FINANSINSPEKTIONEN

Swedish Consumer Credit

1 October 2020

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Summary

One of Finansinspektionen's (FI) assignments is to promote a high level of protection for consumers on the financial markets. Loans and loan payments are very important for household finances, and FI therefore follows the developments related to household borrowing. Household borrowing consists of around 80 per cent mortgages and 20 per cent consumer credit. FI publishes a report every year that analyses mortgages (The Swedish Mortgage Market). This is the report that analyses Swedish households' consumer credit. Even though consumer credit only constitutes a small portion of households' total credit, the interest rate and amortisation payments for these credits amount to more than half of the households' total debt service payments. This is because these types of credit have higher interest rates and amortisation rates than mortgages. The analysis also shows that individual consumers are having difficulty paying for their consumer credit. Overall, this means that the consumer credit market could impact many households, which makes it important for consumer protection on the financial markets.

The report also shows that households' consumer credit has grown. Unsecured loans of more than SEK 250,000 have also increased rapidly. Demand for large unsecured loans may have increased due to a strong economy, rising house prices and low interest rates. Small lines of credit, credit cards and invoices for amounts below SEK 10,000 have increased even more than the large unsecured loans. These small loans increased from SEK 4 billion in 2008 to almost SEK 50 billion in 2019. This trend coincides with the increase in e-commerce, where consumers are often using invoices, lines of credit, or credit cards to pay for online purchases. Most of the consumer credit in the report was small and had a high effective interest rate. This is because the maturity was normally short and the fees were large in relation to the size of the credit. Several small loans can also be the start of larger borrowings if the borrower replaces or increases the loans instead of paying them off. This could result in the borrower experiencing repayment difficulties. FI's stress tests show that many borrowers may need to use more than half of their post-tax income to make interest rate and amortisation payments if the interest rate were to increase significantly.

Finally, the report also shows that one-fifth of consumer credit borrowers received a payment reminder and 4.5 per cent received a collection notice. Among borrowers under the age of 25, the share receiving a collection notice was approximately 8 per cent. Purchases on invoice, where credit checks are not legally mandated, and small, unsecured loans had the highest share of borrowers receiving payment reminders and collection notices. This indicates that many borrowers are having difficulty making their payments. The high percentage that

goes to collection shows that it is important for institutions to run credit checks for the borrower. The share that received a collection notice decreased compared to last year's analysis. One explanation could be the introduction of new rules for high-cost short-term credits, which sharply reduced the supply of these loans.

Current situation and background

Among Swedish households, consumer credit is growing at a faster rate than mortgage borrowing. Although consumer credit only accounts for 20 per cent of total household borrowing, more than half of households' borrowing service payments, in the form of interest and amortisation payments, are attributable to consumer credit. This borrowing may therefore entail risks for both individual households and lenders. By extension, consumer credit may also have an impact on macroeconomic development and financial stability. The aim of this report is to strengthen Finansinspektionen's (FI's) analysis of household borrowing and work with consumer protection.

Swedish households are borrowing to a great extent in order to purchase homes and for consumption. Total household borrowing is equivalent to approximately 80 per cent of gross national product. Borrowing gives households the opportunity to consume without having to first save the full amount they wish to spend. The opportunity to borrow may therefore be good for households and for the economy as a whole. However, borrowing may also make households and lenders vulnerable and may also, by extension, have a detrimental impact on the wider economy. Households that borrow large amounts are tying up a significant portion of their future income in interest and amortisation payments. If the financial circumstances of these households change, they may find it difficult to cope with these commitments. The risk of repayment problems is higher for a borrower who has a limited capacity to repay what they have borrowed. Consequently, a sound credit assessment is important to both borrowers and lenders.

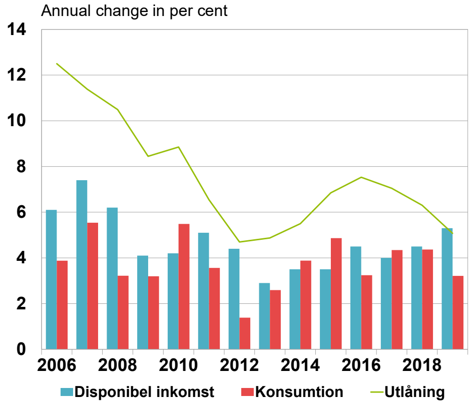
There are various types of credit. A mortgage is secured against a home. Other credit encompasses both loans that are secured against something other than a home, for example a car, and unsecured credit.[1] In this report, we use the term *consumer credit* to refer to all credit that is not secured against a home. The market for consumer credit is more diverse than the mortgage market. There are many different types of credit and lender. It is also possible to borrow through credit intermediaries and agents.[2] Some types of credit are paid out in cash, while others involve the lender paying for goods or services the consumer is purchasing. The consumer is therefore purchasing on credit.

1 Credit that is taken out by a consumer for use in their business activity as a sole trader is not included in this report. Credit of this type is not considered consumer credit under the Consumer Credit Act (2010:1846).

2 Both credit intermediaries and agents work as intermediaries between a consumer or company and a lender. 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 credit becomes interest-bearing.

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

Annual change in per cent

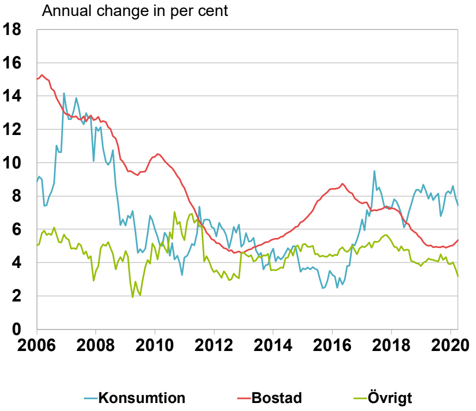


Source: Statistics Sweden.

Note: The annual average is calculated using quarterly or monthly data. The most recent observations used are for 2019.

Diagram 2. Growth in household credit, broken down by purpose

Annual change in per cent



Source: Statistics Sweden.

Note: The growth rates are adjusted for reclassifications and for bought and sold credits. The most recent observation is from April 2020.

Table 1. Composition of the sample.

Number, SEK and SEK million

	Number of borrowers	Amount (funds)	Vol
Unsecured loans	20,974	111,200	2
Object financing	7,286	156,400	1
Lines of credit and credit cards	48,389	13,200	
Purchases on invoice	239,944	1,800	
Combination*	122		
All	316,715	14,400	4

Source: FI.

Note: *Denotes all combinations of the above types of credit. A total of 122 households in the sample had more than one type of credit.

Households have long benefited from a strong economy and their income has increased more than their consumption (Diagram 1). At the same time, household borrowing has increased at an even faster rate. This is largely due to rapid growth in house prices (and mortgage borrowing) which accounts for just over 80 per cent of total household credit.

FI is able to establish that there is a correlation over time between the variation in household consumer credit and the economic cycle. Unsecured credit has grown faster than mortgages in recent years (Diagram 2). During the boom prior to the financial crisis, the rate of growth was high, before dying down at the end of 2008. It has increased rapidly again since 2016. At present, unsecured consumer credit[3] is growing at just over seven per cent per annum, which is faster than the increase in mortgage borrowing. Consumer credit constitutes just under one fifth of total household credit. In terms of interest expenses and repayments, however, consumer credit accounts for a larger proportion of total debt service payments than mortgages because the interest rates and amortisation payments are significantly higher.[4]

Because consumer credit makes up a relatively small portion of total household credit, FI makes the assessment that it only has a limited impact on the economy as a whole. Nevertheless, consumer credit can have a major impact on individual households because this type of credit often has high interest rates and fees. It normally also has a shorter maturity than mortgages. This may mean that a relatively small amount of credit has a high monthly payment, but for a shorter period. There is also a risk that households may have difficultly repaying what they have borrowed if they are not amortising and instead are refinancing or extending their credit as this increases their borrowing costs.

The risks to both lender and borrower may be affected by whether or not the credit is secured and depending on what its purpose is. If the credit is secured, the lender is able to sell the collateral and thereby limit their credit loss and the borrower's residual debtborrowing. The purpose of the credit also affects the borrower. If the credit is being used for home renovations, the value of the home may increase, which can compensate the borrowing costs. However, if the credit has instead financed the cost of a holiday, there is no collateral that can

3 Unsecured consumer credit adheres to Statistics Sweden's definition and denotes unsecured loans and revolving loans.

4 If we assume that the mortgage rate is two per cent and that the interest rate on consumer credit is ten per cent, the interest expense for consumer credit is more than half of households' interest expenses. Adding amortisation payments further increases the proportion of total debt service payments accounted for by consumer credit.

Table 2. Information about lenders, broken down by type of lender

Average of years, SEK, per cent and months

Lender	Age	Income	New credit	Borrowing	Interest rate	Maturity
MB	43	27,200	84,900	1,195,200	7	54
NB	43	24,800	55,100	928,400	13	44
OFB	44	23,400	57,000	1,122,300	12	32
CCF	45	29,600	24,600	1,270,400	14	18
SFC	40	19,000	2,000	33,900	7	6
CCI	38	21,300	17,500	515,700	20	31

Source: FI.

Note: Income denotes net income. Interest rate denotes reported nominal interest rate. There is no data concerning total borrowing for almost all buy now, pay later credit in the sample.

Table 3. Distribution of new borrowers (number) by type of lender and size of credit (SEK thousand)

Per cent

Size of credit	MB	NB	OFB	CCF	SFC	CCI	Total
< 2	0.3	2.3	0.5	1.2	60.1	0.4	64.7
2–5	0.3	1.3	0.5	1.3	8.7	0.2	12.3
5–10	0.4	1.4	0.4	1.5	2.9	0.1	6.8
10–20	0.5	1.5	0.2	1.5	1.4	0.2	5.2
20–50	0.8	1.7	0.2	1.1	0.7	0.2	4.7
50–100	0.7	1.0	0.3	0.3	0.2	0.1	2.5
100–200	0.6	1.0	0.4	0.1	0.0	0.0	2.2
> 200	0.4	0.9	0.2	0.2	0.0	0.0	1.7
Total	3.9	11.1	2.6	7.3	74.0	1.2	100

Source: FI.

Table 4. Distribution of new lending (volume) by type of lender and size of loan (SEK thousand)

Per cent

Size of credit	MB	NB	OFB	CCF	SFC	CCI	Total
< 2	0.0	0.1	0.0	0.1	2.8	0.0	3.1
2–5	0.1	0.3	0.1	0.3	1.9	0.1	2.7
5–10	0.2	0.8	0.2	0.8	1.4	0.1	3.4
10–20	0.5	1.6	0.2	1.6	1.4	0.2	5.4
20–50	2.0	3.9	0.5	2.3	1.5	0.4	10.6
50–100	4.0	5.4	1.5	1.3	0.8	0.3	13.3
100–200	6.5	10.3	4.0	1.3	0.3	0.3	22.7

cover part of the credit in the event of default. This may be of significance if the borrower suffers financial difficulties.

PURPOSE AND DATA

The report describes the market for consumer credit and encompasses borrowers who have taken out new consumer credit. The purpose is primarily to increase our understanding of how this type of credit affects borrowers' finances. The data collected consists of three parts:

- *Sample of individual credits (microdata):* The sample encompasses credits issued by the lenders between 15 and 24 May 2019. Following processing, a total of 316,715 households are included in the sample (Table 1). The information in the sample contains data about the new credits, the borrowers' income, total borrowing, agreed interest rate and other costs.
- *Aggregate data*. FI has also collected information about the lenders' total consumer credit lending. This information encompasses, for example, total lending volumes broken down by the borrower's age and the size of the credit they have taken on. The data stretches from 2008 until the end of 2019.
- *Qualitative data*. The lenders have answered a number of in-depth questions with general and detailed information. The in-depth questions cover matters including credit assessment methods.

This is the third time that FI has compiled this report. Consumer credit institutions have been included in the survey since 2018.[5] We have collected data from a total of 36 lenders for this year's report.[6] As the first report from 2017 included fewer lenders, it is not always possible to compare its results with those in the reports for last year and this year.

VARIOUS TYPES OF LENDER

As there are major differences between lenders, we have divided them into six groups. *Major banks (MB)* generally have a more comprehensive range of products than other lenders and offer both secured and unsecured credit. A *niche bank* (NB) often specialises in one or a few areas, for example consumer credit. An *object financing company (OFC)* mainly grants loans collateralised by something other than a home. A *credit card firm (CCF)* primarily offers credit cards

5 A consumer credit institution is authorised in accordance with the Certain Consumer Credit-related Operations Act (2014:275). FI and the Swedish Consumer Agency are jointly responsible for supervision of consumer credit institutions. FI is responsible for authorisation and monitors these firms' compliance with the provisions of the Certain Consumer Credit-related Operations Act and other regulations. The Swedish Consumer Agency conducts supervision in order to ensure compliance with the Consumer Credit Act.

6 The firms in this report account for 86 per cent of the volume of unsecured loans and 90 per cent of the volume of loans collateralised by something other than a home.

Table 5. Distribution of new borrowers (number) by type of lender and type of credit

Per cent

	MB	NB	OFB	CCF	SFC	CCI	Total
Unsecured loans	2.2	3.3	-	0.2	0.2	0.7	6.6
Object financing	0.3	0.9	1.0	0.2	-	-	2.3
Lines of credit and credit cards	1.5	5.2	1.6	6.8	-	0.1	15.3
Purchases on invoice	-	1.6	-	-	73.8	0.4	75.8
Total	3.9	11.1	2.6	7.3	74.0	1.2	100

Source: FI

Table 6. Distribution of new lending (volume) by type of lender and type of loan

Per cent

	MB	NB	OFB	CCF	SFC	CCI	Total
Unsecured loans	16.7	29.0	-	3.4	0.9	1.3	51.3
Object financing	3.7	8.9	9.5	2.9	-	-	25.1
Lines of credit and credit cards	2.8	4.4	0.8	6.1	-	0.1	14.0
Purchases on invoice	-	0.2	-	-	9.3	0.1	9.6
Total	23.2	42.4	10.3	12.4	10.2	1.4	100

Source: FI.

Table 7. Number of borrowers and average size of credit

Number, SEK

	Year	Unsecured loans	Object financing	Lines of credit and credit cards	Buy now, pay later credit
Number	2017	11,177	4,895	21,989	80,910
	2018	13,740	3,373	28,073	281,781
	2019	13,711	4,135	27,734	238,850
Amount	2017	122,298	144,222	12,008	2,665
	2018	113,055	152,363	11,425	1,589
	2019	123,326	150,283	13,215	1,808

Source: FI.

Note: The table shows a selection of lenders, which allows year-to-year comparison.

where the borrower normally has a predetermined credit limit. *Sales financing companies (SFC)* provide credit when purchasing goods or services. *Consumer credit institutions (CCI)* offer unsecured loans to consumers. They often lend small amounts for a short period. However, there are also consumer credit institutions that offer larger loans with longer maturities.

On average, those who borrow from major banks, niche banks and credit card firms borrowed the largest amounts in the report (Table 2). Sales financing companies and consumer credit institutions have the youngest borrowers on average. These borrowers also have lower incomes. On average, consumer credit institutions' customers have to pay substantially higher interest rates[7]. On average, customers of major banks, together with object financing companies and credit card firms, have the largest total borrowing at the time the new credit is taken on. Total borrowing also includes mortgages, and the proportion of borrowers with mortgages is substantially higher among the customers of major banks and credit card firms.

Sales financing companies accounted for close to three quarters of the borrowers in the sample (Table 5), but only for ten per cent of the volume lent (Table 6). Major banks account for approximately 23 per cent of the volume lent and the niche banks for around 42 per cent. Object financing companies, credit card firms and sales financing companies accounted for around ten per cent each, while consumer credit institutions accounted for approximately 1.4 per cent.

VARIOUS TYPES OF CREDIT

There are many different types of consumer credit. That is why we have divided them into the following four groups: *unsecured loans, object financing, lines of credit and credit cards,* and *purchases on invoice.*[8]

Under the Consumer Credit Act, lenders are not required to conduct a credit assessment under certain circumstances[9], including if the credit

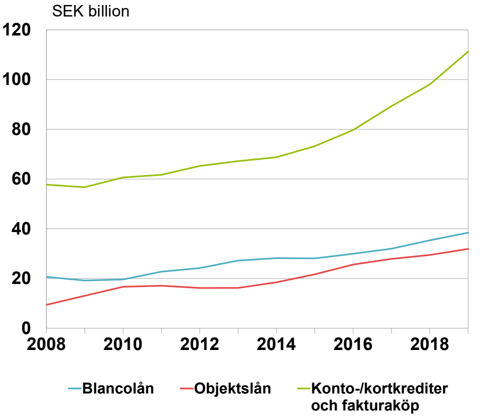
- is interest free,
- pertains to a purchase on credit (invoice credit) that is to be repaid within three months, and
- is only associated with an insignificant fee

7 The average interest rate at consumer credit institutions in last year's report was 90 per cent and in this year's report, which includes the same firms, this figure had fallen to 20 per cent. This is due to the introduction of new legislation between the two measurement periods.

8 The credit types *overdrafts and credit card debt* and *buy now, pay later credit* together make up *revolving loans* in the consumer credit reports for 2017 and 2018.

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

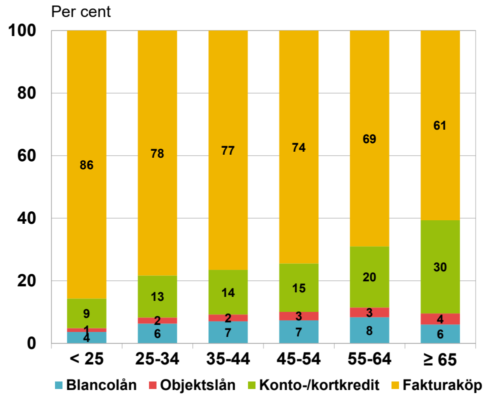
Diagram 3. New lending broken down by type of credit



Source: FI.

Note: Denotes aggregate data. The diagram shows new lending by the companies in the report that reported data for the entire period. Lines of credit and credit cards and purchases on invoice are reported together due to the classification used previously by FI.

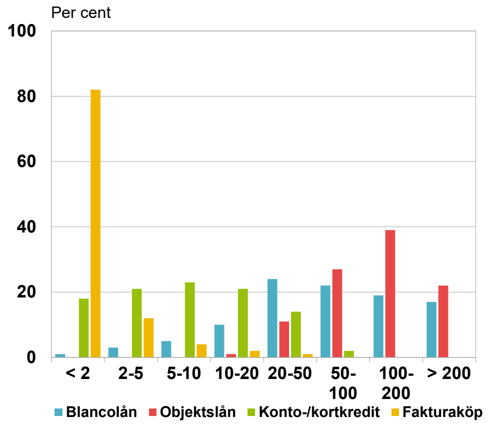
Diagram 4. Distribution of types of loan broken down by different age groups



Source: FI.

Note: Each bar shows the distribution between types of loan for each age group. The proportions are based on number of households per type of loan.

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



Source: FI

Note: The bars for each type of loan add up to 100 per cent.

- is not a high-cost short-term credit.[10]

Based on comparable selections from year to year, we find that the number of households who took out unsecured loans or lines of credit and credit cards was about the same in 2019 and 2018. However, the average credit was SEK 10,000 and SEK 2,000, respectively, higher in 2019 than in the previous year. When it comes to object financing, there are instead a larger number of borrowers and a slightly smaller average credit. Just over 40,000 fewer borrowers borrowed through invoices (purchases on invoice) compared with 2018 (Table 7).[11]

The amounts involved in new consumer credit vary greatly. Two thirds of credits are less than SEK 2,000 and about five per cent are in excess of SEK 100,000 (Table 3). In terms of the lending volume, the relationship is inverse; only three per cent are below SEK 2,000 and around 60 per cent are in excess of SEK 100,000 (Table 4). In total, new lending in 2019 from the companies in the report amounts to SEK 168 billion.[12] Just over one third was unsecured loans, one fifth was object financing and the rest were various types of lines of credit and credit cards, as well as purchases on invoice.

The companies in the report have increased their new lending by 107 per cent since 2008 (Diagram 3). This corresponds to an average of seven per cent per year. New unsecured loans have grown by six per cent per year, object financing by 12 per cent and lines of credit, credit cards and purchases on invoice by six per cent. New lending of unsecured loans increased by 8.7 per cent and object financing increased by 8.3 per cent between 2018 and 2019. The rate of growth in lines of credit and credit cards and purchases on invoice was 13.5 per cent. The proportion of purchases on invoice was larger and the proportion of other types of credit was lower for borrowers under the age of 25. Lines of credit and credit cards were more common among borrowers aged 65 and over (Diagram 4).

Unsecured loans

An unsecured loan is an interest-bearing loan without collateral that has an agreed amortisation plan and a set maturity date. The borrower may, for example, use unsecured loans when purchasing goods or services and for home-related purposes (e.g. as a deposit or for renovations). Furthermore, an unsecured loan may replace existing credits.

10 A high-cost short-term credit is credit that has an effective interest rate of more than 30 per cent plus a reference rate. See the Consumer Credit Act (2010:1846).

11 The reduction in the number of credits is due to factors including adjustment of which credits would be included in the report.

12 The figures are not entirely consistent with the data shown in Diagram 3. This only includes companies in the report that reported data for the entire period.

Around 20,000 borrowers with new unsecured loans are included in the report. The average loan was just over SEK 110,000. Just over one in three unsecured loans was larger than SEK 100,000 and one in five was larger than 200,000 (Diagram 5). Unsecured loans accounted for more than half of the volume in the report but for only seven per cent of the number of borrowers. Major banks and niche banks are the biggest players in the unsecured loan market in terms of both the number of borrowers and the lending volume (Tables 5 and 6).

Object financing – Credit collateralised by something other than a home

An object financing loan is similar to an unsecured loan but has underlying collateral, which is often a car.[13] Consumers use both object financing and unsecured loans in order to purchase larger durables. The report includes 7,300 households with new object financing loans.

Just over 60 per cent of these loans were larger than SEK 100,000 and one in five loans was in excess of SEK 200,000 (Diagram 5). The average loan was approximately SEK 156,000. Around one quarter of the lending volume in the report consisted of loans collateralised by something other than a home. Object financing companies and niche banks are the biggest players in the object financing market in terms of both the number of borrowers and the lending volume (Tables 5 and 6).

Lines of credit and credit cards

In previous consumer credit reports, FI has used the term *revolving credits* as a collective term for both purchases on invoice and lines of credit and credit cards. However, there are differences between these types of credit and we are dividing them up in this year's report.

- A *credit card* has a predetermined credit limit that the borrower is able to use.
- A *line of credit* functions in a similar way but the credit limit here is linked to an account, for example with a bank or a shop.

Almost 90 per cent of these borrowers in the sample pertain to credit cards. There is normally no predetermined repayment plan. However, there is a minimum amount that the cardholder has to pay each month, for example 1/24th of the credit used. The report only includes lines of credit and credit cards that have resulted in a cost for the borrower. These costs can be interest charges, penalty interest, payment reminder charges or late payment charges.

13 Object financing 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. Around 96 per cent of the object financing loans in the sample were car loans and the bulk of the rest have boats as underlying collateral.

Table 8. Purchases on invoice broken down by size of credit (SEK)

Per cent

Size of credit	2017	2018	2019
Under 500	30	42	38
500–1,000	23	24	25
1,000–2,500	24	21	23
2,500–5,000	11	7	8
Over 5,000	12	6	7
Total	100	100	100

Source: FI.

Note: Denotes the sum total of purchases on invoice for the households in the sample. Just over 80 per cent of households only had one purchase on invoice, 12 per cent had two and the rest of the sample had more than two. A total of 246 households had ten or more purchases on invoice during the sampling period of nine days.

Just under 50,000 borrowers with lines of credit or credit cards are included in the sample. This is equivalent to around 15 per cent of both the number of borrowers and the total volume. The average credit used was just over SEK 13,000 and over 40 per cent of the credits were less than SEK 5,000. All different types of lender, aside from sales financing companies, offer lines of credit or credit cards (Tables 5 and 6).

Purchases on invoice

FI has divided up purchases on invoice into the following three types:

1. The first type is a simple purchase on invoice where the borrower does not have the opportunity/right to convert the credit into a hire-purchase agreement. If the customer fails to make a payment on the due date, penalty interest or a payment reminder charge can be added to the original amount. Approximately 1,600 credits, or half of one per cent of the purchases on invoice, had this format.

2. The other type of credit is a purchase on invoice that can be converted into a hire-purchase agreement after the invoice has been issued. This is the most common form of purchase on invoice and makes up just under 60 per cent of the purchases on invoice.

3. The remaining 40 per cent consists of the third type of credit, which is a purchase on invoice where the customer is able to choose to pay in monthly instalments of an amount of their choosing. Normally at least 1/24th of the credit used is amortised for these credits.

The credit period for purchases on invoice usually varies between one and twelve months. Around 54 per cent of purchases on invoice had an agreed maturity of one month or less[14] and just over 40 per cent have a maturity of twelve months. Collectively, purchases on invoice make up over 75 per cent of the borrowers in the sample. However, as the amounts are small compared with other types of credit, this equates to less than ten per cent of the lending volume. The average credit for purchases on invoice was approximately SEK 1,800. Almost 40 per cent of these credits are smaller than SEK 500 and more than 60 per cent are smaller than SEK 1,000 (Table 8).

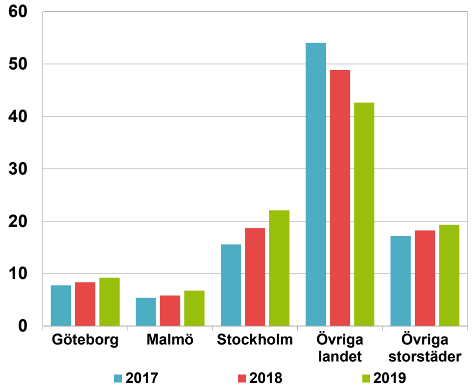
14 One month has been reported if the credit period is less than one month.

Borrowers

On average, borrowers with the highest incomes borrowed the largest amounts and had the highest debt-to-income ratios. However, young borrowers and those with the lowest incomes paid the most in terms of interest and amortisation payments as a proportion of their disposable income.

Diagram 6. Geographical distribution in the sample

Per cent

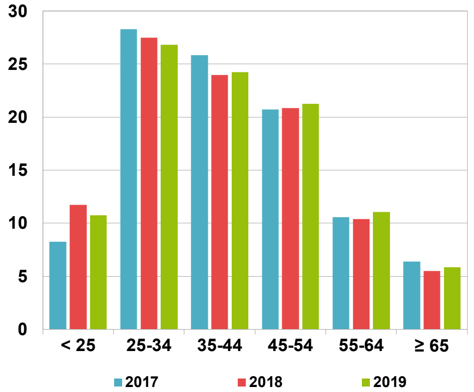


Source: FI.

Note: Stockholm, Gothenburg and Malmö are the metropolitan regions.

Diagram 7. Age distribution in the sample (year)

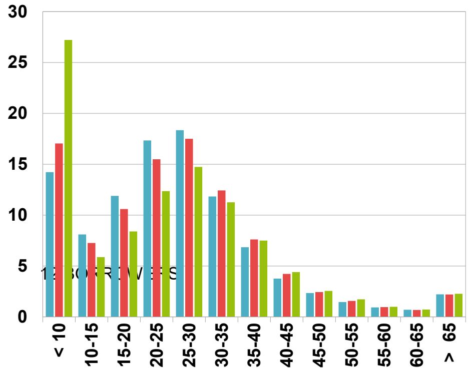
Per cent



Source: FI.

Diagram 8. Distribution gross income (SEK thousand)

Per cent



One way of studying the borrowers is to divide them up geographically. Borrowers in the metropolitan regions Gothenburg, Malmö and Stockholm accounted for a total of 38 per cent of the credits, which can be compared to the fact that approximately 40 per cent of the Swedish population live in these regions. Borrowers who do not live in the metropolitan regions (the category Rest of Sweden) account for just over 40 per cent of the number of consumer credits (Diagram 6).[15]

Borrowers between the ages of 25 and 34 accounted for the largest share of the new credits in the sample (Diagram 7). Almost two thirds of the borrowers in the sample were under the age of 45, while six per cent were over 65. This can be compared with the fact that almost one in five people in Sweden is over 65.

BORROWERS WITH HIGH INCOMES BORROW MORE

Another way to divide borrowers is on the basis of their income. Approximately 2.7 per cent of borrowers had a reported gross income of zero kronor. This is a lower proportion than in last year's report when 13 per cent had a reported income of zero kronor.[16] When we ignore borrowers with a reported income of zero kronor, one fifth of borrowers had a gross income of less than SEK 10,000 per month (Diagram 8). This is a higher proportion than in previous years.

Almost all borrowers who borrowed from sales financing companies and for whom there is no income data borrowed less than SEK 2,000. Borrowers with the lowest incomes borrowed smaller amounts than those with higher incomes. On average, borrowers in the lowest income decile[17] took out unsecured loans of SEK 73,000 (Diagram 10). The average unsecured loan in the highest income decile was SEK 153,000, which is more than twice the size. The same circumstances also apply to object financing and lines of credit and

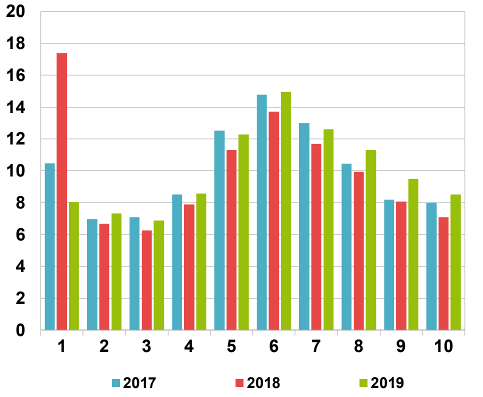
15 The regions used are Greater Gothenburg, Greater Malmö ,Greater Stockholm, Rest of Sweden and Other Large Cities. Other Large Cities includes the municipalities of Borås, Eskilstuna, Gävle, Halmstad, Helsingborg, Jönköping, Karlstad, Kristianstad, Linköping, Norrköping, Sundsvall, Umeå, Uppsala, Västerås, Växjö and Örebro. The category Rest of Sweden contains the municipalities that are not included in the other categories.

16 The difference may be due to an improvement in the quality of the data concerning reported income.

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

Diagram 9. Income deciles

Per cent

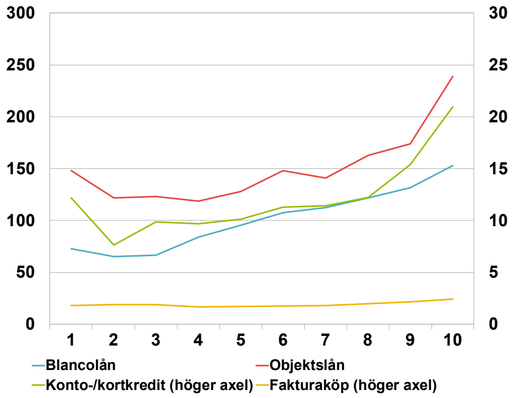


Source: FI.

Note: Deciles divide the borrowers into ten equal parts on the basis of the primary borrower's income. Borrowers for whom there is no reporting income are not included.

Diagram 10. Average size of credit for various types of credit, broken down by income decile

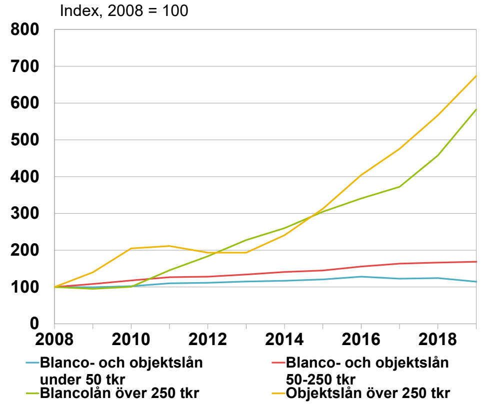
SEK thousand



Source: FI.

Diagram 11. New consumer credit lending, broken down by size of credit

Index, 2008 = 100



Source: FI.

Note: Denotes aggregate data. The diagram shows new lending by the companies in the report that reported data for the entire period.

credit cards. For purchases on invoice, the average credit was about the same for all income levels. However, there is a clear link between income and the amount borrowed. This is beneficial for consumer protection and financial stability as it indicates that repayment capacity has an impact on the amount borrowed.

Borrowers with a gross income of less than SEK 17,000 take out almost eight per cent of the loans of between SEK 100,000 and SEK 200,000, and five per cent of the loans of more than SEK 200,000. The average monthly payment for these borrowers is SEK 3,400 before tax relief on interest payments. This equates to slightly more than one seventh of their net income. The average maturity for these borrowers was just over seven years.

The report does not reveal the full picture.

FI's report only captures new credits that the borrower has with an individual lender. This means that we do not know who has borrowed from more than one lender during the period covered by the sample. Consequently, we are underestimating what proportion of their income some borrowers are using to repay their loans. Then there are households where more than one earner share the expenses. For these borrowers, we are overestimating the proportion of their income that is being used for debt service payments. New borrowers who already have a mortgage took out 35 per cent of the unsecured loans and 54 per cent of the object financing loans.[18] All in all, mortgagors account accounted for 40 per cent of the volume of new unsecured loans and object financing loans.

CONSUMER CREDIT IS GROWING RAPIDLY

Consumer credit has become increasing common in the past decade. New lending of unsecured loans and object financing loans that are under SEK 50,000 has increased by around 23 per cent since 2008. Over the same period, loans of between SEK 50,000 and 250,000 have increased by around 94 per cent. Unsecured and object financing loans over SEK 250,000 have increased by 370 and 513 per cent, respectively over the same period. (Diagram 11).

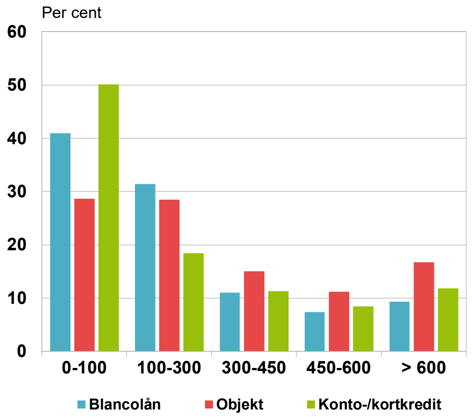
Small credits have increased most

Lines of credit and credit cards, and purchases on invoice under SEK 10,000 have increased by a significantly larger amount over the same period. The volume of new credits has increased by more than 1,000 per cent and the number of new credits by over 4,000 per cent.[19] For credit amounts over SEK 10,000, the increase in volume over the same period has only been 36 per cent.

18 The lenders reported data concerning mortgages (or not) for 53,441 of the borrowers. Approximately 54 per cent of these had a mortgage.

19 Lines of credit and credit cards, and purchases on invoice are reported jointly by the companies in the report.

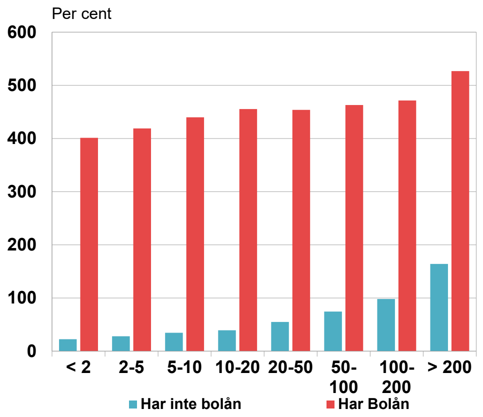
Diagram 12. Proportion of borrowers with different debt-to-income ratios distributed by type of loan



Source: FI.

Note: Debt-to-income ratios over 2,000 per cent and purchases on invoice are excluded.

Diagram 13. Average debt-to-income ratio broken down by size of loan (SEK thousand) and mortgage



Source: FI.

Note: The calculations are based on a total of 52,006 borrowers for whom there are data. 28,091 of these borrowers had a mortgage. Debt-to-income ratios over 2,000 per cent and purchases on invoice are excluded.

In 2008, new lending of amounts under SEK 10,000 through lines of credit and credit cards, and purchases on invoice amounted to approximately SEK 4 billion, compared with close to SEK 50 billion in 2019. This trend coincides with an increase in e-commerce and online shopping, which are often paid for using invoices or with lines of credit and credit cards.

Large consumer credits have also increased a lot

The lending volume of new unsecured loans in excess of SEK 250,000 was almost five times larger in 2018 than it was ten years earlier (Diagram 11). The increase have been particularly pronounced in the past five years, when the average annual rate of growth has been just below 20 per cent. This is linked to a strong economy and low interest rates. At the same time, house prices have risen rapidly over this period. 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. Demand for large unsecured loans may have increased because of rising house prices and the mortgage cap. It is also possible that the amortisation requirements have had an impact on unsecured lending as a larger mortgage affects the principal on which the amortisation requirements are based. Consequently, some borrowers may sometimes prefer unsecured loans to mortgages.

BORROWERS WITH EXISTING LOANS HAVE THE HIGHEST DEBT-TO-INCOME RATIOS

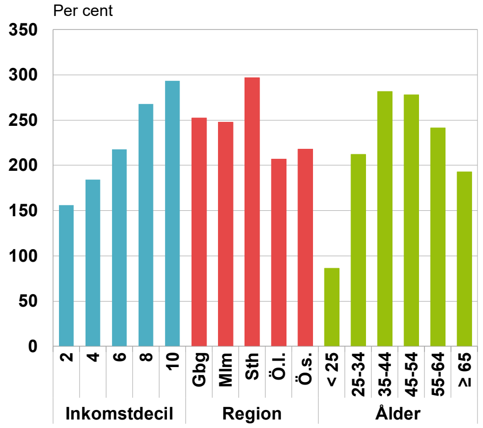
The debt-to-income ratio shows a borrower's debt as a proportion of their income. FI calculates the ratio as the borrower's total borrowing[20] divided by their gross annual income.[21] A high debt-to-income ratio means that the borrower has borrowed a large amount in relation to their income. For borrowers with high debt-to-income ratios, mortgages are common. A high debt-to-income ratio may be an indication of vulnerability. When interest rates are high or in the event of loss of income, households with high debt-to-income ratios need to adapt by reducing their consumption.

There are data on income and total borrowing for between 80 and 90 per cent of the borrowers who took out a new unsecured loan, object financing loan or borrowed using lines or credit or credit cards. We are able to calculate a debt-to-income ratio for these borrowers. The distribution of debt-to-income ratios does not differ that much between borrowers with different types of new credit (Diagram 12). This is because it is mainly existing borrowing that determines the size of the debt-to-income ratio. There are data on income and total borrowing for less than one per cent of borrowers who have made a

20 Total secured and unsecured loans, including the new loan in the sample.

21 In previous reports, the debt-to-income ratio has been calculated using net income, which is why the results are not comparable.

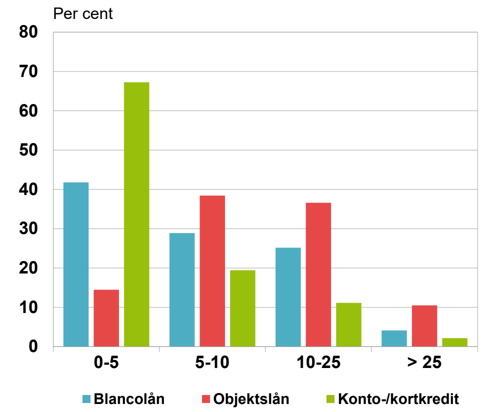
Diagram 14. Average debt-to-income ratio distributed by different groups.



Source: FI.

Note: Debt-to-income ratios over 2,000 per cent and purchases on invoice are excluded.

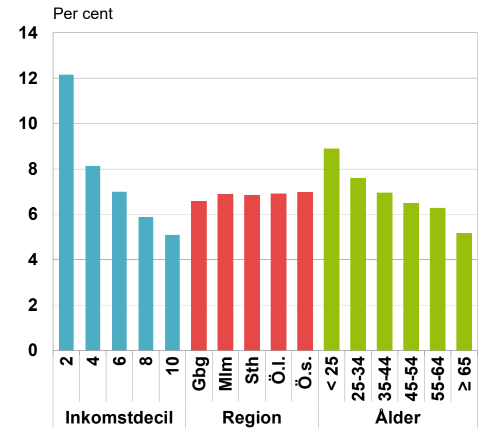
Diagram 15. Proportion of borrowers with different credit service ratios, broken down by type of loan



Source: FI.

Note: Applies to the credit in the sample. The calculations are based on a total of 75,580 borrowers for whom there are data about the credit's interest rate, amortisation rate and the borrower's income. Borrowers with a credit service ratio of over 100 per cent are not included.

Diagram 16. Average credit service ratio, broken down by different groups



Source: FI.

Note: Applies to the credit in the sample. Borrowers with a

new purchase on invoice. This makes the distribution difficult to compare with that for other types of credit.[22]

Mortgages have a major impact on the debt-to-income ratio

The average debt-to-income ratio in the sample is 238 per cent.[23] However, there is a large difference depending on whether or not the borrower already had a mortgage. For those who had a mortgage, the debt-to-income ratio was an average of 450 per cent. And the debt-to-income ratio was around 56 per cent for those who did not have a mortgage. For those borrowers who took out a new loan of over SEK 200,000 and already had a mortgage, the average debt-to-income ratio was around 530 per cent. For those borrowers who did not have a mortgage, the debt-to-income ratio was approximately 164 per cent (Diagram 13).

Average debt-to-income ratio increases with income (Diagram 14). The average debt-to-income ratio in the metropolitan areas was higher than in other parts of the country. It was highest in Stockholm. Borrowers between the ages of 35 and 44 has the highest debt-to-income ratios; 282 per cent on average. This is because they often had a mortgage. The average debt-to-income ratio was lowest for the youngest borrowers; 86 per cent.

BORROWERS WITH LOW INCOMES HAVE THE HIGHEST CREDIT SERVICE RATIOS

Another measure of vulnerability is the household's credit service ratio[24], which allows the borrower's monthly payment for the credit to be compared with their disposable income. The borrower's monthly payment for the credit consists primarily of interest and amortisation. Amortisation reduces the principal and the interest is the cost of the credit.

Tax relief on interest payments may affect the cost of the credit

If the borrower is able to obtain tax relief[25] on their interest payments, the interest expense for the credit is ultimately reduced. As we do not have data on the household's total interest income and interest payments, we do not know whether it is possible to gain tax relief and are thus not able to calculate the actual cost of the individual credit. The interest expense also needs to be at least SEK 1,000 per year for tax relief to be obtained. If we take the calculated total interest

22 Consequently, borrowers with purchases on invoice have been removed from Diagrams 12, 13 and 14.

23 The lenders have reported both income and total borrowing for 63,551 borrowers.

24 Debt service ratio consisting only of the new credit.

25 For entitlement to tax relief on interest payments to apply, the interest expense needs to be at least SEK 1,000 per year. The borrower also has to have a total capital income deficit, i.e. their interest payments must exceed their interest income. Tax relief on interest payments is 30 per cent up to SEK 100,000 and 21 per cent on the portion in excess of SEK 100,000.

expense for each credit as a starting point and estimate the interest expense for the first year of the new credit[26], only twelve per cent of borrowers are able to obtain tax relief on the individual credit in the sample. As pretty much all individual consumer credits are less than SEK 10,000, they do not have an annual interest expense that permits tax relief.

The smallest credits give a very low credit service ratio

In this report, the credit service ratio for the new credit is reported, which means that we are underestimating the total credit service ratio for those borrowers that have existing credits. The amount the borrower pays each months during the repayment period varies depending on the type of amortisation – straight-line amortisation or annuity payments. For straight-line amortisation, we use payments for the first month of the credit to calculate the borrower's credit service ratio. This means that for the first half of the credit we are slightly overestimating the borrower's monthly payment compared to a situation in which the annuity method had been used.

Around 70 per cent of borrowers paid five per cent or less of their disposable income in interest and amortisation on their new consumer credit. This is because seven in ten credits are purchases on invoice where the principal is small compared to other types of credit. Setting aside purchases on invoice, around half of borrowers paid five per cent or less. Just under one in three borrowers with a new unsecured loan and about half of borrowers with a new object financing loan paid ten per cent or more of their income in interest and amortisation (Diagram 15). The average credit service ratio was 8.6 per cent for unsecured loans and 13 per cent for object financing loans. For lines of credit and credit cards, just under one in seven borrowers had a credit service ratio of ten per cent or more. The average was approximately five per cent of disposable income.

The credit service ratio for the new credit decreases with increasing income. The average is 25 per cent in income decile 1, and then gradually decreases to around five per cent in income decile 10. There are no clear regional differences. On average, borrowers under the age of 25 have higher monthly payments as a proportion of their income than older borrowers (Diagram 16).

26 For maturities of up to twelve months, the total interest expense for the credit is used. For maturities of over twelve months, the interest expense is calculated for the first year.

Costs of Borrowing

The majority of the consumer credits in the sample were small and many are expensive in relation to their size. The fact that the borrower needs to take on small credits with high interest rates may be an indication that they are in a strained financial situation. Small credits may also exacerbate the situation for an already vulnerable individual and can, in the worst case scenario, be the start of a borrowing spiral. Many borrowers use unsecured loans to pay off existing loans. This may entail an increased risk of the borrower building up their borrowings, but may also be an indication that they are actively searching for improved credit terms for their existing credits.

Table 9. Average interest rate for unsecured loans, broken down by size of loan (SEK thousand) and type of lender

Per cent

Size of loan	Nominal interest rate		Effective interest rate		Proportion of borrowers	
	CCI	Other	CCI	Other	CCI	Other
< 2	39	9	16,695	11	7	0.5
2–5	37	15	1,529	16	19	0.9
5–10	28	10	183	14	16	3
10–20	22	8	51	10	19	9
20–50	19	7	24	9	27	23
50–100	13	7	16	8	8	24
100–200	11	6	12	7	4	21
> 200	11	7	12	7	0.9	19
Total	25	7	1,478	8	100	100

Source: FI.

Note: The maximum effective interest rate at the time of reporting was set 99,900 per cent, some loans exceeded this limit.

'CCI' is consumer credit institution and 'Other' denotes other lenders in the report – major banks, niche banks, credit card companies and sales financing companies. The calculations used 2,227 and 18,747 borrowers, respectively, with new unsecured loans. FI's sample pertains to loans from spring 2019, i.e. after the new provisions on high-cost short-term credits entered into force. (Please refer to the text box 'Evaluation of high cost credit' on page 17 for more detailed information.)

THE COST DEPENDS ON INTEREST RATE AND MATURITY

FI's report shows that both the nominal interest rate and the effective interest rate are higher for small loans than large loans (Table 9). Loans from consumer credit institutions has significantly higher interest rates than loans from other lenders. Small loans from consumer credit institutions had the highest nominal and effective interest rates in the report. Consumer credit institutions often offer small unsecured loans with short maturities. Around one quarter of borrowers took out a loan of SEK 5,000 or less. The average unsecured loan was around SEK 26,000 and had a maturity of 3.6 years.[27]

Because the repayment period is short, the consumer credit institutions charge higher interest rates than other lenders. This is part of their business model – a lender is able to earn money on a large loan for a long time or on a small loan for a short time. In the latter case, the lender often sets a high interest rate. Some companies also offer loans with short maturities and high interest rates to borrowers who are deemed to have a higher risk (e.g. households who have previously defaulted).

To a consumer, interest-free credit may appear to be free of charge. However, the lender often charges various fees for this credit. Interest-free unsecured loans and interest-free object financing loans are very rare. In many cases, lines of credit and credit cards and purchases on invoice are interest free if they are repaid by the due date.

ANNUITY LOANS COST MORE THAN LOANS WITH STRAIGHT-LINE AMORTISATION

Consumer credit can be amortised in a straight-line manner or as an annuity. Straight-line amortisation means that the borrower amortises the same amount each month throughout the entire repayment period.

27 The average unsecured loan from a major bank is almost SEK 110,000 and had a maturity of around 6.6 years.

Table 10. Estimated cost (repayment) of an unsecured loan in FI's sample

SEK and per cent

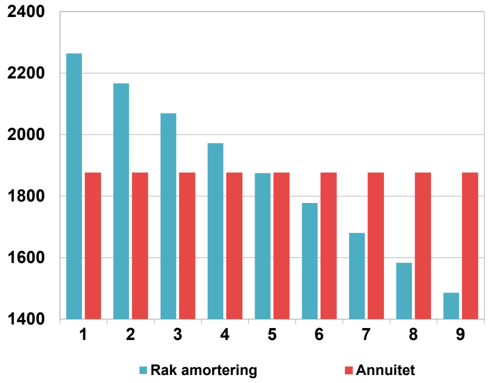
	Annuity	Straight-line
Loans (SEK)	150,000	
Effective interest rate (per cent)	7	
Maturity (months)	108 (9 years)	
Amount first month (SEK)	1,876	2,264
Amount last month (SEK)	1,876	1,397
Total interest payment (SEK)	52,602	47,688
Total repayment (per cent)	135	132

Source: FI.

Note: The calculations are based on an average interest rate and maturity for unsecured loans between SEK 100,000 and 200,000. Total repayment is calculated by dividing the sum total of repayments (amortisation + interest) on the loan by the principal.

Diagram 17. Monthly payment over the life of the loan for an unsecured loan in FI's sample

SEK

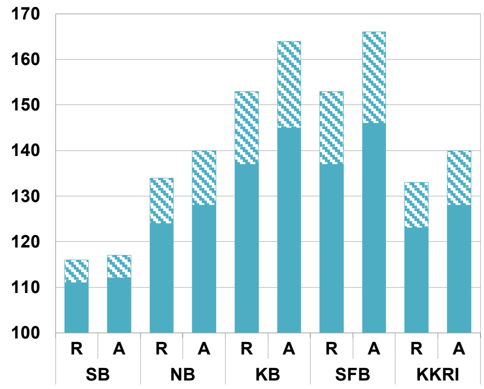


Source: FI.

Note: The diagram shows the monthly payment (interest plus amortisation) for the first monthly invoice in year 1 to year 9 when applying both straight-line amortisation and the annuity method. The principal, interest rate and maturity are the same as in Table 7.

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

Per cent



Source: FI.

Note: The diagram shows the average repayment (interest plus amortisation divided by the size of the loan) The filled in portion of the bar indicates the actual cost less tax relief on interest payments if this is applied to the loan. (See Footnote 19.)

S is straight-line amortisation and means that the same amount is amortised each month during the entire life of the loan. A is annuity method and means that the monthly amount is the same throughout the entire life of the loan.

The monthly interest payment decreases over time because the loan gradually shrinks. An annuity loan, on the other hand, involves the monthly payment being the same throughout the entire repayment period as long as the interest rate remains unchanged.[28] However, the distribution between interest and amortisation changes over time. At the beginning of the repayment period, interest payments make up the bulk of the monthly cost. The proportion of the monthly payment attributable to amortisation then increases. In this report, around 65 per cent of the unsecured loans with a reported amortisation type were annuity loans. Annuity loans were the most common type of object financing loan and they often had a higher nominal interest rate than loans with straight-line amortisation.

We are using an example loan from the samples of SEK 150,000 that has an effective interest rate of seven per cent and a maturity of nine years in order to demonstrate the difference in monthly payments and total repaid amount during the life of the loan (Table 10). In this example, the first monthly invoice[29] for the borrower is approximately 20 per cent higher when straight-line amortisation is used, while the final monthly invoice is approximately 25 per cent lower. In the middle of the life of the loan, the difference between straight-line amortisation and an annuity loan is at its lowest (Diagram 17).

Annuity loans have some advantages. For example, the monthly payment is fixed and lower than with straight-line amortisation during the first half of the life of the loan. However, annuity loans can be associated with risks.[30] 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. Following rescheduling (to a new annuity loan), the portion of the monthly payment that is made up of interest increases. But because annuity loans often have a longer maturity than loans with straight-line amortisation, they have a lower monthly cost than loans with straight-line amortisation. It is therefore not certain that the borrower will always prefer the lowest total repayment (total interest payments plus amortisation payments).

Annuity loans result in a higher total repayment. The average repayment ratio (total repayment divided by the size of the loan) for an unsecured loan was highest for credit card companies and sales financing companies (Diagram 18). For unsecured loans from major banks, the average interest payment is around 16 per cent[31] of the size

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

29 If we assume that the loan starts being paid in January of year 1 and that a total of 12 payments are made for each calendar year.

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

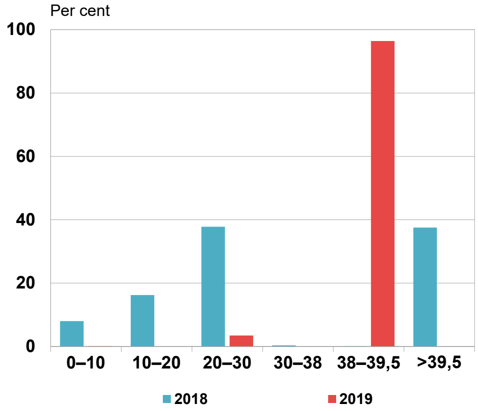
31 Amortisation payments make up 100 per cent of the total repayment and the remaining portion is made up of interest payments. The interest payments are the same as the interest expense if the borrower does not obtain tax relief.

of the loan. If the borrower is able to obtain tax relief on the interest paid, the actual cost of the loan is lower than the total repayment. In order to show an approximation of this effect, the dark portion of the bars in Diagram 18 indicate the total repayment less tax relief.[32]

32 In the example, tax relief is applied to all unsecured loans, irrespective of size of what other information is available about the borrower.

IN-DEPTH ANALYSIS – Evaluation of high-cost short-term credits

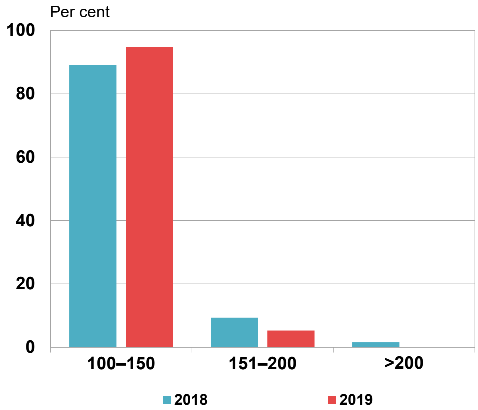
R1.1 Borrowers with high-cost short-term credits broken down by nominal interest rate (per cent)



Source: FI

Note: Data for 2018 were collected before the reform entered into force and data for 2019 were collected after the reform.

R1.2. Repayment ratio for borrowers with high-cost short-term credits (per cent)



Source: FI

Note: Total repayment denotes both interest and amortisation.

High-cost short-term credits are loans to consumers that have an effective interest rate that is higher than the reference rate plus 30 percentage points. This type of credit was previously referred to as micro loans. The size of the loan is normally between SEK 500 and 20,000 and the maturity is often short.
In order to strengthen consumer protection and reduce the risks of over-indebtedness, the Government set up an inquiry into high-cost short-term credits in 2015. The inquiry proposed several measures – including a ceiling on the nominal interest rate (of the reference rate plus 40 percentage points) and a ceiling on the total cost (that this may not be as much as the loan itself). These measures entered into force on 1 September 2018.

The new high-cost short-term credit regulations do not ban this product. However, they do limit how much the lender is permitted to charge. This means that high-cost short-term credits do still exist, but that the number of these loans has decreased sharply.

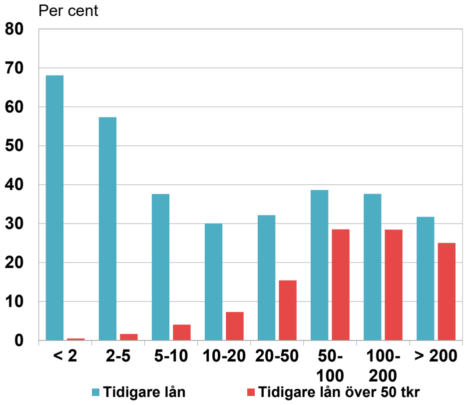
The interest rate ceiling has had a normative effect. Over 96 per cent of borrowers with high-cost short-term credits in 2019 had a nominal interest rate of between 38 and 39.5 per cent (Diagram R1.1). There were almost no loans within this range before the reform. The cost ceiling has not had so much of a practical impact on new lending because only 1.5 per cent of borrowers were above the cost ceiling prior to the introduction of the reform (Diagram R2). Nevertheless, the cost ceiling may suppress fees that are added in the event of repayment difficulties.

Andersson et al. (2020) present modelling estimates showing that those affected by the reform borrowed almost seven per cent more than they would have if the reform had not taken place.[33] This is probably because their borrowing has become cheaper. In total, their borrowing costs have decreased by eight per cent. This makes these borrowers less vulnerable. It is primarily small loans and loans to low-income earners and young people that have decreased as a result of the reform.

Not all unsecured loans are high-cost short-term credits. The total impact on unsecured loans is therefore smaller than that on high-cost short-term credits. In total, unsecured loans smaller than SEK 50,000 decreased by almost one quarter as a result of the reform.

33 See Andersson, M.K., Aranki, T. and Hult, A. (2020) “Fewer high-cost short-term credits after new rules”, FI Analysis 22, Finansinspektionen.

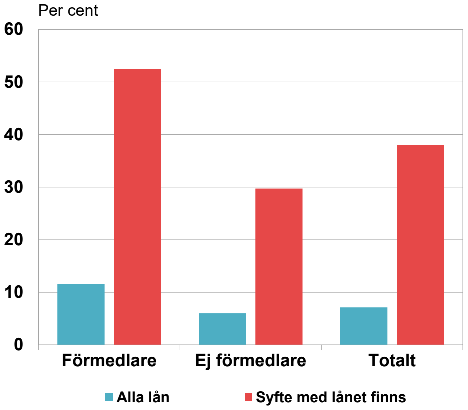
Diagram 19. Proportion with an existing loan with the company broken down by size of loan (SEK thousand)



Source: FI.

Note: The calculations are based on 316,593 borrowers.

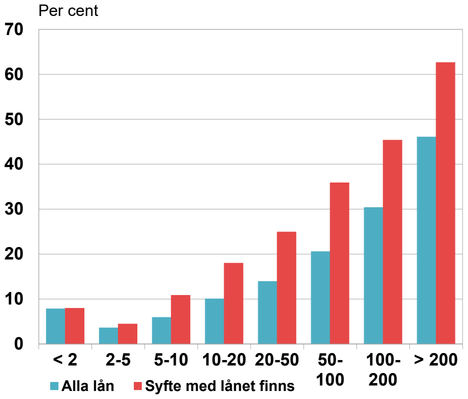
Diagram 20. Proportion of unsecured loans that pertain to settlement of previous loans



Source: FI.

Note: The blue bar shows the proportion of the total number of unsecured loans in the sample that pertain to the settlement of existing loans. The red bar shows the proportion of new unsecured loans for which a purpose is specified. The calculations are based on 21,163 unsecured loans and a purpose is specified for approximately 60 per cent of these.

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



Source: FI.

Note: See note to Diagram 20.

SMALL LOANS MAY LEAD TO LARGE LOANS

When a borrower takes out several small loans, these loans can accumulate. Almost 70 per cent of those who took out an interest-bearing loan of less than SEK 2,000 already had an existing interest-bearing loan with the same company (Diagram 19). This means that the majority of the new borrowers who took out a small loan already had at least one interest-bearing credit prior to 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, just under one in five borrowers with an existing loan took out a new loan that was larger than SEK 100,000. A borrower accumulating loans in this manner may lead in the long term to the borrower being highly leveraged. Almost one in three borrowers who borrowed between SEK 50,000 and 200,000 already had existing loans of over SEK 50,000 from the same company.

A borrower who already has small margins in their finances and uses small loans to cope with their day-to-day expenditure, may have difficulty with repayments. Consequently, small loans may be a sign of an aggregate large loan.[34] However, it may also be a sign that the household already has large borrowings or difficulty with repayments.

Unsecured loans are often used to pay off existing loans.

The reasons why borrowers take out unsecured loans vary. The purpose of the loan was unknown for 40 per cent of the unsecured loans in FI's report.[35] Where this information was available, the most common reason for the loan was to pay off other loans and credit.[36] Other common purposes specified by the borrower were to buy vehicles, make home improvements or for other types of consumption.

Around 23 per cent of all unsecured loans are used to pay off existing loans and credit. For loans of more than SEK 100,000, this proportion was twice as high. When the borrower has specified a purpose for the loan, the proportion is 38 per cent for all principal amounts and 54 per cent for loans of more than SEK 100,000. It was more common for borrowers to use unsecured loans obtained through an intermediary[37] to pay off existing loans and credits (Diagram 20).

It was more common for borrowers with large loans to be paying off existing loans than for those with small loans. For loans of more than

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

35 The proportion of unsecured loans for which a purpose is specified is about the same for both small and large loans.

36 The loans that are being paid off may be of different types, e.g. high-cost short-term credits, credit card debt or other unsecured loans.

37 Credit intermediaries act as intermediaries between a consumer or company and a lender.

SEK 200,000, almost half of these loans had this purpose. Where the borrower specified a purpose for the loan, just under two thirds of the loans of more than SEK 200,000 were being used to pay off other loans and credit (Diagram 21).

Borrowers' Repayment Capacity

Large loans are more frequently preceded by a more extensive credit assessment than small loans. Above all, it was purchases on invoice involving small amounts of credit that resulted in payment reminders and collection notices during the first months of the credit. Around 4.5 per cent of borrowers received a collection notice. This is lower than in last year's report when the corresponding proportion was seven per cent. FI's stress tests show that many borrowers may need to spend more than half of their net income on interest and amortisation payments if interest rates were to increase. These borrowers may have problems making these payments or be forced to reduce their consumption.

Table 11. Type of credit assessment broken down by different types of lender

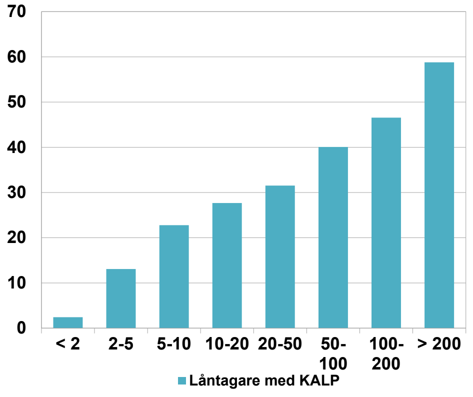
Per cent

	Discretionary income	Debt-to-income ratio	Internal risk grade	External risk grade
MB	40	71	58	100
NB	22	35	57	67
OFC	60	0	40	86
CCF	54	46	54	64
SFC	0	0	91	94
CCI	88	30	52	46
Total	11	11	81	89

Source: FI.

Diagram 22. 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.

It is the responsibility of the lender to determine whether the borrower has the capacity to cope with the credit repayments.[38] If a borrower runs into difficulties with their repayments, this may lead to the lender suffering credit losses. Consequently, the credit assessment is important for both the lender and the borrower.[39] Lenders use data such as the borrower's income, expenses and existing loans in order to assess their repayment capacity.

FI assesses borrowers' resilience and repayment capacity through stress tests in which interest rates increase or incomes fall.

METHODS USED IN LENDERS' CREDIT ASSESSMENTS

The report shows that lenders use various methods in their credit assessments. There is no legal requirement to conduct credit assessments for purchases on invoice. This is why there is often none of the data used in the event of a credit assessment for this type of credit.

Credit assessments of the other types of credit are often conducted as follows:

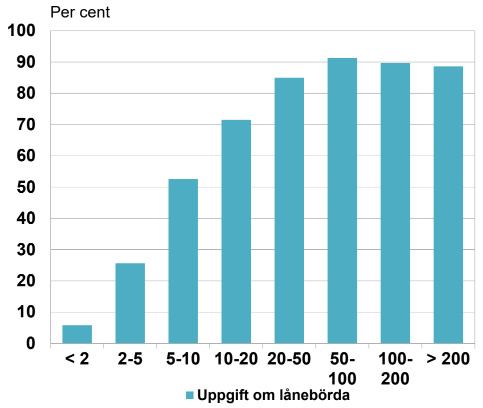
- The lender calculates discretionary income. This is the method that analyses the repayment capacity in most detail.[40]
- The lender obtains data about the borrower's income and total borrowing (their debt-to-income ratio). The debt-to-income ratio (together with interest and amortisation payments) can be seen as a simplified variant of a discretionary income

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

39 It is the Swedish Consumer Agency that supervises consumer credit institutions' credit assessments.

40 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 data concerning total borrowing in various loan intervals (SEK thousand)



Source: FI.

Note: The bars indicate the proportion of borrowers in each interval for which there are data concerning total borrowing at the time credit is granted.

calculation, but only takes into account income and debt service payments.

- The lender uses an internal or external method to grade the borrower's risk.

Several of the lenders use a combination of different methods in their credit assessments. For example, a lender might calculate a debt-to-income ratio, calculate discretionary income and perform a credit check. Data that forms the basis of a credit assessment is retrieved both directly from the consumer and from external sources, for example credit reference firms.

Discretionary income calculation most common for large loans

The majority of the loans from major banks, object financing companies and consumer credit institutions have been preceded by a discretionary income calculation (Table 11). A calculation of this nature is used in particular for unsecured loans and loans collateralised by something other than a home. However, because the calculations vary between different lenders, it can be difficult to make an entirely true comparison of borrowers' financial circumstances. Some lenders use the borrower's income and the debt service payments on all of the borrower's borrowings, their actual other housing costs and standardised figures for subsistence costs.[41] Other lenders' calculations use, for example, the Swedish Consumer Agency's standardised figures for subsistence costs, loans with the same lender and the borrower's income.

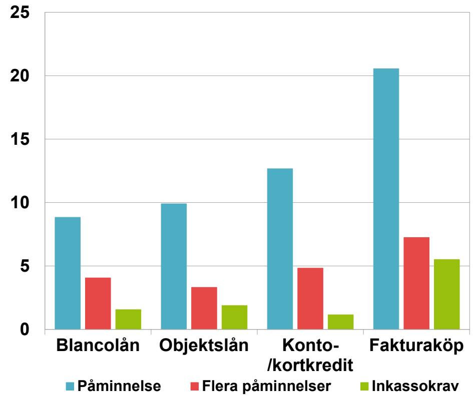
There is a clear relationship between the amount being borrowed and how common it is for the lender to perform a discretionary income calculation (Diagram 22). If between SEK 2,000 and 5,000 is being borrowed, the discretionary income is calculated in 13 per cent of cases. If more than SEK 200,000 is being borrowed, this calculation is performed for almost 60 per cent of borrowers.

Total borrowing and calculation of debt-to-income ratio

Some lenders assess the borrower's repayment capacity by calculating the debt-to-income ratio. A borrower with a low debt-to-income ratio is normally less sensitive to interest rate rises or loss of income and is therefore deemed to be more resilient than a borrower with a high debt-to-income ratio. For the majority of loans, the major and niche banks had sufficient information to be able to assess the borrowers' debt-to-income ratios. There was a reported debt-to-income ratio for 56 per cent of those who borrowed more than SEK 200,000 and whose discretionary income had not been calculated by the lender. And for the borrowers for whom there was no reported debt-to-income ratio, the lenders had data on the household's total borrowing at the time the credit decision was made in almost all cases.

41 See Finansinspektionen (2019). "The Swedish Mortgage Market".

Diagram 24. The proportion of borrowers who received payment reminders and collection notices for various types of credit



Source: FI

Note: Pertains to the initial months of the credit.

Table 12. The proportion of borrowers with unsecured loans who received payment reminders and collection notices in various loan intervals (SEK thousand)

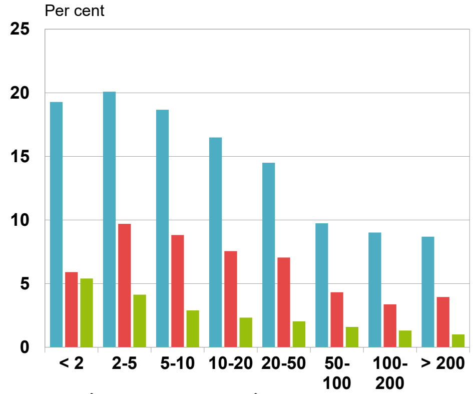
Per cent

Size of credit	Reminder	More than one reminder	Collection notice
< 2	11.5	0.8	6.3
2–5	24.9	9.3	10.1
5–10	11.5	5.6	4.2
10–20	8.8	3.9	2.2
20–50	8.2	4.1	0.9
50–100	7.9	3.9	1.4
100–200	7.8	3.5	0.7
> 200	8.6	4.0	0.8

Source: FI

Note: Pertains to the initial months of the credit.

Diagram 25. The proportion of borrowers who received payment reminders and collection notices in various loan intervals (SEK thousand)



FI's report shows that there are lenders that have no information whatsoever about the household's total borrowing. In addition, barely any lenders obtain data on student loans. For unsecured loans, object financing loans and lines of credit and credit cards, there are data on total borrowing for between around 80 and 90 per cent of borrowers. However, for purchases on invoice, which normally involve a relatively small amount of credit, there is equivalent data for only around five per cent of borrowers. Data concerning total borrowing is mainly absent for credit of less than SEK 5,000, where purchases on invoice are common (Diagram 23).

Methods for grading risk

Most lenders supplement their discretionary income or debt-to-income ratio calculation with methods for grading risk. However, there are lenders that only use risk grading. These methods are usually based on various data concerning the borrower and estimate the risk that the borrower will not be able to repay what they have borrowed. The borrower is assigned a risk grade that helps the lender assess the borrower's creditworthiness. All borrowers have graded the risk of almost all of their borrowers using an internal or external method (Table 12).

Credit checks

Lenders often use credit checks in their credit assessments. A credit check may include information about the borrower's income, borrowing and any records for non-payment on loans. However, a credit check does not necessarily include all a consumer's borrowings as not all lenders report this data to credit reference firms. Nor do all credit reference firms supply data concerning borrowers' borrowings. In addition, not all credit reference firms' records are updated in real time.[42]

REMINDERS AND COLLECTION NOTICES MAY BE SIGNS OF REPAYMENT PROBLEMS

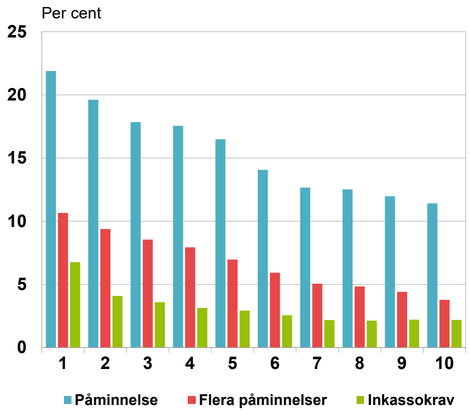
Reminders and collection notices may be signs that a borrower is having difficulty repaying what they have borrowed.[43] The proportion of households who received payment reminders during the initial months of the credit[44] was twice as high for the credit type purchases

42 See FI's proposed regulatory change in the consumer protection report for 2020.

43 Credit that results in records of non-payment or are sent to the Swedish Enforcement Authority are also indications of repayment problems. The report includes data concerning loans transferred to the Swedish Enforcement Authority. These date only pertain to the initial months of the credit. Around one per cent of borrowers had credit that had been sent to the Swedish Enforcement Authority. However, it is difficult to estimate the actual proportion as several companies sell on these borrowings to third parties, for example a debt collection agency, before they are sent to the Swedish Enforcement Authority.

44 For lines of credit and credit cards and purchases on invoice, payment reminders and collection notices have been issued during the first ten months after the credit has been used. For other types of credit, they have been issued during the first five months. In those cases

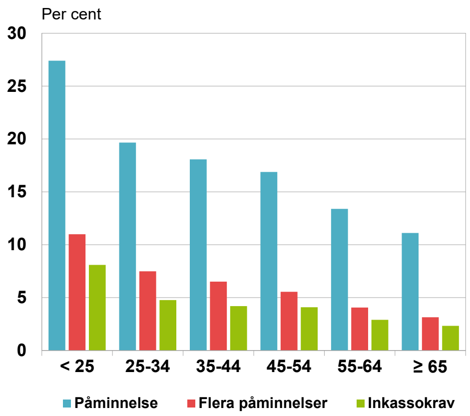
Diagram 26. Proportion of borrowers who received payment reminders and collection notices for different income deciles



Source: FI.

Note: Pertains to the initial months of the credit.

Diagram 27. Proportion of borrowers who received payment reminders and collection notices in different age groups (years)



Source: FI.

Note: Pertains to the initial months of the credit.

Table 13. Proportion of borrowers who received payment reminders and collection notices for various types of lender

Per cent

Type of lender	Reminder	More than one reminder	Collection notice
MB	7.1	2.6	0.6
NB	24.5	5.3	3.8
OFC	8.4	3.1	1.1
CCF	7.0	2.9	0.3
SFC	19.1	7.3	5.3
CCI	40.2	14.2	8.6
Total	18.3	6.6	4.5

Source: FI.

Note: Pertains to the initial months of the credit.

on invoice than for other types of credit. The proportion of borrowers who received collection notices was almost four times as high among those who made purchases on invoice than for other borrowers (Diagram 24).

In total, around one in five borrowers had received at least one payment reminder and just under seven per cent had received two or more reminders. For unsecured loans, object financing loans and lines of credit and credit cards, this proportion was around half as large. Approximately 4.5 per cent of the borrowers in the sample had received a collection notice during the initial months of the credit. The corresponding proportion in last year's report was seven per cent.[45] Both reminders and collection notices are most common for small credits for which there is often no data concerning total borrowing and discretionary income (Diagram 25). For unsecured loans of between SEK 2,000 and 5,000, more than one in ten borrowers received a collection notice. For large unsecured loans, the corresponding proportion was less than one per cent (Table 12).

The proportion of borrowers who received collection notices decreased with the increasing size of the new loan. This may be due to the fact that more extensive credit assessments are conducted for larger loans. However, it may also be due to the additional costs (through penalty interest) often being higher if a larger loan is not looked after. Payment reminders and collection notices were more common among borrowers with low incomes than those with high incomes. Around ten per cent of borrowers in income deciles 1 and 2 received two or more payment reminders (Diagram 26).

Young borrowers receive more reminders and collection notices

It is more common for borrowers under the age of 25 to receive one or more payment reminders. One in four borrowers in this age group received a reminder and more than one in ten received two or more during the initial months of the credit. Around eight per cent of borrowers under the age of 25 received a collection notice, which is almost twice as high a proportion as other borrowers. It is also four times higher than the figure for borrowers aged 65 and over (Diagram 27).

Many more purchases on invoice result in debt collection compared with other types of credit

The number of reminders varies between different types of loan and lender. Around nine per cent of borrowers with unsecured loans received at least one reminder during the first five months of the loan.

where a borrower has borrowed from the same lender more than once during the sampling period, the borrower may have received two or more reminders for an individual credit or, for example, one reminder for credit A and one reminder for credit B.

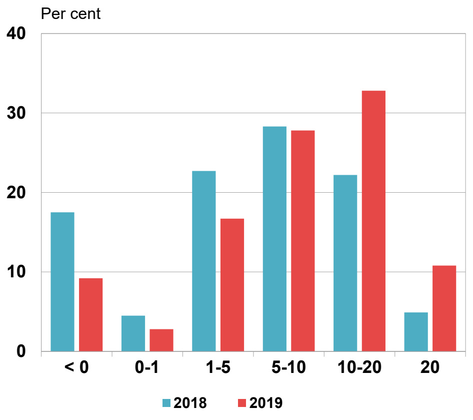
45 The reduction may be due to a reduction in the proportion of high-cost short-term credits in the sample, but it is not possible to exclude the possibility that the reduction relates to reporting differences between the samples.

This proportion was 21 per cent for purchases on invoice. The figure for borrowers with lines of credit and credit cards was 13 per cent, but for this type of credit the reminder can have taken place within the first ten months. It is more common for a borrower who has taken on new credit from a niche bank, sales financing company or a consumer credit institution to receive a payment reminder or a collection notice (Table 13). It is also more common for borrowers to receive collection notices for credit they have with these institutions. Over eight per cent of those who have borrowed from consumer credit institutions received a collection notice. This indicates that many borrowers may have difficulties with repayments.

Some loans sent to the Swedish Enforcement Authority during the initial months of the credit

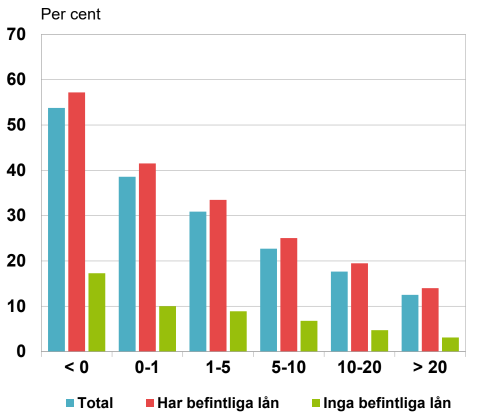
Of the unsecured loans that resulted in a collection notice, 0.2 per cent had been handed over to the Swedish Enforcement Authority within the first five months. The corresponding figure for purchases on invoice was 1.4 per cent. Around two per cent of borrowers under the age of 25 had their loans sent to the Swedish Enforcement Authority. This can be compared to a figure of around 0.4 per cent for other age groups. However, for a loan to end up with the Swedish Enforcement Authority within five months (ten months for lines of credit and credit cards) of being issued, the borrower must have departed from the repayment plan at a very early stage. FI has no information about the credit after the initial months. This means that more borrowers may have received collection notices and that more loans may have been handed over to the Swedish Enforcement Authority.

Diagram 28. Distribution of households into various intervals for monthly surplus with credit (SEK thousand)



Source: FI.

Diagram 29. Credit service ratio in various intervals for monthly surplus (SEK thousand)



Source: FI.

Note: The diagram shows interest and amortisation payments in relation to net income in 2019.

ASSESSMENT OF BORROWERS' RESILIENCE

FI stress tested 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 encompass those single borrowers[46] for whom there are complete data concerning income, total borrowing and what this consists of.[47] These data are available for just under 13 per cent of all borrowers and for just over half of all credits that are larger than SEK 20,000.[48] The data consists of 65 per cent lines of credit and credit cards, 25 per cent unsecured loans and 10 per cent object financing loans.[49]

FI has used a simplified *discretionary income* calculation that is based on the borrower's net income. We deduct interest payments and amortisation payments with straight-line amortisation for all existing credits[50]. Standardised amounts are then used for subsistence costs (based on the number of adults and children in the household) and housing costs (based on whether the borrower owns or rents their home).[51] The discretionary income calculation provides an estimate of the borrower's cash flow. When a borrower has a deficit or a small surplus this indicates a lower repayment capacity.

However, this simplified calculation is not able to precisely capture the borrower's actual situation. The borrower may have costs that are lower or higher than those we use. The borrower may also, for example, have savings they are able to use if their financial circumstances deteriorate. In the calculations we use interest payments before tax relief on interest payments. One option would have been to use the interest expense less tax relief. The reason why we did not do so is that we do not know which borrowers are obtaining tax relieve and thus reducing their ongoing debt service payments.[52] It also provides a truer picture of the borrower's actual cash flow. Not including tax relief on interest payments and using straight-line amortisation in our calculations results in a somewhat lower surplus and a slightly higher credit service ratio. It is therefore possible to interpret the results as a conservative way of calculating these figures.

46 Around 98 per cent of the borrowers in the sample take on credit without a co-signer.

47 Existing mortgages, other secured loans and other unsecured credit.

48 There are data for around 56 per cent of borrowers in 2019 and for approximately 50 per cent of borrowers in 2018.

49 No purchases on invoice are included as these lack data concerning total borrowing.

50 We used different standardised amounts for interest and maturity tor existing borrowing that is not included in the sample.

51 We have used standardised amounts for subsistence costs and existing borrowing. Subsistence costs are set at the Swedish Enforcement Authority's normal amounts, which are used as a basis for attachment of salary and debt reconstruction. These are lower than the Swedish Consumer Agency's standardised amounts and may therefore be interpreted as a minimum subsistence level.

52 For those who are employees, their employer may make deductions in the preliminary income tax before the salary is paid.

One in five borrowers has a small surplus

The average surplus for new borrowers in 2019 (2018) was initially around 11,000 (6,900) per month. Although the margins for those with a surplus appear, on average, to be good, a large proportion of borrowers have small surpluses. Around 21 (33) per cent of those borrowers who have a surplus, had less than SEK 5,000 left after essential expenses each month. In total, around nine (17) per cent of borrowers have a deficit initially (Diagram 28).

Those borrowers who did not have an existing credit when they took out the new credit inn 2019 paid an average of about seven per cent of their net income in interest and amortisation (credit service ratio). This is around one percentage point higher than in 2018. The borrowers who already had an existing credit when they took out the new credit paid a little over one quarter of the net income in interest and amortisation. We also see that the credit service ratio decreases when the discretionary income surplus increases. The average credit service ratio for borrowers with deficits is approximately 54 per cent. For borrowers with existing credits and a surplus of SEK 20,000 or more, the credit service ratio is just over 13 per cent (Diagram 29). On the whole, we see that the credit service ratios are a little higher in 2019 than in 2018.

Increased payments when interest rates are stressed

If the interest rate increases by five percentage points on all credits, monthly payments increase by an average of just under one per cent of income for those who did not have an existing credit.[53] For those new borrowers who already had loans when they took out the new credit, monthly payments increase by an average of 43 per cent of disposable income.

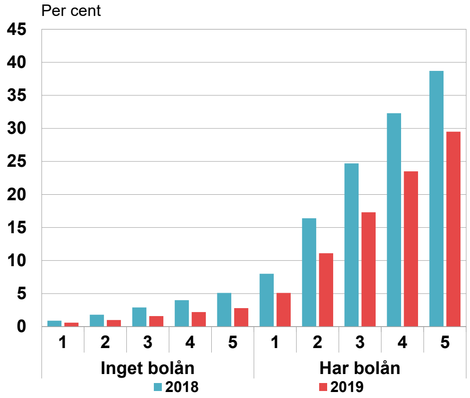
Among those borrowers in the report who had existing credits, just over eleven per cent has a credit service ratio of over 50 per cent at current interest rates. If interest rates increase by five percentage points, around 35 per cent of those with existing credits had a ratio of over 50 per cent. This indicates that many borrowers may have difficulties with repayments when interest rates rise.

Deficit in the event of higher interest rates

FI’s stress test shows 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 increase in the interest rate is both added to the new credit and also to the borrower’s credits. Initially, around nine (17) per cent of all borrowers had a deficit. Among those who had existing mortgages, the proportion with a deficit was approximately ten (19) per cent initially. For those who did not have an existing mortgage, this proportion was just under nine (16) per cent.

53 This makes stress tests a real interest rate scenario, which is a simplification. Income probably also increase in a situation in which interest rates are rising.

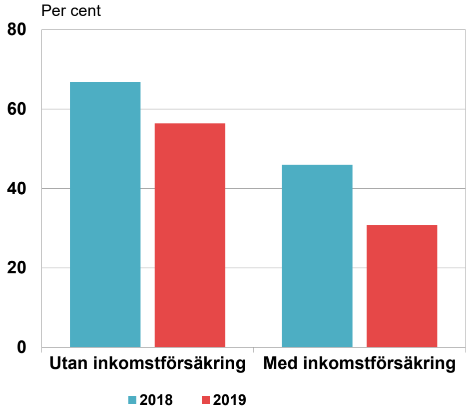
Diagram 30. Proportion of borrowers with a surplus initially who end up with a deficit when interest rates increase



Source: FI.

Note: The X axis shows interest rate rises in percentage points.

Diagram 31. Proportion of borrowers with a deficit with and without income protection insurance.



Source: FI.

With interest rates increased by two percentage points, around six (nine) per cent of all borrowers who have a surplus initially end up with a deficit. Among borrowers who did not have a mortgage, the proportion with a deficit was approximately one (two) per cent. And for those who had a mortgage, this proportion was around eleven (16) per cent (Diagram 30).

Deficit in the event of unemployment

FI has also calculated what proportion will end up with a deficit if they are in receipt of unemployment benefit without compensation for loss of income (unemployment insurance) at the compensation levels applicable when the credit was taken out in 2019. If all borrowers lose their jobs, about 56 (67) per cent of them will end up with a deficit (Diagram 31). This is an increase of around 46 percentage points compared with the initial situation. The high proportion of borrowers with a deficit in the event of unemployment is due to factors including that around 87 (81) per cent of borrowers have a gross income in excess of the maximum amount that is available without income protection insurance.[54] In addition, unemployment benefit does not give an entitlement to the job tax deduction. If all borrowers had income protection insurance, 80 per cent of gross income without a salary cap, the proportion of borrowers with a deficit would be about 31 (46) per cent. This is about 22 percentage points more than the initial situation.

Stress tests suggest slightly reduced risk in 2019

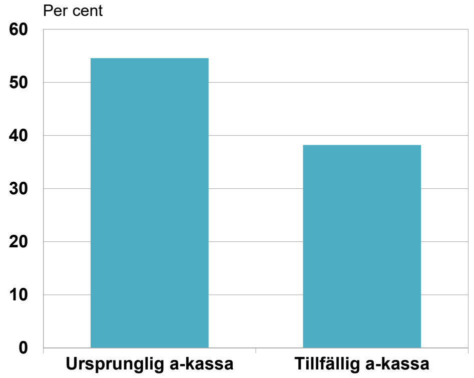
The stress tests indicate that the proportion of borrowers who may have difficulty managing their finances increases in a stressed situation. Even those households that still have good margins may also end up with debt service payments that are higher as a proportion of their income. This may result in them being forced to reduce their consumption.

Households that took out new consumer credit in 2019 have somewhat larger margins that those who took out new credit in 2018. In the report for 2019, around nine per cent of households had a deficit, compared with approximately 17 per cent in 2018. If interest rates are increased by five percentage points, around 16 per cent of borrowers who had a surplus would instead end up with a deficit. The corresponding proportion was approximately 21 per cent in 2018. New borrowers in 2019 are also a little more resilient to loss of income. In the event of unemployment, around 56 per cent of borrowers will end up with a deficit if we assume that they do not have income protection insurance, but are in receipt of unemployment benefit. The corresponding figure for 2018 was 67 per cent. The fact that those who took out new credit in 2019 have slightly better

54 The maximum benefit before tax that an employee is able to apply for is SEK 910 per day for 22 days per month. This is equivalent to SEK 20,020 per month.

resilience than those who took out credit in the previous year is primarily due to them having a higher average income.

Diagram R3. Proportion of borrowers with a deficit in the event of unemployment under the original and temporarily increased unemployment benefit levels



Source: FI.
Note: The calculations apply to 2020 with the data from the 2019 sample having been adjusted to take into account amortisation of credit and pay rises.

Deficit in the event of unemployment with temporary unemployment benefit

The coronavirus pandemic has had a major negative impact on the Swedish labour market. Because of this, the Riksdag and the Government have decided to ease the conditions for obtaining compensation from unemployment insurance and have also increased the maximum benefit. The increase is temporary and applies from 13 April 2020 to 3 January 2021, inclusive. For example, the maximum unemployment benefit is increased from SEK 20,020 to approximately SEK 26,400 per month for the first 100 days. The basic benefit is also increased from SEK 8,030 to SEK 11,220 per month. FI has calculated the proportion of single households that took out new credit in 2019 that would end up with a deficit in the event of unemployment under the new temporary rules.

If borrowers who took out new consumer credit in 2019 amortised all their credits, did not take out any new credit during the period and received a nominal pay rise of 2.9 per cent, the proportion with a deficit in 2020 would be around 55 per cent when applying the conditions for unemployment insurance that applied before the temporary change was introduced. This is approximately one percentage point fewer borrowers with a deficit than in 2019. Under the temporary unemployment insurance rules the proportion of borrowers with a deficit would decrease by about 17 percentage points to approximately 38 per cent.

The large reduction in the proportion with a deficit is due to factors including that the temporary rules increase the maximum benefit. Around 87 per cent of borrowers had an income above the normal maximum benefit. And around 68 per cent of borrowers had an income above the temporary maximum benefit. The results show that the temporarily increased benefit for the first 100 days reduces the proportion of borrowers who end up with a deficit in the event of unemployment. This is because many borrowers had incomes that were higher than the maximum unemployment benefit.

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