FINANSINSPEKTIONEN

Swedish Consumption Loans 2018

14 June 2018

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Summary

Finansinspektionen (FI) follows the development of household debt on an ongoing basis. Debt can lead to risks for borrowers and lenders as well as the economy at large. Household debt largely consists of mortgages, but also of consumption loans. In order to better understand consumption loans, we have mapped the market.

Most consumption loans are small and relatively expensive. They have a high effective interest rate. This is because the maturity is normally short and the fees that are charged are large in relation to the size of the loan. However, it is large loans that represent the largest share of new lending, and it is also these loans that are growing the fastest. The increase has been particularly large over the past four years, a period which has featured a strong economy and low interest rates. In addition, the mortgage cap and the amortisation requirement may have contributed in part to the increase in the use of large consumption loans for housing purposes and other purchases.

Borrowers with the highest income take the largest loans. Households with mortgages normally have larger consumption loans than households without mortgages. Small loans can be the start of larger debt if the borrower replaces or increases the loan instead of repaying it. In the long run, this could result in the borrower becoming over-indebted.

Lenders conduct their credit assessments differently. In general, the assessment is more thorough for larger loans. A debt-to-income ratio has been calculated for almost all borrowers who take large loans. Fifty percent of the loans granted for more than SEK 100 000 have been preceded by a calculation of the household's monthly surplus.

Because consumption loans represent a small percentage of household debt, they constitute only a limited stability risk, but consumption loans affect household finances. Households with large consumption loans spend on average one-fourth of their income on interest rates and amortisation payments. If these households also have mortgages, they pay even more. FI's stress test shows that many borrowers could find themselves in a difficult economic situation if interest rates were to rise or they were to experience a loss of income. Some borrowers may even experience problems their loan payments since their expenses exceed their income.

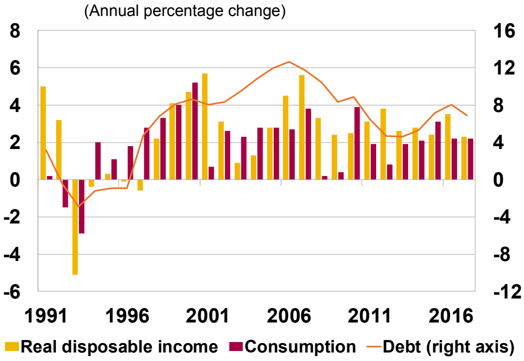
This report maps the market for consumption loans and focuses on potential risks associated with these loans. In order to gain better insight into the effect of consumption loans on borrowers' finances, we will continue to follow the market.

Background

Swedish households have high levels of debt and the size of this debt has grown rapidly in recent years. This is particularly true with regard to mortgages, but consumption loans have also grown at a fast rate. Consumption loans may entail risks to individual households, to macroeconomic development and to financial stability. This is why we are surveying this market. The aim is to better understand consumption loans and to strengthen FI's analysis of household debt and work with consumer protection.

Diagram 1. Growth in household debt, income and consumption.

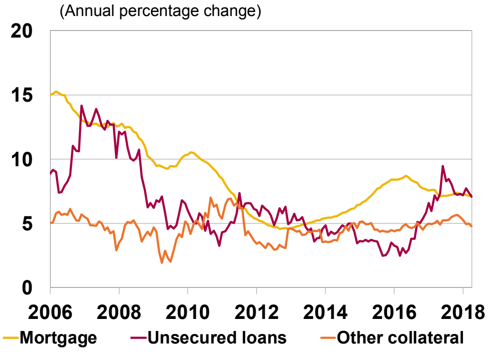
(Annual percentage change)



Source: Statistics Sweden.

Diagram 2. Growth in household debt, distributed by purpose

(Annual percentage change)



Source: Statistics Sweden.

Note: The growth rates are adjusted for reclassifications and for bought and sold loans.

Swedish households borrow money to purchase homes and for other consumption to a large extent. Total household borrowing is equivalent to a little more than 80 per cent of GDP. Loans give households the opportunity to consume without having to save in advance. That is why loans are good for households and for the economy as a whole. However, high levels of debt also make households and lenders vulnerable and can, by extension, also have an impact on the wider economy. Households that have high levels of debt are tying up a large portion of their future income in interest and amortisation payments. If the financial circumstances of such households change, they may find it difficult to cope with these commitments. The risk of payment problems is greater if loans are granted to borrowers who have a limited repayment capacity. The credit assessment is therefore important for both the borrower and the lender.

There are various types of loan. Mortgages are loans collateralised by a home. There are also loans that are collateralised by something other than a home (for example a car), as well as unsecured loans.[1] In this report, we use the term consumption loans to refer to all loans that are not collateralised by a home.

Households have long benefited from a strong economy and their income has increased more than their consumption (Diagram 1). This has contributed to increased saving. At the same time, household debt has increased at an even faster rate. The most important cause is the high growth in mortgages, which account for 82 per cent of total household debt (Diagram 2). Consumption loans are normally sensitive to economic fluctuations. They grew strongly during the economic boom that preceded the financial crisis, only to slow down towards the end of 2008. They have increased rapidly once again since 2016. They are currently growing at a rate of about seven per cent per year. Consumption loans represent 18 per cent of total household debt.[2] Accordingly, consumption loans make a smaller contribution

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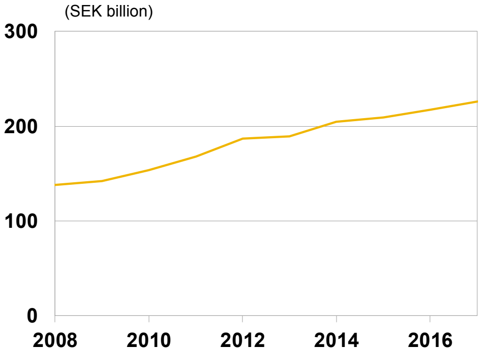
1 An exception is made for loans taken out by a consumer for use in their business activity as a sole trader. Such loans are not regarded as consumer credit under the Consumer Credit Act (2010:1846).

2 Assuming that the mortgage rate is two per cent and the consumption loan interest rate is seven per cent, the interest payments of consumption loans constitute almost half of all household interest payments. Adding amortisation payments, consumption loans' proportion of total debt service payments increases even more.

Diagram 3. Total lending

(SEK billion)



Source: FI.

Note: The diagram shows collected aggregate data concerning unsecured loans, revolving loans and loans collateralised by something other than a home from 20 companies.

Table 1. Composition of the sample.

(Number, SEK and SEK million)

Type of loan	Number borrowers	Amount (average)	Volume
Unsecured loan (U)	14 142	113 000	1 600
Revolving (R)	128 160	3 500	400
Secured (S)	5 653	151 000	900
U + R	167		
U + S	1		
U + S	24		
U + R + S	0		
All	147 763	19 500	2 900

Source: FI.

than mortgages to the total increase in household debt. In terms of interest payments and debt service payments, consumption loans represent a larger proportion of total payments because the interest and amortisation rates are higher for these loans.

FI's assessment is that consumption loans only have a small impact on financial stability. Consumption loans may still entail risks to individual households because the interest rates and fees of these loans are higher than those of mortgages. They also have short maturities, which may result in high monthly expenditure even when the loan is small. There is also a risk if households reschedule or increase the size of their loans instead of repaying them. In addition, borrowers who find it difficult to repay their loans may need to reduce their consumption. This can have a detrimental impact on the development of the economy.

In 2016, FI conducted a survey of about 80 credit institutions.[3] This showed that unsecured loans often have high costs. Another conclusion was that loans are often increased in size (or otherwise rescheduled) to the consumer's disadvantage, as the total cost of the loan often increases when rescheduled.

In its appropriation directions for 2018, FI has been tasked with reporting the results of a consumer credit survey.[4] This survey has been restricted to covering consumption loans from 20 banks and credit market companies.[5] These companies account for 80 per cent of unsecured loans and 60 per cent of loans collateralised by something other than a home. Total lending by these companies has increased since 2008 and was SEK 225bn in 2017 (Diagram 3).

The market for consumption loans is more diverse than the mortgage market. There are many different types of loan and lender. Loans can also be taken out through credit intermediaries and agents.[6] Some loans are paid out in cash, while others involve the lender paying for goods the consumer is purchasing. The consumer is therefore buying the goods on credit. Consumption loans are also made more complicated in that they can mature with or without interest and that there may be differences in repayment terms.

AIM AND DATA

The survey describes the market for consumption loans and borrowers who have taken out a new consumption loan. The aim is to increase

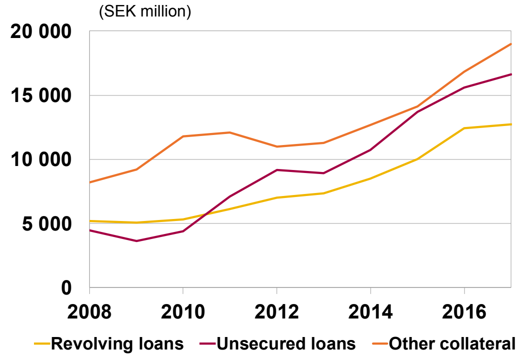
3 See Finansinspektionen (2017), "Consumer Protection on the Financial Market", published 11/05/2017. The survey collected data at an aggregate institutional level.

4 See Swedish Government (2017), "Regleringsbrev för budgetåret 2018 avseende Finansinspektionen" (Appropriation Directions for Finansinspektionen for Fiscal Year 2018).

5 Instant loan firms, i.e. institutions authorised under the Certain Consumer Credit-related Operations Act (2014:275), are not included in this survey.

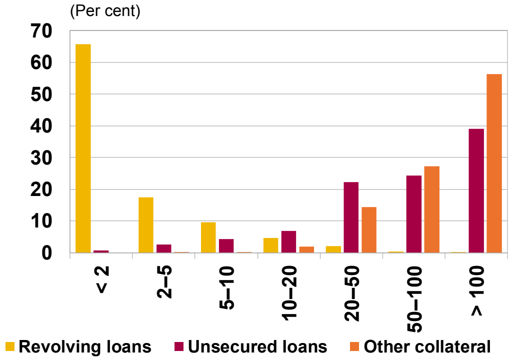
6 Both credit intermediaries and agents work as intermediaries between a consumer or company and a lender. The intermediary receives commission on the mediated loan volume. This means that it is in the interests of the intermediaries to mediate as large volumes as possible, as they do not carry any credit risks. FI has previously described commission-based credit mediation, see Finansinspektionen (2017), "Consumer Protection on the Financial Market". Agents make it possible for a consumer to pay for goods or services on credit. Agents may either receive a commission on the mediated volume or a share of what the customer pays the lender if the loan becomes interest-bearing.

Diagram 4. New lending distributed by type of loan
(SEK million)



Source: FI.
Note: The graph shows new lending by the companies included in the survey.

Diagram 5. Size distribution (SEK thousand) divided by type of loan
(Per cent)



Source: FI.

our understanding of what impact these loans have on the borrower's finances and on the economy as a whole. The survey covers unsecured loans and loans collateralised by something other than a home.

The data collected consists of three parts:

- *Sample of individual loans (microdata):* The sample encompasses all loans issued by the lenders between 15 and 24 May 2017. Following processing, a total of 147 763 borrowers are included in the sample (Table 1). The information in the sample contains data about the new loans, the borrowers' income, total loans, agreed interest rate and other costs. This is the first time FI has compiled such a sample.
- *Aggregate data*. FI has also collected information about the lenders' total consumption loan lending. This information also includes total lending volumes distributed by age group and size of loan. The information goes back to 2008.
- *Qualitative data*. Through a number of in-depth questions, the lenders have provided both general and detailed information. The in-depth questions cover matters including credit assessment methods.

VARIOUS TYPES OF LOAN AND LENDER

The companies in the survey have increased their new lending by 170 per cent since 2008 (see Diagram 4). It is primarily the volume of unsecured loans that has increased. This has grown by 273 per cent, which corresponds to an average annual percentage change of 17 per cent. Revolving loans and loans collateralised by something other than a home have increased by an average of approximately 10 per cent per year.

Revolving loans

A revolving loan is a line of credit the borrower can use, for example when making purchases online or in a physical shop using a credit card or credit account. The line of credit may have a predetermined limit, but this is not necessarily the case. A revolving loan often has no amortisation plan or maturity date.

Only revolving loans that became interest-bearing or entailed an additional cost to the borrower, e.g. interest on arrears or late payment charges, are included in the survey.

Approximately 128 000 borrowers took out revolving loans. The majority of these loans were less than SEK 2 000 (Diagram 5). Revolving loans accounted for around 15 per cent of the volume of loans in the survey sample (Table 1).

Unsecured loans

An unsecured loan is an uncollateralised loan with an agreed amortisation plan and a set maturity date. The borrower may use unsecured loans when purchasing goods or services and for home-related purposes (e.g. as a deposit or for renovations). Furthermore, one unsecured loan may replace several small loans.

Unsecured loans are often large. Approximately 14 000 unsecured loans are included in the survey, and the average loan was SEK 113 000. Around 60 per cent of unsecured loans were larger than SEK

Table 2. New borrowers distributed by type of lender and size of loan (SEK thousand)

(Per cent)

	Major bank	Niche bank	Sales finance
Under 2	5.0	4.0	40.0
2–5	3.6	3.3	8.7
5–10	2.9	3.1	4.0
10–20	1.8	2.2	2.0
20–50	2.3	2.9	1.2
50–100	2.3	2.6	0.2
Over 100	3.7	4.3	0
Total	21.5	22.4	56.1

Source: FI.

Note: As there are substantial differences between lenders, FI has divided them into three groups. Major banks lend large volumes to home buyers and consumers. A niche bank lends smaller volumes and often specialises in one area. Sales finance companies issue unsecured loans for purchasing goods or services.

Table 3. New lending volume distributed by type of lender and size of loan (SEK thousand)

(Per cent)

	Major bank	Niche bank	Sales finance
Under 2	0.1	0.4	1.7
2–5	0.4	0.6	1.6
5–10	0.7	1.1	1.6
10–20	0.9	1.4	1.5
20–50	2.7	4.1	1.5
50–100	5.6	8.6	0.4
Over 100	27.0	38.2	0.1
Total	37.4	54.3	8.3

Source: FI.

Note: See the note to Table 2.

50 000 (Diagram 5). Unsecured loans accounted for just over half of the volume in the survey.

Secured loans – loans collateralised by something other than a home

A secured loan is similar to an unsecured loan in several ways but is collateralised by something other than a home – most frequently a car.[7] Consumers use both secured and unsecured loans in order to purchase larger durables.

The survey includes 5 600 new secured loans. Half of these were larger than SEK 100 000 (Diagram 5). The average loan was approximately SEK 151 000. About 30 per cent of the loan volume consisted of loans collateralised by something other than a home.

Lenders

As there are major differences between lenders, we have divided them into three groups. *Major banks* lend large volumes to home buyers and consumers. A *niche bank* lends smaller volumes and often specialises in one area. *Sales finance companies* issue loans for purchasing goods or services.

Sales finance companies have, on average, younger customers than the major and niche banks. These borrowers also have significantly lower incomes and, on average, have to pay higher interest rates. The differences in terms of interest rates and incomes between major and niche banks are small. On average, the major banks' customers have the largest mortgages and the largest total debt. There is no data in the survey about mortgagors among the sales finance companies. That may be due to sales finance companies not collecting data concerning mortgages. However, it could also be the case that mortgagors' revolving loans do not normally become interest-bearing, which may in turn be because mortgagors are accustomed to paying loan instalments.

Sales finance companies account for more than half of the loans (Table 2) but for only eight per cent of the loan volume (Table 3) in the sample. Major banks and niche banks each account for about a fifth of loans. The major banks account for 37 per cent of the loan volume and the niche banks 54 per cent. Almost two thirds of the volume consists of loans that are larger than SEK 100 000.

All loans may entail risks

This report focusses on the potential risks of consumption loans. For example, loans that are large in relation to income may entail high monthly costs. If the financial circumstances of households deteriorate, this may affect their repayment capacity and lead to the consumer becoming over-indebted. But small loans can also entail risks. They can be the beginning of a debt spiral in which the consumer takes out new loans to repay old ones.

Borrowers who find it difficult to repay their loans will probably reduce their consumption. If many borrowers act the same way, there is a risk that this creates or reinforces an economic downturn.

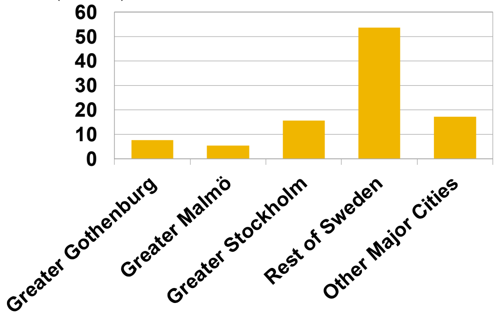
7 A secured loan can be offered in several different ways. One example is car loan. It can be provided through a lender paying the dealership for the car. The loan is then set up as an instalment credit between borrower and lender.

Borrowers

There are various types of consumption loan. FI's survey indicates that most loans are small. However, the larger loans are those that are growing most rapidly. Borrowers with the highest income take out the largest loans. Those who have both mortgages and large consumption loans have the highest debt-to-income ratios and spend the largest proportion of their income on interest and amortisation payments.

Diagram 6. Geographical distribution in the sample

(Per cent)



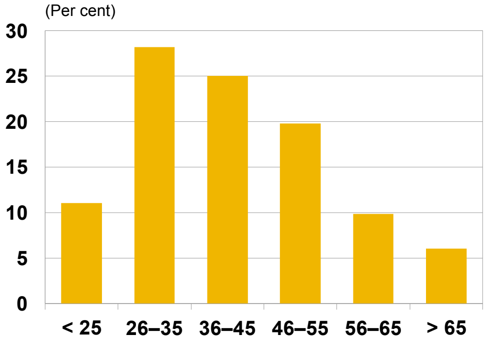
Source: FI.

Note: Other Major Cities is described in Footnote 8.

One way of studying the borrowers is to divide them up geographically. Borrowers who live outside of the major metropolitan areas, in the category Rest of Sweden, take out more than half of consumption loans (Diagram 6).[8] Gothenburg, Malmö and Stockholm combined account for a total of 29 per cent of the loans, which can be compared to the fact that approximately 40 per cent of the Swedish population live in these regions. People aged between 26 and 35 is the age group in the survey that takes out the largest proportion of loans (Diagram 7). Almost 65 per cent of the new borrowers in the sample are below the age of 46 and six per cent are above the age of 65. Almost one quarter of the population as a whole is above the age of 65.

Diagram 7. Age distribution in the sample (year)

(Per cent)



Source: FI.

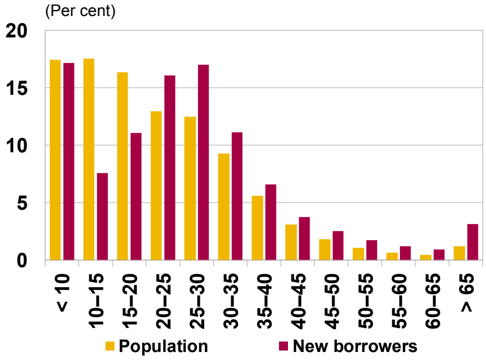
BORROWERS HAVE HIGHER INCOMES THAN THE REST OF THE POPULATION

Another way to divide borrowers is on the basis of their income. The average income of the borrowers in FI's sample is higher than that of the Swedish population as a whole. Around 97 per cent of the borrowers in the survey have no co-signer. This means that the lenders consider only the borrower's own income.

In the population as a whole, the majority of single-households are in the lower income groups (Diagram 8).[9] Almost half of those who took out a new consumption loan have a gross income of SEK 20 000–35 000 per month. Around 20 per cent of borrowers have a gross income that is below SEK 10 000 per month. Several of these borrowers have an income that is below SEK 1 000 per month. Furthermore, almost seven per cent of borrowers have a reported income of zero. According to the lenders, some of these borrowers have no income and in other cases the lender has not retrieved the information. The latter is particularly applicable to small loans. The majority of borrowers who took out larger consumption loans have a salary that is higher than the Swedish median salary.

Diagram 8. Income distribution in the sample

(Per cent)



Source: FI.

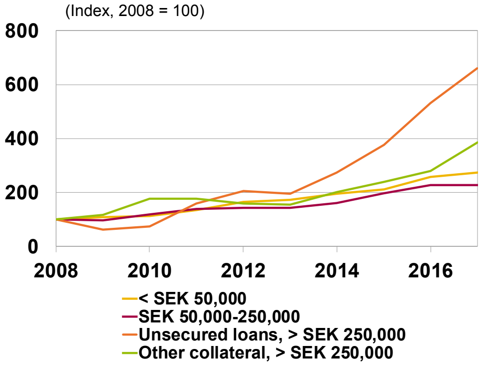
Note: New borrowers denotes the proportion in various income groups (SEK thousand) according to FI's sample. Population indicates how gross income is distributed for single-households in the population as a whole.

8 The regions used are Greater Gothenburg, Greater Malmö ,Greater Stockholm, Rest of Sweden and Other Major Cities. Other Major Cities includes the municipalities of Borås, Eskilstuna, Gävle, Halmstad, Helsingborg, Jönköping, Karlstad, Kristianstad, Linköping, Norrköping, Sundsvall, Umeå, Uppsala, Västerås, Växjö and Örebro. The category Rest of Sweden contains the municipalities that are not included in the other categories. There are 80 borrowers in the sample that do not have a region.

9 Since almost all borrowers in the survey have no co-signer, their income is compared to single households in the population as a whole.

Diagram 9. New consumption loans distributed by size

(Index, 2008 = 100)

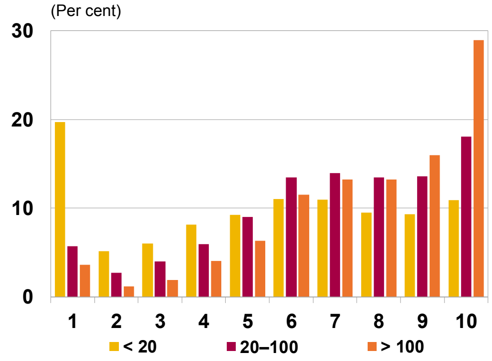


Source: FI.

Note: The graph shows new lending by the 20 lenders, distributed by size. The data collected by FI covers the first three quarters of 2017 and have therefore been multiplied by 1.3.

Diagram 10. Distribution of loans broken down into income decile and size (SEK thousand)

(Per cent)

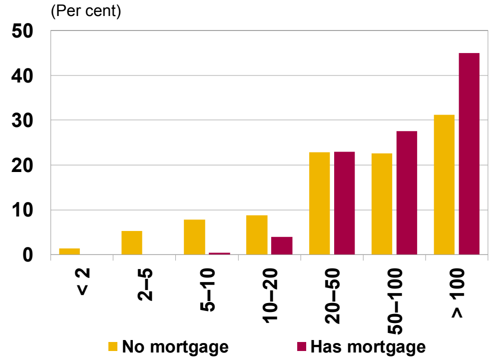


Source: FI.

Note: The distribution shows the proportion of the sample that is within the different income deciles (gross income) found in the population as a whole. Deciles divide the population as a whole into ten equal parts. If the borrowers in the survey were consistent with the income distribution of the population as a whole, all the bars would be 10 per cent.

Diagram 11. Distribution of unsecured loans broken down into new loans (SEK thousand) and home owners

(Per cent)



Source: FI.

Note: The graph is based on 107 062 borrowers.

LARGE LOANS ARE GROWING RAPIDLY

It has become increasingly common to take out consumption loans. The volume of new loans below SEK 50 000 has almost trebled since 2008 (Diagram 9). This coincides with a rise in e-commerce and that online purchases are often financed using revolving loans.

It is not just small loans that have increased; the largest consumption loans have increased even more. The lending volume of new unsecured loans in excess of SEK 250 000 was almost seven times larger in 2017 than in 2008. The increase has been particularly large over the past four years, This is linked to a strong economy and low interest rates. At the same time, house prices have risen rapidly. Since FI introduced the mortgage cap in 2010, households have only been able to take out mortgages of up to 85 per cent of the value of their home. As house prices have increased, so has the need for other types of financing. It may also be the case that the larger unsecured loans are used to an increasing extent to settle previous loans.

Large secured loans were developing in more or less the same way as smaller consumption loans up until 2016. In 2017 they increased by almost 40 per cent. This increase may to some extent be due to the amortisation requirement leading to more people than previously financing their car purchases using a loan collateralised by something other than a home instead of by increasing the size of their mortgage.[10]

HIGH-INCOME EARNERS TAKE OUT LARGE LOANS

Borrowers with the lowest incomes take out the smallest loans. Borrowers in the lowest income decile[11] account for almost one in five loans of less than SEK 20 000 (Diagram 10). Those who take out large loans often have high incomes. Borrowers in the highest income decile represent almost one in three loans of more than SEK 100 000 (Diagram 10). This equates to a monthly gross income of SEK 44 000. However, low-income earners also take out large loans. People with a gross monthly income of less than SEK 17 000 take out almost seven per cent of loans in excess of SEK 100 000. For these borrowers, the average monthly loan payment is SEK 2 750, after interest rate deductions. This equates to a quarter of their net income.

About half of borrowers who take out an unsecured loan or loan collateralised by something other than a home already have a mortgage.[12] These borrowers took out almost 45 per cent of the unsecured loans and 77 per cent of loans collateralised by something other than a home over the sample period. Their unsecured loans are also often large (Diagram 11). All in all, these mortgagors account for 62 per cent of the volume of new unsecured loans and loans collateralised by something other than a home. Approximately 80 per

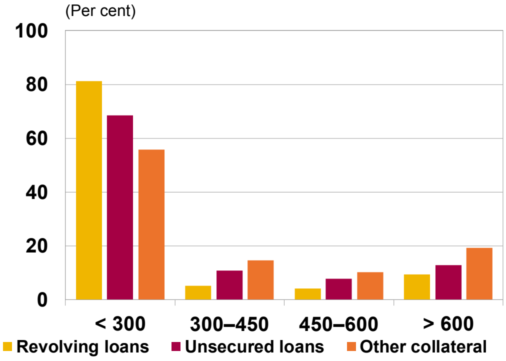
10 The number of newly registered cars increased by only 1.2 per cent in the same period and cannot therefore explain the increase in large loans collateralised by something other than a home.

11 Deciles are created by households being divided into 10 equal parts on the basis of their income.

12 The lenders reported data concerning mortgages (or not) for 107 062 of the borrowers. About 10 per cent of these had a mortgage.

Diagram 12. Proportion of borrowers with different debt-to-income ratios distributed by type of loan

(Per cent)

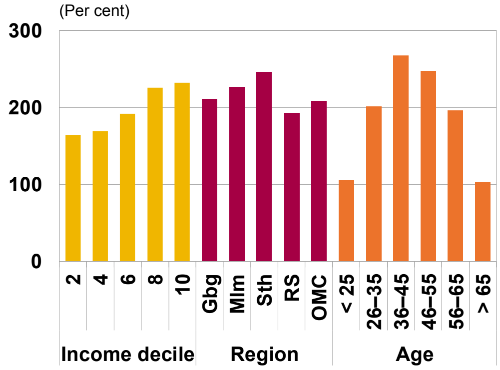


Source: FI.

Note: The debt-to-income ratio is calculated using the borrower's total debt and net income. The calculations are based on 41 506 borrowers. Borrowers with debt-to-income ratios in excess of 20 times their income have been excluded.

Diagram 13. Average debt-to-income ratio distributed by different groups.

(Per cent)

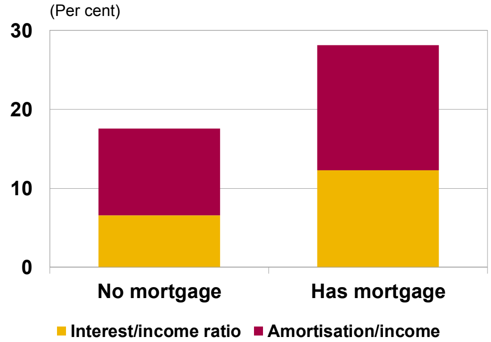


Source: FI.

Note: The income deciles are based on the gross income of the population as a whole. The debt-to-income ratio is calculated using the borrower's total debt and net income. The regions are Greater Gothenburg (Gbg) Greater Malmö (Mlm), Greater Stockholm (Sth), Rest of Sweden (RS) and Other Major Cities (OMC). The calculations are based on 41 506 borrowers; debt-to-income ratios above 2 000 per cent are not included.

Diagram 14. Debt service payments as a proportion of disposable income

(Per cent)



Source: FI.

Note: 17 625 households are included in the calculations.

cent of borrowers with mortgages have an income that is above the median.[13]

Those with a mortgage have the highest debt-to-income ratios

A borrower's vulnerability can be assessed using their debt-to-income ratio. To do this, FI calculates the debt-to-income ratio as the borrower's total debt divided by their gross annual income. A high debt-to-income ratio means that a large portion of a borrower's income is spent on interest payments and any amortisation payments. The average debt-to-income ratio[14] in the sample is 212 per cent. The debt-to-income ratio for borrowers who also have mortgages is significantly higher – an average of 521 per cent.[15] That can be compared to 411 per cent for new mortgagors in the 2017 mortgage survey.[16]

There are variations between the different types of loans. Consequently, the proportion of borrowers can be divided up into various debt-to-income ratio intervals based on loan type. The debt-to-income ratios for households with unsecured loans and secured loans are higher than for households with revolving loans. This is because these loans are large. Approximately 13 per cent of borrowers with unsecured loans and almost 20 per cent of borrowers with secured loans have a debt-to-income ratio of over 600 per cent (Diagram 12). The majority of people who take out a revolving loan have a debt-to-income ratio below 100 per cent.

The average debt-to-income ratio also differs between different types of borrowers (Diagram 13). Borrowers with the highest incomes have the highest debt-to-income ratios. In the second income decile, the average debt-to-income ratio is approximately 160 per cent, while it is approximately 230 per cent in the highest decile. The average debt-to-income ratio in the major metropolitan areas is higher than in other parts of the country. It is highest in Stockholm.

The youngest and oldest borrowers have the lowest debt-to-income ratios. The average debt-to-income ratio of these borrowers is approximately 100 per cent. The average debt-to-income ratio is highest for borrowers aged between 36 and 45. The debt-to-income ratio is around 250 per cent for these borrowers.

Borrowers with large loans have the highest debt burden

Another way of assessing borrowers' vulnerability is to compare the proportion of the borrower's income they spend on interest and amortisation payments. The interest-to-income ratio is calculated by dividing interest payments by net income. The debt service ratio also takes amortisation payments into account. A high debt service ratio indicates poorer payment capacity and resilience to disruptions and interest rate rises.

13 Approximately half of those without a mortgage have an income that is above the median.

14 The lenders have reported both income and total debt for approximately 30 per cent of the borrowers in the survey.

15 This may be an overestimate as there may be co-signers on the mortgage, which is not evident from the information about the new loan.

16 See "The Swedish Mortgage Market 2017", Finansinspektionen.

Those who do not have mortgages are making interest payments that are an average of 6.5 per cent of their net income (Diagram 14).[17] Their interest-to-income ratio increases slightly in line with the size of the new loan. The debt service ratio shows that borrowers who do not have a mortgage are making interest and amortisation payments that are an average of 17 per cent of their income. For those who are borrowing more than SEK 100 000 this figure is around 25 per cent. New borrowers who also have a mortgage pay an even larger proportion. This applies regardless the size of the new consumption loan. The combination of a new loan larger than SEK 100 000 and an existing mortgage leads to the highest debt service ratios. Such borrowers spend an average of 35 per cent of their disposable income on interest and amortisation payments.

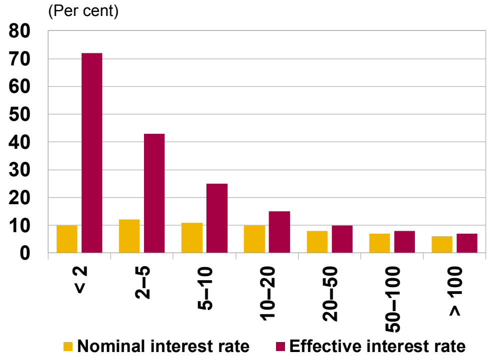
17 Note that the cost is calculated using the borrowers' total debt and not just on the new loan. In the calculations FI has assumed that the interest on a mortgage is two per cent (before interest rate deductions) and that other loans have the same interest rate as has been agreed for the new loan. Furthermore, it is assumed that mortgages are amortised at a rate of one per cent per year, other existing loans at a rate of ten per cent and the new loans in accordance with the contractually agreed maturity. Revolving loans have no maturity. The assumption there is that they will be amortised over 24 months. For those who own their home, the calculation is an overestimate as there may be co-signers on the mortgage that have not been reported.

Costs of Borrowing

Most consumption loans are small and may cost a lot relative to their size. Small loans may also be the beginning of a debt spiral. It is relatively common for loans to be replaced or increased in size rather than being amortised. In the long run, this could result in the consumer becoming over-indebted.

Diagram 15. Average interest rate distributed by size of loan (SEK thousand)

(Per cent)

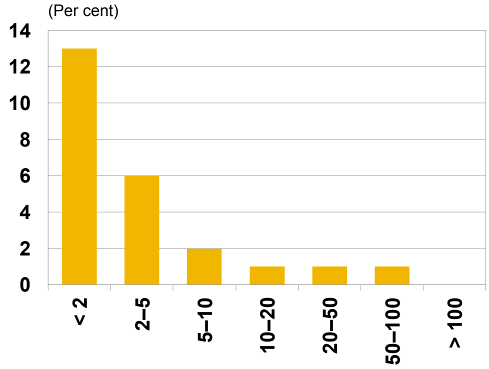


Source: FI.

Note: The calculations include 17,157 borrowers.

Diagram 16. Additional costs distributed by size (SEK thousand)

(Per cent)

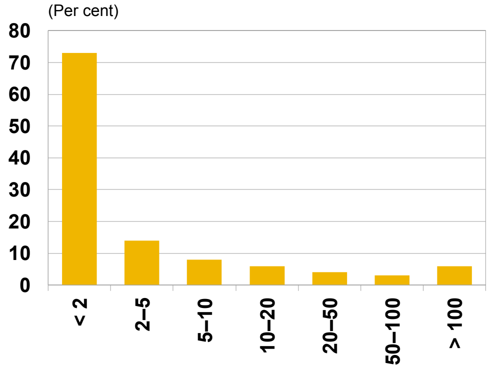


Source: FI.

Note: The additional costs pertain to the first five months of the loan.

Diagram 17. Total cost distributed by size of loan (SEK thousand), revolving loans

(Per cent)



Source: FI.

Note: The total cost pertains to the first five months of the loan

THE COST DEPENDS ON INTEREST RATE AND MATURITY

FI's survey shows that small loans have almost the same nominal interest rate as larger loans. However, the effective interest rate[18] on the small loans is often significantly higher (Diagram 15). This is because small loans have large fees relative to the size of the loan.[19] In the sample, the small loans also have the highest additional costs during the first five months of the loan (see Diagram 16).[20]

To a consumer, an interest-free loan may appear to be free of charge. But interest-free loans often have various fees. Revolving loans are interest-free if they are paid back before the maturity date. The smallest reported revolving loans that are not repaid in time have an average cost, including the interest incurred, over the first five months that is the equivalent to 70 per cent of the loan (Diagram 17).

Annuity loans cost more than loans with straight-line amortisation

Both unsecured loans and loans collateralised by something other than a home can be amortised on a straight-line basis or as annuities. Straight-line amortisation means that the borrower amortises the same amount each month throughout the entire life of the loan. The monthly interest payment decreases over time as the loan gradually shrinks. An annuity loan, on the other hand, involves the monthly payment being the same throughout the entire life of the loan as long as the interest rate is unchanged.[21] However, the distribution between interest and amortisation changes over time. Initially, the bulk of the monthly cost consists of interest payments. The share of the monthly payment attributable to amortisation then increases.[22]

Around 69 per cent of the loans with a reported amortisation type in the survey are annuity loans. Annuities are most common among loans collateralised by something other than a home. This may be

18 The effective interest rate indicates what the interest rate would be if the loan had a maturity of one year. The effective interest rate also takes into account fees other than the contractually agreed interest rate.

19 An interest rate and cost cap for high-cost loans is being introduced on 1 September 2018. This means that neither the interest rate on the loan nor the penalty interest may be more than 40 per cent higher than the reference rate. In addition, the costs may not be higher than the size of the loan. The regulations do not encompass purchases on credit and will likely not have a major impact on the loans in this survey.

20 Five months had passed between the loan being paid out and FI collecting the data.

21 If the interest rate increases, the monthly cost may also increase.

22 Annuity loans are described in detail in "Consumer Protection on the Financial Market", 2017, .Finansinspektionen.

Table 4. Estimated cost (repayment) of an unsecured loan in FI's sample

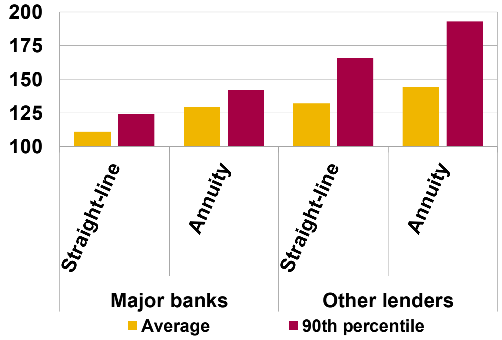
	Annuity	Straight-line
Loans (SEK)	112 000	112 000
Effective interest rate (%)	10.7	10.7
Maturity (months)	82	82
Total cost (SEK)	40 000	35 000
Total repayment (%)	136	131

Source: FI.

Note: The calculations are based on 12,429 unsecured loans that have a reported effective interest rate. The calculations assume that all these loans can be repaid either through annuity or straight-line amortisation.

Diagram 18. Total repayment for an unsecured loan broken down by amortisation method and lender

(Per cent)

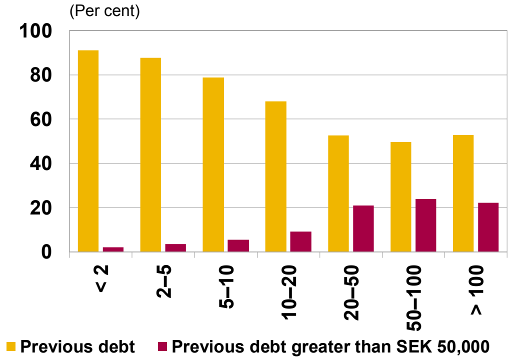


Source: FI.

Note: The graph shows the average repayment (interest plus amortisation payments divided by the size of the loan) and the repayment for borrowers who have a higher cost than 90 per cent of borrowers. Straight-line means that the same amount is amortised each month throughout the life of the loan. Annuity means that the monthly amount is instead the same throughout the entire life of the loan.

Diagram 19. Proportion with a previous debt with the company distributed by size of loan (SEK thousand)

(Per cent)



Source: FI.

Note: The calculations are based on 12,937 borrowers for whom there is data about a debt with the company.

because the annuity method is the standard amortisation method for secured loans. Annuity loans often have a lower nominal interest rate than loans with straight-line amortisation. That is partly because secured loans are collateralised. For a loan of SEK 100 000, the difference in interest rate is an average of 1.8 percentage points. The average contractually agreed maturity in the sample is 90 months for annuity loans and 75 months for loans with straight-line amortisation.

Even though annuity loans do have some advantages such as lower interest rates and fixed monthly fees, they may be associated with risks.[23] If the loan is replaced with a new loan after a short period of time, the borrower has only amortised a small portion of the loan. The proportion of the monthly fee that consists of interest increases when the loan is rescheduled and the maturity is extended.

In order to illustrate the differences between the amortisation methods, we have used those who took out an unsecured loan as a basis, and have calculated their total costs with annuity and straight-line amortisation. In the calculation, the interest rate and maturity are the same for both amortisation methods. This isolates the effects of the amortisation method. The average unsecured loan is approximately SEK 112 000 and has a maturity of 82 months, with an effective interest rate 10.7 per cent.[24] The calculations show that the average loan would cost approximately SEK 40 000 if it was taken out as an annuity loan (see Table 4).[25] This equates to 36 per cent of the size of the loan. If the loan was instead taken out with straight-line amortisation, it would cost a little over SEK 35 000, or 31 per cent of the loan.

A comparison of straight-line amortisation and annuities also allows the borrower's alternative cost to be taken into account. The actual expenditure at the beginning of the repayment period is lower for an annuity loan than for a loan with straight-line amortisation.[26] If the borrower is able to save the difference with a return that is equal to the interest rate, both amortisation methods will have the same total cost. In practice, however, this means that the borrower needs to take big risks with their savings.[27]

Annuity loans often have a longer maturity than loans with straight-line amortisation. A loan with long maturity entails high total interest payments (everything else being equal) for the borrower, but low monthly payments. It is therefore not certain that the borrower will always prefer the lowest total repayment (total interest payments plus amortisation payments). For unsecured loans, repayments are lower with major banks than with other lenders (Diagram 18). The major banks' customers have somewhat higher incomes and take out larger new loans. Repayments are highest for those who take out an annuity loan with a niche bank or sales finance company. One in ten of these

23 See "Consumer Protection on the Financial Market" (2017), Finansinspektionen.

24 By basing the illustration on the same loan size, interest rate and maturity, differences in repayments will only depend on which amortisation method the borrower has used.

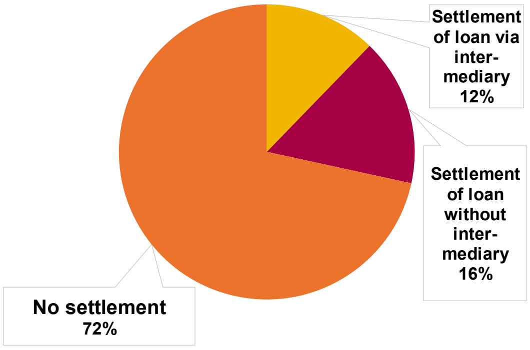
25 The calculations are based on 12 429 unsecured loans that have a reported effective interest rate. The calculations assume that all these loans can be repaid either through annuity or straight-line amortisation.

26 The interest rate deduction contributes to the expenditure being lower for an annuity loan.

27 On average, the borrowers in the survey need a return of 10.7 per cent.

Diagram 20. Proportion of unsecured loans that pertain to settlement of previous loans

(Per cent)

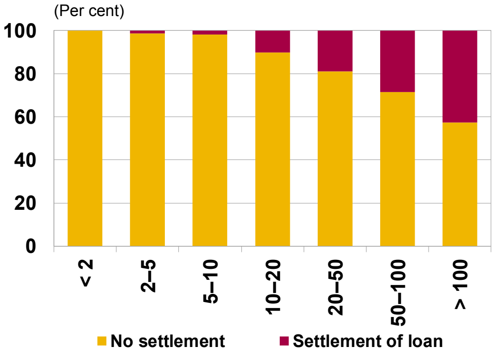


Source: FI.

Note: The calculations are based on 10,618 borrowers.

Diagram 21. Proportion of unsecured loans that are used to settle loans, distributed by size (SEK thousand)

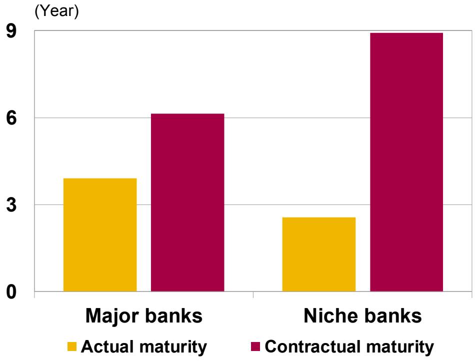
(Per cent)



Source: FI.

Diagram 22. Average maturity of unsecured loans

(Year)



Source: FI.

Note: The data comes from the qualitative questions in the survey.

borrowers repay almost double the amount they have borrowed, or more.

SMALL LOANS MAY BE THE BEGINNING OF A LARGE DEBT

Small loans cost more relative to their size compared to larger loans. But since the loans are small, the cost in monetary terms is also small. A borrower who already has small margins in their finances and uses small loans to manage their basic expenses may still have difficulty with loan repayments. In the long run, this may lead to increasing debt.[28]

It is common for credit intermediaries to use advertising to encourage borrowers to consolidate their loans. There may be advantages for the customer to do this. One such advantage is that the monthly payment becomes lower if the maturity of the new loan is longer than that of the old loans. However, rescheduling loans in this manner also has disadvantages. The total cost increases as the longer maturity entails interest being paid over a longer period. For those who increase the size of their loan at the same time, the total cost increases even more.

Debt can build up if the borrower takes out several small loans. Around 90 per cent of those who take out an (interest-bearing) loan below SEK 2 000 have a previous (interest-bearing) debt with the same company (Diagram 19). This means that almost all new borrowers who take out a small loan have at least two interest-bearing loans after taking out the new loan. Those who previously had a loan with a sales finance company normally took out a small new loan. With other lenders, one in eight borrowers with an existing loan took out a new loan larger than SEK 100 000. Debt building up in this manner may lead in the long term to a high level of debt for the borrower. Approximately one in five borrowers who borrows more than SEK 20 000 have previous loans with the same company that exceed SEK 50 000.

It is almost always unsecured loans that are used to settle other loans.[29] FI's sample shows that 28 per cent of those who take out an unsecured loan use this to settle existing loans (Diagram 20). Nearly half of these are taken out via credit intermediaries. A larger proportion of borrowers with large loans are settling existing loans (Diagram 21). Furthermore, it is common for the actual maturity to be shorter than that which was contractually agreed (Diagram 22). This is an indication that a loan is being rescheduled. Early settlement may also be due to the borrower receiving better terms with another lender. For the niche banks, the difference between contractually agreed and actual maturity is six years, compared with two years for the major banks.

The survey shows that it is common for borrowers to have several small interest-bearing loans and that loans are replaced instead of being repaid. Small loans may therefore be the beginning of a larger

28 See the discussion on over-indebtedness in “Stärkt konsumentskydd på marknaden för högkostnadskrediter" (Stronger consumer protection in the market for high-cost loans), (SOU 2016:68).

29 The loans that are being settled may be of different types, e.g. instant loans, credit card debt or other unsecured loans.

debt. In the long run, this could result in the borrower becoming over-indebted.

Borrowers' Repayment Capacity

Lenders use various methods to assess borrowers' repayment capacity. Large loans are more frequently preceded by a more thorough credit assessment than small loans. FI's stress tests suggest than many borrowers may find it difficult to repay their loans if interest rates go up or their income decreases. This is especially true for borrowers with both mortgages and large consumption loans.

Table 5. Type of credit assessment distributed by different types of lender
(Per cent)

	Major bank	Niche bank	Sales finance
Disc. income	30	12	0
DTI ratio	59	82	1
Risk class	92	94	95
None	0	2	3

Source: FI.

It is the responsibility of the lender to determine whether the borrower has the capacity to cope with the costs of the loan.[30] If a borrower has prolonged problems repaying their loans, this may cause losses for the lender and over-indebtedness for the borrower. Credit assessment is therefore important for both the lender and the consumer. Lenders use data such as the borrower's income, expenses, debts and assets in order to assess the repayment capacity.

FI assesses borrowers' resilience and repayment capacity by stressing borrowers' monthly surplus.

VARIOUS METHODS IN LENDERS' CREDIT ASSESSMENTS

The in-depth questions in the survey show that lenders use various methods in their credit assessments. They may be classified in accordance with the following:

- The lender calculates discretionary income.[31]
- The lender retrieves information about the borrower's income and debt (their debt-to-income ratio). The debt-to-income ratio (along with interest and amortisation) can be seen as a simplified variant of a discretionary income calculation, but only takes into account income and debt repayments.
- The lender uses an internal or external method to classify the risk of the loan.

Several of the lenders use a combination of the various methods in their credit assessments. For example, a lender may conduct both a credit check and a discretionary income calculation for a consumer. Data that is used as the basis of a credit assessment is retrieved both directly from the consumer and from external sources, such as credit information companies.

Discretionary income calculations are most common for larger loans

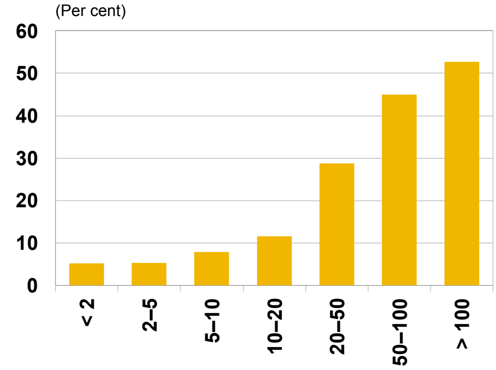
Approximately 30 per cent of loans issued by the major banks have been preceded by a discretionary income calculation (see Table 5). A

30 See the Consumer Credit Act (2010:1846). There are exceptions for factoring in certain cases (Section 4, point 1 of the Consumer Credit Act).

31 In the discretionary income calculation, the lender deducts the household expenditure from household income. The calculation normally has to show a surplus for the lender to grant the loan.

Diagram 23. Proportion of borrowers with discretionary income calculations in various loan intervals (SEK thousand)

(Per cent)

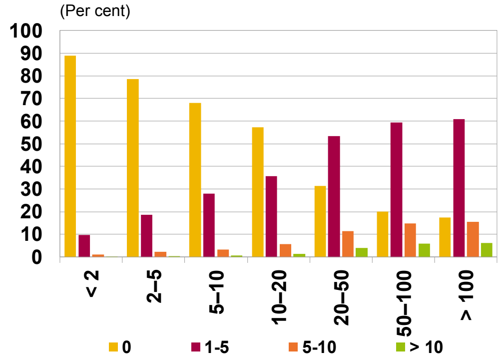


Source: FI.

Note: The bars indicate the proportion of borrowers in each interval for which there is a discretionary income calculation.

Diagram 24. Number of credit checks in various loan intervals (SEK thousand)

(Per cent)



Source: FI.

Note: The bars indicate the proportion of credit checks in each interval for which there is a discretionary income calculation.

Table 6. Proportion of borrowers with payment reminders or debt collection demands during the first five months of the loan

(Per cent)

	Reminder	Debt collection
Unsecured loans	9.4	0.6
Revolving loan	24.6	1.3
Secured loan	8.5	1.1
Total	22.5	1.2

Source: FI.

calculation of this nature is used in particular for unsecured loans and loans collateralised by something other than a home. These calculations are less common for revolving loans. Some lenders have stated that they use discretionary income calculations for revolving loans only if the loan is larger than a certain amount.
Several lenders state that they take into account variables including the household's[32] income, its housing and subsistence costs[33], costs of other loans, total debt and assets in their discretionary income calculations. However, lenders perform the calculation in different ways. It may therefore be difficult to conduct an entirely true comparison of borrowers' financial circumstances.

There is a clear relationship between the size of the loan and how common it is for the lender to perform a discretionary income calculation (Diagram 23). If the size of the loan is between SEK 10 000 and 20 000, discretionary income is calculated in ten per cent of cases, and if the loan exceeds SEK 100 000 kronor, a calculation has been performed for more than half of borrowers.

Total debt and calculation of debt-to-income ratio

Some lenders assess the borrower's repayment capacity by calculating debt relative to income – known as the debt-to-income ratio. A borrower with a low debt-to-income ratio is normally less sensitive to interest rate rises and is therefore deemed to be more resilient than a borrower with a high debt-to-income ratio. Debt-to-income calculation is primarily used for credit assessments for unsecured loans and loans collateralised by something other than a home. For the majority of loans, the major and niche banks have sufficient information to be able to assess the borrowers' debt-to-income ratios. Of those who are borrowing more than SEK 100 000 and are not subject to a discretionary income calculation, 89 per cent have a reported debt-to-income ratio.

FI's survey shows that there are lenders that have no information about total household debt. Furthermore, some lenders do not retrieve information about all debts (e.g. debts with other companies or student debt).

Methods of risk classification

Most lenders supplement their discretionary income calculation or debt-to-income ratio calculation with internal or external methods of risk classification. These methods normally include a variety of data about the borrower (e.g. postcode and number of credit checks) and estimate the probability of the borrower being unable to repay the loan. The borrower is assigned a risk class that helps the lender assess the borrower's creditworthiness. All lenders have classified almost all their loans (Table 6).

Credit checks

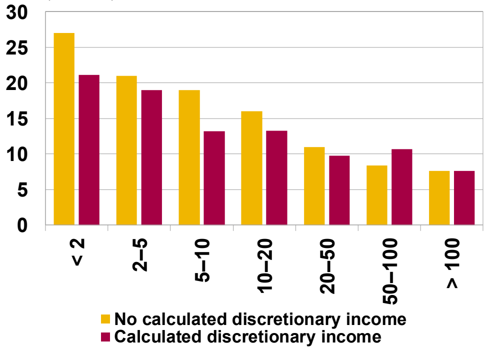
Lenders often use credit checks in their credit assessments. A credit check may include information about the borrower's income, debt and any records for non-payment of debt. However, a credit check does

32 Household denotes the primary borrower and any co-signers.

33 The majority of lenders have stated that they use the Swedish Consumer Agency's calculations for reasonable subsistence costs in their discretionary income calculations.

Diagram 25. Proportion of borrowers with payment reminders during the first five months of the loan, distributed by the size of the loan

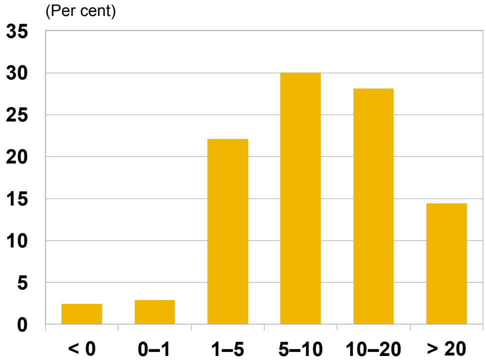
(Per cent)



Source: FI.

Diagram 26. Distribution of households into various monthly surplus intervals (SEK thousand)

(Per cent)

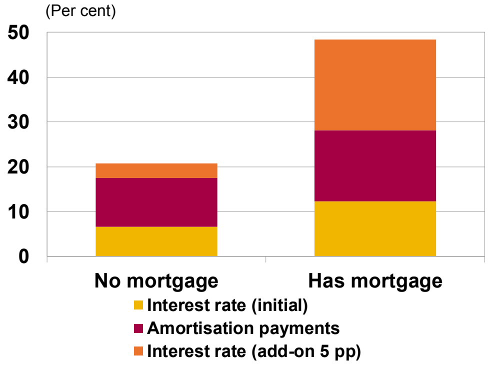


Source: FI.

Note: An adjusted monthly surplus can be created for 10,002 borrowers. The households with a reported discretionary income of exactly zero have been excluded.

Diagram 27. Debt service payments as a proportion of disposable income

(Per cent)



Source: FI.

Note: The graph shows interest and amortisation payments relative to disposable income. A total of 17 625 households are included in the calculations.

not necessarily include all of a consumer's loans as small loans are not always reported.

The proportion of borrowers for whom the lender performs a credit check is greater for large loans. Those who are borrowing less than SEK 2 000 have no previously reported credit checks in almost 90 per cent of cases (Diagram 24). Of those borrowers for whom there is data concerning credit checks, approximately one per cent of have more than ten. However, a large number of credit checks does not necessarily mean that the borrower has a large number of loans. This could also be because the borrower has compared different lenders.

Indications of payment difficulties

Reminders and debt collection demands may be indications that a borrower is having difficulty repaying the loan.[34] Almost one in four borrowers received at least one reminder during the first five months of the loan (Table 5). This proportion is highest for revolving loans. The proportion of borrowers who have received at least one payment reminder is lower for large loans (Diagram 25). This may be due to it being less common for borrowers with small loans to use direct debit or e-invoicing. It may also be due to large loans leading to higher costs unless they are paid in accordance with the agreement. Reminders to borrowers are less common where the lender has performed a discretionary income calculation. Approximately ten per cent of these borrowers have received at least one reminder in the first five months. The lower proportion, compared with all borrowers, is linked to some extent to them having taken larger loans. However, even if we disregard the size of the loan, borrowers for whom the lender has performed a discretionary income calculation receive fewer reminders. One explanation may be that this calculation weeds out borrowers with a lower repayment capacity.

The proportion of borrowers who receive debt collection demands is small. However, it is still worth noting that more than one per cent of those who have taken out a revolving loan have received at least one debt collection demand within the first five months.

FI'S ASSESSMENT OF BORROWERS' RESILIENCE

FI stresses borrowers' monthly surplus in order to see how resilient they are to worse financial circumstances. Examples of such changes are interest rate rises and loss of income. The stress tests include those borrowers for whom there were complete data concerning surplus, total loans and income.[35] This information is available for one in three loans larger than SEK 20 000.[36] FI has initially adjusted the reported discretionary income values for differences between the interest rates the lenders use in the calculation and the actual rates.

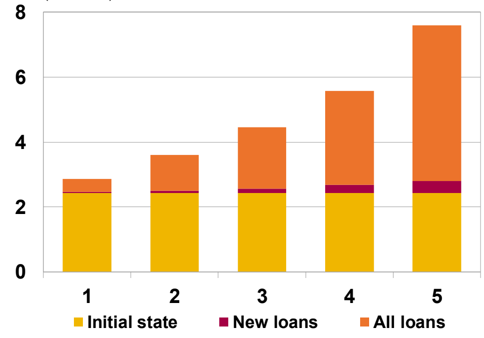
34 Cases with the Swedish Enforcement Authority and records for non-payment of debt are also indications of payment difficulties. Such information is not included in the survey.

35 The discretionary income surplus is the starting point. FI then uses total loans to calculate the change in the surplus if the interest rate increases. In the same way, the borrower's income is used to simulate a loss of income.

36 There are data for 44 per cent of unsecured loans, ten per cent of loans collateralised by something other than a home and almost two per cent of revolving loans. In the stress tests, FI assumes that these borrowers represent all those who have taken out a new large consumption loan.

Diagram 28. Proportion of borrowers with a deficit in the event of interest rate rises

(Per cent)

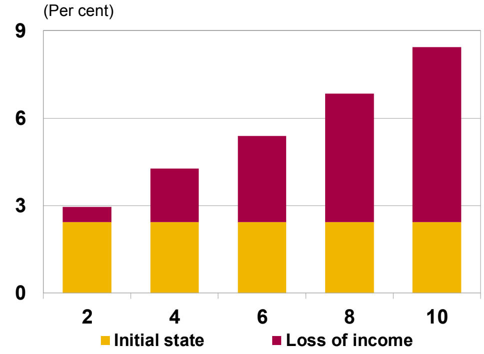


Source: FI.

Note: The X-axis shows interest rate rises in percentage points. The calculations are based on 10 002 borrowers.

Diagram 29. Proportion of borrowers with a deficit in the event of loss of income

(Per cent)

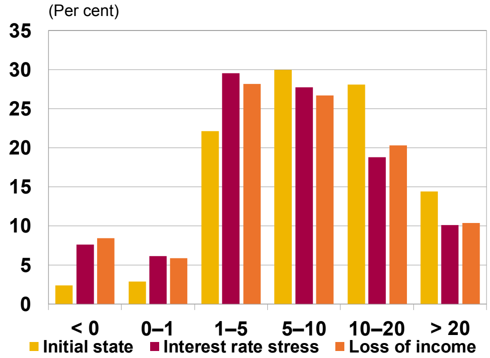


Source: FI.

Note: The X-axis shows loss of income in percentage points. The calculations are based on 10 002 borrowers.

Diagram 30. Distribution of households into various monthly surplus intervals (SEK thousand)

(Per cent)



Source: FI.

Note: The interest rate has been stressed by five percentage points and the loss of income is ten per cent. There are monthly surplus calculations for 10 002 borrowers. The households with a reported discretionary income of exactly zero have been excluded.

The average surplus for new borrowers is currently SEK 11 500 after tax per month. Even if the margins on average appear to be good, a large proportion of borrowers have low surpluses. Almost 30 per cent of borrowers have a surplus of less than SEK 5 000 per month (see Diagram 26). In order to assess borrowers' resilience, FI has estimated what proportion end up with a deficit in the discretionary income calculation – if the interest rate increases or their income decreases.

Cost in the event of stressed interest rate

On average, borrowers with both consumption loans and mortgages pay approximately one third of their income in interest and amortisation payments (Diagram 27).[37] Amortisation payments represent just over half of monthly payments. Those who only have consumption loans pay a significantly smaller portion of their income in interest and amortisation payments. For these borrowers, amortisation payments represent two thirds of their debt service payments.

If the interest rate increases by five percentage points, the monthly payments of borrowers without mortgages will increase by two per cent of their income. The reason this increase is moderate compared to the original interest payment is because many of these borrowers have small loans. In addition, they have a relatively high interest rate to begin with. The situation looks different for those who have both mortgages and consumption loans. Their payments increase by approximately 20 per cent of their net income. The contribution from the interest rate rise is therefore significant for those with mortgages. This is because they have large loans with a relatively low initial interest rate (mortgages have lower interest rates than consumption loans). After the interest rate rise, almost half of their income is spent on interest and amortisation payments.

Deficit in the event of a higher interest rate

FI's stress test shows that the proportion of borrowers who end up with a deficit in the event of an interest rate rise of one to five percentage points. The interest rate rise is both added only to the new loan and also to all of the borrower's loans. Initially, 2.4 per cent of borrowers have a deficit. If the interest rate rises by one percentage point, the number of households with a deficit rises to almost three per cent (see Diagram 28). In the event of an interest rate that is five percentage points higher than the current rate, a total of 7.6 per cent of borrowers will have a deficit. The equivalent proportion of those who also have a mortgage is ten per cent. The new loans only contribute marginally to the proportion who will end up with a deficit.

Deficit in the event of loss of income

In the same way as when the interest rate is stressed, FI has calculated the proportion of borrowers who will end up with a deficit if their income decreases. In the event of a loss of income of two per cent, nearly three per cent of borrowers will have a deficit in the calculations (Diagram 29). If income decreases by ten per cent, the number of households with a deficit rises to just over eight per cent.

37 Assumptions behind the calculations used for interest-to-income and debt service ratios are explained in the chapter on borrowers above.

Those with a mortgage are more resilient to loss of income; just over four per cent of these will have a deficit.

Stress tests indicate the risks faced by borrowers

All in all, the stress tests indicate that the proportion of borrowers who may have difficulty managing their finances in a stressed situation increases. In addition, many borrowers will have small surpluses (Diagram 30). Those who still have good margins may also end up with debt service payments that are higher as a proportion of their income. This is especially the case for borrowers with both mortgages and large loans.

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