

## Summary

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High-cost short-term credits (HCSTC) are defined as unsecured consumer loans with an effective rate that is at least 30 percentage points higher than the reference rate. These credits were previously called micro loans. They are normally between SEK 500 and SEK 20,000 and often have a short maturity.

To strengthen consumer protection and reduce the risks for overindebtedness, the Government has introduced a number of measures to combat HCSTCs – for example, an *interest rate cap* for the nominal interest rate corresponding to the reference rate plus 40 percentage points and a *cost cap* limiting the total costs of the loan to the amount of the loan. These measures entered into force on 1 September 2018. This FI Analysis is an initial analysis of the reform.

The number of new HCSTCs decreased sharply following the reform. The reform has probably played a large role in this decrease by reducing the supply of HCSTCs. It is also evident that several companies have stopped offering such credits.

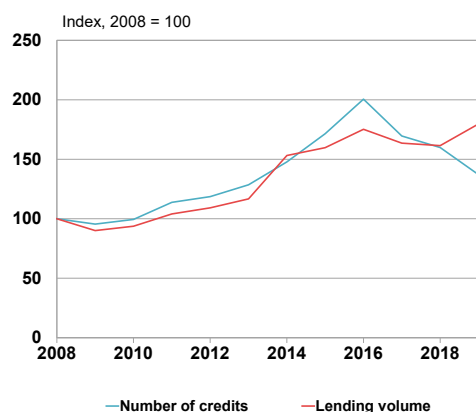
The interest rate cap has had a normative effect. More than 96 per cent of the new HCSTCs in 2019 had a nominal interest rate of between 38 and 39.5 per cent. No new loans were issued in 2018 within this span. The cost cap, in turn, has most likely not had much of an impact on new lending at the time the contract is signed since only 1.5 per cent of the borrowers were above the cost cap before the reform was introduced. However, the cost cap can limit costs that can accrue in conjunction with payment problems.

Those affected by the reform borrowed almost 7 per cent more in 2019 than they would have borrowed without the reform. This is probably due to the borrowers asking for larger loans since interest rates are lower. However, even though they are borrowing more, their borrowing cost on average decreased 15 per cent as a result of the lower interest rates. Primarily small credits and credits to low-income borrowers and young borrowers decreased as a result of the reform.

All unsecured loans are not HCSTCs. The total impact on new unsecured loans is therefore smaller than for new HCSTCs. In total, new lending of unsecured loans under SEK 50,000 decreased by almost one-fourth.



Diagram 1. Lending from companies offering HCSTCs



Source: FI.

Note: The calculations are based on companies in the consumer credit survey in 2019 that reported aggregate data for the years 2008–2019.

## HCSTCs are small and expensive

High-cost short-term credits (HCSTCs, previously called microloans) have been offered in Sweden since 2006. The product typically consists of unsecured loans to consumers amounting to between SEK 500 and SEK 20,000 with a term of between 30 and 300 days. The effective interest rate<sup>1</sup> has historically ranged from one hundred to several thousand per cent.<sup>2</sup>

The number of credits from companies that had at least 25 per cent HCSTCs in their unsecured lending in 2018 doubled between 2008 and 2016 (see Diagram 1).<sup>3</sup> The number of credits has decreased since then, but the lending volume from these companies has continued to increase. In 2019, it was 80 per cent larger than in 2008.

When the current Consumer Credit Act<sup>4</sup> entered into force in 2011, Parliament decided that it should also cover credits smaller than EUR 200 (the equivalent of around SEK 2,000). As a result, microloans were subject to the same regulations as other loans. However, Finansinspektionen (FI), the Swedish Enforcement Authority and the Swedish Consumer Agency have thereafter repeatedly noted that there are still risks associated with HCSTCs and that the Consumer Credit Act's rules are insufficient from a consumer protection perspective (see, for example, Kronofogden, 2012, Konsumentverket, 2013a and 2013b, and Finansinspektionen, 2014). To create a better consumer credit market, the Government introduced requirements in 2014 that companies issuing credits to consumers must apply for authorisation from FI. Previously, they had only needed to register with FI.

In order to investigate the need for additional enhancements to consumer protection and reduce the risks associated with overindebtedness, the Government appointed an inquiry in 2015 (see Regeringen, 2015). The inquiry suggested several measures that targeted HCSTCs, including a cap for the nominal interest rate and a cap for the total costs. Following a decision by Parliament, a number of new provisions in the Consumer Credit Act entered into force on 1 September 2018 (see Regeringen, 2018).

This FI Analysis studies the impact of these provisions. We start by describing the new provisions for HCSTCs. We then use FI's data of individuals with new consumer credit to estimate the effects of the reform.

## New provisions for HCSTCs

An HCSTC is a consumer credit where the effective interest rate is at least 30 percentage points above the reference rate (see the Fact Box: Terms and Definitions).<sup>5</sup> The effective interest rate consists of the nominal interest rate – normally called the credit's interest rate – and

### Fact Box: Terms and definitions

*The nominal interest rate* is a cost for a credit. It consists of a percentage of the credit and is expressed as the annual cost in per cent.

*The effective interest rate* also takes into consideration costs other than the nominal interest rate, such as set-up and payment notification fees and ongoing instalments during the term of the credit.

The effective interest rate is a measure of how much a credit costs. Another measure of the cost is *total cost during the term of the credit*. Lenders are obligated to provide information about both the effective interest rate and total cost.

A credit is defined as a *high-cost, short-term credit (HCSTC)* if the effective interest rate is more than 30 per cent plus a reference rate and does not refer primarily to a purchase on credit. *The reference rate* is the repo rate for the previous six months of the calendar year rounded upward to the nearest half percentage point.

On 1 September 2018, new provisions were issued for HCSTCs: the nominal rate may not be higher than 40 per cent plus the reference rate and the total cost may not be higher than the original credit. The first restriction is called *the interest rate cap* and the second *the cost cap*.

1 The effective interest rate does not only consider the nominal interest rate. It also considers other costs, such as set-up and payment notification fees.

2 See SOU 2016:68, page 124.

3 This does not mean that HCSTCs doubled, but it gives an indication of the trend for HCSTCs.

4 See Regeringen (2010).

5 The reference rate corresponds to the Riksbank's repo interest rate at the end of the previous six months rounded up to the closest half percentage point.

other costs, for example set-up and payment notification fees. Since the reference rate was -0.50 per cent when the provisions were introduced in 2019, all loans with an effective rate of at least 29.5 per cent were HCSTCs according to the definition.

## INTERNATIONAL OVERVIEW

Research from the US shows both advantages and disadvantages associated with HCSTCs (see Campbell et al., 2011).<sup>6</sup> These types of credits can be useful for households that experience negative events. For example, households that used HCSTCs in conjunction with catastrophes have to a large extent avoided being forced to sell their property (see Morse, 2011). An interest rate cap also restricts households' access to liquidity, which can have a negative impact on their economic situation (see Zinman, 2010). In contrast there is research showing that HCSTCs can be harmful to the borrower. For example, the use of HCSTCs is linked to payment problems (see Meltzer, 2010). Furthermore, it is more common for those who used an HCSTC to enter into personal bankruptcy than those who did not take such a credit (see Skiba and Tobacman, 2019).

There are other countries in the EU that implemented measures similar to those that Sweden implemented. In one EU study, which is presented in SOU 2016:68, an interest rate cap in general leads to a decrease in the access to credits. The study also shows that it is primarily credits with the highest costs and credits often taken by consumers with lower creditworthiness that are disappearing from the market.

For example, in Finland, there is evidence that an interest rate cap (based on the effective interest rate) is having a slow-down effect on their equivalent to HCSTCs. After introducing an interest rate cap of 50 per cent in 2013, both the number of granted credits and costs for these credits have fallen. Research also shows that the repayment period for these credits has increased since the interest rate cap (see Eduskunta, 2018).

In September 2019, the interest rate cap in Finland was lowered to 20 per cent (see Konkurrens- och konsumentverket, 2019a). The new interest rate cap is based on the nominal interest rate, and the regulation now applies to all consumer credit. The reason for the change was in part that the first interest rate cap did not reduce debt problems to the desired extent. An interest rate cap that applies to all consumer credit also is also more difficult to circumvent. A cost cap was also introduced at the same time (see Konkurrens- och konsumentverket, 2019b).<sup>7</sup> According to the cost cap, costs in excess of the nominal interest per day may not exceed 0.01 per cent of the credit amount. Costs other than the interest rate may also not be larger than EUR 150 per year.

In Great Britain, so-called payday loans have fallen by more than half since this market was regulated. There has been an interest rate cap and cost cap for HCSTCs since 2014. This includes credits that must be paid back within 12 months and have an effective interest rate of

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<sup>6</sup> This research refers to payday loans that, like Swedish HCSTCs, are often small and expensive.

<sup>7</sup> On 1 July 2020 a temporary measure was introduced until the end of the year due to the coronavirus. The interest rate cap was lowered further to at the most 10 per cent, and direct marketing of consumer credits was banned.

100 per cent or less. In all, the cost for the credit may not exceed 0.8 per cent of the borrowed amount per day. The regulation also includes late fees, which may not be higher than the original credit rate. An absolute cost cap was also introduced that, like the Swedish cost cap, entails that the consumer will never need to pay back more than twice the original credit amount.

### THE SWEDISH INTEREST RATE CAP

The nominal interest rate for HCSTCs has historically been high compared to other unsecured loans. To limit the interest rate, an interest rate cap is an important part of the new provisions for HCSTCs. The Swedish cap for the *nominal* interest rate for HCSTCs is set as the reference rate plus 40 percentage points. This means that the cap was 39.5 per cent when it was introduced. The justification for the level of the interest rate cap was that the entire market for HCSTCs would be affected at the same time as would be margins in relation to other companies issuing unsecured loans. The inquiry considered 40 per cent to be a reasonable level.

The aim of the interest rate cap is to limit the borrowing cost without banning HCSTCs. It aims primarily to benefit consumers facing a high risk of having payment problems (see Regeringen, 2018).

### THE SWEDISH COST CAP

There is also a cost cap linked to the reform. This cap states that the cost for an HCSTC may not be larger than the amount of the credit. The costs include, in addition to the nominal interest rate, set-up fees and payment notification and collection fees.<sup>8</sup> This means that the total payments (including amortisation payments) during the term of the credit may not be more than twice the original credit amount. The total cost for the loan is determined by the mentioned costs and the maturity. This means that the cost cap places direct restriction on these variables. However, the cost cap also means that the borrower's costs will stop growing after they reach the cap. These costs refer to not only contractual costs but also late fees and additional costs related to the Collection Fees Act that may accrue. Prior to the reform, there was no limit to how high these costs could be.

According to SOU 2016:68, a cost cap would not influence the conditions for existing credit products on the market. The majority of the companies that offer HCSTCs are far from the cost cap at the time the contract is signed. The cost cap is instead intended to limit the lender's possibility for compensation if repayment is delayed. The aim of the provision, in other words, is to protect consumers who have payment problems from rapidly growing costs that could mire them down in indebtedness. The cost cap also gives the consumer information about how expensive a credit can be if they were to have payment problems.

### OTHER PROVISIONS

In addition to the interest rate cap and the cost cap, which directly influence the borrower financially, the reform also includes a number of additional changes. One of these changes is that full or partial stand-alone credits are no longer covered by the exemption from

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<sup>8</sup> Costs related to any legal proceedings are not included.

credit assessments (see Regeringen, 2018).<sup>9</sup> In addition, the lender may only extend the maturity of an HCSTC once. The lender may be exempted from this provision if the extension does not entail additional costs for the consumer or if the extension is necessary for the borrower to be able to pay back the credit. The lender must also inform the borrower that the loan is an HCSTC.

The reform also introduced an information requirement in the marketing of HCSTCs, as was a provision on moderate marketing of credits in general.

### EXPECTED IMPACT OF THE REFORM

One aim of the Swedish reform was to reduce the risk that consumers take loans they cannot pay back. The proposals were also expected to protect consumers by preventing debt from growing past a certain level. This would increase the consumer protection and reduce the risk of overindebtedness (see SOU 2016:68).

The inquiry asserted that the interest rate cap could result in the lender replacing HCSTCs with other expensive products, such as bank overdrafts or credits with longer maturities. The inquiry also took the position that the reform could reduce the size of the market for HCSTCs by some companies opting to terminate these activities due to reduced income. There was also cause to believe that lenders would be more thorough in their credit assessments since it would be more difficult for them to cover any credit losses.

Overall, the Government expected the reform to contribute to a more responsible market for high-cost short-term credits.

## Evaluation of the reform

We study first the developments on the HCSTC market after the new provisions entered into force. We then analyse the specific impacts of the interest rate cap and the cost cap. In conclusion, we estimate how the reform has influenced the issuance of unsecured loans in general and HCSTCs in particular.

We carry out this analysis using data from FI's surveys of new consumer credit borrowers. The surveys contain information about, for example, borrowers' income and new credits. FI conducted one survey in May 2018 and one in May 2019. This means that we have information about new credits and borrowers both before and after the reform. It is possible that some lenders had changed their credits already before the new rules were introduced (see Finansinspektionen, 2019). Therefore, it is possible that the calculations to some extent underestimate the impact of the reform.

The analysis is based on borrowers with new unsecured loans and not individual loans. Almost all of the borrowers in FI's survey have only taken one unsecured loan<sup>10</sup>, although it is somewhat more common for those who take HCSTCs to take several loans. However, the percentage of borrowers who took more than one HCSTC decreased from 25 per cent to 4 per cent in 2019.

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<sup>9</sup> Stand-alone credits are loans that have no direct link to the purchase of a good or service.

The exemption from credit assessment now only applies to credits that refer to purchases on credit and that are subject to section 4 of the Consumer Credit Act.

<sup>10</sup> FI's survey only includes new credits from the same company during a ten-day period.

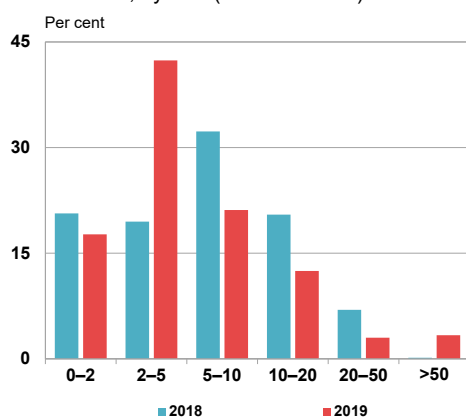
Table 1. Unsecured loans and HCSTCs

Per cent		
	2018	2019
Number with new unsecured loans	30,626	21,058
Number with new HCSTCs	11,323	866
Percentage with new HCSTCs	37.0	4.1
<b>Lenders</b>		
Consumer credit institutions	97.0	99.3
Specialised banks	2.7	0.5
Other	0.3	0.2
<i>Total</i>	<i>100.0</i>	<i>100.0</i>

Source: FI

Note: *Other lenders* refers to large banks and sales financing companies. The data comes from FI's consumer credit surveys in 2018 and 2019. The calculations refer to the number of borrowers with new unsecured loans.

Diagram 2. Percentage of borrowers with HCSTCs, by size (SEK thousand)



Source: FI

## FEWER BORROWERS WITH HCSTCS AFTER THE REFORM

The new provisions for HCSTCs do not ban the product; they only limit how much the lender may charge. This means that there are still HCSTCs. In 2018, 37 per cent of borrowers with new unsecured loans below SEK 50,000 in FI's survey were classified as borrowers with an HCSTC (Table 1).<sup>11</sup> The following year, this percentage decreased to around 4 per cent. The number of borrowers with HCSTCs was also more than 90 per cent lower in 2019. Other non-HCSTC credits increased slightly at the same time. Overall, there were just over 9,500 fewer borrowers with unsecured loans below SEK 50,000 in FI's survey in 2019 compared to in 2018.

Consumer credit institutions were the primary issuers of HCSTCs in 2018 and 2019 (Table 1). In 2018 some specialised banks also issued HCSTCs (around 3 per cent of this type of credit), but this lending more or less ceased in 2019. Seven (out of 34) companies in FI's survey issued HCSTCs in 2018.<sup>12</sup> In 2019, five of them no longer issued HCSTCs and two continued with approximately the same scope in 2019 as in 2018. It is likely that the supply of HCSTCs has decreased since they are not as profitable for lenders after the reform. The fact that some lenders have chosen to issue credits other than HCSTCs can be because other types of credit may now be more profitable than small unsecured loans, for example credit cards or other revolving credits.<sup>13</sup>

The above-mentioned changes cannot be assigned solely to the reform since a lot happens in the economy during a year. However, the calculations indicate that the reform led to fewer HCSTCs. This is in line with the outcome in other countries where similar regulation was introduced.

## HCSTCS ARE OFTEN SMALL

Despite a sharp reduction in the number of HCSTCs, there were still almost 900 borrowers with HCSTCs in FI's sample. This is sufficient for conducting our analyses if we also assume that these borrowers are representative for the entire market. We start by studying if there were other types of borrowers who took new HCSTCs in 2019 than in 2018.

HCSTCs are normally small. In 2018, 72 per cent of borrowers with a new HCSTC borrowed less than SEK 10,000 (Diagram 2). The percentage of HCSTCs under 10,000 increased to 81 per cent in 2019. HCSTCs above SEK 50,000 are unusual, but the percentage in 2019 was slightly higher than in the previous year.

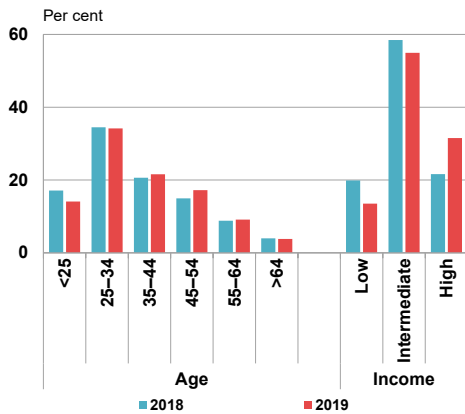
In terms of the borrower's age and income, there were small changes between 2018 and 2019. HCSTCs are more common among consumers between the ages of 25 and 34, and this group represents

<sup>11</sup> We use the effective interest rate for the classification. Where the lender has not reported an effective rate, we have calculated the effective rate using the nominal interest rate. All loans that are HCSTCs have a reported effective interest rate.

<sup>12</sup> At least 20 per cent of the lending from these seven companies consisted of HCSTCs. The companies that only offered HCSTCs in 2018 also did so in 2019. Overall, there were around 40 companies with authorisation to issue HCSTCs in Sweden in 2019. This figure was significantly higher in previous years.

<sup>13</sup> A revolving credit is a facility a borrower can use, for example through credit card purchases or lines of credit online and in brick-and-mortar stores.

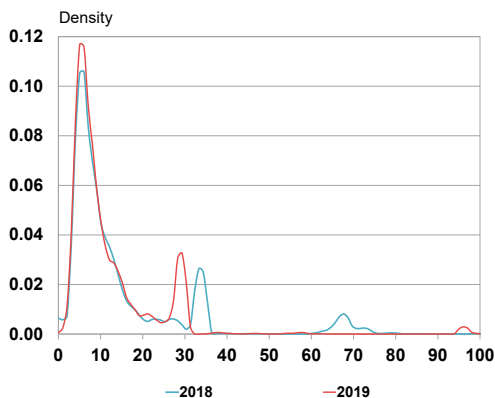
Diagram 3. The percentage of borrowers with HCSTCs by age and income



Source: FI.

Note: The income groups are based on the groupings of borrowers in FI's surveys.

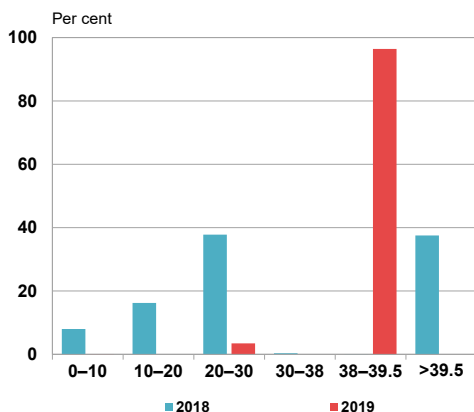
Diagram 4. Effective interest rate for borrowers with new unsecured loans under SEK 50,000



Source: FI

Note: The diagram is limited to effective interest rates under 100 per cent. There are occasional credits with significantly higher effective rates. These credits are often small and have a short term.

Diagram 5. Borrowers with HCSTCs by nominal interest rate (per cent)



Source: FI

Note: The data refers only to HCSTCs of less than SEK 50,000.

just over every third credit (Diagram 3). This type of credit is relatively unusual among borrowers above the age of 55. HCSTCs are most common among middle-income borrowers.<sup>14</sup> In 2019, the percentage of credits to consumers with low income decreased. This can be a sign that lenders have become more thorough in their credit assessments, which was also expected prior to the reform.

### Larger share of new unsecured loans just under the cap for the interest rate

The breakdown of the *effective* interest rate for all borrowers with new unsecured loans under SEK 50,000 shows that it was relatively common to have an effective interest rate above the cap of 29.5 per cent in 2018 (Diagram 4). However, due the reform, companies that issued credits at an effective rate of more than 30 per cent lowered the interest rate and other fees in 2019 to just below the cap. This means they avoid the restrictions imposed by the reform.

### INTEREST RATE CAP HAS HAD NORMATIVE EFFECT ON NOMINAL INTEREST RATE

The average nominal interest rate for new unsecured loans decreased sharply following the reform. In FI's surveys, it fell from on average 60 per cent in 2018 to 12 per cent in 2019. In 2018, almost 38 per cent of borrowers with new unsecured loans that would have been classified as HCSTCs had a nominal interest rate of more than 39.5 per cent (Diagram 5). Other HCSTCs had nominal interest rates of less than 30 per cent. Following the reform, the interest rate cap has had a normative effect on HCSTCs – both from above and below. The normative effect from below can be due in part to some credits having disappeared from the companies' product ranges, but it can also be due to some lenders, who previously offered lower interest rates, seeing an opportunity to raise interest rates to the cap. More or less all HCSTCs had a nominal rate of between 38 and 39.5 per cent in 2019. In this range there were almost no unsecured loans that would have been classified as HCSTCs in 2018. This shows that the interest rate cap has had a major impact on the nominal interest rate for HCSTCs.

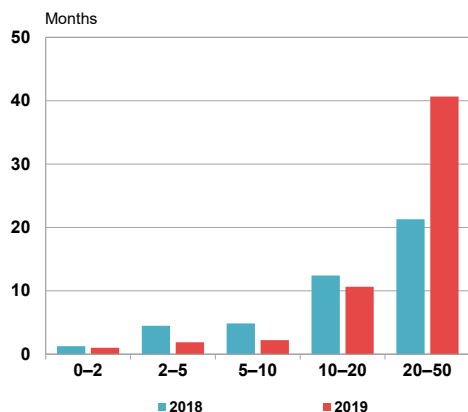
### COST CAP HAD SMALL IMPACT ON NEW LENDING

The nominal interest rate is one of the costs for a credit, and it determines to a large extent the credit's total costs. However, the maturity is also important for both the total costs and the running costs. A short maturity (all else equal) results in a high monthly fee since the amortisation payments become large relative to the loan. At the same time, a short maturity results in a low total cost since the borrower only pays interest for a short period of time. A long maturity (all else equal) has the opposite effect – low monthly fees and large total costs. This means that the reform's cost cap also imposes a restriction on the maturity of the credit.

The maturity for borrowers with HCSTCs has increased for credits above SEK 20,000 (Diagram 6). For credits below SEK 20,000, in contrast, the average maturity has decreased. In addition to the nominal interest rate, the borrower also pays any set-up and notification fees. These fees often constitute a significant portion of

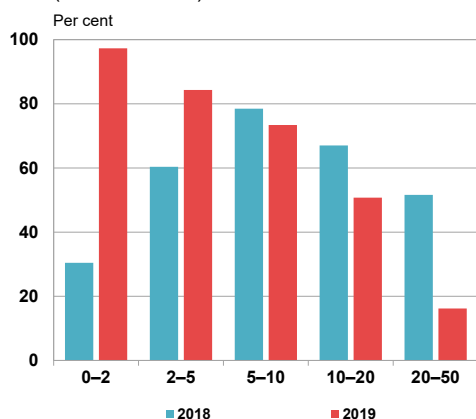
14 We sorted the borrowers by income. We call the third with the lowest income "low-income borrowers" and the third with the highest income "high-income borrowers". Those in-between are called "middle-income borrowers". The incomes in FI's surveys are generally higher than for the population as a whole, see Finansinspektionen (2019).

Diagram 6. HCSTCs' average maturity by credit amount (SEK thousand).



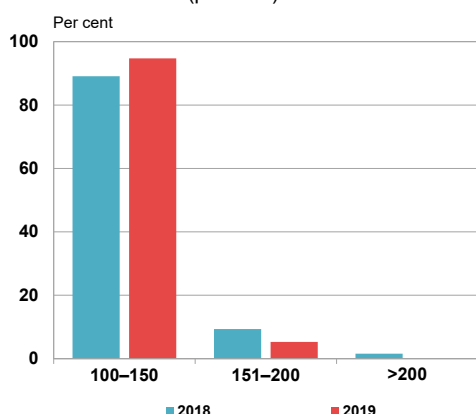
Source: FI.

Diagram 7. Fees in relation to total cost by credit amount for borrowers with HCSTCs (SEK thousand)



Source: FI.

Diagram 8. Repayment ratio for borrowers with HCSTCs (per cent)



Source: FI.

Note: Repayment ratio shows the total repayment in relation to the amount of the credit. Total repayment refers to both interest and amortisation.

the total cost for an HCSTC. These fees' percentage of the total costs increased sharply in 2019 for borrowers with HCSTCs below SEK 5,000 (Diagram 7). For borrowers with larger credits, though, the fees' percentage has decreased. This implies that lenders have compensated for the lower nominal interest rate with higher fees on small loans and longer maturity on larger credits.

The repayment ratio summarises the borrower's contractual total costs during the term of the credit. We calculate the ratio (ex ante) as the credit's total costs and amortisation payments divided by the original credit amount.<sup>15</sup> The repayment ratio has decreased for borrowers with HCSTCs of less than SEK 20,000 and increased for borrowers with credits above SEK 20,000. This reflects the changes in maturity and extra costs for different credit amounts between the years.

In 2018, 1.5 per cent of the borrowers had a repayment ratio of more than 200 per cent (Diagram 8).<sup>16</sup> In practice, there were very few credits before the reform that were calculated as being above the cost cap when the contract was signed. This means that the cost cap most likely has not had a major impact on new lending. In 2019, 95 per cent of borrowers that took a new HCSTC had a repayment ratio of less than 150 per cent – in other words, 5.5 percentage points more than in 2018. Even though the cost cap did not impact costs when the credit was issued, the cap can limit additional costs in the future, such as late fees, extension fees and collection fees.

Even if the cost cap has not had a major impact on new lending, it can have limited credit issuers' possibilities for compensation in the event payments are delayed. This was also the purpose of the regulation: to protect consumers who are having payment problems from uncontrolled debt growth. However, we cannot analyse this in this study since we only have information about borrowers who are taking out new credits. To study if the cost cap has actually limited borrowers' costs, we need information about borrowers who have not made their payments in accordance with the agreed instalment plan.

## BORROWERS AFFECTED BY THE REFORM ARE BORROWING MORE

So far, we have found that the number of borrowers with HCSTCs has decreased. We will now continue and estimate how the reform has affected the amount of new unsecured loans borrowers are taking.<sup>17</sup> The size of the loan depends on more than just the reform. We therefore need to compare what would have happened without the reform. Since this is not directly observable, we must estimate this hypothetical development.

One way to estimate what would have happened without the reform is to divide the borrowers into two groups. The first group (control group) consists of households that are not affected by the reform; the

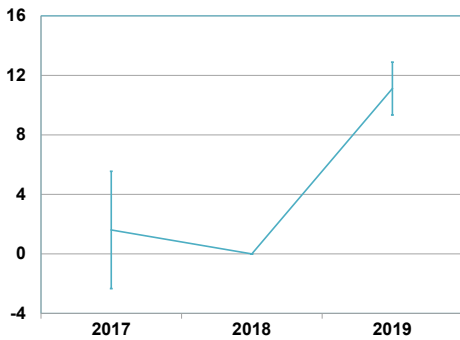
15 Under this definition, the repayment ratio is 100 per cent if the borrower only pays back the credit amount (amortises) without having any costs for the credit. If the ratio is 200 per cent, the borrower has paid back twice the amount of the credit (when the entire credit is paid off).

16 We have only considered contractual costs in the calculation. There can also be non-contractual costs during the term of the credit, for example collection fees and costs for payment injunctions. For small credits, these fees can result in a cost that exceeds the cap.

17 The provisions may also have affected other types of credit. But we are not estimating that here.



Diagram 9. Test of parallel trends between groups  
Per cent



Source: FI.

Note: The diagram shows the changes in the unsecured loans for affected borrowers and the control group before and after the reform. When the confidence interval includes zero, the difference between the groups (and relative to the 2018 dataset) is not statistically significant.

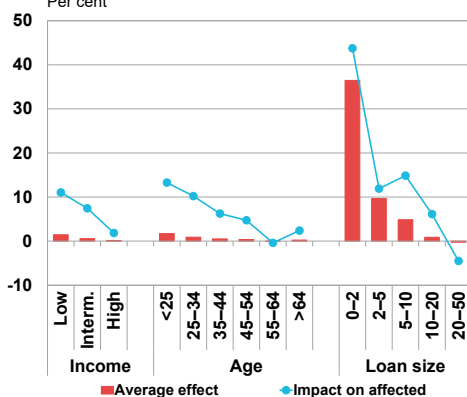
Table 2. Impact of the reform on credit amount  
Per cent and amount

Credit amount	Estimate
Affected	6.8*** (1,2)
Degree of explanation	94.6
Number of observations	31,394

Source: FI

Note: Robust standard of error in parentheses. \*\*\* indicates that the estimate is statistically different than zero at a one-percent level. The table shows only the difference-in-difference estimate, which indicates the effect of the reform on borrowers with new unsecured loans where the effective interest rate is above 26.5 per cent.

Diagram 10. Estimated impact and increase in credit amount by borrower and credit amount  
Per cent



Source: FI.

Note: Impact on affected borrowers shows the estimated impact of the reform. The average impact considers both the percentage of affected borrowers, and the impact is on those affected.

second group consists of households that are affected. The reform applies to credits with an effective interest rate of more than 29.5 per cent (2019).<sup>18</sup> But the percentage of borrowers with an interest rate under the cut-off point for what is considered to be an HCSTC has increased (Diagram 4). Thus, in reality, they have also been affected by the reform. Our division into groups therefore looks like this:

1. *The control group* consists of borrowers with new unsecured loans under SEK 50,000 with an effective interest rate below 26.5 per cent.
2. *The group affected* by the provision took a new unsecured loan under SEK 50,000 with an effective interest rate of at least 26.5 per cent.

We have created the groups using the effective interest rate since this is the basis for the reform. We assume that the entire increase in the percentage of borrowers below the cap of 29.5 per cent in Diagram 4 is affected by the reform. This is why we use 26.5 per cent as the cut-off point between the groups. This division into groups means that 19 per cent of the borrowers who took a new unsecured loan of less than SEK 50,000 in 2019 is found in the group that was affected by the reform.<sup>19</sup>

The fundamental assumption for the approach we use is that credit amount for both groups would have followed the same trend without the reform.<sup>20</sup> We test the (null) hypothesis that the average growth in the credit amount was the same – if the trends were parallel – in the groups before the reform using data from 2017 and 2018. According to the outcome, we cannot reject the hypothesis (Diagram 9). This means, in turn, that we, like in previous FI Analyses, can estimate so-called *difference-in-difference* equations to calculate the impact of the reform (see Finansinspektionen, 2017, Andersson et al., 2018, Andersson and Aranki, 2019, and Aranki and Larsson, 2019).

Our estimates show that borrowers who actually took a credit and were affected by the reform borrowed almost 7 per cent more than without the reform (Table 2).<sup>21</sup> This goes hand-in-hand with the credit being on average 22 per cent more inexpensive for those affected. Overall, the means that the cost of the credit decreased by 15 per cent, which improved these borrowers' financial situation.

We also can use the approach to study how the regulation has affected different types of borrowers. In addition to an estimate of those affected, we can calculate the total impact on the borrower types by weighing together those affected by the reform with all borrowers in each group.

The reform has had most of an impact on borrowers who took HCSTCs of less than SEK 2,000. These borrowers borrow around 45 per cent more than without the reform (Diagram 10). This most likely

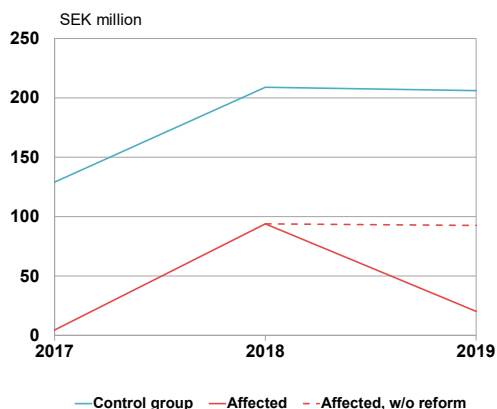
18 Since FI's sample refers to May 2019, the cap is 29.5 per cent. Between 1 July and 31 December 2019, the cap was 30 per cent.

19 Compared to the years 2017–2019 (which we use in the estimates), 43 per cent of the borrowers belong to the group that would have been affected had the reform been in place.

20 Since the groups consist of new borrowers each year, the borrowers in the groups are different every year.

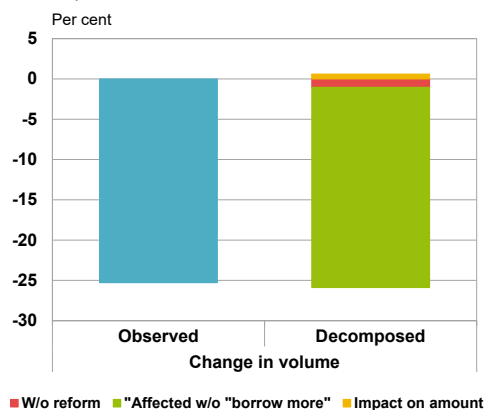
21 Some borrowers may have chosen a different type of credit. We cannot estimate how they have been affected by the reform. However, we do consider that there are fewer consumers with new HCSTCs in section "...but total lending decreased".

Diagram 11. Total lending of unsecured loans under SEK 50,000



Source: FI.

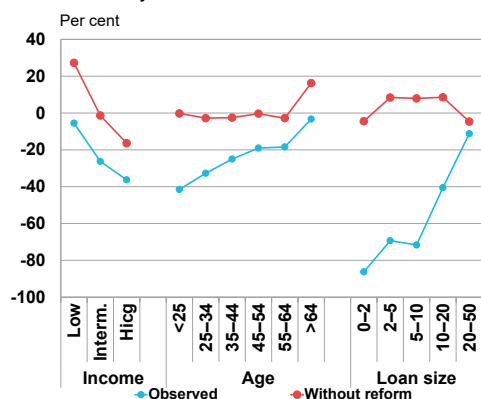
Diagram 12. Reduced lending and estimated impact of the reform



Source: FI.

Note: "Without reform" shows what happened given the assumption that those who were affected had followed the trend in the control group. "Affected without borrowing more" shows how much lending would have slowed if those who were affected had not borrowed more. "Impact on amount" refers to the estimate impact on the credit amount for those who took out a new unsecured loan of less than SEK 50,000. The estimated impact of the reform is the sum of the green and yellow area in the split bar.

Diagram 13. Lending with and without the reform by borrower and credit amount



Source: FI.

Note: The difference between observed and without reform measures the effect of the reform assuming parallel trends.

is because the total cost for the smallest loans has decreased the most since the reform. The reform has resulted in the total lending of unsecured loans under SEK 2,000 increasing by around 35 per cent compared to without the reform and considering those who actually took a credit. This is because HCSTCs are common among the smallest credits.

The total repayment has increased for those who borrowed between SEK 20,000 and 50,000 and were affected by the reform. Therefore, it is reasonable that those affected in this group borrowed less due to the reform; they borrowed on average 4 per cent less. Relatively few credits are affected in this amount group. For those who borrowed between SEK 2,000 and 20,000, we estimate that affected borrowers borrowed 10 per cent more.

Considering income and age, the reform had the largest impact on low-income borrowers and the youngest borrowers (Diagram 10). Those with the lowest income that were affected borrowed on average 11 per cent more than what they would have borrowed without the reform. And borrowers under the age of 25 borrowed around 13 per cent more on average. Considering all persons with new unsecured loans, the borrowed volume increased 1.4 per cent for low-income borrowers and 1.7 per cent for young borrowers.

### ...BUT TOTAL LENDING DECREASED

The total impact of a reform depends on *how many* are affected and by *how much* they are affected. In this case, the reform impacts approximately every fifth borrower who took a new unsecured loan under SEK 50,000. And they are borrowing almost 7 per cent more than what they would have borrowed without the reform. Weighed together with loans not affected by the reform, this means that new unsecured loans under SEK 50,000 on average have become 0.6 per cent larger due to the reform. But we have previously noted that the *number* of borrowers with new unsecured loans decreased by almost one-third. The total lending via unsecured loans under SEK 50,000 decreased by 25.3 per cent between 2018 and 2019. To estimate how much of this decrease is due to the reform, we once again use our groups (those above and below an effective interest rate of 26.5 per cent). We assume that total lending of unsecured loans increased in the same way for those affected as for the control group without the reform (Diagram 11).<sup>22</sup> The estimates show that the reform has slowed lending by 24.3 per cent (Diagram 12). This includes borrowers borrowing more because of the reform. According to our results, lending in 2019 would have decreased by just over 1 per cent without the reform.

When broken down by borrower, our results show that lending decreased the most for low-income borrowers and young borrowers (Diagram 13). In terms of the credit amount, small credits have decreased the most. Lending of small credits has decreased sharply even though they have become cheaper and those who actually took out a small credit are borrowing more. This is most likely because the supply of this type of credit has decreased since they are not as profitable for the companies as before the reform. However, other

<sup>22</sup> We cannot conduct a statistical test here for parallel trends since we only have two observations (2017 and 2018) for each group before the reform. However, Diagram 11 implies that the groups followed a similar trend between 2017 and 2018.

types of credit, for example revolving credits, may have replaced small unsecured loans.

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