Statistics Denmark and own calculations.

Household wealth, that is, total assets less total debt, accounted for more than 3.5 times disposable income in 2008, cf. Chart 3. Even though wealth has declined in recent years due to falling prices on shares and housing, it is at a high level in a longer-term perspective. Wealth is also still comfortably above the level in 2003 where the most recent upswing in the Danish economy took momentum. On a rough average basis, housing wealth amounted to approximately 1.2 million DKK (225,000 USD) per household in 2008. This is a noticeable amount both in absolute terms and in a historic context. There are, of course, large differences across households, but it suggests that the household sector taken as a whole is well consolidated.⁴



Note: Wealth at the end of the year. Household disposable income for 2008 is partly estimated. Source: Danmarks Nationalbank, Statistics Denmark and own calculations.

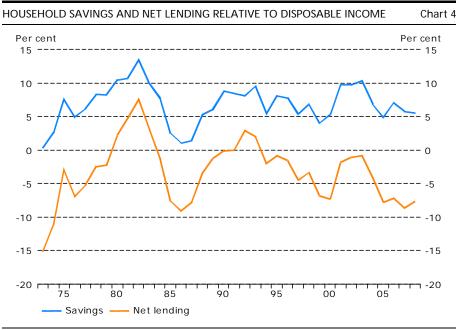
To conclude, the increase in household indebtedness in recent decades is more than offset by the accumulation of assets at a macro level. Hence, to a

Certain asset categories are not included. For instance, the value of land, consumer durables and capital goods owned by self-employed are not included. This implies that the stated wealth figure under-estimates the true value.

large extent, the increase in debt reflects a grossing-up of household balances whereby assets and liabilities have increased simultaneously. This is, for instance, the case when rising house prices lead to an increase in housing wealth and, at the same time, a rise in mortgage debt in response to an increasing collateral value of housing. Apart from the most recent years, the rise in household debt has not been accompanied by a deterioration of total wealth which in 2008 was at a high level. This wealth accumulation reflects the fact that households have been saving income throughout the period, cf. below.

Household savings

The favourable wealth position of Danish households is the result of years of wealth accumulation through positive savings, cf. Chart 4. According to National Accounts, the savings ratio of households has in most of the years been around 5-10 per cent of disposable income. This fairly high savings ratio was also sustained during the upswing in the years 2003-2008 and has contributed to the increase in overall wealth, in particular, since the beginning of the 1990s.



Note: 2008 is partly estimated. Net lending is defined as savings less investments in real assets. Source: Statistics Denmark and own calculations.

Households have had a net lending deficit – or net borrowing requirement – for several years where investments in real assets (e.g. residential investments) have exceeded savings, cf. Chart 4. This implies that households on an aggregate basis have financed part of their real investments by increasing their debt or by selling off financial assets. This net lending deficit has put a downward pressure on financial wealth (i.e., financial assets less debt), cf. Chart 3. Financial wealth has, on the other hand, been sustained by long-run capital gains e.g. on shares and other equity.