FINANSINSPEKTIONEN

Swedish Consumption Loans

13 June 2019

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Summary

One of Finansinspektionen's (FI's) statutory objectives is to secure to a high level of protection for consumers on the financial markets. This is one of the reasons why FI monitors the development in household debt. Debt can lead to risks for borrowers and lenders as well as the economy at large. Household debt largely consists of mortgages, but it also includes consumption loans (non-mortgage lending). FI conducted this analysis in order to strengthen FI's understanding of household debt and its work with consumer protection.

Since consumption loans represent a mere 18 per cent of household debt, they currently constitute only a limited stability risk. However, our analysis shows that there are risks for individual consumers. Interest rate and amortisation payments on consumption loans accounted for a significant portion of households' total borrowing costs, and there are borrowers who are already showing signs of having payment problems today. In addition, more borrowers would experience problems if their economic conditions were to decline. This indicates that many borrowers might need to reduce their consumption when interest rates rise, which could have a negative impact on real economic growth.

The majority of consumption loans 2018 were small and had a high effective interest rate. This is because the maturity was normally short and the fees that are charged were large in relation to the size of the loan. Several small loans can also be the start of larger debt if the borrower replaces or increases the loan instead of paying it off. This could result in the borrower being unable to afford the loan repayments.

However, it was large consumption loans that represented the largest share of new lending. Growth in larger loans has been particularly strong the past five years. This time period coincide with a strong economy and low interest rates. In addition, the mortgage cap and the amortisation requirements may also have contributed to the increase in the use of large consumption loans for housing purposes.

The largest loans were issued to the borrowers with the largest income. This is positive from a consumer protection and a financial stability perspective. However, households with large consumption loans spend on average one quarter of their post-tax income on interest and amortisation payments.

FI's data shows that every seventh loan has resulted in a collection notice for the borrower. This is a sign that many borrowers may be experiencing problems repaying their loans. A thorough creditworthiness assessment could reduce the share of borrowers who have received a collection notice. In most cases, lenders conduct a more thorough creditworthiness assessment for larger loans.

Present situation and a look back

Swedish households have a high level of debt, and their debt has increased rapidly in recent years. Mortgages make up the majority of household debt, but consumption loans represent more than half of households' debt service payments. Therefore, these loans can pose risks to individual households. In the long run, these risks could affect macroeconomic growth and financial stability. The objective of this report is to strengthen FI's understanding of household debt and its work with consumer protection.

Many Swedish households borrow money to buy homes and for consumption. In total, these loans amount to 84.5 per cent of GDP. Loans allow households to consume without first needing to save, so loans are good for households and the economy as a whole. However, high levels of debt also make households and lenders vulnerable, and in the long run it can have a major impact on the economy. Households with high levels of debt tie up a large portion of their future income in interest and amortisation payments. If households' economic conditions change, they may find it difficult to meet these commitments. This risk is larger if loans are granted to borrowers who have a limited repayment ability, thus making a sound creditworthiness assessment key for both the borrower and the lender.

There are different types of loans. A mortgage uses a home as collateral, and other loans either use collateral other than a home (for example a car) or no collateral (unsecured loans and revolving loans).[1] In this report, we use the term *consumption loan* for all loans that do not use a home as collateral.[2]

The market for consumption loans is more diversified than the mortgage market. There are many different types of loans and lenders. Consumers can also take loans through credit intermediaries and agents.[3] Some loans are paid in cash, while for other loans the lender pays for a good the consumer buys. The consumer thus purchases the good on credit. Furthermore, consumption loans are more complicated in that they can be granted with or without interest and the maturity can vary.

Households have benefited for a long time from a strong economy, and household income has increased more than consumption (Diagram 1). At the same time, household debt has increased even faster than income. This is largely due to the rapid increase in house

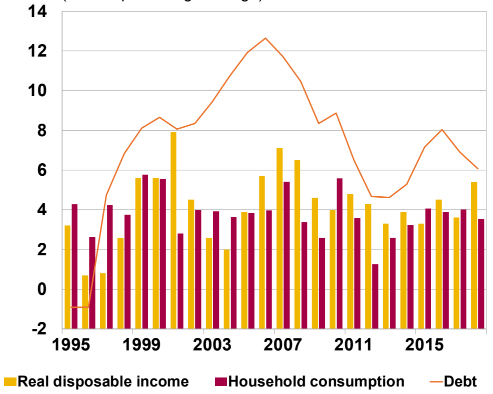
1 A revolving loan is a facility that a borrower can draw from, for example through credit card purchases or purchases on credit online and in a physical store. Loans that are taken by a consumer and are intended for use in a proprietary business are not included in the analysis. These loans are not considered consumer loans according to the Consumer Credit Act (2010:1846).

2 Statistics Sweden uses the terms *mortgages*, *loans with other collateral* and *loans without collateral*. Loans without collateral includes unsecured loans and revolving loans.

3 Both credit intermediaries and agents function as middlemen between a consumer or firm and a lender. Agents makes it possible for a consumer to pay for the good or service using credit. Agents can either receive a commission on the mediated volume or part of what the customer pays to the lender for the loan is interest-bearing.

Diagram 1. Growth in household debt, income and consumption

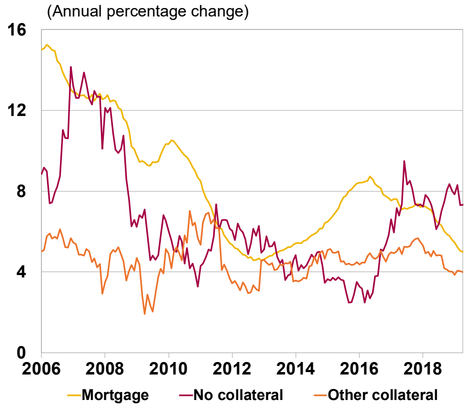
(Annual percentage change)



Source: Statistics Sweden.

Diagram 2. Growth of household debt by purpose

(Annual percentage change)



Source: Statistics Sweden.

Note: Growth rates are adjusted for reclassifications and bought and sold loans. Most recent observation is April 2019.

Table 1. Composition of the sample

(Number, SEK and SEK million)

Type of loan	Number of borrowers	Amount (funds)	Volume
Unsecured (U)	30,450	78,200	2,400
Revolving (R)	343,821	3,304	1,100
Object (O)	6,739	162,400	1,100
U + R	284		
U + O	3		
R + O	37		
U + R + O	0		
All	381,334	12,100	4,600

Source: FI.

prices (and mortgages), and mortgages correspond to 82 per cent of households' total debt. In recent years, though, loans without collateral – unsecured loans and revolving loans – have grown faster than mortgages (Diagram 2).

Growth in consumption loans is cyclical. During the economic boom prior to the financial crisis, consumption loans increased sharply and then slowed at the end of 2008. Since 2016, they have been increasing sharply again. Currently, consumption loans without collateral[4] are growing at a rate of more than 7 per cent a year. Loans for consumption represent 18 per cent of total household debt. In terms of interest expenses and debt service payments, consumption loans represent an even larger share of the total payments when compared to mortgages since their interest rates and amortisation rates are higher.[5]

FI makes the assessment that consumption loans have a limited impact on financial stability since they represent a relatively small portion of total lending. Consumption loans can still have a major impact on individual households, though, since these loans often have high interest rates and fees. They also have relatively short maturities, which means that a small loan could have a high monthly cost, albeit during a short period of time. There is also a risk that individual households will have trouble making their payments if they do not amortise, and instead extend or increase their loans, since the loan's costs increase. Borrowers who find it difficult to pay off their loans may also need to reduce their consumption. If a large number of borrowers need to reduce their consumption simultaneously, this could have an adverse effect on the economy.

The risks for both lenders and borrowers are influenced by whether the loan has collateral as well as by the objective of the loan. If the loan is collateralised, the lender can sell the collateral, limiting the credit loss and the borrower's negative equity. The purpose of the loan can also be of importance for the borrower. If the loan is used to renovate a home, the value of the home may increase. This compensates for the borrowing costs. If the loan instead is used to finance a trip, there is no collateral that can cover parts of the loan given a default. This can be of some importance if the borrower experiences financial difficulties.

PURPOSE AND DATA

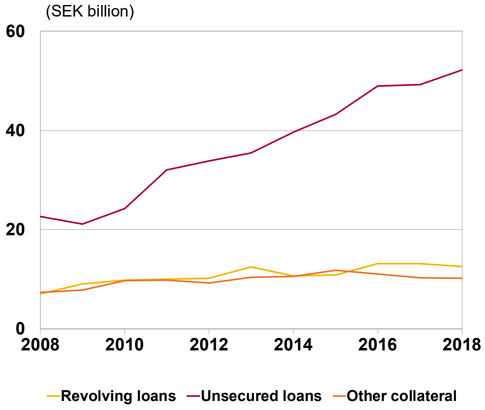
This report describes the market for consumption loans and the borrowers that took a new consumption loan. Its purpose is to increase the understanding for how these loans affect the borrower's finances and the economy at large.

4 Consumption loans without collateral follow Statistic Sweden's definition and refer to unsecured loans and revolving loans.

5 Under the assumptions that the mortgage rate is 2 per cent and the interest rate on consumption loans are 8 per cent, the interest expense for consumption loans is almost half of the households' total interest expenses. With amortisation payments, the consumption loans' share of the debt service payments is even higher.

Diagram 3. New lending by type of loan

(SEK billion)



Source: FI.

Note: The diagram shows new lending at the companies in FI's data.

Table 2. Number of borrowers and average size of the loan

(Number, SEK and SEK million)

		Unsecured	Revolving	Object
Number of	2017	14,000	129,300	5,700
	2018	17,400	334,300	4,900
Amount	2017	112,700	5,900	150,600
	2018	121,900	3,200	172,000

Source: FI.

Note: The table shows a sample of lenders that allows comparison between 2017 and 2018.

The gathered data consists of three parts:

- *Sample of individual loans (microdata)*: The sample includes loans that lenders issued May 15–May 24, 2018. After processing, the sample contains 381,334 households. The data in the sample includes, for example, information about the new loans, borrowers' income, total debt, contractual interest rates and other expenses.
- *Aggregate data*. FI has also gathered data about lenders' total lending of consumption loans. This data includes, for example, total lending volumes broken down by borrowers age and the size of the loan. The data stretches back in time to 2008.
- *Qualitative information*. Through a number of in-depth questions, the lenders have provided both general and detailed information. These questions relate to, for example, methods applied for creditworthiness assessments.

This is the second time FI conducts this type of analysis. This year's report also includes consumer credit institutions.[6] In total, FI has gathered data from 34 lenders.[7] Because there are more lenders in this year's data, the results are not always comparable with last year's report.

TYPES OF LOANS

The companies in the data have increased their lending by 103 per cent – or 7 per cent a year on average – since 2008 (Diagram 3). New unsecured loans have increased by 9 per cent a year, revolving loans by 6 per cent and loans with other collateral by 3 per cent.

Revolving loans

A revolving loan is a line of credit available to the borrower, for example through credit card purchases or purchases on credit online and in a physical store. More than half of the revolving loans in the data are purchases paid by invoice. Almost every third loan is a payment-plan purchase, and every eight is a credit card debt. The revolving loans not associated with a payment plan typically specify a minimum amount that must be paid each month, for example 1/24 of the drawn credit line.

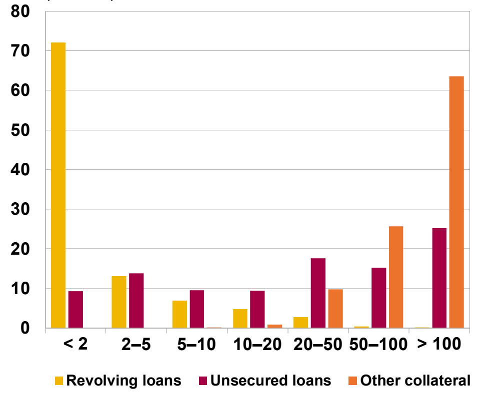
The data used for this report only includes revolving loans that have created a cost for the borrower, such as interest for payment-plan purchases, penalty interest, or reminder or late fees.

6 A consumer credit institution has permission according to the Certain Consumer Credit-related Operations Act (2014:275). FI and the Swedish Consumer Agency share the supervision of consumer credit institutions. FI is responsible for authorisation assessment and carrying out supervision of the firms' compliance with the provisions set out in the Certain Consumer Credit-related Operations Act and other provisions. The Swedish Consumer Agency carries out supervision of compliance with the Consumer Credit Act.

7 Together, the companies in the data represent 90 per cent of the volume of unsecured loans and 90 per cent of the volume of loans with collateral other than a home. The companies' total lending has increased by just over 130 per cent since 2008 and amounted to SEK 244 billion in 2018.

Diagram 4. Distribution of size (SEK thousand) by type of loan

(Per cent)



Source: FI.

Table 3. Borrowers by type of lender

(Year, SEK, per cent and months)

Lender	Age	Income	New loan	Debt	Interest	Maturity
MB	45	20,300	48,700	1,060,700	10	49
NB	44	23,200	49,700	670,700	12	49
OFC	44	21,200	27,200	39,300	15	40
SFC	39	15,800	1,700	7,500	12	23
CCI	37	18,400	8,000	59,600	90	16

Source: FI.

Note: Because there are large differences between the lenders, FI has broken them down into five groups: MB = major bank; NB = niche bank; OFC = object financing company; SFC = sales financing company; and CCI = consumer credit institution. Income is net income per consumption unit.

FI's sample includes approximately 344,000 borrowers with new revolving loans. The majority of these loans were smaller than SEK 2,000 (Diagram 4). Revolving loans represented approximately one-fourth of the loan volume in the sample (Table 1). Based on a comparable sample between the years, we find that more households took new unsecured loans and revolving loans in 2018 than in 2017 (Table 2). However, the average loan was SEK 9,000 and SEK 2,700 smaller, respectively. The opposite was the case for object financing; there were fewer borrowers in the data from 2018, but the average loan was more than SEK 20,000 larger than in the data from 2017.

Unsecured loans

An unsecured loan is an interest-bearing loan without collateral that has an agreed amortisation schedule and a pre-determined due date. The borrower can use unsecured loans to purchase goods or services and for housing (for example for the deposit or renovations). An unsecured loan can also replace several loans.

Unsecured loans are often large. The data contains around 30,000 borrowers with new unsecured loans, and the average size of the loan was just under SEK 80,000. Approximately every fourth unsecured loan was larger than SEK 100,000 (Diagram 4). The unsecured loans represented just over half of the volume in the data even though they constitute only 8 per cent of the number of loans.

Object financing – loans with collateral other than a home

Object financing is similar to unsecured loans in several respects, except that there is collateral (often a car).[8] Consumers can use both object financing and unsecured loans to buy large durables.

The data includes 6,800 households with new loans for object financing. More than 60 per cent of these loans were larger than SEK 100,000 (Diagram 4). The average loan was around SEK 162,000. Approximately one-fourth of the loan volume in the data consisted of loans with other collateral.

DIFFERENT TYPES OF LENDERS

Because there are large differences between lenders, we have broken them down into five groups. *Major banks* generally have a more comprehensive product range than other lenders and offer loans both with and without collateral. A *niche bank* is often specialised in one or several areas, for example consumption loans. An *object financing company* generally issues loans with collateral other than a home. *Sales financing companies* issue loans for the purchase of a good or service. *Consumer credit institutions* offer loans without collateral to consumers. They often lend smaller amounts for a short period of time, but some consumer credit institutions offer larger loans with longer maturities.

Major banks and niche banks on average issue the largest loans in the data (Table 3). Sales financing companies and consumer credit institutions on average have the youngest customers. These borrowers also have lower income. Consumer credit institutions' customers on

8 A loan for object financing can be offered in different ways. One example is a car loan. This loan is provided by the lender paying the car dealership for the car. The loan is then set up as an instalment credit between the borrower and the lender.

Table 4. Distribution of new borrowers by type of borrower and size of loan (SEK thousand)

(Per cent)

	MB	NB	OFC	SFC	CCI
< 2	0.0	3.0	0.6	42.7	1.9
2–5	0.0	2.6	0.8	8.0	2.7
5-10	0.3	2.5	0.5	3.0	1.5
10-20	2.6	2.6	0.2	1.5	1.0
20-50	2.2	3.0	0.1	0.1	0.4
50-100	1.2	1.8	0.1	0.1	0.0
> 100	2.0	2.9	0.3	0.0	0.0
Total	15.2	18.5	2.6	56.2	7.6

Source: FI.

Note: See the note to Table 2.

Table 5. Distribution of new lending, volume by type of lender and size of loan (SEK thousand)

(Per cent)

	MB	NB	OFC	SFC	CCI
< 2	0.1	0.1	0.0	1.6	0.1
2–5	0.4	0.5	0.1	1.3	0.6
5-10	1.1	1.0	0.2	1.1	0.7
10-20	2.1	2.0	0.2	1.1	0.8
20-50	3.9	5.2	0.2	1.3	0.6
50-100	4.9	7.1	0.4	0.5	0.2
> 100	26.0	31.8	2.5	0.3	0.3
Total	38.4	47.7	3.6	7.1	3.1

Source: FI.

Note: See the note to Table 2.

average pay significantly higher interest rates. The differences in interest rates and income between the major banks and the niche banks are small. The major banks' customers on average have the largest total debt.

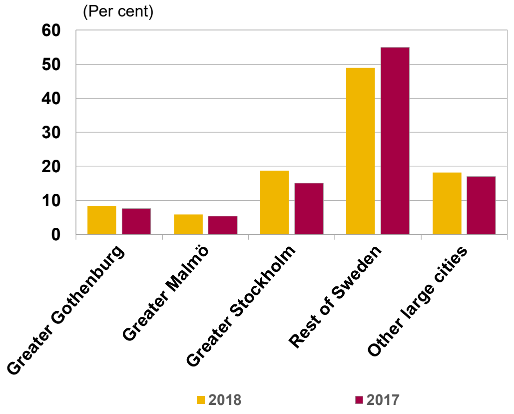
Sales financing companies represent half of the new loans (Table 4) but only 7 per cent of the loan volume (Table 5) in the sample. Major banks and niche banks each represent just over one-fifth of the loans. The major banks represent 38 per cent of the loan volume and the niche banks 48 per cent. The object financing companies and consumer credit institutions represent 4 and 3 per cent of the loan volume, respectively.

Borrowers

Borrowers with the highest income take the largest loans, and the large loans are growing the fastest. Borrowers with both mortgages and large consumption loans have the highest debt-to-income ratios and pay the largest percentage of their income in interest and amortisation payments.

Diagram 5. Geographic distribution

(Per cent)

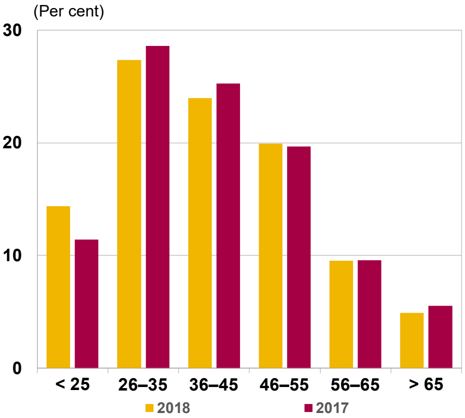


Source: FI.

Note: "Other large cities" are defined in Footnote 8.

Diagram 6. Age distribution in the sample

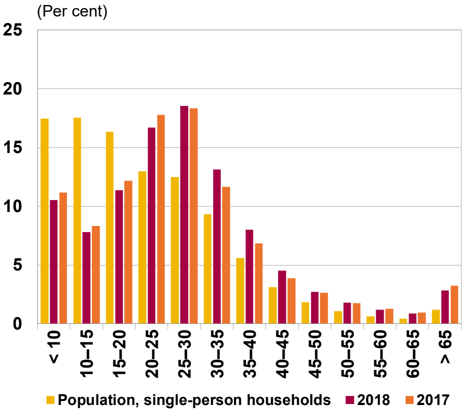
(Per cent)



Source: FI.

Diagram 7. Distribution of gross income

(Per cent)



Source: FI.

Note: Borrowers with reported income of SEK 0 are not included in the diagram.

One way to study the borrowers is to divide them into their geographic location. Borrowers living outside the metropolitan areas (Rest of Country) take more than half of the consumption loans (Diagram 5).[9] Gothenburg, Malmö and Stockholm together represent 35 per cent of the loans, which can be compared to the percentage of the Sweden population living in these regions, 40 per cent. The geographic distribution in the 2018 data is similar to the distribution in the 2017 data, but the share of new borrowers in Rest of Country is slightly higher, and the share in Stockholm is slightly lower.

Persons between 26 and 35 take the largest share of new consumption loans (Diagram 6). Almost two out of three new borrowers in the sample are younger than 46, and 6 per cent are older than 65. In the population, almost every fourth person is older than 65. Compared to the 2017 data, the share of borrowers under the age of 25 is slightly higher in the 2018 data.

BORROWERS HAVE HIGHER INCOME THAN THE POPULATION

Another way to group the borrowers is by income. The borrowers in FI's sample have on average higher income than Sweden's population. Around 97 per cent of the borrowers in the data have no co-signers.

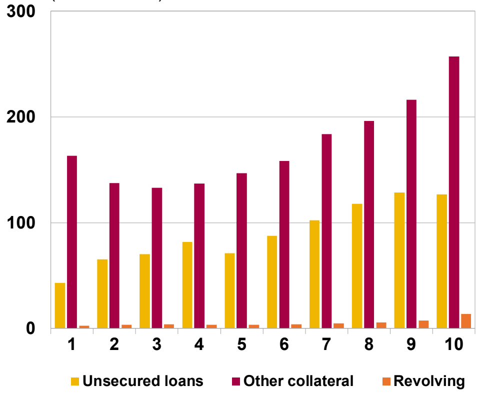
In the population, the most single-person households are found in the lowest income intervals (Diagram 7).[10] Half of the borrowers who took a new consumption loan have an income before tax of SEK 20,000–35,000 a month. If we disregard the borrowers with a reported income of SEK 0, approximately 11 per cent of the borrowers have an income of less than SEK 10,000 a month. There is also an additional 13 per cent of the borrowers with a reported income of SEK 0. This is a higher share than in last year's data, when 7 per cent had a reported income of SEK 0. Almost all of the loans issued to borrowers without income refer to loans from sales financing companies for less than SEK 2,000. The lenders state that some of these borrowers do not have an income, and in other cases the lender has not gathered this information. According to the Consumer Credit Act, the lender does not need to conduct a creditworthiness assessment under certain conditions: if the loan is interest-free, refers to a purchase on credit

9 The regions that are used are Greater Gothenburg, Greater Malmö, Greater Stockholm, Rest of Country 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. Rest of Country includes the municipalities that have not already been mentioned in the other categories. Eighty borrowers in the sample do not have a region.

10 Because almost all borrowers in the data do not have a co-signer, we compare their income to the income of single-person households in the population.

Diagram 8. Loans by income deciles and type of loan

(SEK thousand)

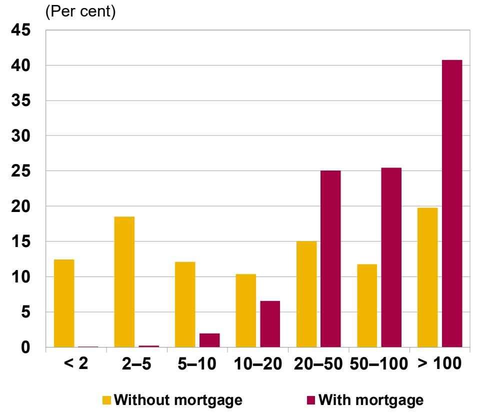


Source: FI.

Note: The distribution shows the average loan in the population for specified income deciles (income after tax per consumption unit). Deciles break the population down into ten groups of equal size. Households with a reported income of zero are excluded.

Diagram 9. Distribution of unsecured loans by new loans (SEK thousand) and mortgagors

(Per cent)

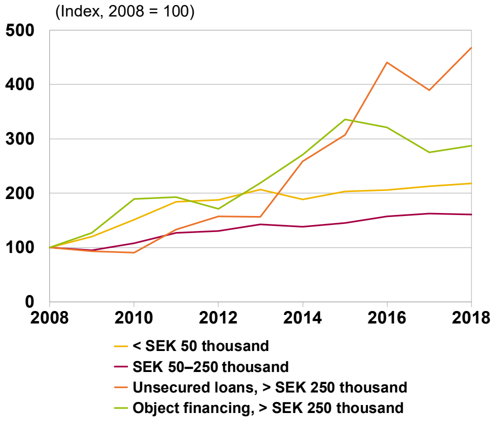


Source: FI.

Note: The diagram is based on data from 30,737 borrowers..

Diagram 10. New consumption loans by size

(Index, 2008 = 100)



Source: FI.

Note: The diagram shows new lending at the companies in FI's analysis broken down by size.

(invoice) that is to be paid within three months, and only is associated with a negligible fee. Furthermore, the loan may not be a high-cost loan.

Borrowers with the lowest income take smaller loans than those with higher income. Borrowers in the lowest income decile[11] take unsecured loans that on average amount to SEK 43,000 (Diagram 8). The average unsecured loan in the highest income decile is almost SEK 126,000. This is also the case for loans with collateral other than a home. Thus, there is a clear correlation between income and the size of the loan. This is good for both consumer protection and financial stability.

Low-income borrowers can also take large loans. Persons with a monthly income before tax of less than SEK 17,000 take almost 7 per cent of the loans that are larger than 100,000. The loan's average monthly payment for these borrowers is SEK 2,500 before interest deductions. This corresponds to just over one-fifth of their income after tax. Average maturity is almost seven years for these borrowers.

There are households that borrow from several institutions. FI's data only captures the loans households have with one lender. This means that we underestimate how much of their income some households spend to repay their debt. Then there are households where several income-earners share the expenses. For these households, we overestimate how much of their income they are spending on their debt service payments.

The new borrowers who already have a mortgage took 25 per cent of the unsecured loans and 53 per cent of the loans with collateral other than a home during the sample period.[12] Their unsecured loans are also often large (Diagram 9). Together, the borrowers with a mortgage represent 30 per cent of the volume of new unsecured loans and loans with collateral other than a home. The income level of more than 80 per cent of borrowers with a mortgage is above the median.[13]

LARGE LOANS ARE GROWING RAPIDLY

It has become more common to take out consumption loans. The volume of new loans for less than SEK 50,000 has almost doubled since 2008 (Diagram 10). This coincides with the increase in e-commerce and the more frequent use of revolving loans to finance online purchases.

It is not only small loans that have increased. The largest consumption loans have increased significantly more. 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. This increase has been particularly large the past five years, and it is related to the strong economy and low interest rates. House prices have also risen rapidly. Since FI introduced the mortgage cap in 2010, households may only

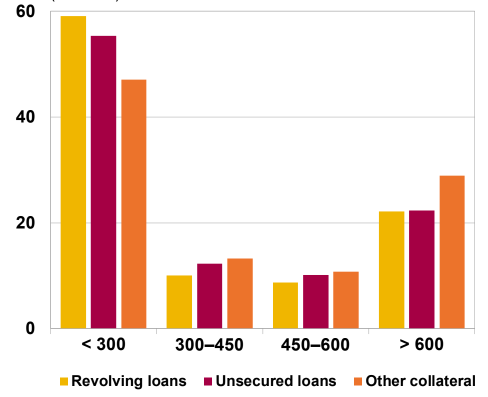
11 Deciles are created by dividing households into 10 equally large groups based on their income.

12 The lenders reported data about the existence of a mortgage (or not) for 30,737 of the borrowers. Approximately 13 per cent of this sample had a mortgage.

13 Approximately half of those who did not have a mortgage have an income that is above the median.

Diagram 11. Share of borrowers with specified DTI ratios by type of loan

(Per cent)

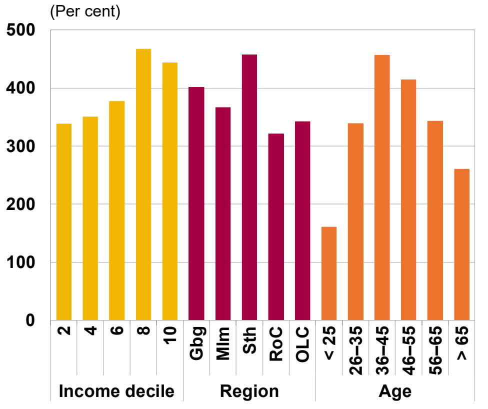


Source: FI.

Note: The DTI ratio is calculated using the borrower's total debt and income after tax. The calculations are based on data from 52,507 borrowers. Borrowers with DTI ratios that are 20 times larger than their income have been excluded.

Diagram 12. Average DTI ratio broken down into groups

(Per cent)



Source: FI.

Note: The income deciles are based on the population's income before tax. The DTI ratio is calculated using the borrower's total debt and income after tax. The regions are Greater Gothenburg (Gbg), Greater Malmö (Mlm), Greater Stockholm (Sth), Rest of Country (RoC) and Other Large Cities (OLC). The calculations are based on data from 52,507 borrowers. DTI ratios of more than 2,000 per cent are not included.

take a mortgage for 85 per cent of the value of the home. Demand for larger unsecured loans may have increased due to rising house prices and the mortgage cap. The amortisation requirements may have also impacted unsecured loans since an increase in mortgages affects the size of the debt that determines the monthly amortisation. Therefore, borrowers may sometimes prefer unsecured loans to an increase in their mortgage.

Large loans for object financing grew sharply between 2012 and 2015, but these loans then slowed slightly. Therefore, the amortisation requirements do not appear to have resulted in an increase in borrowers' car and boat loans.[14]

Borrowers who already had a loan have the highest debt-to-income ratios

The debt-to-income (DTI) ratio is a measure of a borrower's vulnerability. FI calculates the ratio in this report as the borrower's total debt divided by annual income after tax. A high DTI means that a large portion of the borrower's income goes to interest and, if relevant, amortisation payments. The average DTI in the sample is 364 per cent.[15]

The distribution of the DTI ratios does not differ much between the different types of new loans (Diagram 11). This is because it is whether or not the household already has a loan that, to a large extent, determines the size of the DTI ratio.

The average DTI ratios increase with income (Diagram 12). The DTI ratio in the metropolitan areas is higher on average than in other parts of the country. Stockholm has the highest DTI ratio.

Borrowers between the ages of 35 and 55 have the highest DTI ratios: on average 435 per cent. This is because they often have a mortgage. The average DTI ratio is lowest for the youngest borrowers, 160 per cent.

14 This could also be because some lenders offer unsecured loans instead of object financing when purchasing a car.

15 Lenders have reported both income and total debt for 52,507 borrowers.

IN-DEPTH-ANALYSIS – Mortgages and unsecured loans

Unsecured loans are used to buy goods and services, but they are also used for housing – for example, as part of the financing for the purchase or for renovations.

As a reference, we use the households that did not have any loans before they took out an unsecured loan. After the new loan, these households had a debt of almost SEK 70,000 on average (Table B1.1). Their debt service payments – interest rate and amortisation – amounted to 4 per cent of disposable income. Those that already had an unsecured loan and took out a new loan had a debt of SEK 347,000 on average. These households paid on average almost 20 per cent of their income.

Table B1.1 New loan, debt, monthly income after tax, DTI ratio and debt service ratio for previous loans

(SEK, SEK, per cent and per cent)

	Existing loan			
Unsecured:	**No**	**Yes**	**No**	**Yes**
Mortgage:	**No**	**No**	**Yes**	**Yes**
Percentage	41	33	3	22
New loan	22,700	110,500	124,300	120,600
Debt	68,300	346,700	2,148,100	2,138,100
Income	20,100	22,800	31,100	30,000
Debt-to-income ratio	28	125	600	602
Debt servicing	4.1	18.6	33.4	32.1

Source: FI.

Note: The table includes borrowers with unsecured loans and mortgages. Each cell shows (top to bottom) the total debt after the new loan, the household's income after tax, the DTI ratio and debt service payments (interest rate and amortisation) as a share of income.

Almost every second household that took out a new unsecured loan in 2018 already had a mortgage. Their total debt (after the new loan) was around SEK 2.1 million, and their DTI ratio was 600 per cent on average.[16] Almost one-third of their disposable income went to interest and amortisation payments. This has not changed since 2017. The monthly payments for those that took out a new loan in 2018 were approximately 4 percentage points higher than for those who took out a new loan in 2017.

16 It is common that mortgagers have co-signers. If we assume that every mortgage have two signers the average DTI ratio drops to just above 300 per cent.

Borrowing costs

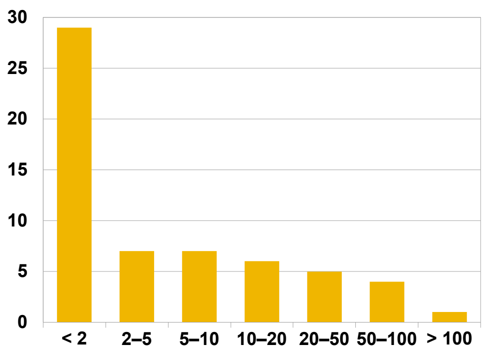
FI's data shows that almost every seventh loan has been used to pay off a previous loan. Most consumption loans are small, and many have a very high cost relative to their size. Small loans can worsen a situation for an already exposed borrower and, in worst case, be the start of a debt spiral. However, measured in SEK, a large loan costs more than a small loan. This is because large loans are associated with an interest expense over a long period of time.

Table 6. Average interest rate by size of loan (SEK thousand) and type of lender
(Per cent)

	Nominal interest rate		Effective interest rate	
Size of loan	CCI	Other	CCI	Other
0 – 2	99	10	1,446	12
2 – 5	47	13	15	15
5 – 10	50	12	238	16
10 – 20	32	9	70	12
20 – 50	10	8	14	10
50 – 100	7	7	8	8
>100	6	6	7	7
Total	38	7	463	8

Source: FI.
Note: "CCI" refers to consumer credit institutions and "Other" refers to other lenders in the data – major banks, niche banks and sales financing companies. The calculations are based on 19,030 and 36,841 borrowers with new unsecured loans, respectively. FI's sample refers to loans from the spring of 2018, i.e. before the new provisions regarding high-cost loans entered into force.

Diagram 13. Total costs by size of loan (SEK thousand), revolving loans
(Per cent)



Source: FI.
Note: The total costs refer to the first ten months of the loan.

COST IS DETERMINED BY INTEREST AND MATURITY

FI's data shows that both the nominal and effective interest rates are higher for small loans than large loans (Table 6). Loans from consumer credit institutions have significantly higher interest rates than loans at other lenders.

Small loans from consumer credit institutions have the highest nominal and effective rates in the data. Consumer credit institutions often offer small unsecured loans with short maturities. Their average unsecured loan is approximately SEK 8,500 and has a maturity of six months.[17] Because the repayment period is short, the lender charges a higher interest rate than other lenders. This is part of the business model – a lender can make money on a large loan over a long period time or on a small loan over a short period of time. In the latter case, the lender often applies a high interest rate. Some companies also sometimes offer loans with short maturity and high interest rate to customers who are considered to be riskier (for example households with a record of non-payment).

An interest-free loan can appear to be free to a consumer. However, interest-free loans often have different fees. Interest-free unsecured loans and loans with collateral other than a home are very unusual. In many cases, revolving loans are interest-free if they are paid back before the due date. The smallest reported revolving loans that had not been repaid on time have an average cost during the first ten months of almost 30 per cent of the loan (Diagram 13).

Annuity loans cost more than loans with straight amortisation.

Many consumption loans can be amortised straight or as an annuity. Straight amortisation means that the borrower amortises the same amount every month over the entire term of the loan. The monthly interest charge thus decreases over time since the loan gradually shrinks. An annuity loan instead means that the monthly amount is the same during the entire term as long as the interest rate is the same.[18] However, the distribution between interest rate and amortisation changes over time. At the beginning, the largest portion of the monthly cost is the interest payments. The share of the amortisation payments then increases over time.

17 The average unsecured loan at a major bank amounts to almost SEK 125,000 and has a maturity of approximately 82 months (7 years).

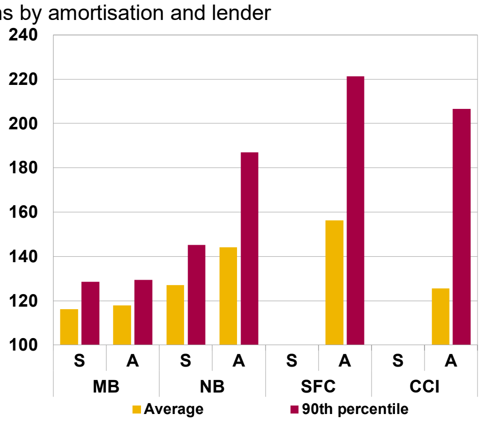
18 If the interest rate increases, the monthly cost can increase.

Table 7. Estimated cost (repayment) for an unsecured loan in FI's sample

	Annuity	Straight
Loans (SEK)	124,000	
Effective interest rate (%)	8.3	
Maturity (months)	93	
Total cost (SEK)	44,500	40,300
Total repayment (%)	136	133

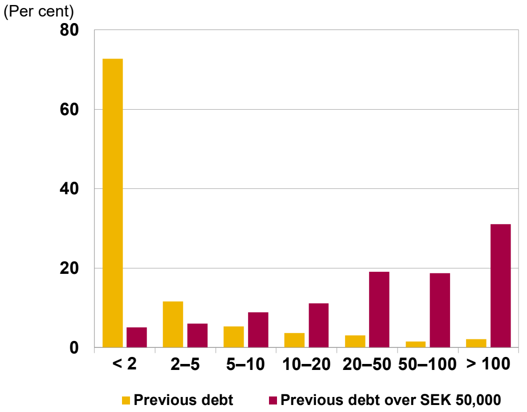
Source: FI.
Note: The calculations are based on 16,731 unsecured loans that have a reported effective interest rate. In the calculations, the assumption is made that all of these loans are repaid either through an annuity or straight amortisation.

Diagram 14. Total debt service ratio for unsecured loans by amortisation and lender



Source: FI.
Note: The diagram shows the average debt service ratio (interest plus amortisation divided by the size of the loan) and the debt service ratio for borrowers with a higher cost than 90 per cent of the borrowers. S stands for straight amortisation and means that the same amount is amortised every month for the entire term of the loan. A stands for annuity and instead means that the monthly amount is the same during the entire term of the loan.

Diagram 15. Share with previous debt at the company by size of loan (SEK thousand)



Source: FI.
Note: The calculations are based on data from 128,937 borrowers with data about a debt with the company.

Approximately 75 per cent of the loans with a reported type of amortisation in the data are annuity loans. Annuities are most common among loans that have collateral other than a home, and they often have a higher nominal rate than loans with straight amortisation. The average agreed maturity in the sample is 86 months (46 if we include consumer credit institutions) for annuity loans and 83 (77) months for loans with straight amortisation.[19]

Annuity loans have some advantages. For example, the monthly fee is fixed and lower than in straight amortisation for the first half of the term of the loan. However, annuity loans can be associated with risks.[20] If the loan is replaced with a new loan after a short period of time, the borrower has only amortised a small part of the loan. For example, the remaining debt is SEK 7,000 larger for annuities when a loan of SEK 124,000 with a 93-month term is renewed after two years.[21] After a renewal (to a new annuity loan), the share of the monthly fee that consists of interest increases.

However, since annuity loans often have a longer maturity than loans with straight amortisation, they have lower monthly costs than corresponding loans with straight amortisation. It therefore cannot be assumed that the borrower always prefers the lowest total repayment (total interest expense plus amortisation payments).

The agreed debt service payment – interest plus amortisation – for unsecured loans is on average lower at the major banks than at other lenders (Diagram 14). The debt service payments are highest for borrowers with an annuity loan from a sales financing company or a consumer credit institution. One out of ten of these borrowers pays back more than double the borrowed amount. The big difference between the average and the 90th percentile is due to maturity differences.

SMALL LOANS CAN BE THE START OF A HIGH LEVEL OF DEBT

Debt can build up by the borrower taking several small loans. More than 70 per cent of those that take an interest-bearing loan of less than SEK 2,000 already have an interest-bearing debt in the same company (Diagram 15). This means that the majority of new borrowers that take a small loan have at least two interest-bearing loans after the new loan. Those that already had a loan at a sales financing company normally took a small new loan. At other lenders, one out of eight borrowers that already has a loan takes a new loan larger than SEK 100,000. Building up debt in this way can lead in the long run to high levels of debt for the borrower. Approximately every fifth borrower who borrowers more than SEK 20,000 already has a loan of more than SEK 50,000 from the same company.

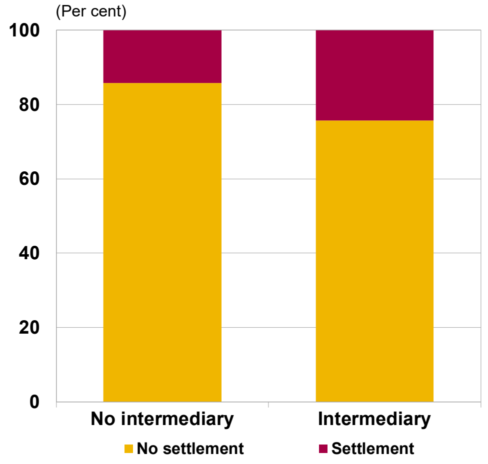
A borrower who already has small margins in his or her finances and use small loans to meet everyday expenses may experience problems paying of their debt. Small loans could therefore be a sign of debt

19 The figures in parentheses refer to the maturity including consumer credit institutions.

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

21 The figures are taken from the average unsecured loan with a specified type of amortisation in the data.

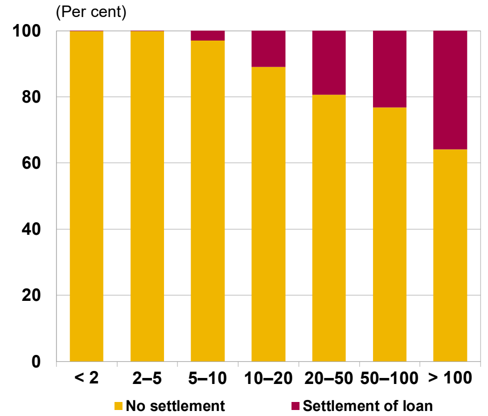
Diagram 16. Share of unsecured loans that refer to the settlement of previous loans



Source: FI.

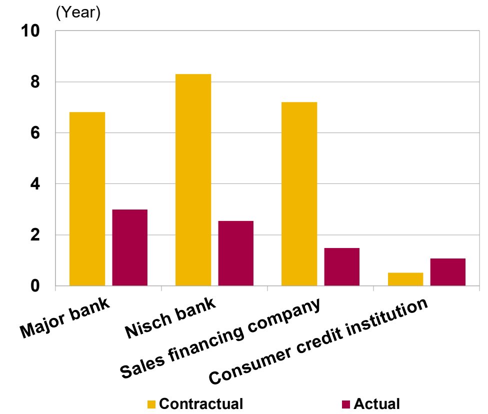
Note: The calculations are based on data from 10,618 borrowers.

Diagram 17. Share of unsecured loans used to settle loans, by size (SEK thousand)



Source: FI.

Diagram 18. Average maturity for unsecured loans



Source: FI.

Note: The data comes from the qualitative questions in FI's survey. It refers to unsecured loans paid during the period January 1–September 30, 2018.

accumulation[22], but it could also be a sign that the household already has a high level of debt or payment difficulties.

There is almost always unsecured loans that are used to pay off other loans.[23] FI's sample shows that 14 per cent of those that take unsecured loans do it to pay off existing loans (Diagram 16). Of the loans taken from a credit intermediary, approximately 24 per cent are used to pay of existing loans. There is a larger percentage of borrowers with large loans that pay off existing loans (Diagram 17).

In addition, it is common for the actual maturity to be shorter than the agreed maturity (Diagram 18). This is a sign that loans are being replaced by new loans. Prepayment can also be due to the borrower getting better conditions at another lender. For niche banks, the difference between agreed and actual maturity is almost 6 years, compared to 4 years at the major banks. For consumer credit institutions, actual maturity is approximately six months longer than the agreed maturity, which is an increase by a factor of two. This can be because the maturity of the loans was extended. Those that extend a loan at a consumer credit institution increase the debt on average from SEK 5,400 to SEK 12,000. The monthly payment for these borrowers is approximately the same as before the increase, which indicates that borrowers want to keep the same monthly payment. This is explained by the loans' maturity being extended on average from 5 to 27 months.

HIGH-COST LOANS

On 1 September 2018, new provision on high-cost loans went into effect.[24] High-cost loans are loans with an effective interest rate that is 30 percentage points higher than the reference rate.[25] High-cost loans are also subject to provisions regarding interest rate and cost caps[26].

FI's sample refers to loans from the spring of 2018, i.e. before the new provisions entered into force.

According to the interest rate cap, a lender may not charge a nominal interest rate higher than the reference rate plus 40 percentage points. This means in practice that the interest rate at the moment may not be higher than 39.5 per cent for a high-cost loan. According to the cost cap, the costs for the loan may not be larger than the size of the loan – a household that borrows SEK 1,000 should not need to pay back more than SEK 2,000. The purpose of the new provisions is to strengthen consumer protection and reduce the risk that this type of loan leads to over-indebtedness[27].

22 See the discussion about indebtedness in "Stärkt konsumentskydd på marknaden för högkostnadskrediter", SOU 2016:68.

23 The loans that are paid off can be different types of loans, for example instant loans, credit card debt or other unsecured loans.

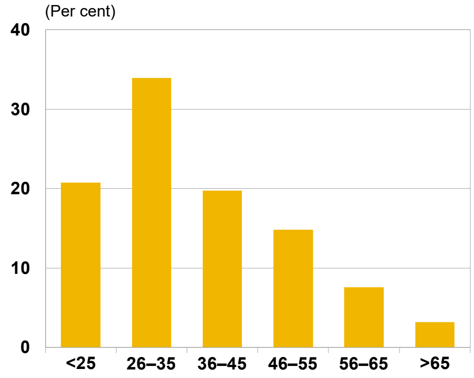
24 The provisions were implemented in the Consumer Credit Act (2010:1846).

25 The reference rate is fixed once every six months (1 January and 1 July) by the Riksbank. The reference rate corresponds to the Riksbank's repo rate at the end of the previous six months, rounded upward to the closest one-half percentage point. The reference rate was set at -0.50 per cent on 1 January 2019.

26 See sections 19a and 19b of the Consumer Credit Act (2010:1846)

27 "Stärkt konsumentskydd på marknaden för högkostnadskrediter" (SOU 2016:68)

Diagram 19: Age distribution, borrowers with new high-cost loans.



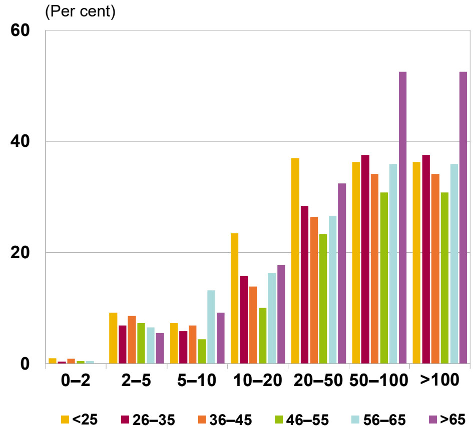
Source: FI

In FI's data, approximately 47 per cent of the unsecured loans and 1 per cent of the revolving loans can be classified as high-cost loans. These loans were issued primarily by consumer credit institutions and niche banks. All of the loans that are affected by the interest rate cap have been issued by consumer credit institutions. This corresponds to 27 per cent of all loans issued by consumer credit institutions. No unsecured loans or revolving loans from other lenders would have been affected by the interest rate cap.

Of the borrowers who took high-cost loans in 2018, 75 per cent are younger than 45 (Diagram 19). The corresponding figure for all borrowers in the data is 65 per cent. Around 85 per cent of the borrowers have an income before tax that is less than SEK 35,000/month. This can be compared to 75 per cent in the data.

FI also asked several qualitative questions as part of the data about how lenders changed their business models as a result of the new provisions. The lenders who implemented such changes state that they adapted their loans so as not to be subject to the definition of high-cost loan. For example, the companies have lowered the nominal interest rates, raised the minimum loan amounts, extended their maturities and introduced new types of invoicing fees and set-up costs. However, it also became apparent that companies opted to stop offering some loans since they no longer are considered to be profitable.

Diagram B2.1. Share of granted loans by size and age group



Source: FI.

IN-DEBT-ANALYSIS – Credit Intermediaries

A credit intermediary functions as a middleman between lenders and consumers who want to apply for a loan. The credit intermediary makes it possible for the consumer to compare loans from several lenders at the same time while only conducting one credit check. This can be positive for the customer since the number of registered credit checks often affects the borrower's creditworthiness. The downside is that there is a middleman that will need to be paid for his or her services. These costs are ultimately charged to the borrower.

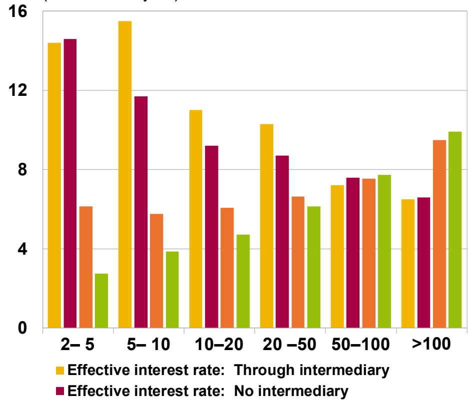
Small loans through intermediaries cost more

The share of loans granted through an intermediary increases with the size of the loan (Diagram B2.1). This is probably because the total cost for a loan that is less than SEK 50,000 is higher through an intermediary.[28] The higher cost is because the interest rate is higher and the maturity is longer (Diagram B2.2). This in turn can be due to the interest rate partly finances the intermediary's commission. The commission typically increases as the size of the loan increases, but relative to the loan it is higher for small loans. For loans that are less than SEK 5,000, the commission amounts on average to 15 per cent of the loan, and for loans larger than SEK 50,000 the commission is around 4 per cent. Unlike for small loans, the total cost for a loan that is larger than SEK 50,000 is slightly lower if the loan goes through a credit intermediary. This can be a sign that a credit intermediary contributes to better competition, which is positive for borrowers.

28 We compared the cost of unsecured loans at companies that issue loans both with and without intermediaries since intermediaries are used primarily for these loans. FI's analysis uses 21 credit intermediaries. Of these companies, 16 have granted between 20 and 80 per cent of their loans through intermediaries.

Diagram B2.2. Effective interest rate and maturity for granted loans by loan size

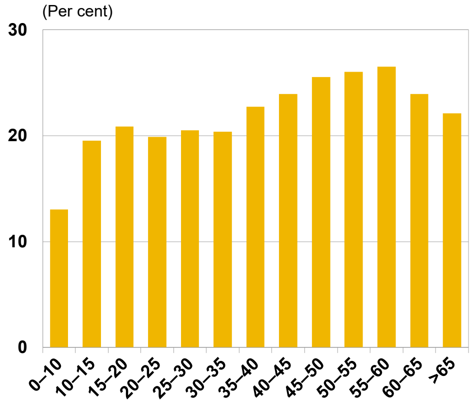
(Per cent and year)



Source: FI.

Diagram B2.3 Share of granted loans by income group

(Per cent)



Source: FI.

Use of intermediaries increases with income

The age distribution for the share of borrowers who used intermediaries for their loan is similar, but there are a few exceptions (Diagram B2.1). For larger loans, young borrowers use intermediaries with approximately the same frequency regardless of the size of the loan. Subsequently young borrowers use intermediaries more often (than other age groups) in the range where mediated loans are more expensive, that is SEK 10,000–50,000. In the other age groups, the share increases as the size of the loan increases. The oldest borrowers use intermediaries for more than half of the loans that are larger than SEK 50,000. The corresponding figure for the other age groups is between 30 and 40 per cent.

In FI's data, the share of mediated loans tends to increase with income (Diagram B2.3). Borrowers with a monthly income of between SEK 55,000 and SEK 60,000 have the largest share. This may be because they on average borrow larger amounts than those with lower income.

Borrowers' repayment ability

Large loans are more frequently preceded by a more thorough creditworthiness assessment than small loans. Every seventh loan resulted in a collection notice for the borrowers. This share is significantly lower for loans where the creditworthiness of the borrower was assessed through a discretionary income calculation. FI's stress tests indicate that many borrowers will spend more than half their income after tax on interest and amortisation payments. These borrowers may experience payment difficulties or be forced to reduce their consumption.

It is the lender's responsibility to determine if the borrower is able to handle the costs of a loan.[29] If a borrower has problems repaying his or her loans over a long period of time, this could result in losses for the lender and over-indebtedness for the borrower. The creditworthiness assessment is therefore important for both the lender and the consumer.[30] Lenders use the borrower's income, expenses, debt and assets, for example, to assess the repayment ability.

FI assesses the borrowers' resilience and repayment ability by stressing their monthly surplus through higher interest rates or income reduction.

METHODS IN THE LENDERS' CREDITWORTHINESS ASSESSMENTS

The data shows that the lenders use different methods in their creditworthiness assessments. Common methods are:

- The lender calculates discretionary income.[31]
- The lender gathers information about the borrower's income and debt (DTI ratio). The DTI ratio (together with the interest and amortisation payments) can be viewed as a simplified version of discretionary income, but it only considers income and debt service payments.
- The lender uses an internal or external method to classify the borrower's risk.

Several of the lenders combine different methods in their assessments. For example, a lender might both calculate DTI and discretionary income and conduct a credit check. Information that serves as a basis for a creditortiness assessment are obtained both directly from the consumer and from external sources, such as credit rating firms.

29 See the Consumer Credit Act (2010:1846). There are exceptions for some invoice loans (Section 4, point 1 of the Consumer Credit Act).

30 The Swedish Consumer Agency conducts supervision of the consumer credit institutions' creditworthiness assessment procedures.

31 In the discretionary income calculation, the lender deducts the household's expenses from its income. The calculation normally must show a surplus in order for the lender to approve the loan.

Table 8. Type of creditworthiness assessment by type of lender

(Per cent)

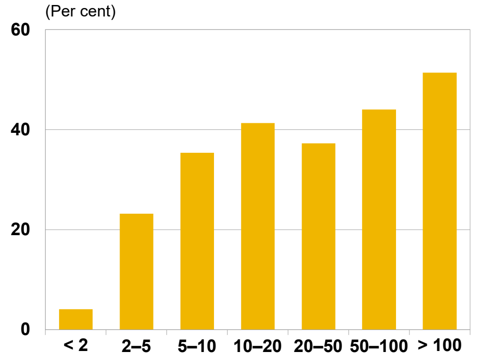
	DIC	DTI ratio	Risk grade	None
CCI	95	99	29	0
NB	11	92	94	5
OF	97	98	100	0
MB	75	99	94	0
SFC	0.1	76	99	1

Source: FI.

Note: The risk classification can be either internal (by the company) or external. DIC is discretionary income calculation.

Diagram 20. Share of borrowers with discretionary income calculation in specified loan intervals (SEK thousand)

(Per cent)



Source: FI.

Note: The bars show the share of borrowers in each interval where there is a discretionary income calculation.

Discretionary income calculation is most common for larger loans

The majority of the loans at major banks, object financing companies and consumer credit institutions have been preceded by a discretionary income calculation (Table 8). Such a calculation is used primarily for unsecured loans and loans with collateral other than a home. However, different lenders conduct different discretionary income calculations. It can therefore be difficult to fairly compare the borrowers' financial circumstances. Some lenders look at the borrower's income, interest rate and amortisation payments on all loans, other actual housing expenses and average subsistence costs.[32] Other lenders use, for example, the Swedish Consumer Agency's standardised subsistence costs, debt with the lender in question and the primary borrower's income in their discretionary income calculation.

There is a clear correlation between the size of the loan and how common it is for the lender to calculate the borrower's discretionary income (Diagram 20). If the loan is between SEK 2,000–5,000, the discretionary income is calculated in 20 per cent of the cases, and if the loan is larger than SEK 100,000, the discretionary income is calculated for more than half of the borrowers.

Total debt and calculation of DTI ratio.

Some lenders assess the borrower's repayment ability by calculating the DTI ratio. A borrower with a low DTI is normally less sensitive to interest rate increases and is therefore considered to be more resilient than a borrower with a high DTI ratio. For a majority of the loans, the major banks and niche banks have enough information to be able to calculate the borrowers' DTI ratios. Of the borrowers with loans of more than SEK 100,000, and for which the lender does not calculate discretionary income, 89 per cent have a reported DTI ratio. Of the loans that have a reported DTI ratio, the lender in almost all of the cases has had information about the household's total debt at the time of the credit decision.

FI's data shows that there are lenders that do not have any information about the household's total debt. This information is missing primarily for loans smaller than SEK 10,000. In addition, some lenders do not gather information about, for example, school loans.

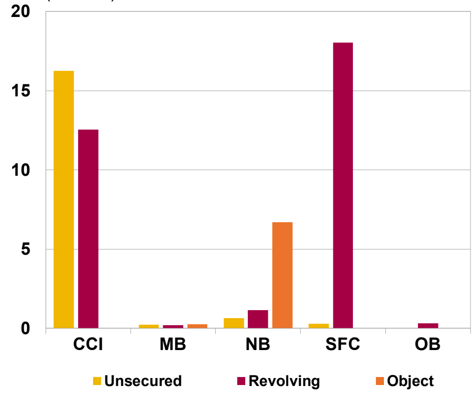
Methods for risk classification

Most lenders supplement their discretionary income or DTI ratio calculations with internal or external methods of risk classification, but some lenders use only a risk classification. The methods are normally based on information from the borrower (for example postal code and the number of credit checks) and calculate the probability that the borrower will not be able to repay the loan. The borrower is assigned a risk grade that helps the lender assess the borrower's creditworthiness. All lenders have assigned almost all their borrowers to a risk grade (Table 8).

32 See Finansinspektionen (2019), "The Swedish Mortgage Market".

Diagram 21. Share of borrowers with collection notice during the early months of the loan

(Per cent)

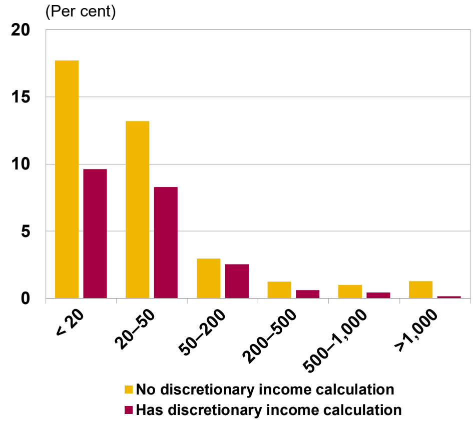


Source: FI.

Note: For revolving loans, the collection notice was issued during the first ten months of the loan. For other types of loans, the collection notice was issued during the first five months of the loan.

Diagram 22. Share of borrowers with collection notice during the sample period for specified sizes of the borrower's total debt (SEK thousand)

(Per cent)



Source: FI.

Credit checks

Lenders often use credit checks in their creditworthiness assessments. A credit check can contain, for example, information about the borrower's income, debt, and any records of non-payment. However, a credit check does not necessarily include all of the loans a consumer has since not all lenders report debt information to the credit rating firms. Also, not all credit rating firms provide information about borrowers' debt. The credit rating firms' registers are furthermore not always updated in real time.

Every seventh loan resulted in a collection notice

Reminders and collection notices may be signs that a borrower is having difficulty repaying a loan.[33] In total, more than 15 per cent of all loans in the sample resulted in a collection notice for the borrower (Diagram 21).[34] The number of reminders varies significantly between different types of loans and lenders. For unsecured loans, approximately 17 per cent of the borrowers received at least one reminder during the first five months of the loan. For revolving loans, this figure was 55 per cent during the first ten months of the loan. The high percentage can in part be due to FI only including revolving loans that entailed a cost for the borrower, such as a reminder fee. It is more common for borrowers that took a loan from a sales financing company or a consumer credit institution to receive a payment reminder.

Collection notices are also more common for loans taken from these institutions. More than every sixth borrower that took an unsecured loan from a consumer credit institution has received a collection notice. The share is slightly higher for those that took a revolving loan from a sales financing company. This is a sign that many borrowers could be experiencing problems repaying their loans. Of the unsecured loans that have resulted in a collection notice, 0.4 per cent were registered with the Swedish Enforcement Authority within the first five months. The corresponding figure for revolving loans is 1 per cent during the first ten months. However, in order to be registered with the Swedish Enforcement Authority within five months (ten months for revolving loans) of issuance, the borrower must have deviated from the payment plan already in the early months. FI has no information about these loans after these months. Therefore, more borrowers may have received collection notices, and more loans may have been turned over to the Swedish Enforcement Authority.

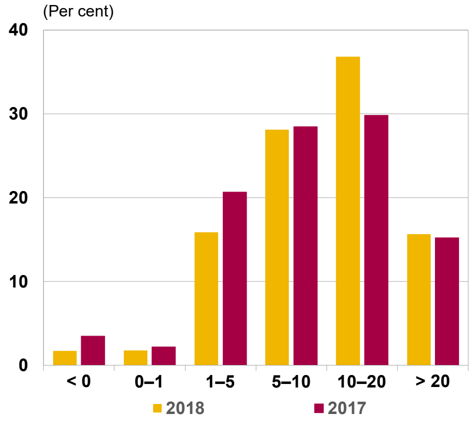
The share of borrowers with collection notices decreases with the borrower's total debt (Diagram 22). This could be because borrowers with a high level of debt normally use e-invoices and automatic withdrawal, but it could also be because the extra costs (through penalty interest) are often larger if payments are not made on a larger loan. The share with collection notices also decreases with the size of the new loan and the age of the borrower. However, this share is not affected much by the borrower's income.

The creditworthiness assessment affects the share of borrowers who later receive collection notices. Just over 16 per cent of borrowers

33 Registered debt with the Swedish Enforcement Authority and records of non-payment are also signs of an impaired repayment ability. Such information is not included in the data.

34 These loans account for 15 per cent of the total lending volume in the sample.

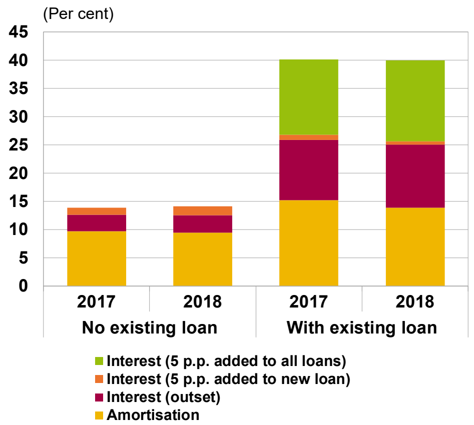
Diagram 23. Distribution of households into specified monthly surplus intervals (SEK thousand)



Source: FI.

Note: Adjusted monthly surplus can be created for 37,441 borrowers in 2018 and 16,242 borrowers in 2017. Households with reported discretionary income of exactly 0 have been excluded.

Diagram 24. Debt service payments as a share of disposable income



Source: FI.

Note: The diagram shows interest rate expenses and amortisation payments relative to disposable income. The calculations for 2017 include 21,519 households and for 2018 41,277 households.

with a new loan where the lender did not calculate discretionary income received a collection notice. The corresponding share for those who underwent a discretionary income calculation is 5 per cent. With all probability, a thorough creditworthiness assessment reduces the risk for repayment problems.

FI'S ASSESSMENT OF BORROWERS' RESILIENCE

FI stresses the borrowers' monthly surplus to see how strong their resilience is to weaker economic conditions, for example interest rate increases and loss of income. The stress tests include the borrowers that have complete information about surpluses, total loans and income.[35] This information is available for one in three loans larger than SEK 20,000.[36] FI has initially adjusted the reported discretionary income values for differences between the interest rates the lenders use in the calculation and the actual rates.

The average surplus for new borrowers is currently SEK 14,500 per month. Even if the margins on average appear to be good, surpluses are low for a large share of borrowers. Approximately 16 per cent of the borrowers have a surplus of less than SEK 5,000 per month after necessary expenses (Diagram 23).

Costs given a stressed interest rate

Borrowers who did not already have a loan when they took the new loan spent on average 13 per cent of their income after tax on interest and amortisation payments (Diagram 24).[37] This is approximately as much as in the 2017 data. Borrowers who already had an existing loan spent on average one-fourth of their income on interest rate and amortisation payments on both the new loan and previous loans combined. Amortisation payments represented the largest share of the monthly payments for those who did not already have an existing loan and more than half of the payments for those who already had a loan.

If the interest rate increases by 5 percentage points, the monthly payment increases on average by 1 per cent of income for those who did not already have a loan. For new borrowers who already have a loan, the new loan increases the monthly payments on average to 40 per cent of the disposable income. Just under one percentage point is due to the new loans.

Some countries regulate the debt service ratio (interest and amortisation payments in relation to disposable income). For example, Estonia has limited the ratio to 50 per cent.[38] Among borrowers in the

35 FI starts with the discretionary income surplus and then uses total loans to calculate the change in the surplus if the interest rate increases. FI uses the borrower's income in the same way to simulate a loss of income.

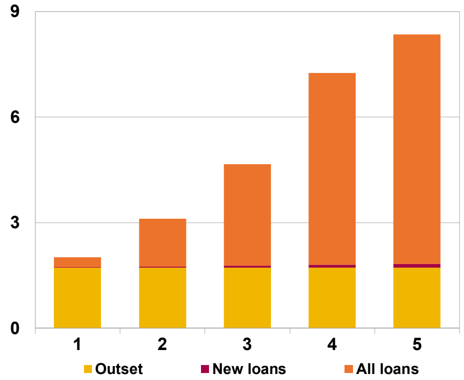
36 There is data for 55 per cent of unsecured loans, 31 per cent of loans with collateral other than a home and 7 per cent of revolving loans. In the stress tests, FI assumes that these borrowers represent all those who have taken a new large consumption loan. In order to be able to compare the results with last year, we use the same types of lenders as we did one year ago.

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

38 Other countries that have set a cap for their debt service ratio include Japan (30 per cent) and the Netherlands, where the ratio is dependent on income and the interest rate. Poland

Diagram 25. Share of borrowers with a deficit given an increase in the interest rate

(Per cent)

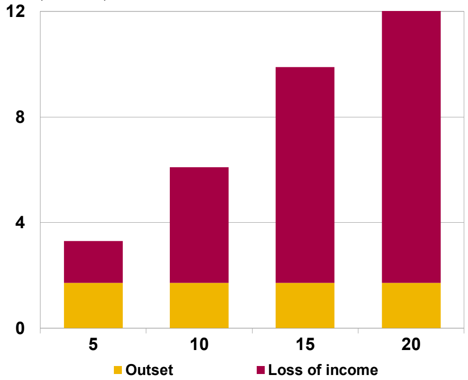


Source: FI.

Note: The X axis shows the increase in the interest rate in percentage points. The calculations are based on data from 37,441 borrowers.

Diagram 26. Share of borrowers with a deficit given a loss of income

(Per cent)

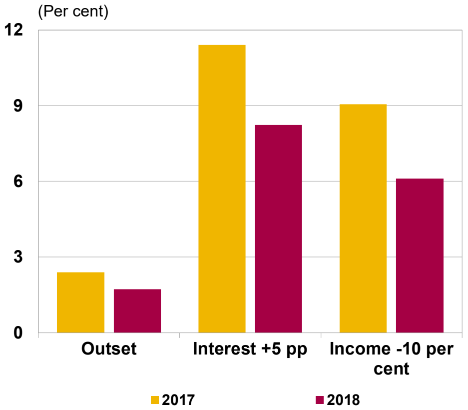


Source: FI.

Note: The X axis shows the loss of income in per cent. The calculations are based on data from 37,441 borrowers.

Diagram 27. Share of new borrowers with a deficit following a stress

(Per cent)



Source: FI.

Note: Monthly surplus calculated for 37,441 borrowers in the 2018 data and 16,242 borrowers in the 2017 data. Households with reported discretionary income of exactly 0 have been excluded.

data who already had a loan, 8.5 per cent have a debt service ratio of more than 50 per cent at the current interest rate. If the interest rate increases by 5 percentage points, every fourth borrower who already has a loan has a ratio of more than 50 per cent. This indicates that many borrowers could have problem making their payments when the interest rate increases, and even more would need to cut back on their consumption. This in turn could have an impact on real economic development.

Deficit at higher interest rate

FI's stress test shows how many borrowers would have a deficit if the interest rate were to increase by 1 to 5 percentage points. The increase is added both to the new loan and to all of the borrower's loans. At the outset, 1.5 per cent of the borrowers had a deficit. When the current interest rate is raised by 5 percentage points, a total of 8.3 per cent of the borrowers have a deficit (Diagram 25). The new loans contribute only marginally to the share that have a deficit.

Deficit following loss of income

Just like when it stressed the interest rate, FI also calculated how many borrowers would have a deficit if they had a loss of income. A loss of income of 10 per cent results in a deficit for 6.1 per cent of the borrowers in the calculation (Diagram 26). If income drops by 20 per cent, this share increases to more than 14 per cent. The share with a deficit falls with the borrower's income.

Stress tests indicate slightly lower risks in 2018

As a whole, the stress tests show that the share of borrowers who could experience financial problems increases in a stressed scenario. Even those with good margins could experience an increase in their debt service payments in relation to income. This may mean that they need to cut back on their consumption.

Households that took a new consumption loan in 2018 are less vulnerable than those that took a new loan in 2017.[39] In the data from 2017, 2.4 per cent of households had a deficit at the outset compared to 1.7 per cent in 2018 (Diagram 27). Given an increase in the interest rate of 5 percentage points, 8.3 per cent of those that took a new consumption loan in the 2018 data would have a deficit. The corresponding share was 11.4 per cent in the 2017 data. The new borrowers in the 2018 data are also a little more robust to a loss of income. Approximately 6 per cent would have a deficit if their income dropped by 10 per cent. This is 3 percentage points lower than in the 2017 data. If unemployed, one-third of the borrowers would have a deficit.[40] In the 2017 data, the corresponding figure was 47 per cent. The slight increase in resilience among borrowers that took a new loan in the 2018 data compared to the 2017 data is because those with a small surplus have slightly higher income and borrow a bit less. When considering all borrowers, the differences between the years are smaller.

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and Hungary have limits on loans in foreign currency. See also "OECD Economic Outlook: November 2017", 2017:2, OECD Publishing, Paris.

39 All differences presented in the report are statistically significant at the one-per cent level.

40 If a borrower becomes unemployed, income decreases by 20 per cent with a cap of around SEK 15,000/month after tax. We assumed that no borrowers have income insurance.

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