SPEECH

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SPEAKER: Deputy Governor Cecilia Skingsley

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Household debt under the micro-scope*

The issue of household indebtedness is currently under discussion in many different contexts. The Riksbank, for example, has expressed its concern about the development of household debt and the situation on the mortgage market for several years now.[1] The discussions centre on to what extent the increase in household debt that we have seen for some time poses a risk to the real economy and to the stability of the financial system, and on the measures that may be needed to reduce these risks.

However, the statistics available to date have not made it possible to conduct all the analyses that we would have liked to conduct to get a complete picture of the debt situation. With the support of the Sveriges Riksbank Act, the Riksbank therefore decided in the summer of 2013 to collect data on individuals' debts from the eight largest banks in Sweden. This data provides important pieces of the puzzle regarding household debt.

The analysis of the data shows, for example, that households in general are highly indebted in relation to their incomes – and this applies above all to low and middle-income earners. It also applies irrespective of where they live in Sweden and how old the borrowers are. The analysis also shows that almost four out of ten borrowers do not reduce their debts over time and that most of those who do reduce them very slowly. This indicates that the information on household debt that we previously had access to is more generally applicable than we thought.

A continued increase in indebtedness in the household sector may have serious consequences for the real economy and for financial stability. I therefore see clear risks with the Swedish households' debt situation.

Given the results of this analysis, and given that there are vulnerabilities in the Swedish financial system specifically linked to the banks' mortgage lending, it

* I would like to thank Annika Svensson, Marianne Sterner, Jakob Winstrand and Dilan Ölcer for their help in writing this speech and for their views on earlier versions.

[1] International stakeholders, for example the IMF, the OECD and the EU, have also been concerned. The risks associated with high household indebtedness have also been discussed at other central banks. The Riksbank warned about these risks already prior to the financial crisis (see, for example the speech made by Stefan Ingves on 4 October 2013).

is of the utmost importance to prioritise work on preventive measures. We need to reduce the risks relating to indebtedness and strengthen the resilience of the banks. I think that the Riksbank's analysis can provide an important contribution to this work.

Although we now have better information about household debt, important pieces of the puzzle are still missing. The Riksbank's data collection was a first measure and there is no older, historical information on debts at the household level. And, as many others have said before me, we do not have any information on household wealth either.

Today, I intend to speak above all about the new results from the analysis of the Riksbank's data on the debts of individual's and households and explain how these relate to other studies of household indebtedness. I also want to explain why the results should be viewed in the light of the vulnerabilities in the Swedish financial system. Let me begin, however, by saying a few words about why household debt is a cause of concern to the Riksbank at all.

Household debt can threaten sustainable growth

The Riksbank has long pointed out the risks associated with the development of household debt. When household debt is analysed, the debts are usually placed in relation to something else. As most households pay their borrowing costs using their current incomes rather than their assets, the debt ratio, that is debts in relation to disposable incomes, is often used as an illustrative measure of risk.[2]

Since 1995, the aggregate household debt ratio, that is total household debt as a percentage of disposable income, has increased from 90 to 174 per cent, and it is expected to continue to increase in the years immediately ahead. Although the aggregate debt ratio has grown somewhat more slowly in recent years, it is still very high in an historical perspective (see Chart 1).

Chart 1. Aggregate debt ratio

Sources: Statistics Sweden and the Riksbank

[2] Data from, among others, the European Central Bank,indicates that households in countries that were hit relatively hard by the recent financial crisis often had higher debts, fewer liquid assets and higher interest expenditure in relation to incomes than countries that were hit less hard.

This has led to the households becoming increasingly sensitive to shocks such as a loss of income, falling asset prices or rising interest rates. Our primary concern is not that the households will cause the banks any major loan losses. As we have pointed out for some time, our assessment is that this risk is limited. However, such shocks may lead the households to drastically reduce their consumption, especially in the case of households with large debts, and this may have an impact on the development of the macroeconomy.[3] Falling consumption may in turn reduce the profitability of Swedish companies and ultimately lead to increased loan losses from the banks' lending to companies. The risk of such a scenario occurring in Sweden may also have increased in connection with the dramatic increase in the total level of indebtedness.[4] I would also like to point out the difficulties that many individuals experience when bad times coincide with high private debts.

An additional factor is that mortgage lending forms an important part of the Swedish banks' assets, which means that the financial system is sensitive to risks linked with indebtedness. The banks fund as much as three-quarters of their lending for housing purposes on the market for covered bonds and access to funding on this market is based on Swedish and foreign investors being highly confident in the safety of the the underlying assets. If confidence wanes, funding costs may increase and access to funding may decline. This would disrupt the functioning of the financial system and thus have a direct negative effect on financial stability. This means that the Swedish mortgage market is in fact not only a concern for us here in Sweden but also for many investors around the world.

All in all, this means that shocks of various kinds can lead to the high level of indebtedness in the household sector causing problems for both the real economy and financial stability. This may make it more difficult for the Riksbank to perform its tasks. There are therefore good reasons for the Riksbank to care about household indebtedness.

The analysis to date has been based on limited data

The debate on whether the level of household indebtedness is sustainable or not has to date been based on partly inadequate data. In recent years, the analysis has largely been based on aggregate data on the households' assets and liabilities from Statistics Sweden's quarterly data.[5] However, over the last four years it has also been possible to some extent to base the analysis on the annual mortgage survey conducted by Finansinspektionen, in which information on randomly-sampled new borrowers and some aggregate data are gathered from the banks. However, the random samples in the mortgage surveys only cover a limited period and only refer to new loans. The random samples thus only represent only 1.6 per cent of the debts of the household sector.

[3] One explanation of this is that a household's propensity to consume is affected by how highly indebted the household is. Studies have found that a highly-indebted household reduces its consumption more in a crisis than a lowly-indebted household. See, for example, Andersen, A.L., Duus, C. and Jensen, T.L. (2014), "Household debt and consumption during the financial crisis: Evidence from Danish micro data", Working Paper, Danmarks Nationalbank and Mian, A. Rao, K. and Sufi, A. (2013), "Household Balance Sheets, Consumption, and the Economic Slump", Quarterly Journal of Economics 128(4), pp. 1687-1726.

[4] International studies have shown that a substantial build-up of debt can increase the probability of financial crises and of falls in housing prices, as well as exacerbating the effects if a crisis does occur. See, for example, Borio and Drehmann (2009), Schularich and Taylor (2012), and the IMF (2012).

[5] Since 2007, when wealth tax was abolished, no authority has had the assignment of collecting data on individual's debts and assets.

Consequently, they do not provide a comprehensive view of the situation in the loan stock, that is for existing loans. As the information on the loan stock presented in the surveys is at the aggregate level, it is also not possible to analyse, for example, the distribution of debt ratios.

In November 2013, the findings of a government inquiry, "Over-indebtedness in a credit society", were published. The data in the inquiry was partly based on new information from the Swedish Enforcement Authority and from UC, a credit information agency. However, the data constituted only a cross-section of the households' debts and thus did not enable an analysis of how debts had developed.

All in all, this means that existing sources of data do not provide a complete picture of household debt, and that the discussion of the risks associated with household indebtedness has so far been based on limited material.

The Riksbank's credit data an important piece of the household-debt puzzle

In order to be able to perform better analyses of household debt at the individual and household levels, the Riksbank therefore decided in the summer of 2013 to gather credit information on all of the borrowers of the eight largest banks.[6] This information covers all the loans these borrowers have registered with UC, not just those granted by the eight largest banks. The amount of data is therefore substantial and the loan volume covers approximately 80 per cent of household loans from monetary financial institutions and 94 per cent of all mortgages.[7] This should be compared to the random samples in the mortgage surveys, which cover 1.6 percent of households loans from monetary financial institutions.

The data includes monthly data for a three-year period[8] on various types of credit, taxed earned income after tax, number of co-borrowers, taxation values for detached houses, the parish in which the borrower is registered and other information. The material contains information on almost four million indebted adult individuals, which corresponds to 52 per cent of Sweden's total adult population.[9] The individuals in the data can be linked to over 1.8 million households.

On the basis of this material we now have the possibility to conduct an in-depth study of total household debt and not only of new loans – a possibility that we have never really had before. Using this individual data, it is also possible to examine how debts are distributed, for example between different income and age groups and geographically. It also enables us to follow how debts develop over time and thus also provides some information on the households' amortisation behaviour. The Riksbank's credit data is therefore an important piece of the household-debt puzzle.

[6] The eight largest banks are Danske Bank, Handelsbanken, Länsförsäkringar Bank, Nordea, SBAB Bank, SEB, Skandiabanken and Swedbank.
[7] According to Statistics Sweden, loans from MFIs to households amounted to SEK 2,826 billion in July 2013, with 81 per cent of these being mortgages.
[8] From July 2010 to July 2013.
[9] According to Statistics Sweden, 7.7 million people aged over 17 were resident in Sweden in 2013.

The Riksbank's credit data confirms our concern

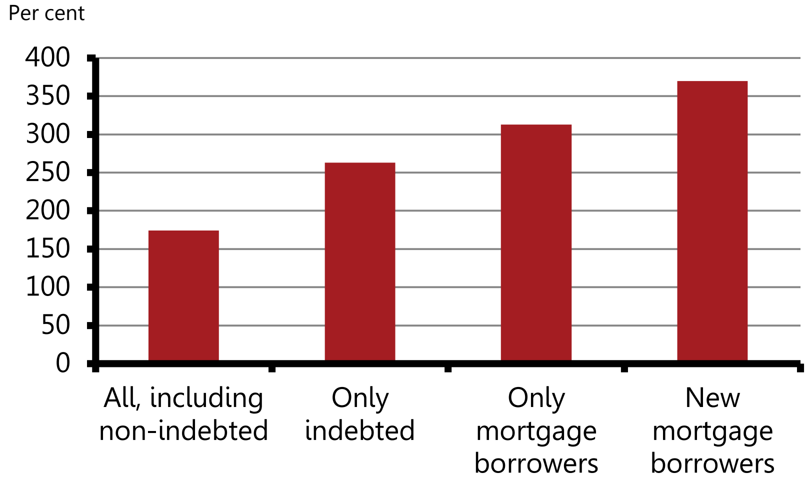
Let me now say something about what our data shows and also in some cases place the data in relation to other results that have been presented to us in various contexts. It is of course not my intention to give the impression that other results are incorrect in some way. It is rather the case that data is used in different ways depending on one's perspective and focus, and this is reflected in the results. The Riksbank's particular focus is on the risks that household indebtedness may pose to the real economy and financial stability.

The aggregate debt ratio underestimates debts among borrowers

As I mentioned earlier, the aggregate debt ratio is 174 per cent. However, as this figure is based on the entire Swedish household sector it also includes individuals who have no debts but have an income. Now that it is possible, it therefore seems more relevant to examine the debt ratio for those who actually have debts, that is almost four million Swedes over the age of 17. If the debt ratio is calculated only for indebted households, the figure arrived at is 263 per cent. If we look at those who have mortgages (which constitute approximately four-fifths of indebted households) the debt ratio reaches 313 per cent (see Chart 2).

This comparison clearly shows that debt ratios vary depending on which households we choose to look at, and it also makes clear the extent to which the aggregate debt ratio underestimates the actual burden of debt for indebted individuals.

Chart 2. Debt ratios for different groups



Note. The debt ratio for the group designated "All, including non-indebted" corresponds to the aggregate debt ratio shown in Chart 1. It is calculated as the household sector's total debts in relation to the sector's total disposable incomes. The debt ratios for the other three groups are calculated as averages of the individual households' debt ratios.
Sources: Statistics Sweden, the Riksbank and Finansinspektionen

Not only new borrowers have high debt ratios

Another claim is that high debt ratios are mostly to be found among new mortgage borrowers. Considering the dramatic price increases on the Swedish housing market in recent years, this is a completely reasonable claim. The higher housing prices are, the greater the loan required to finance the purchase of a house or flat. Finansinspektionen's mortgage survey shows that the debt ratio for new mortgage borrowers averages 370 per cent, which is a higher debt ratio than for existing mortgage holders. On the other hand, I do not think that the difference between new mortgage borrowers and those who have owned their homes for some time is as big as I had perhaps expected. This is because people who have owned their homes for a while have had the opportunity to reduce their debts. The fact that the difference is not bigger could indicate that the households reduce their debts at a relatively slow rate. Let me return to this a little later.

The debt ratio is highest among low and middle-income earners

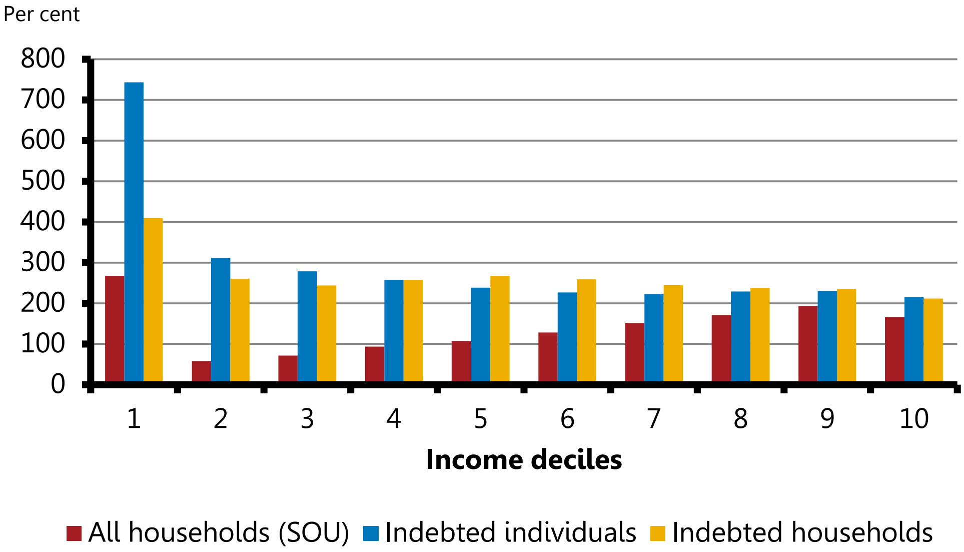
One conclusion of the government's inquiry "Over-indebtedness in a credit society" is that the highest debt ratios are to be found among those with the highest incomes. This is the picture you get if you look at the population as a whole, that is if you also include individuals who have an income but no debts. This means that the inquiry really shows that low-income earners do not take loans to the same extent as high-income earners.

If we instead look at debts in relation to incomes only for those individuals who have debts we get a different picture. The average debt ratio is then higher than 200 per cent in all of the income groups, and in fact highest in the lower income groups (see Chart 3).

If we look at households instead, which may be reasonable considering that many borrowers in fact live in a household with more than one income earner and thus share responsibility for servicing the loan, the picture is till one of high debts in relation to incomes in all of the income groups. And here too it is clear that the highest debt ratios are mainly to be found among low and middle-income earners.

Our results thus contradict the picture that it is only those with high incomes that have the highest debt ratios, that is those who are traditionally regarded as having a higher level of eduction, a stronger position on the labour market and wealth that they can draw from in difficult situations.

Chart 3. Debt ratios in different income groups



Sources: SOU 2013:78 and the Riksbank

High debt ratios are not only a metropolitan phenomenon

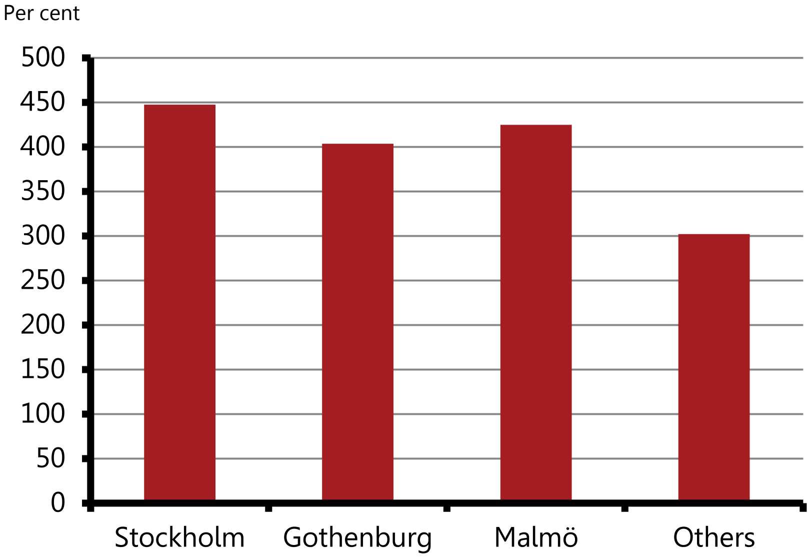
It may also be of interest to look at the geographical distribution. It has often been claimed in the debate in recent years that debts are mostly a "Stockholm problem". The Riksbank's credit data shows that the debt ratios for households with mortgages in the three major metropolitan municipalities are over 400 per cent (see Chart 4). This is a very high figure, which to a certain extent confirms the picture of a high level of debt in the metropolitan regions. However, something that surprised me is that the debt ratio in the rest of the country, that is outside the major metropolitan municipalities, is not that much lower but actually amounts to 300 per cent.

As the rest of the country includes municipalities close to the major cities, however, it can be said that this figure exaggerates the debt ratio outside the metropolitan regions. If we instead look at the county level, the average debt ratios for households with mortgages were 430 per cent in the County of Stockholm, 324 per cent in the County of Västra Götaland, 352 per cent in the County of Skåne and 265 per cent in the rest of the country.[10]

In my world, a debt ratio of 265 per cent is also a high figure. Moreover, more than half of Sweden's population live in the three major metropolitan counties where the debt ratio is even higher. I therefore object to the picture of high indebtedness as being only a metropolitan phenomenon.

[10] One quarter of the total debts are in the County of Stockholm, one sixth in the County of Västra Götaland, one seventh in the County of Skåne and one third in the rest of the country.

Chart 4. Debt ratios for households with mortgages in different municipalities

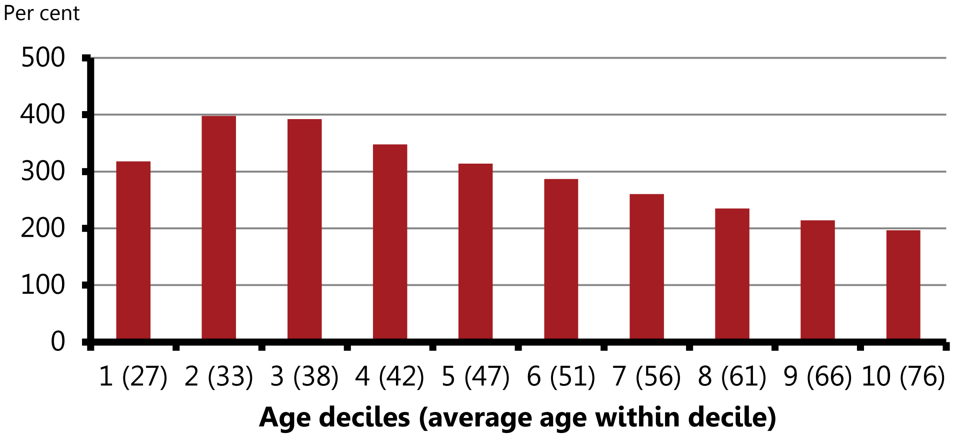


Source: The Riksbank

Young people are most highly indebted, but older people also have high debt ratios

I would also like to take this opportunity to say something about how the debts are distributed per age group. It is sometimes claimed that it is mostly younger people that are highly indebted. This is also confirmed by the Riksbank's credit data. However, we also note that indebtedness is actually rather high in the older age groups (see Chart 5). In other words it is not only "young yuppies in central Stockholm" that have large debts but also their grandparents living in small towns and villages in other parts of the country.

Chart 5. Debt ratios for indebted individuals in different age groups



Source: The Riksbank

■ *Many borrowers do not reduce their debts, and those that do reduce them slowly*

Let me now also shed some light on how debts change over time. Between 2012 and 2013, 24 per cent of the individuals with mortgages increased their debts and 16 per cent had unchanged debts. Just over 60 per cent reduced their debts in the same period (see Chart 6). For those that reduced their debts in this period, the reduction corresponds to an average remaining amortisation period of 99 years.

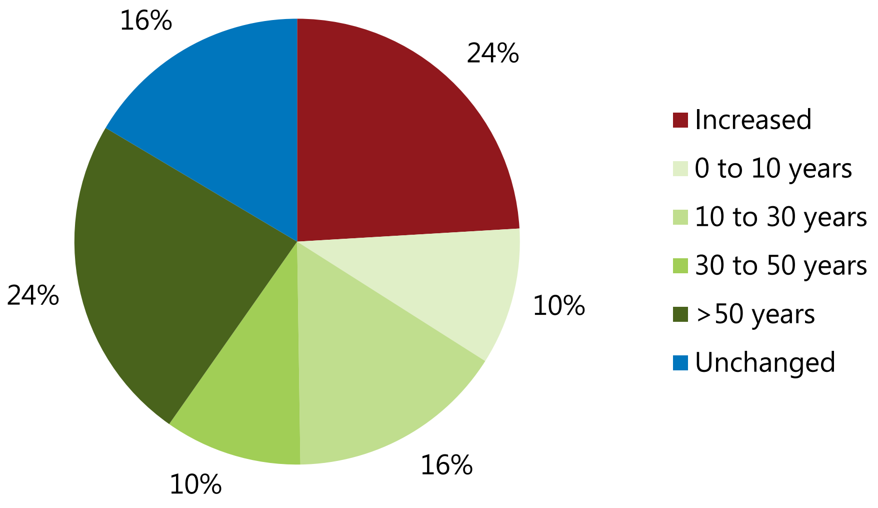
In other words, 40 per cent of the individuals that have mortgages have increasing or unchanged debts, and those that reduce their debts do so very slowly.

Over the three years for which we have data, the proportion of individuals reducing their debts has in fact increased and the proportion increasing their debts has decreased. On the other hand, the increase in the proportion of individuals reducing their debts has been very small.

All in all, the analysis of the Riksbank's credit data thus shows that debt ratios are fairly evenly-distributed across income groups. They are also spread throughout the country. The analysis also shows that debt ratios are high even for older borrowers. Consequently, I would like to point out that the problems associated with debt seem to be both more extensive and more comprehensive than we have previously realised.

Chart 6. Change in debt among individuals with mortgages, July 2012–July 2013

Percentages



Source: The Riksbank

The risks associated with household debt should be viewed in the light of vulnerabilities in the financial system

The risks relating to the development of household debt should be viewed in the light of the vulnerabilities that exist in the Swedish financial system as a whole. The Riksbank has pointed this out in its Financial Stability Reports.

The Swedish financial system, of which the major Swedish banks form a substantial part, is large in relation to the Swedish economy. For example, the assets of the Swedish banks amount to 400 per cent of GDP. This is a high figure in an international perspective. Events that lead to problems in the banking sector will, not least because of the size of the sector, have serious consequences for both the financial system and the real economy.

At the same time, all of the major banks have a large proportion of lending to the Swedish household sector and are also closely interlinked in that they have similar exposures.

The major Swedish banks fund about half of their operations on the capital markets of which a substantial part is in foreign currency. In simple terms this means that more than one of every two krona that are lent to Swedish households is ultimately governed by conditions that are set by anonymous capital managers in Sweden or elsewhere in the world.

Moreover, approximately half of the banks' funding consists of covered bonds which are partly held by foreign investors and partly by the other major Swedish banks.

All in all, this means that developments on the mortgage market in Sweden are not only important to individual banks but also to the banking sector as a whole. If the providers of the banks' market funding were to lose confidence in the banks, or in the situation on the mortgage market, the price of funding could increase and access to funding decrease. This would entail higher interest rates for households and perhaps also for companies, depending on the ability of the banks to parry such a situation. It is therefore vital that our financial system is resilient and inspires confidence, and that the development of household debt is deemed to be sustainable in the long term. We are in a situation in which the development of debt in Sweden and the Swedish mortgage market are not only matters of importance to us here in Sweden but also to international investors.

We need measures, and the possibility to follow them up, to ensure a system that is sustainable in the long term

As I said earlier, the new data means that we have taken several further steps towards seeing the risks associated with household debt. However, I would like it to make it clear that there is still a long way to go. We still do not have the entire picture. An important area where we need more data is the asset side, where we have information on the overall situation in the household sector but not broken down at the individual and household levels. In order to be able to follow developments it is of course also important to have long, continually updated time series.

The analysis of the new data that we now have access to shows, all in all, that households in general are highly indebted in relation to their incomes, and this applies above all to low and middle-income earners. It also applies irrespective of where the borrowers live and how old they are. The analysis also shows that many borrowers do not reduce their debts over time and that those who do reduce them very slowly.

I find this situation worrying. It is not mainly those with high incomes and those who can be assumed to have considerable wealth that have the largest debts in relation to their incomes. To a rather large extent it appears to be those who probably have less financial scope to manage potential shocks. This poses risks to the development of the real economy, but also to the stability of the financial system, especially in the light of the vulnerabilities that we see in the Swedish financial system in general.

I firmly believe that measures are needed in several areas to create long-term sustainability. This is a question of wide-ranging measures to increase resilience in the financial system, but also of targeted measures to reduce the risks relating to household debt. It is important that the discussion does not drag on - measures are needed now. I hope that the basis for analysis that the Riksbank is now presenting will help those concerned to make good decisions on the required measures.