



Payday loans

Repeat customers—presentation based on analysis of the transaction data

14 February 2014



Introduction

- This presentation is about patterns of repeat usage of payday loans.
- The analysis in this presentation will only refer to repeat business with the same lender (use of multiple lenders will be covered by analysis of data submitted by credit reference agencies)
- Rollovers are conceptually similar to repeat loans taken out very shortly after an existing loan is repaid. However, in this analysis we focus on entirely new loans when thinking about “repeat business”. Rollovers are discussed in detail our presentation on customer and transaction data
- Data: transaction level dataset from major lenders covering all loans issued between 1/1/2012 and 31/08/2013. Approximately 15mn loans. See Appendix for some summary statistics.
- We have excluded some products due to data problems. See Appendix for more details.



I. New and repeat customers



Main questions

1. What percentage of loans (by number and value) do new loans represent (i.e. a customer's first loan with a given lender)?
2. How important (in terms of total number and value of loans taken out, as well as in terms of number of customers) are different "cohorts" of customers in a given year, e.g. customers who took out their first loan this year, a year ago, or more than a year ago?
3. How many people start borrowing/come back/stop borrowing from a particular lender in a given month?

REMINDER: The analysis in this presentation only covers repeat business with the same lender

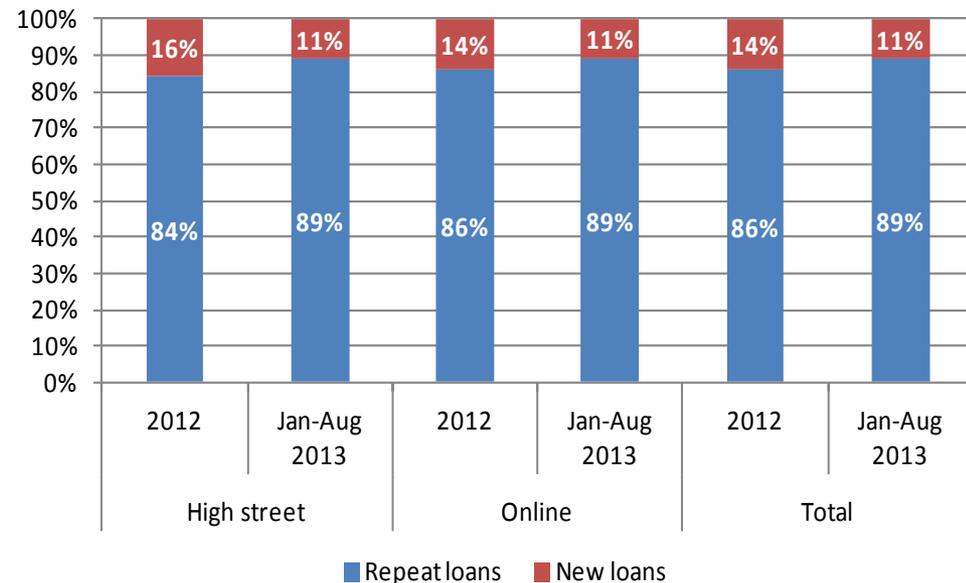
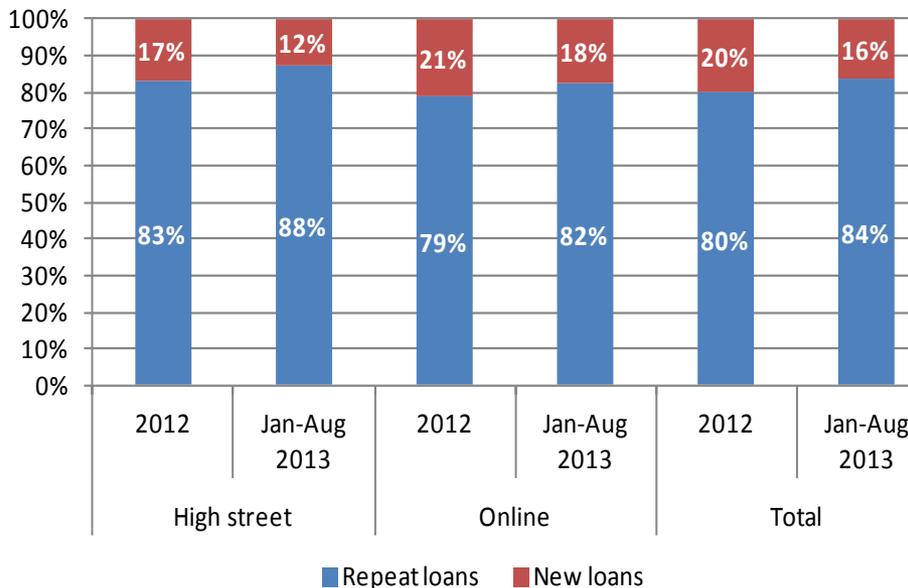


% of new/repeat loans

What percentage of loans (by number and value) do new loans represent?

By number of loans

By value of loans

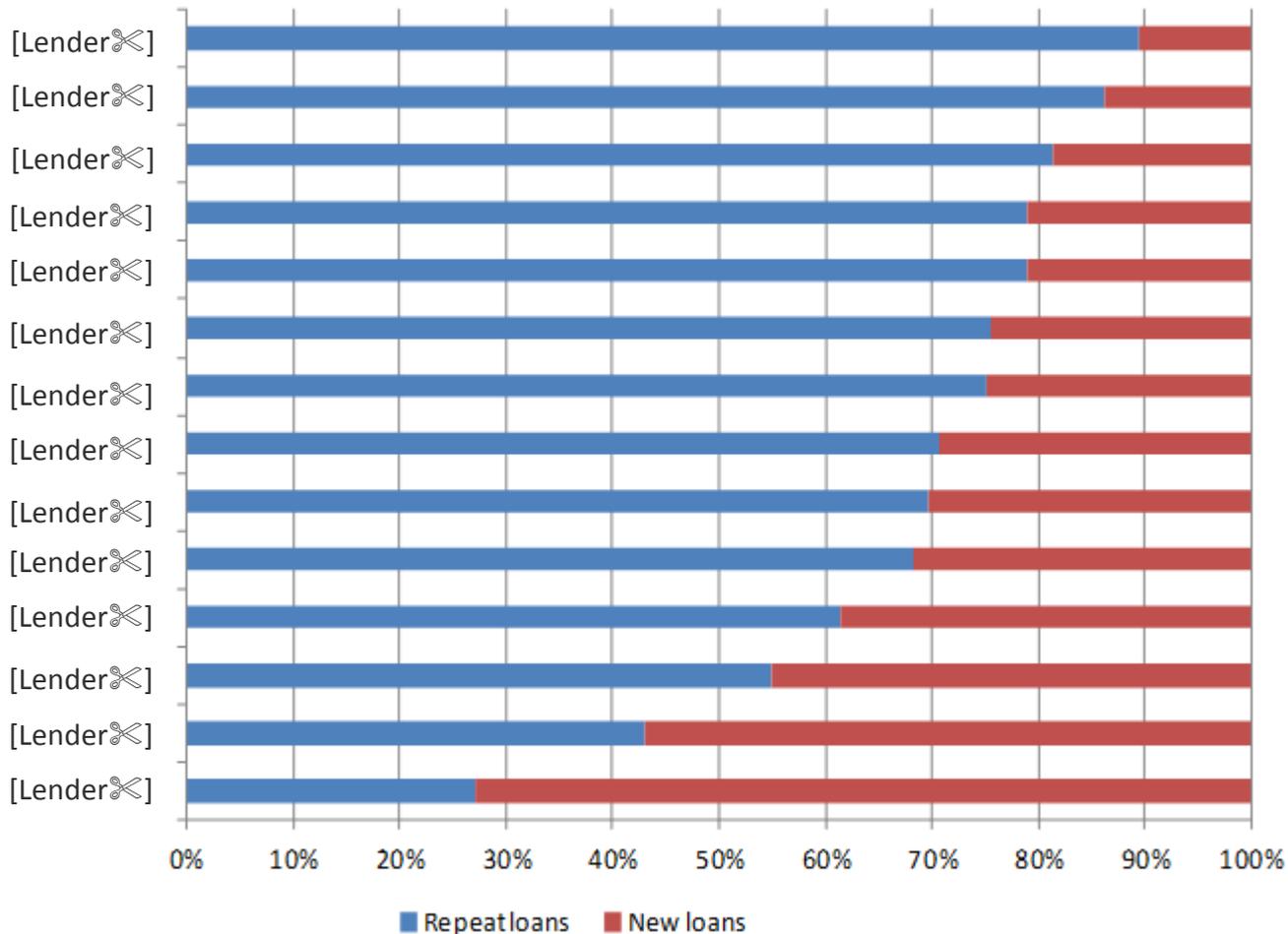


- “New loans” – loans to customers that have not previously borrowed from a lender. “Repeat loans” – all loans to customers that have previously borrowed from the lender.
- NB: Analysis is from the perspective of a given lender, and “new customers” may have previously taken out a loan with another lender



% of new/repeat loans: by lender (I)

By number of loans, 2012

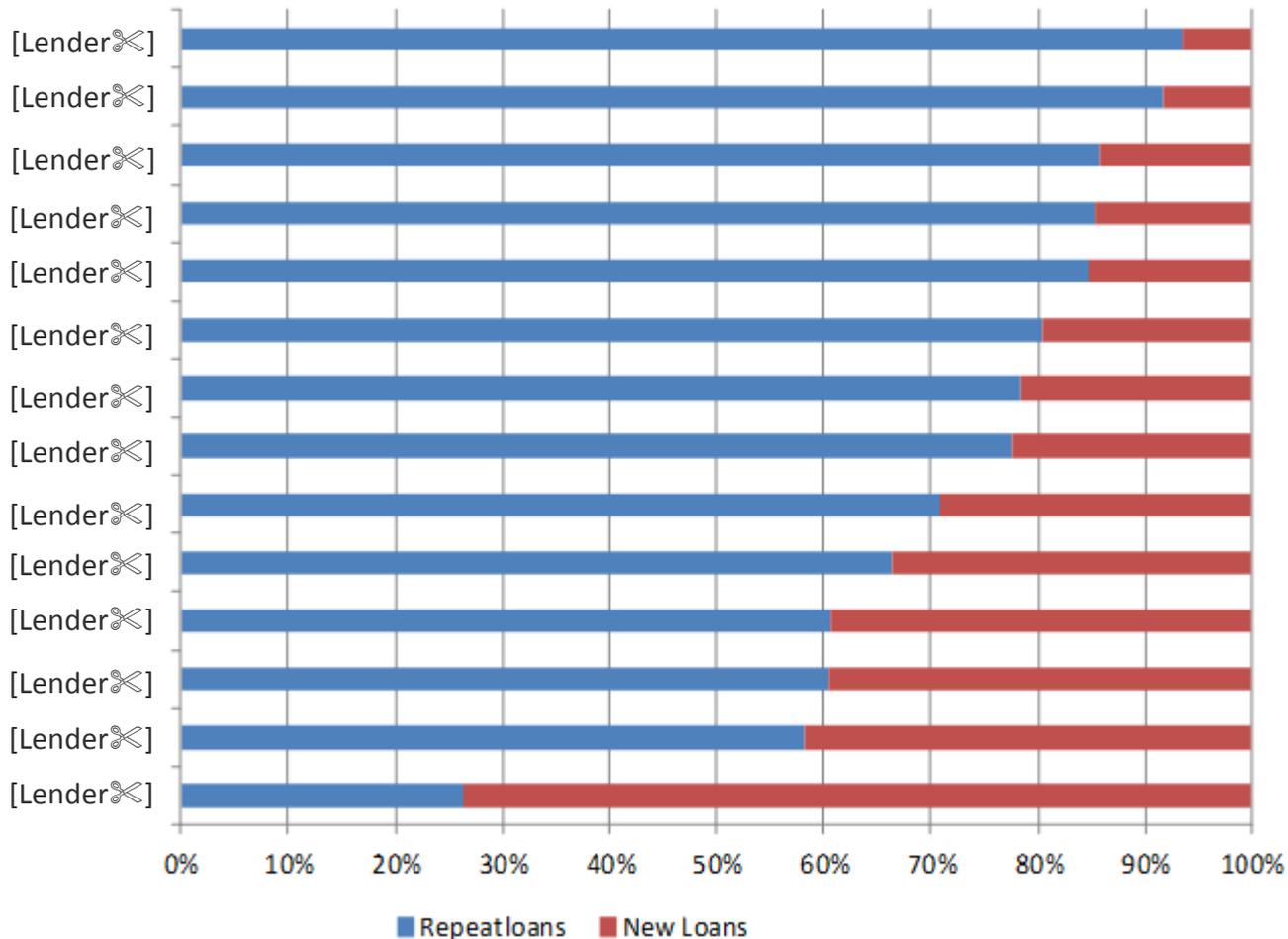


Share of new loans (by number) varies substantially by lender, accounting for between 11% and 73% of all loans taken out in 2012



% of new/repeat loans: by lender (II)

By value of loans, 2012

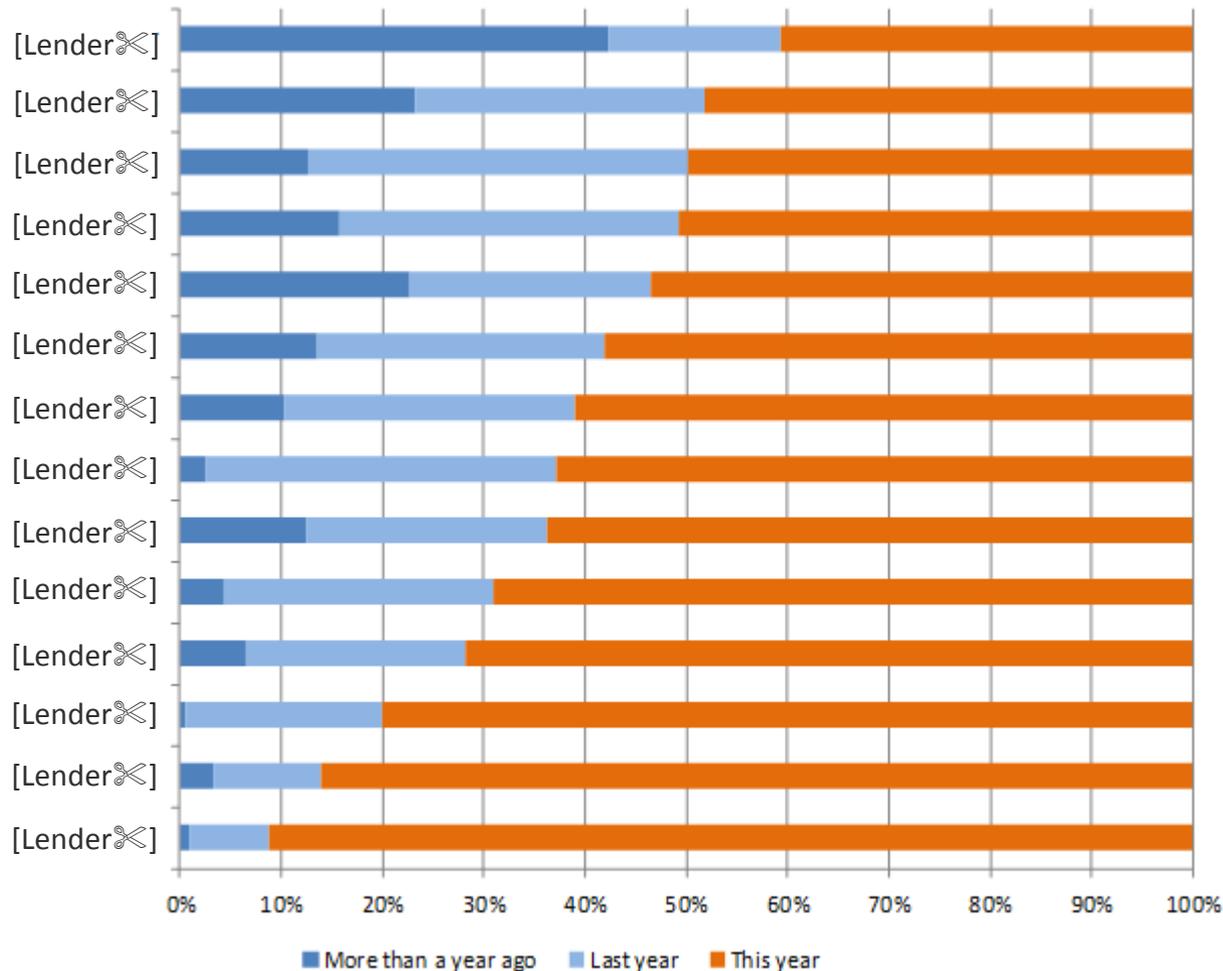


Share of new loans (by value) varies substantially by lender, accounting for between 6% and 74% of all loans taken out in 2012

Cohorts of customers by year of first loan (I) – by lender



Total number of loans, 2012, by cohort



“**This year**” shows ALL loans taken out in 2012 by customers who started borrowing from a particular lender in 2012.

“**Last year**” shows ALL loans taken out in 2012 by customers who started borrowing from a particular lender in 2011.

“**More than a year ago**” shows ALL loans taken out in 2012 by customers who started borrowing from a particular lender in 2010 or earlier.

Variation by lender

Customers who started borrowing from a particular lender in 2012 took out between 41% and 91% of loans in 2012 (by number of loans).

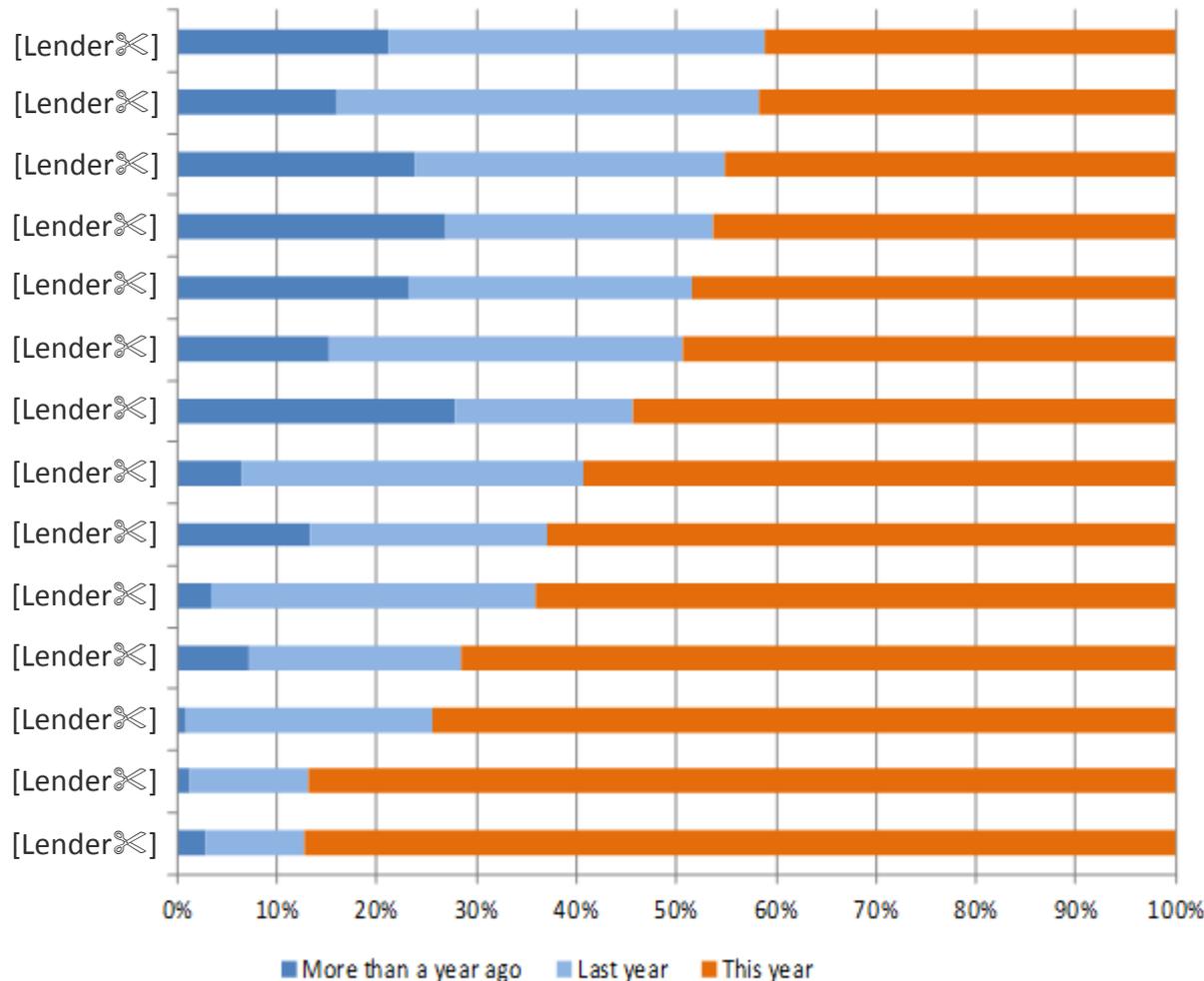
Customers who started borrowing from a particular lender in 2011 took out between 8% and 37% of loans in 2012.(by number).

Customers who started borrowing from a particular lender in 2010 or earlier, took out between 1% and 42% of loans in 2012 (by number).

Cohorts of customers by year of first loan (II) – by lender



Total value of loans, 2012, by cohort



“**This year**” shows ALL loans taken out in 2012 by customers who started borrowing from a particular lender in 2012.

“**Last year**” shows ALL loans taken out in 2012 by customers who started borrowing from a particular lender in 2011.

“**More than a year ago**” shows ALL loans taken out in 2012 by customers who started borrowing from a particular lender in 2010 or earlier.

Variation by lender

Customers who started borrowing from a particular lender in 2012 took out between 41% and 87% of loans in 2012 (by value of loans).

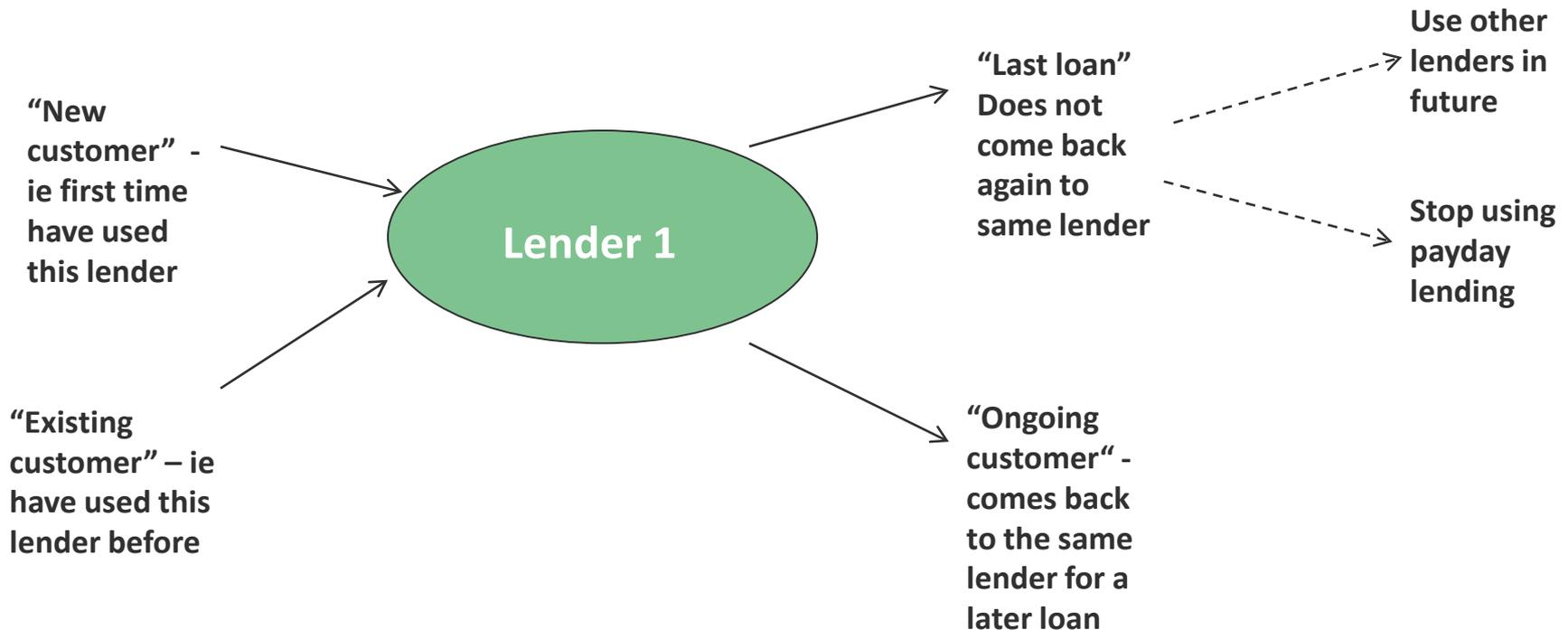
Customers who started borrowing from a particular lender in 2011 took out between 10% and 42% of loans in 2012 (by value).

Customers who started borrowing from a particular lender in 2010 or earlier, took out between 1% and 28% of loans in 2012 (by value).

Monthly “snapshot” – customers who start, stop, or keep borrowing (I)



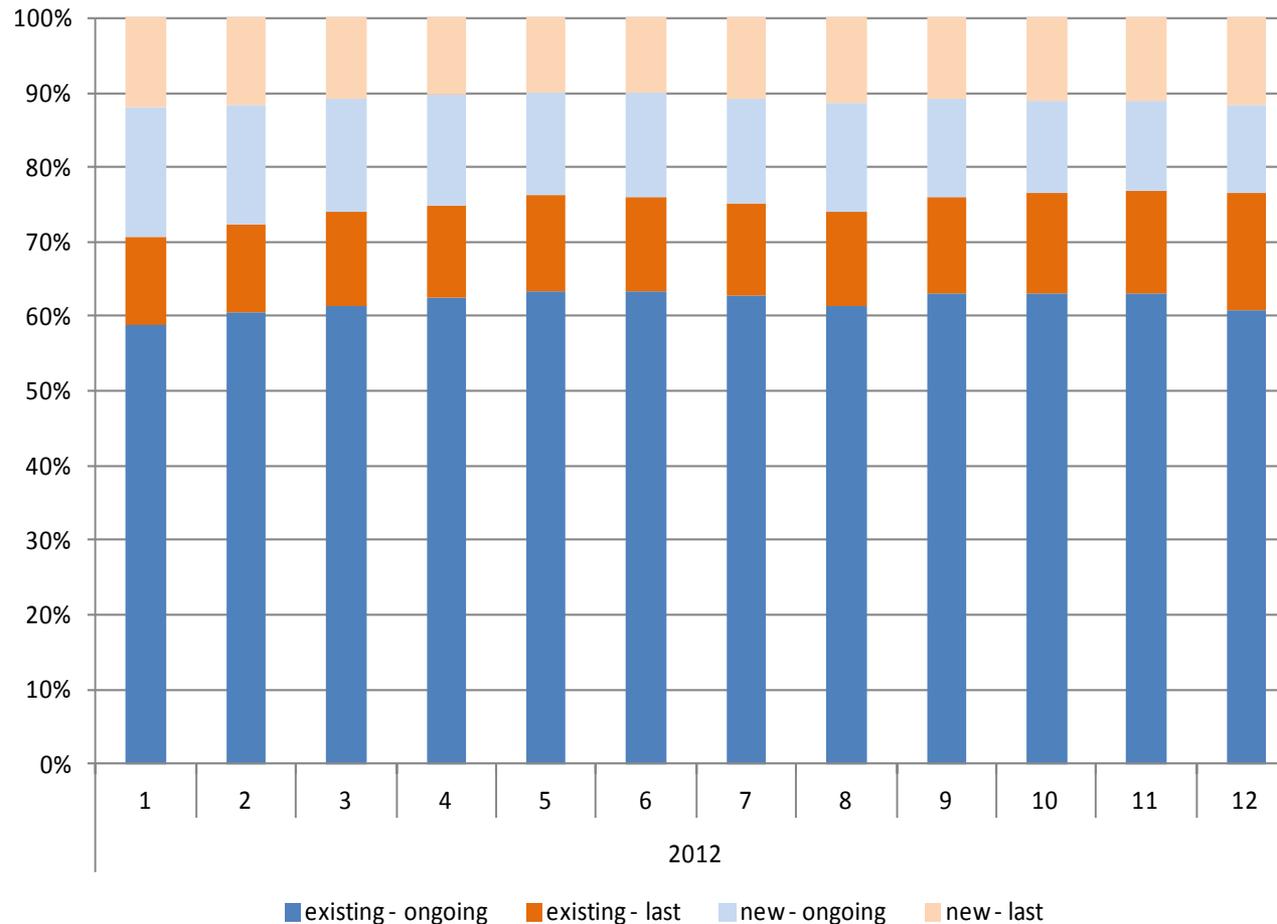
The following slides explore customer ‘churn’ by looking at how many customers are new to a particular lender in any given month and whether customers subsequently come back for another loan with the same lender later on.



Monthly picture – customers who start, stop, or keep borrowing (II)



Number of customers, 2012, by month and customer type



Blue colour: ongoing customers who come back. **Orange colour:** customers who took out their last loan this month.

Darker shade: existing customers who have borrowed from the lender before. **Lighter shade** – new customers this month.

Observations

10-12% of customers only ever take out a single loan with the lender (“new-last”)

12-17% are “new”, and will come back to that lender in the future (“new-ongoing”)

12-16% are existing customers who leave their lender (“existing-last”)

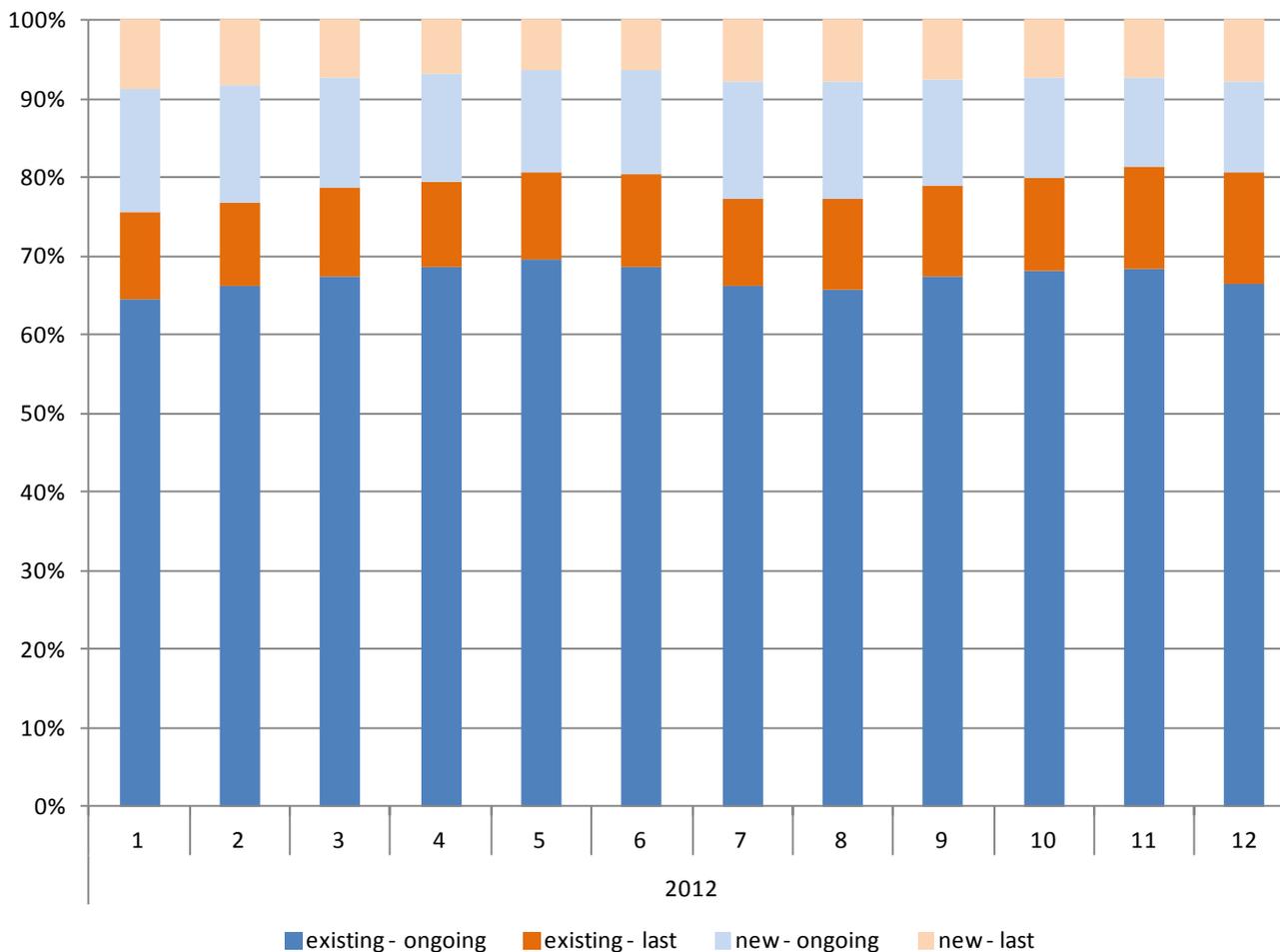
~60% are those who have borrowed from the lender before and will come back (“existing – ongoing”)

Note: dataset ends on 31/08/2013. Some customers in “last” category may have returned after that date for another loan.

Monthly picture – customers who start, stop, or keep borrowing (III)



Number of loans, 2012, by month and customer type



Blue colour: ongoing customers who come back. **Orange colour:** customers who took out their last loan this month.

Darker shade: existing customers who have borrowed from the lender before. **Lighter shade –** new customers this month.

Observation

Around 65% of loans every month are taken out by customers are those who have borrowed from a given lender before and will come back to the same lender at least once again.

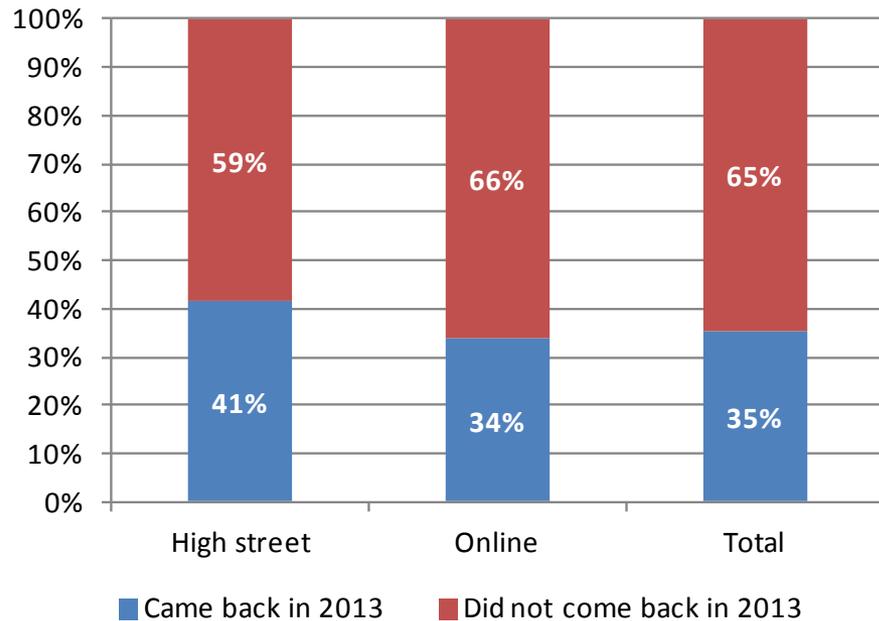
Note: dataset ends on 31/08/2013. Some customers in “last” category may have returned after that date for another loan.



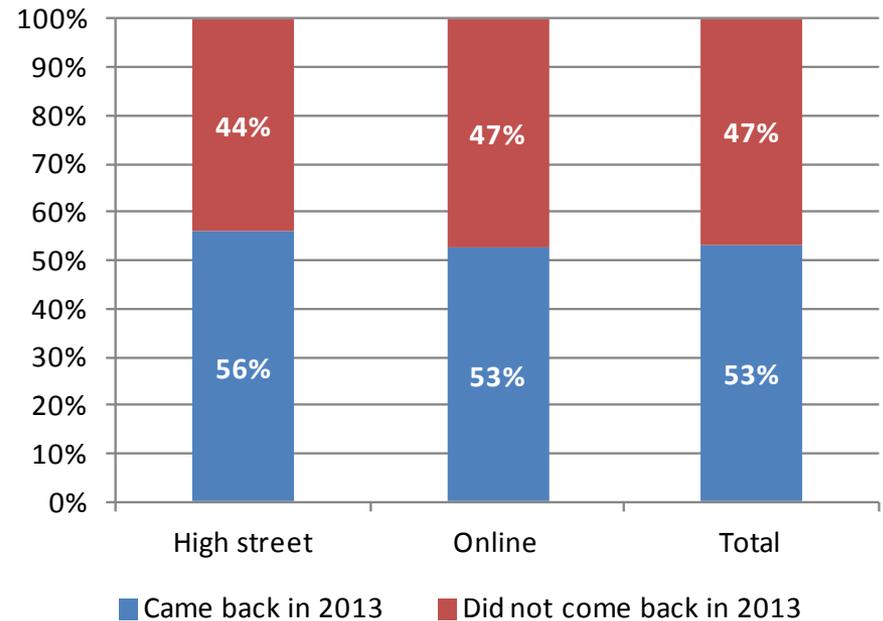
Customers who stop borrowing

Out of all customers who took out loans in 2012, how many came back in January-August 2013?

By number of customers in 2012



By number of loans they took out in 2012



Customers who came back in 2013 tended to be heavier borrowers in 2012.

Note: dataset ends on 31/08/2013. Some customers in “did not come back” category may have returned after that date for another loan.



Summary of the section

- In 2012, around 20% of all loans were issued to customers that had not previously borrowed from the lender (representing 14% of total value of loans).
- The share of “new loans” varies widely from lender to lender (between 11% and 73%)
- All lenders issued more than 40 per cent of the loans made in 2012 to customers who took out their first loan in that year. For some lenders, this proportion was over 80 per cent.
- In any given month, approximately 60% of a lender’s customers are existing customers who will return to the lender for a further loan, 10-12% are existing customer who will not return for a further loan, 12-17% are new customers who will return for a further loan, and 10-12% are new customers who only take out a loan in that month and do not return for further loans.
- Out of all customers who took out a loan in 2012, 65% did not come back for another loan between January and August 2013. This proportion is higher for online customers than for high street borrowers.



II. Journey of a new customer



Journey of a new customer

Main question:

After a customer takes out his first loan ever with a given lender, how many additional loans (from the same lender) will he come back for within 30 days or within 1 year from the date of the first loan?

In this section we restrict our dataset only to customers who took out their very first loan with a given lender between January and August 2012 so that we can trace their behaviour for 365 days after the date of their first loan (as our dataset ends on 31/08/2013).* We also count “top-ups” as separate loans.

We also exclude some “long term” products whose typical duration is longer than that of a “standard” payday loan.

For comparison: the average duration of products we classified as “standard” is 22 days (median 21 days); average duration of “long term” products in our dataset is 181 day (median 166 days). Because we analyse additional borrowing from the same lender in a given period of time, inclusion of long term products would skew the results. These longer term products represent 3.4% of all the loans in our dataset.

* - See Appendix for analysis of all new customers who took out their first loan in 2012. The results do not significantly change.

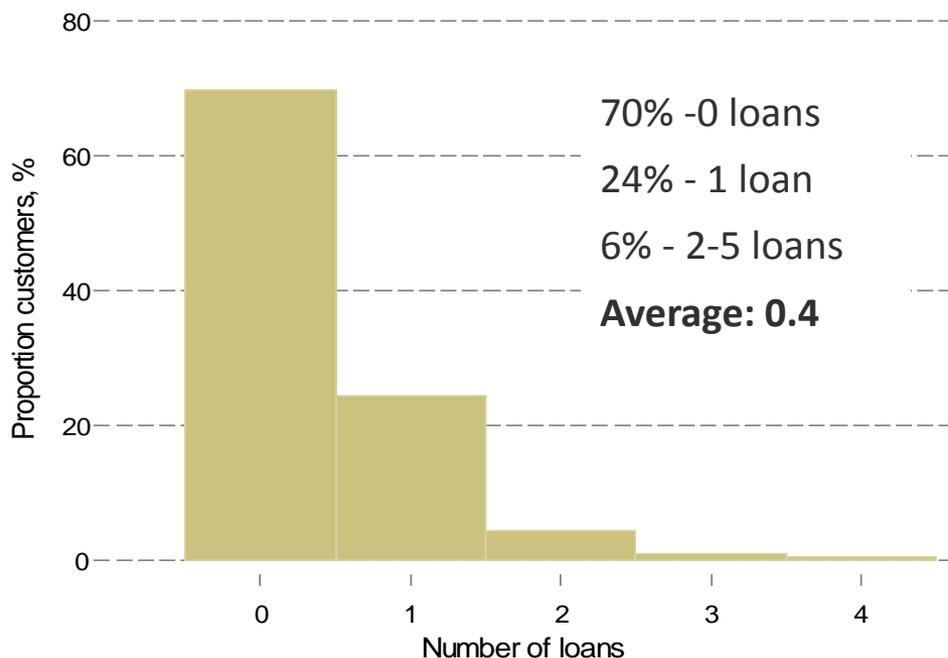


Journey of a new customer: customers who obtained their first loan in Jan-Aug 2012 (I)



What happens to new customers after they take out their first loan?

Additional loans taken out within 30 days from taking out the first loan



Upper 0.5% of observations are not shown. 99.5% of customers take out 4 loans or fewer. Maximum is 14.

Do customer have the need to rollover the first loan?

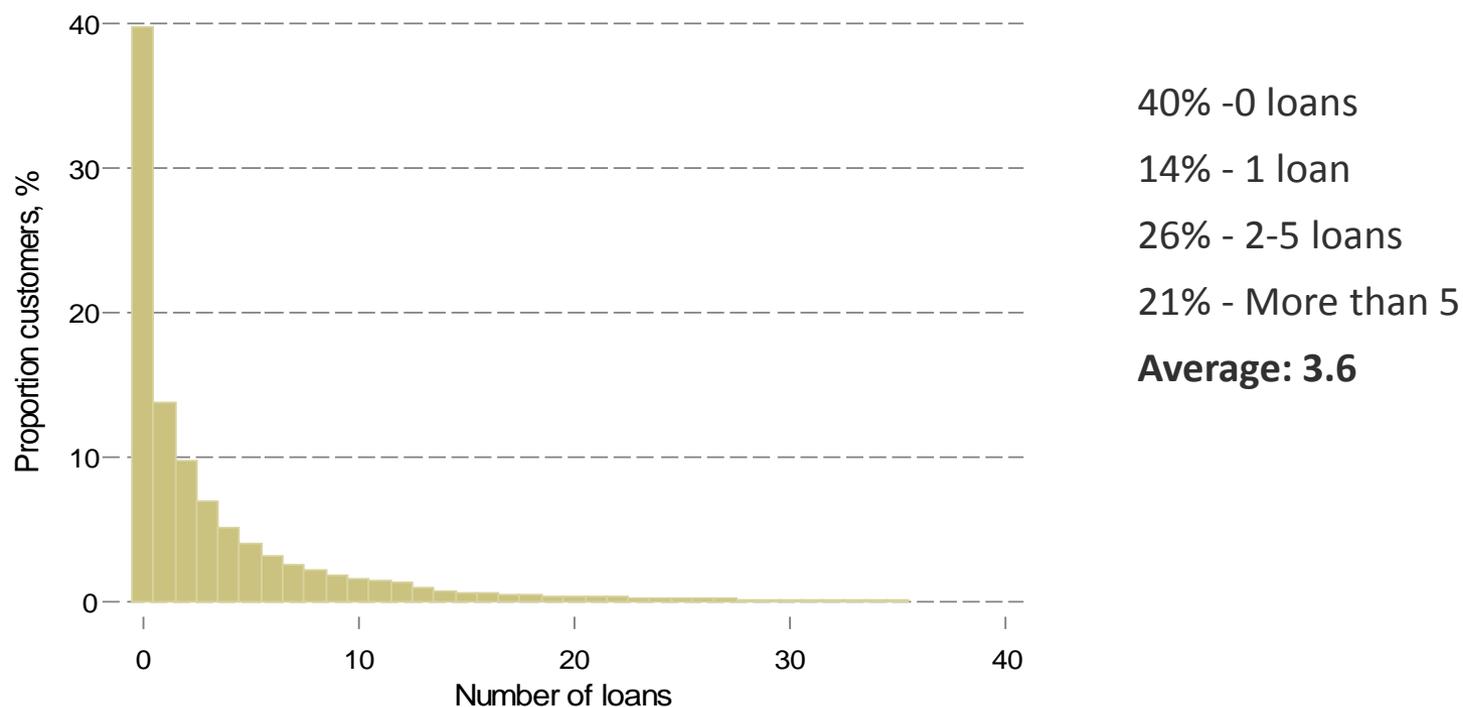
	Did not roll over first loan	Rolled over first loan	Total
Did not borrow again within 30 days	51%	19%	70%
Came back for a loan within 30 days	28%	2%	30%
Total	79%	21%	

Around half of customers either borrowed again within 30 days or rolled over their first loan

Journey of a new customer: customers who obtained their first loan in Jan-Aug 2012 (II)



Additional loans taken out within 365 days from taking out the first loan

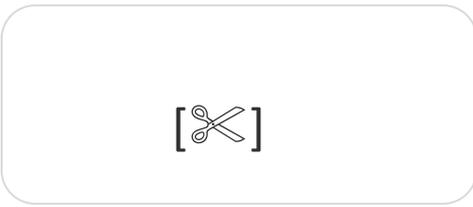
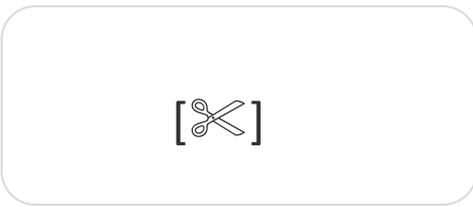


Upper 0.5% of observations are not shown. 99.5% of customers take out 35 loans or fewer. Maximum is 123.



Comparison of channels and major lenders: customers who obtained their first loan in Jan-Aug 2012

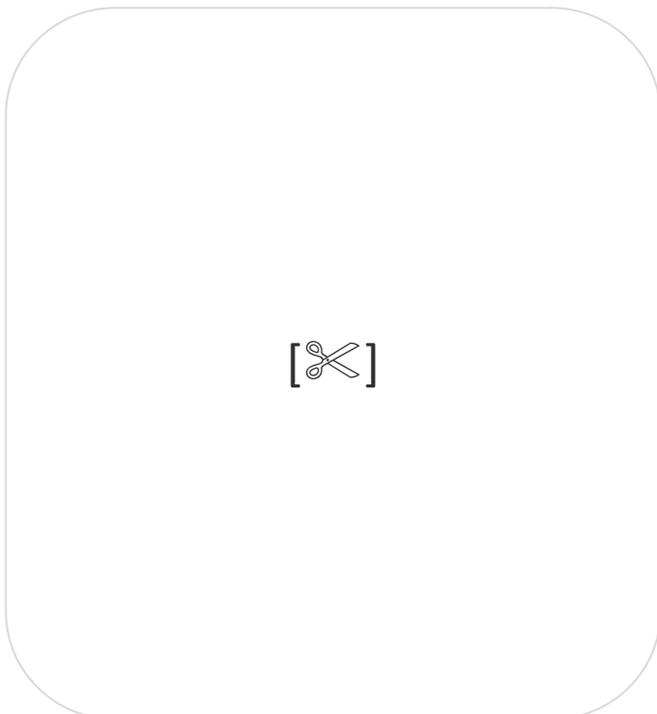
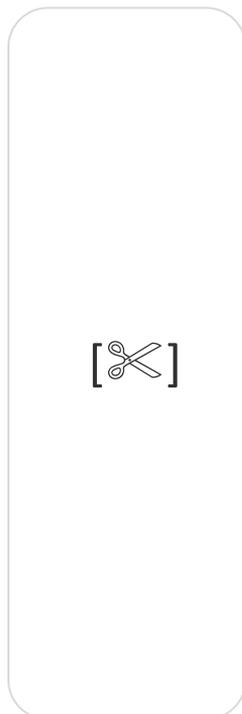


	ALL	WONGA	DOLLAR (ICL)	CASHEURO NET	All high Street lenders	All online lenders
Within 30 days from first loan						
% of customers with additional:						
0 loans	70				67	70
1 loan	24				22	25
2-5 loans	6				10	5
more than 5 loans	0				1	0
Within 365 days from first loan						
% of customers with additional:						
0 loans	40				34	41
1 loan	14				15	13
2-5 loans	26				29	25
more than 5 loans	21				22	21



Comparison of yearly statistic by lender: customers who obtained their first loan in Jan-Aug 2012

How many additional loans did new customers take out within 365 days of their very first loan?

Lender	% of customers who took out:				Average number of loans taken out within 365 days
	0 loans	1 loan	2-5 loans	More than 5 loans	
ARISTE HOLDING LIMITED					
CASH STORE					
CASHEURONET					
CFO					
CHEQUE CENTRES					
DOLLAR(EXPRESS FINANCE)					
DOLLAR(ICL)					
DOLLAR(MEM)					
H&T					
MYJAR					
SRC(SPEEDY CASH)					
SRC(WAGEDAYADVANCE)					
WONGA					
TOTAL					



Summary of the section

- Looking at all new customers who took out their first loan in Jan-Aug 2012:
 - Within 30 days from taking out their first loan, 30% came back for at least one additional loan from the same lender. Around 50% of new customers did not rollover their first loan and did not get a new one within 30 days.
 - Within 1 year from taking out their first loan, 60% came back for at least one additional loan from the same lender. 21% came back for more than 5 loans within a year.
 - On average, customers took out 3.6 further loans from the same lender within a year after getting their first loan.
 - Degree of repeat business varies widely across the lenders. The proportion of customers who did not borrow again from the same lender within a year after getting their first loan varies between 23% and 82%. The proportion of customers who took out more than 5 loans within a year after getting their first loan is between 0% and 40%.



III. Loan value, duration, repayment, rollovers



Introduction

Main question:

- Does the loan value, duration, repayment profile, or incidence of rollovers, depend on whether the loan is the first loan of a customer, or his second, third etc.

We are looking at customers who obtained their very first loan in 2012.

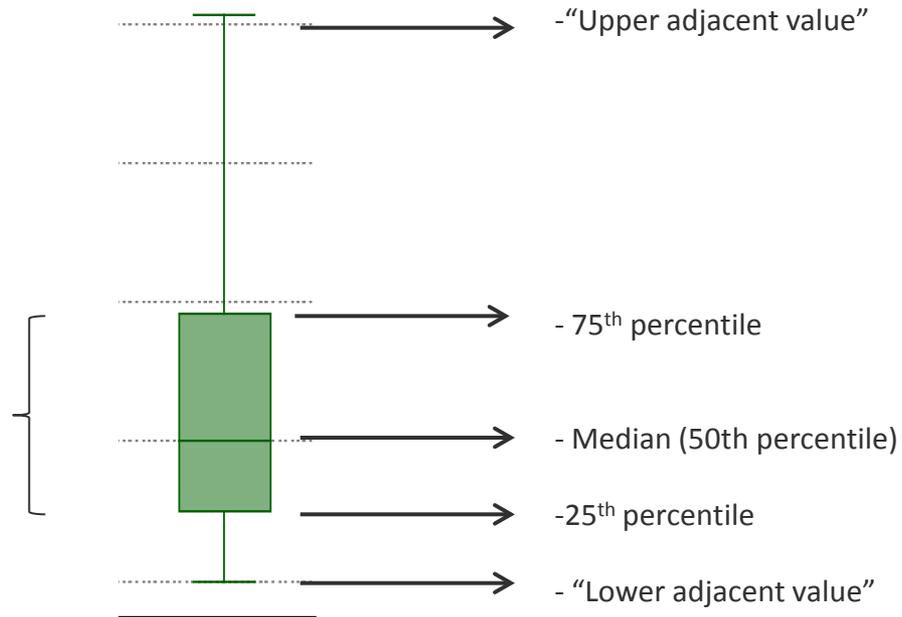
We also exclude some “long term” products whose typical duration is longer than that of a “standard” payday loan (see slide 16 for more details).

REMINDER: The analysis in this presentation only covers repeat business with the same lender

Introduction (II)

A box plot can be used to describe the distribution of a variable (e.g. loan value). They can be interpreted as follows:

“Middle” 50% of observations



“Upper adjacent value” is the largest value less than or equal to 75^{th} percentile + $1.5 * (75^{\text{th}}$ percentile – 25^{th} percentile)

“Lower adjacent value” is the smallest value larger than or equal to 25^{th} percentile – $1.5 * (75^{\text{th}}$ percentile – 25^{th} percentile).

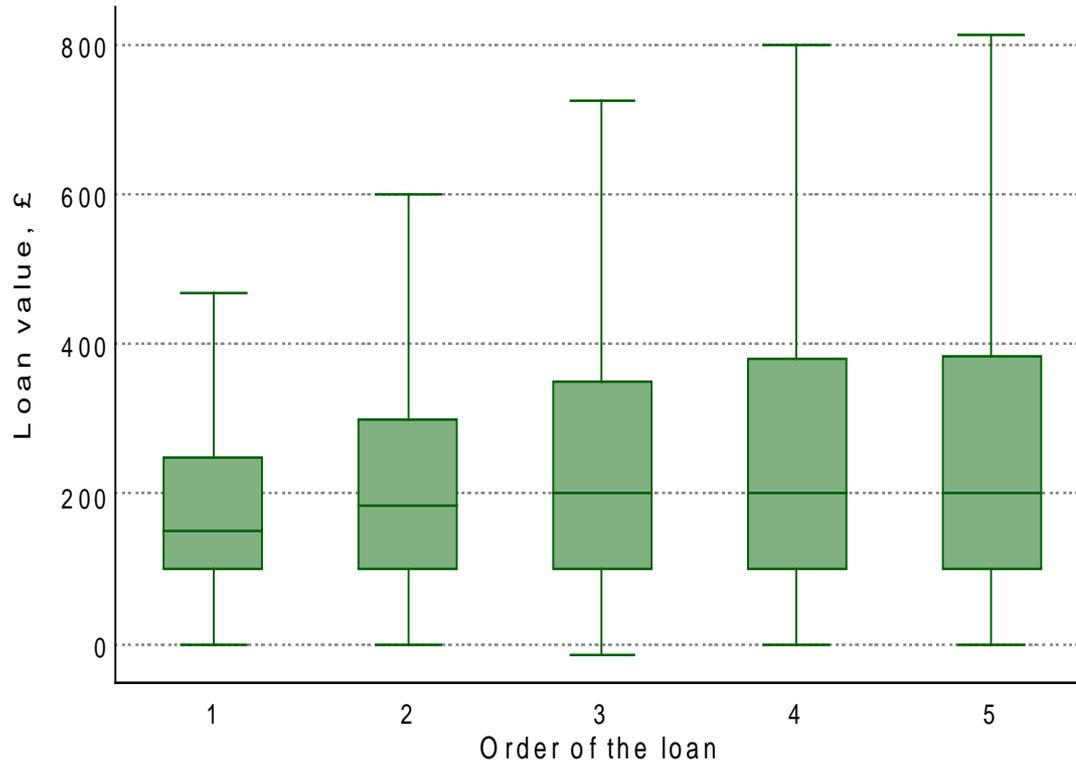
Outliers above upper adjacent value and below lower adjacent value are not shown in a box plot.



Loan value: first loan vs later loans (I)

Do loans tend to increase in size with time (i.e. second loan vs first loan etc.)?

All new customers who took out their first loan in 2012



Average loan
value:

177

224

246

260

269

of loans: 1,651,688

982,903

724,064

560,266

447,111

Average loan value
increases, while
median levels off at
200

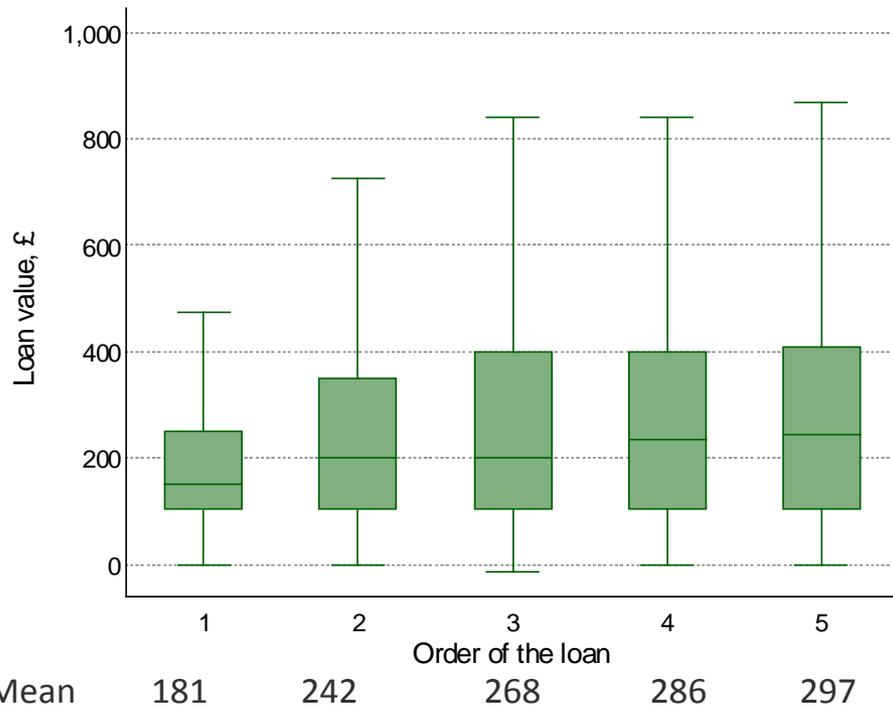
See Appendix for the
actual distribution of
values for “Loan #1”,
“Loan #2”, etc.

Loan value: first loan vs later loans (II): by channel

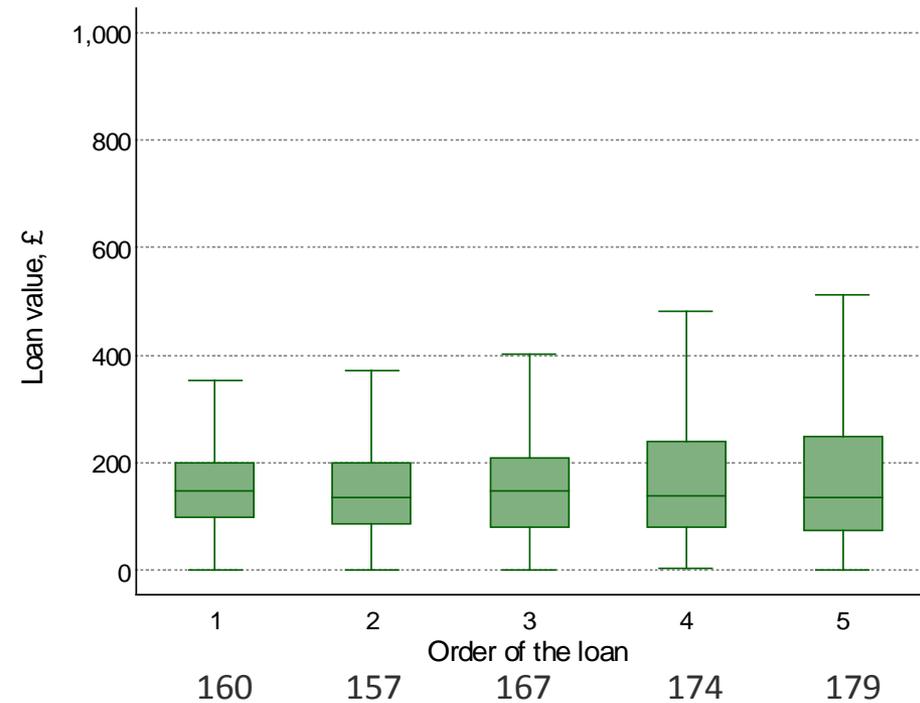


All new customers who took out their first loan in 2012

Online



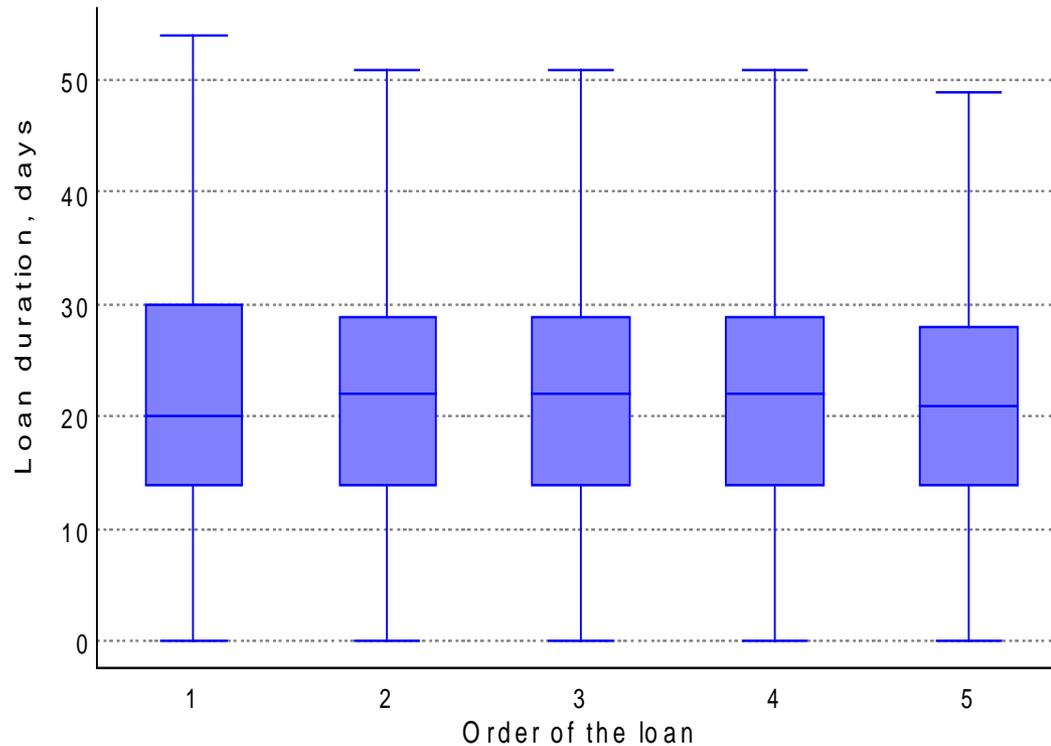
High street



Evolution of loan size with order of the loan seems to be more pronounced online

Loan duration: first loan vs later loans (I)

All new customers who took out their first loan in 2012



Loan durations do not seem to change significantly

Online average loan duration decreases slightly after loan #4. On high street average loan duration does not change for loans #1-5.

Average duration: 22.1 23.0 22.5 21.9 21.2



A note on methodology

When we describe how certain features (loan size, duration) vary depending on the order of the loan, we have compared the “average first loan” of all customers to the “average second loan” of all those who took out at least 2 loans, to “average third loan” of all who took out at least 3 loans and so on. One implication of this is that when we compare, for example, the average duration of payday customers’ fifth loans to the average duration of payday customers’ fourth loans, we are comparing different groups of customers (as some borrowers will have taken out four loans, but not five).

An alternative approach is to keep the set of customers the same, and compare the fifth and fourth loans of only those borrowers who have taken out five or more loans. An analysis of the evolution of loan value and duration using this approach is presented in the Appendix. The results are broadly similar (although there are some difference when looking at the evolution of loan duration, which is shown to increase slightly between loans number 1 and 3 when using this alternative approach).



Repayment (I)

How does repayment profile change with the order of the loan (for example, a customer's first loan vs second vs third etc).

We only look at loans that were due on or before 1 October 2013.

Possible repayment profiles are (these are assigned according to the status of a given loan as of 1 October 2013):

- Repaid in full early – loan was repaid in full earlier than the originally agreed repayment date
- Repaid in full on time – loan was repaid in full on the originally agreed repayment date
- Repaid in full late – loan was repaid in full later than the originally agreed repayment date (including loans that were rolled over and then repaid in full, and also loans that were not rolled over but repaid in full late)
- Never repaid in full – loan was not repaid in full as of 1 October 2013 (including loans that were rolled over and not repaid in full, and also loans that were not rolled over and not repaid in full)

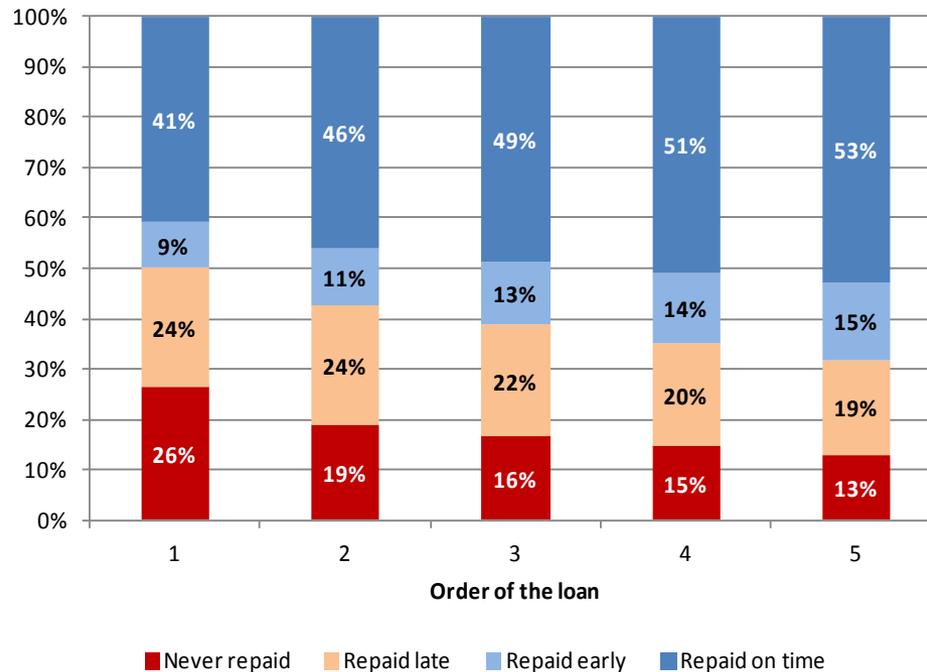


Repayment (II)

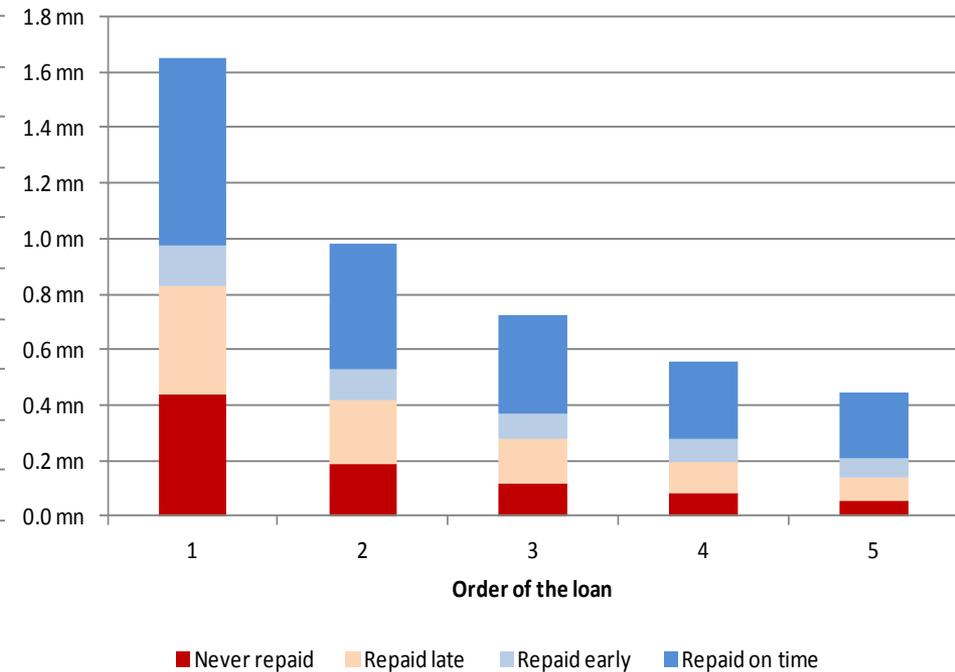
How does repayment profile change with the order of the loan?

All loans by new customers who took out their first loan in 2012

Number of loans issued, by repayment profile, %



Number of loans issued, by repayment profile



Repayment profile improves for later loans



Repayment (III) - by channel

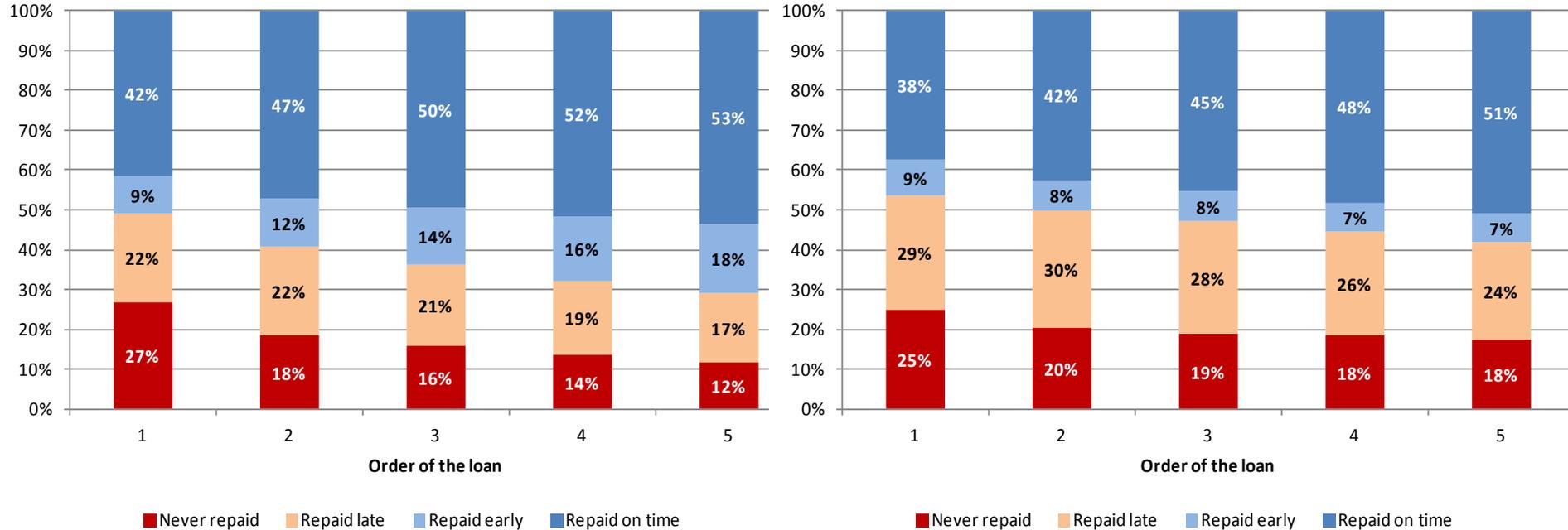
How does repayment profile change with the order of the loan?

All loans by new customers who took out their first loan in 2012

Number of loans issued, by repayment profile, %

Online

High street



Repayment profile improves for later loans both online and on the high street. Repayment profile for online customers is generally better than on the high street for any loan of a given order.

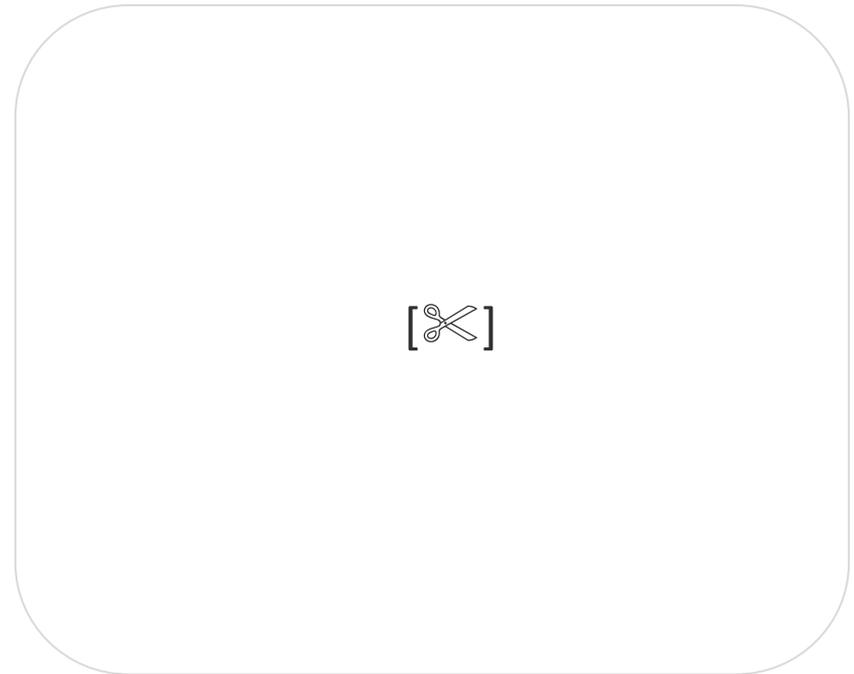
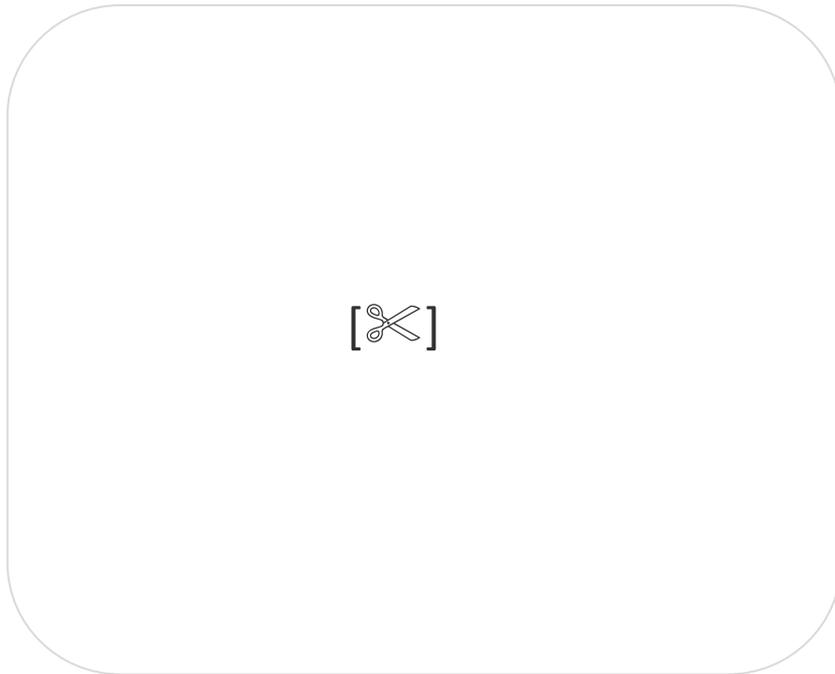


Repayment (IV) – by lender

How does repayment profile change with the order of the loan?

All loans by new customers who took out their first in 2012

Number of loans issued, by repayment profile, %



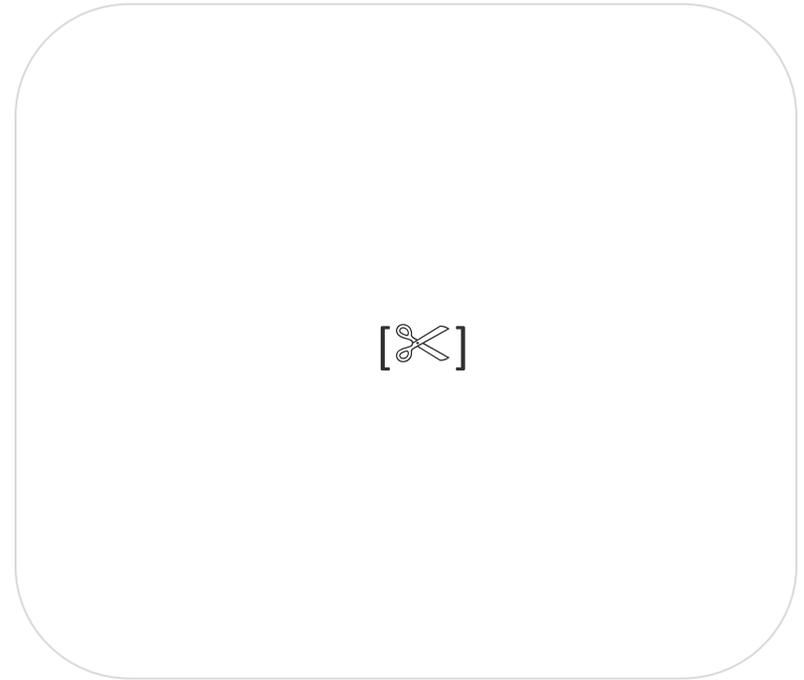
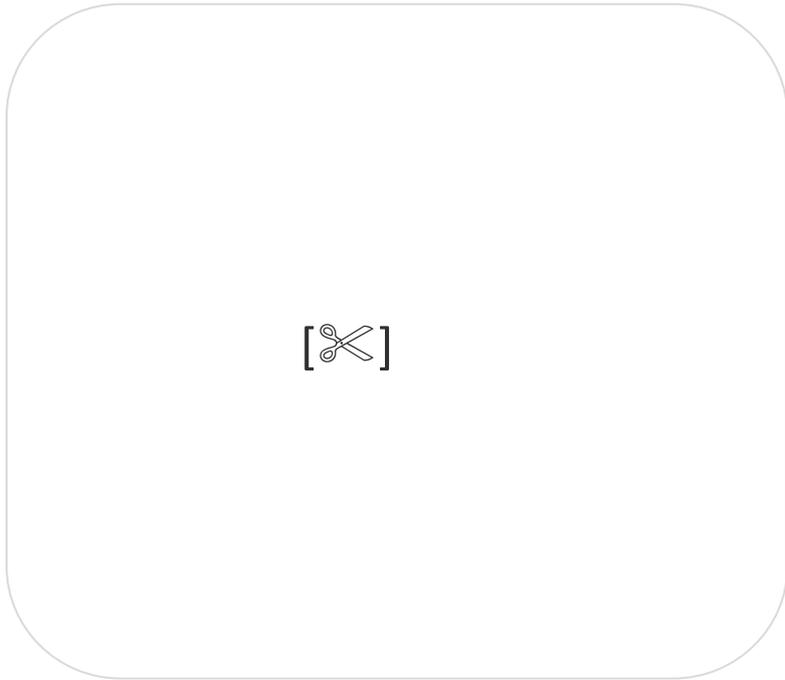


Repayment (V) – by lender

How does repayment profile change with the order of the loan?

All loans by new customers who took out their first loan in 2012

Number of loans issued, by repayment profile, %





Repayment (VI)

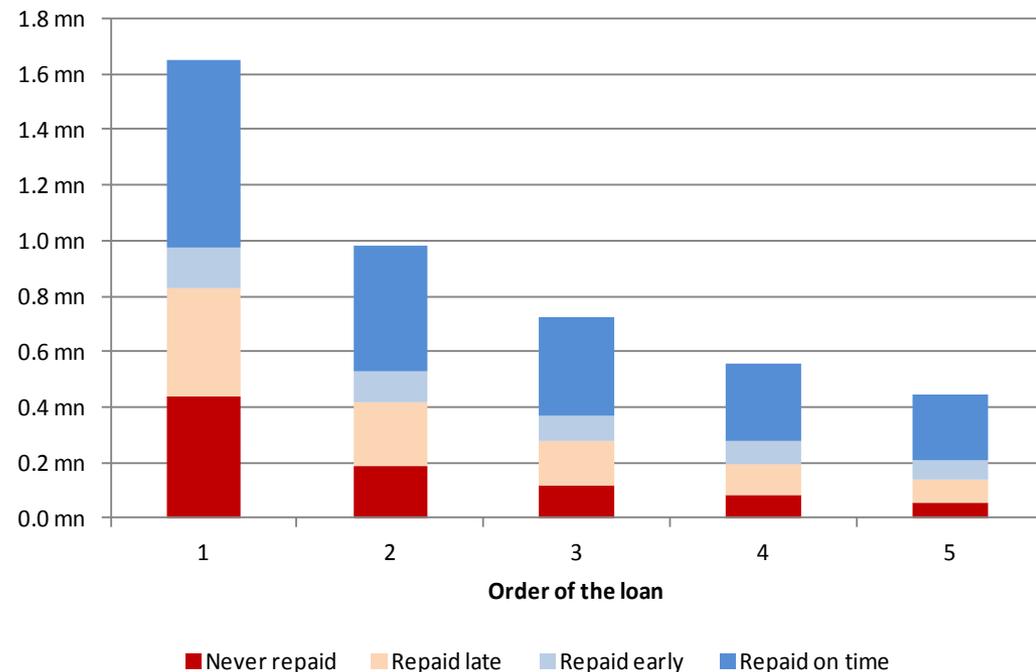
We observe that people “leave the market”, i.e. number of customers who took out in total 5 loans is smaller than number of customers who took out 4 loans, etc.

How does repayment profile vary depending on whether a particular loan is last for a given customer or not?

By “last loan” we mean the last loan of a given customer from a given lender in our dataset (1 January 2012 to 31 August 2013)

All loans by new customers who took out their first loan in 2012

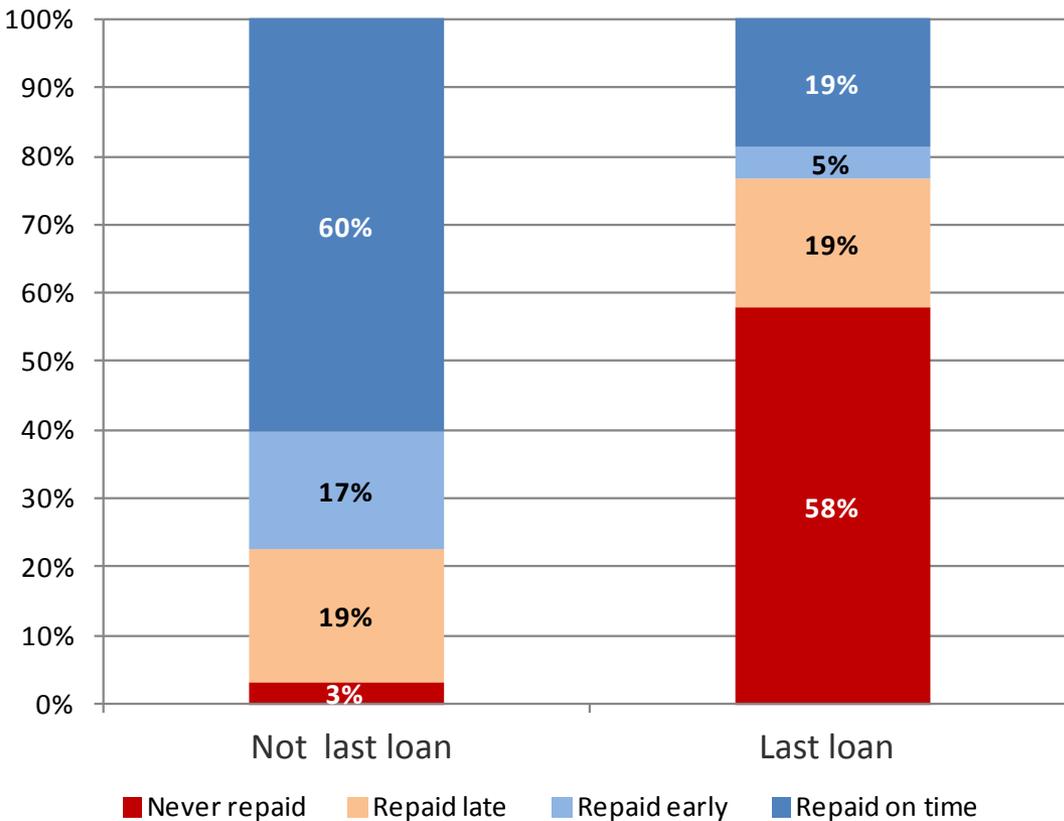
Number of loans issued, by repayment profile





Repayment (VII)

Repayment profile of an “average last loan” vs “average not-last loan” (by number of loans) of all customers who started borrowing from a given lender in 2012



The chart is based on all loans (Jan'12-Aug'13) of all customers who took out their first loan in 2012

“Last” loans are less likely to be repaid on time, or at all.

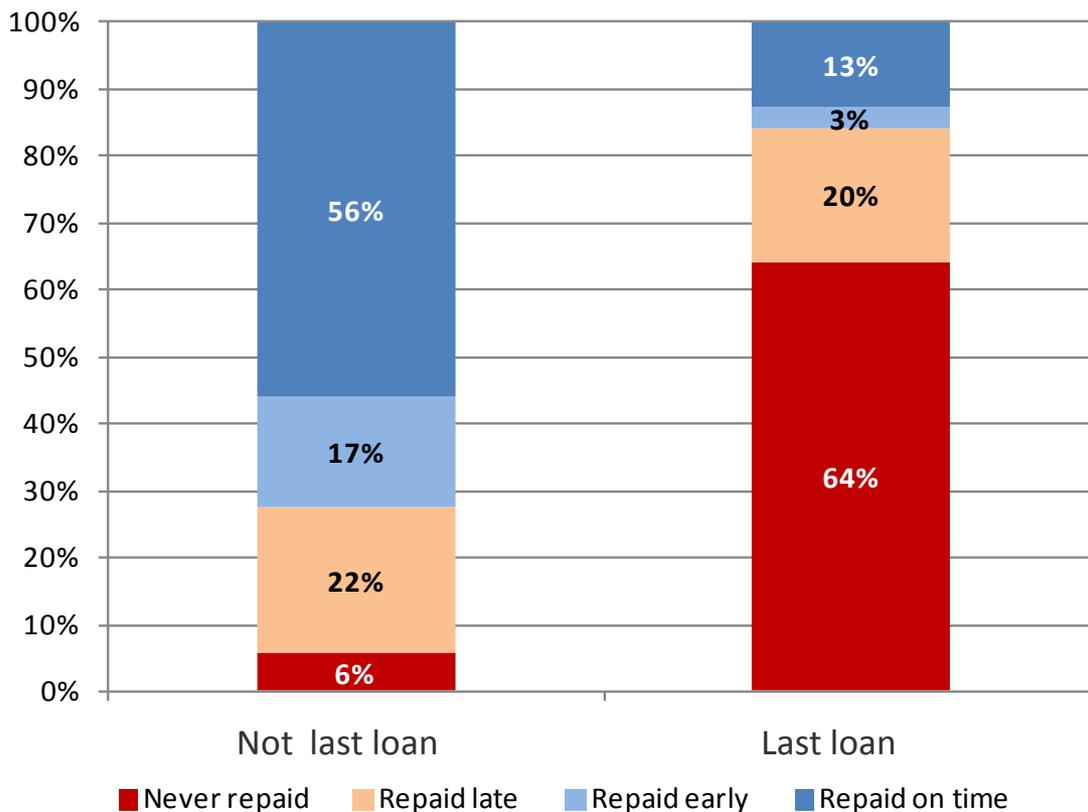
The result that last loans are less likely to be repaid on time or at all is also observed if we restrict our analysis to the customers of individual lenders.

Please see Annex for comparison of repayment profiles of last vs non-last loans for loans of order 1 to 10 (disaggregated).



Repayment (VIII)

Repayment profile of an “average last loan” vs “average not-last loan” (by number of loans) for customers who started borrowing in 2012, and whose last loan was in 2012.



In previous chart we mix together “true last” loans, when a customer stopped borrowing from a particular lender, with loans that happened to be “last” in our dataset.

The chart in this slide is based on all loans of all customers who took out their first AND their last loan in 2012.

“Last” loans are less likely to be repaid on time, or at all (and again this is true when we look at the customers of individual lenders)

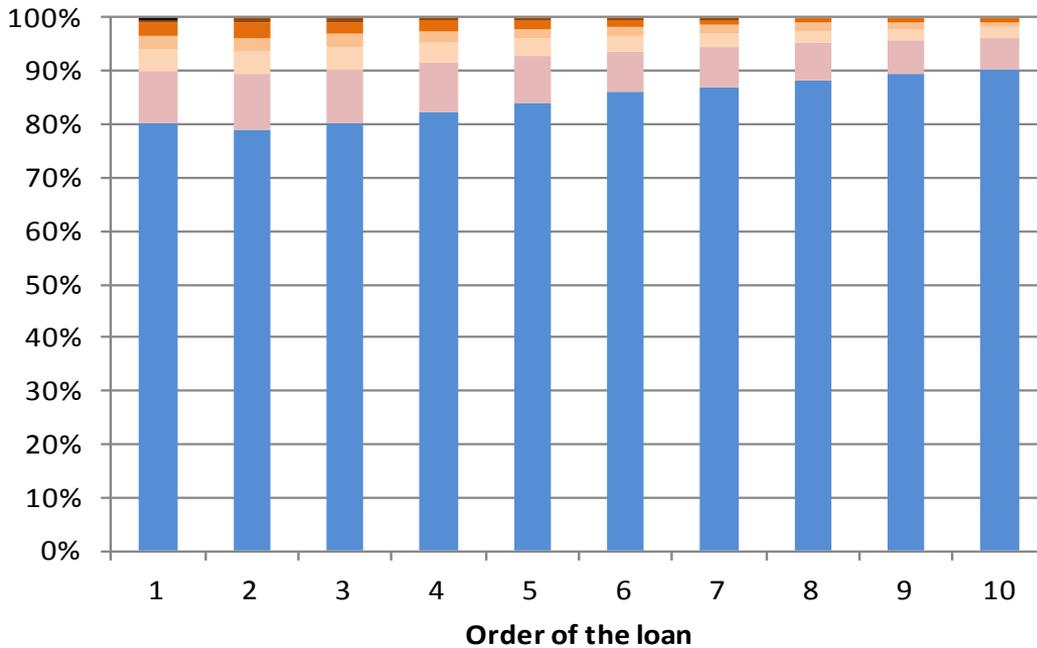


Rollovers (I)

How does rollover behaviour change with the order of the loan?

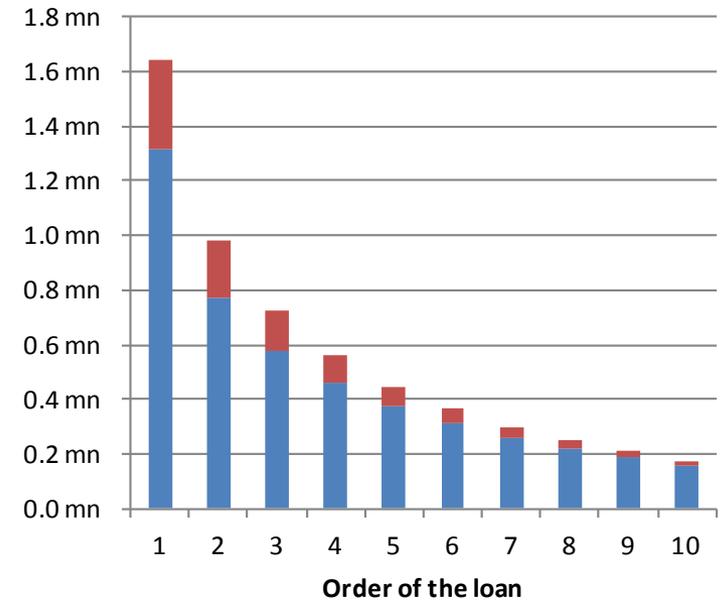
All loans by new customers who took out their first loan in 2012

Number of loans issued, by rollover profile, %



Number of rollovers: 0 1 2 3 4-6 7-10 >10

Number of loans issued, by rollover profile



Not rolled over Rolled over

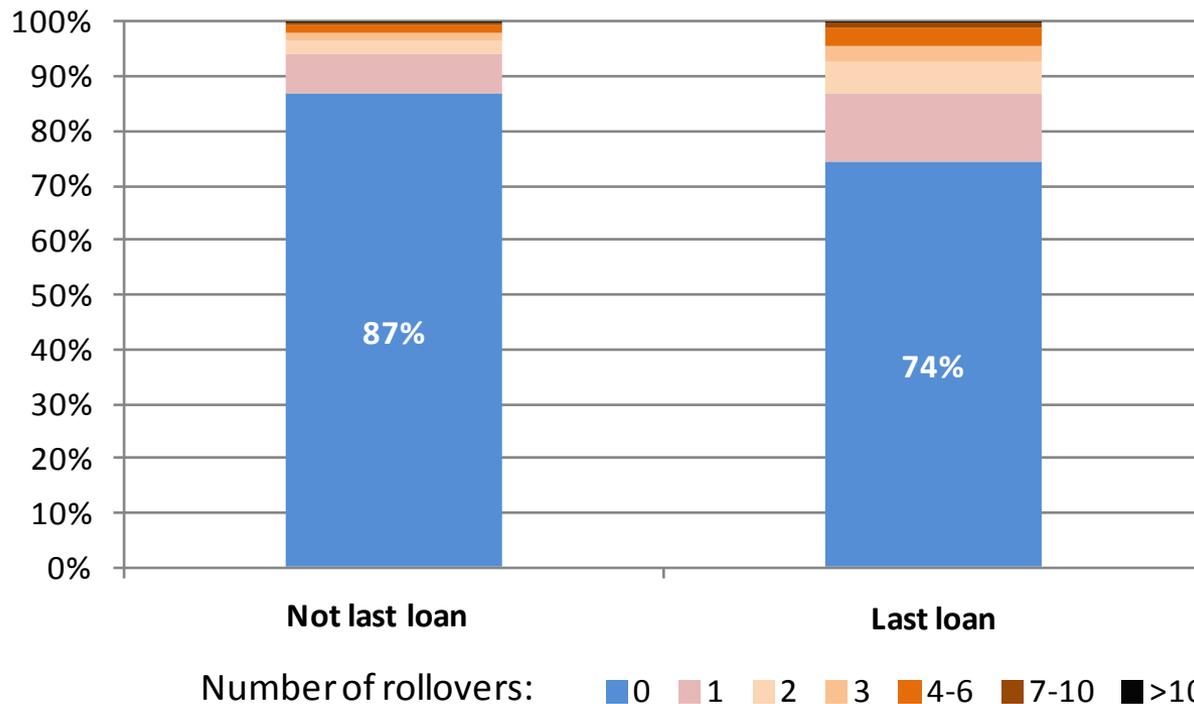
Share of loans that were rolled over is similar for loans #1-3, and then gradually falls.

Earlier loans are more likely to be rolled over. We do not find a significant difference between channels.



Rollovers (II): last loans vs not last loans

Rollover profile of an “average last loan” vs “average not-last loan” (by number of loans) of all customers who started borrowing from a given lender in 2012



The chart is based on all loans (Jan’12-Aug’13) of all customers who took out their first loan in 2012

A customer’s “last” loan is more likely to be rolled over than his/her earlier loans

As in slide 35, here we mix together “true last” loans, when a customer stopped borrowing from a particular lender, with loans that happened to be “last” in our dataset. The results are broadly the same if we restrict our analysis to all customers who took out their first AND their last loan in 2012.



Summary of the section

- Loan value tends to increase as customers come back for more loans. This is more prominent online than on the high street.
- There is evidence of a slight increase in the average duration of a customer's second and third loans, compared with their first.
- The repayment profile of loans improve with the "order of the loan", e.g. a customer's fifth loan with a lender is, on average, less likely to never be repaid in full or to be repaid in full late than the first.
- There is a striking difference between repayment profile of loans depending on whether they are "last" for a given customer. On average, 58% of all "last loans" are never repaid in full, compared to 3% of loans that are not last which are never repaid. This suggests that in many cases where a customer stops borrowing from a given lender, this is due to their failure to repay their last loan.
- Later loans are slightly less likely to be rolled over. A customer's last loan is slightly more likely to be rolled over than a loans which is not their last



Appendix



Data description

Data: transaction level dataset from major lenders covering all loans issued between 1/1/2012 and 31/08/2013. Approximately 15mn loans. See next slide for summary statistics.

We have excluded some products due to problems with variables “date of the first loan” or “date of the loan”, and some problematic observations (about 1.4% of all observations).

Following products are excluded from the analysis:

- CashEuroNet: Product [✂] – as an open credit facility – loan date variable is not consistent with the way it was submitted by other lenders and for other products. Represents around [✂] of all the loans in the total sample.
- SRC: Product [✂] – data for this product was submitted later in the course of analysis and we had no opportunity to check its quality. Approximately [✂] of observations in total sample.
- Cheque centres: Products [✂] – date of first loan for these products is incorrect and was not resubmitted. These represent about [✂] of total number of observations and about [✂] of loans issued by Cheque Centres in the sample.

Records of [✂] customers of SRC are dropped because they used both channels online and high street – these were excluded in order to enable us to analyse customer behaviour by channel (these customers represented about [✂] of SRC customers in the sample covering approximately [✂] of SRC loans). These represent about [✂] of all observations.

3 observations (out of about 15mn) were dropped because date of first loan was missing.



Data summary

Lender (alphabetical order)	2012				Jan-Aug 2013			
	Number of loans	Value of loans, £m	Number of customers	Average number of loans per customer	Number of loans	Value of loans, £m	Number of customers	Average number of loans per customer
ARISTE HOLDING LIMITED								
CASH STORE								
CASHEURONET								
CFO								
CHEQUE CENTRES								
DOLLAR(EXPRESS FINANCE)								
DOLLAR(ICL)								
DOLLAR(MEM)								
H&T								
LENDING STREAM								
MYJAR								
SRC(SPEEDY CASH)								
SRC(WAGEDAYADVANCE)								
WONGA								
Total	8,782,969	2,269	2,614,620		6,038,228	1,565	1,965,602	

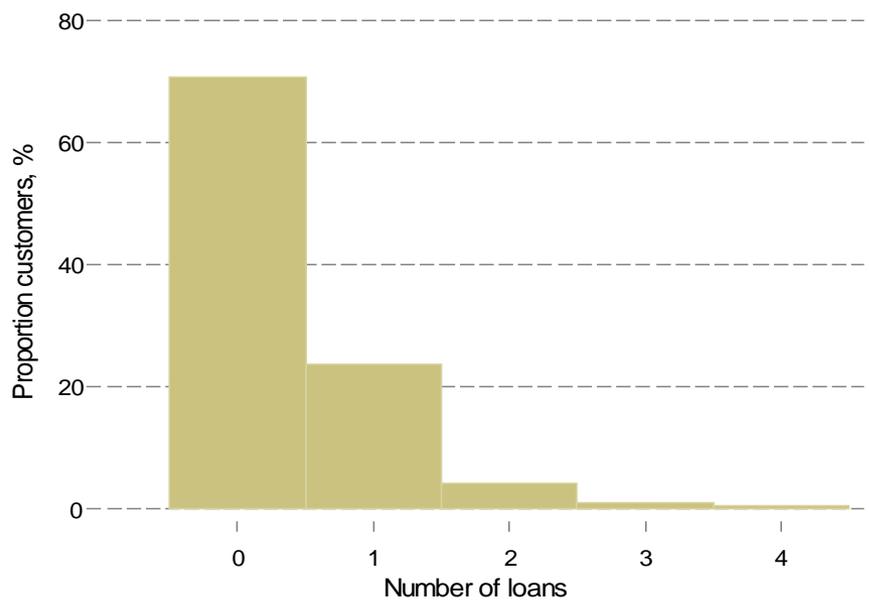




Journey of a new customer: customers who obtained their first loan in 2012 (I)

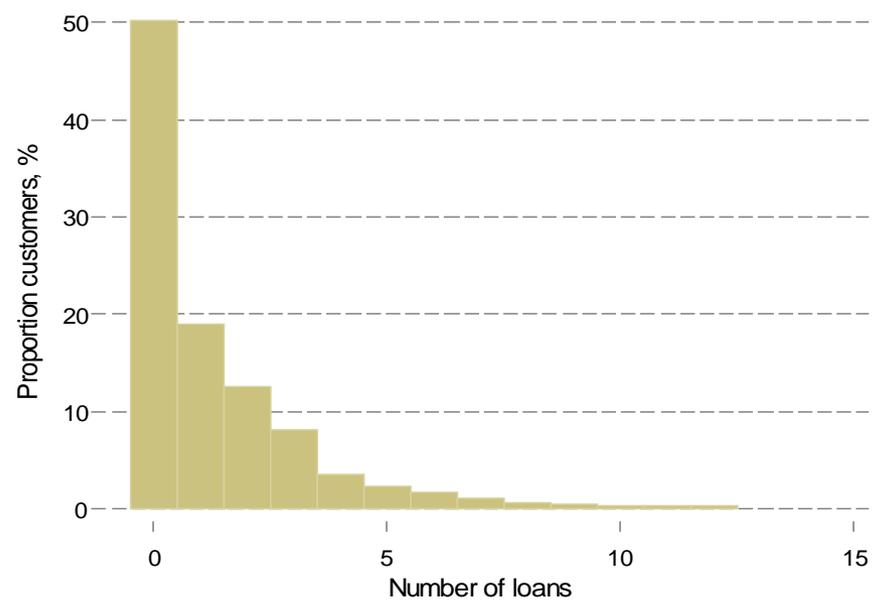


Additional loans taken out within 30 days from taking out the first loan



70% - 0 loans
 24% - 1 loan
 6% - 2-5 loans
Average: 0.4

Additional loans taken out within 90 days from taking out the first loan



50% - 0 loans
 19% - 1 loan
 26% - 2-5 loans
 5% - more than 5
Average: 1.3

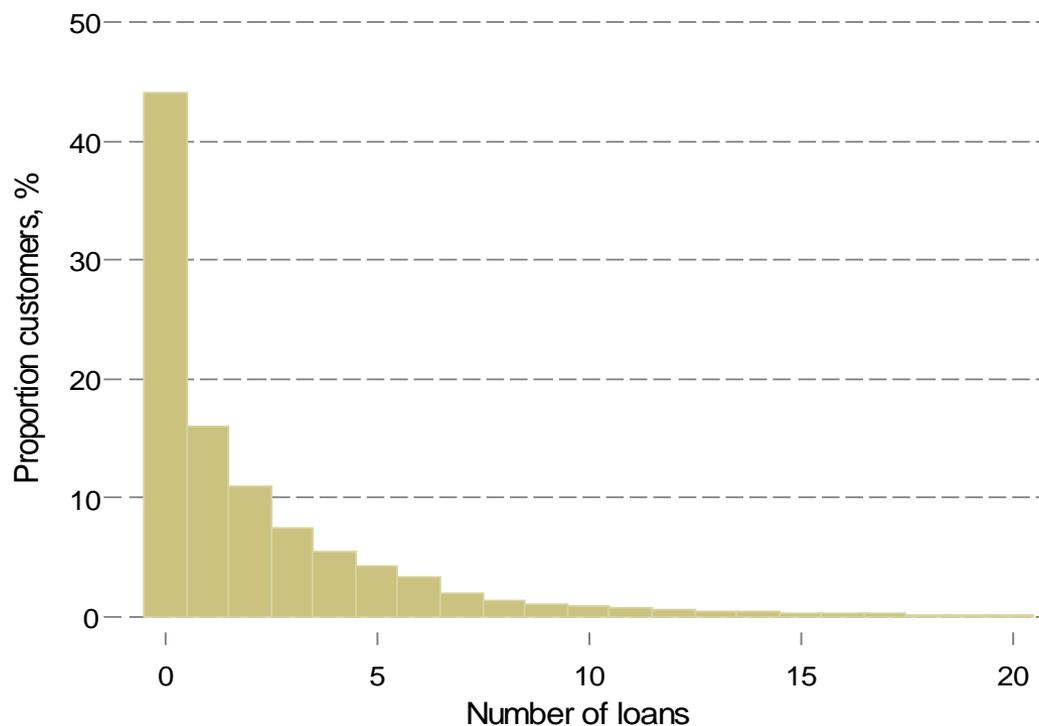
Upper 0.5% of observations are not shown.



Journey of a new customer: customers who obtained their first loan in 2012 (II)



Additional loans taken out within 180 days from taking out the first loan



44% - 0 loans
16% - 1 loan
28% - 2-5 loans
12% - more than 5
Average: 2.2

Note: dataset ends on 31/08/2013 so we cannot produce yearly statistics for everyone who entered in 2012

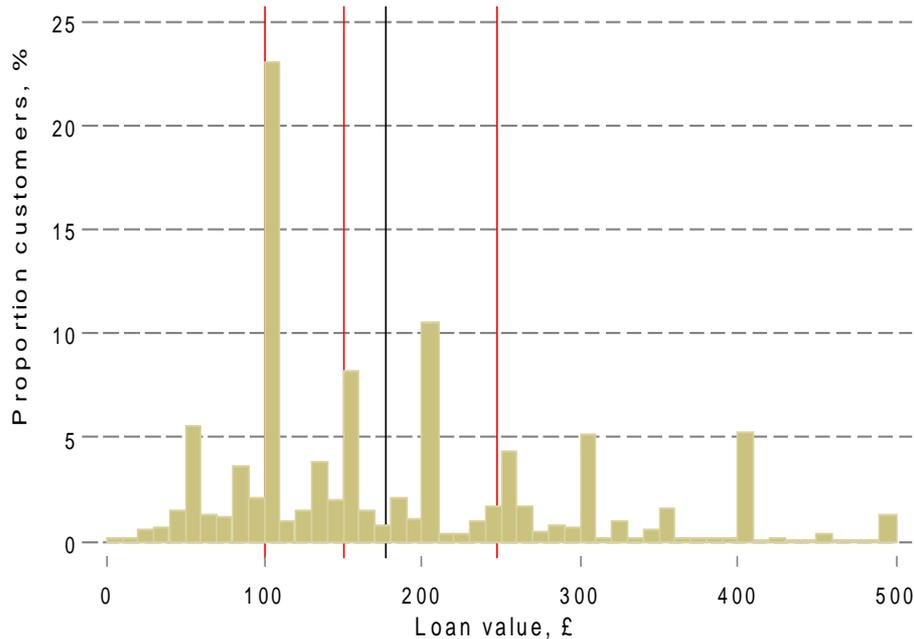
Upper 0.5% of observations are not shown.

Loan value: first loan vs later loans – distribution (I)

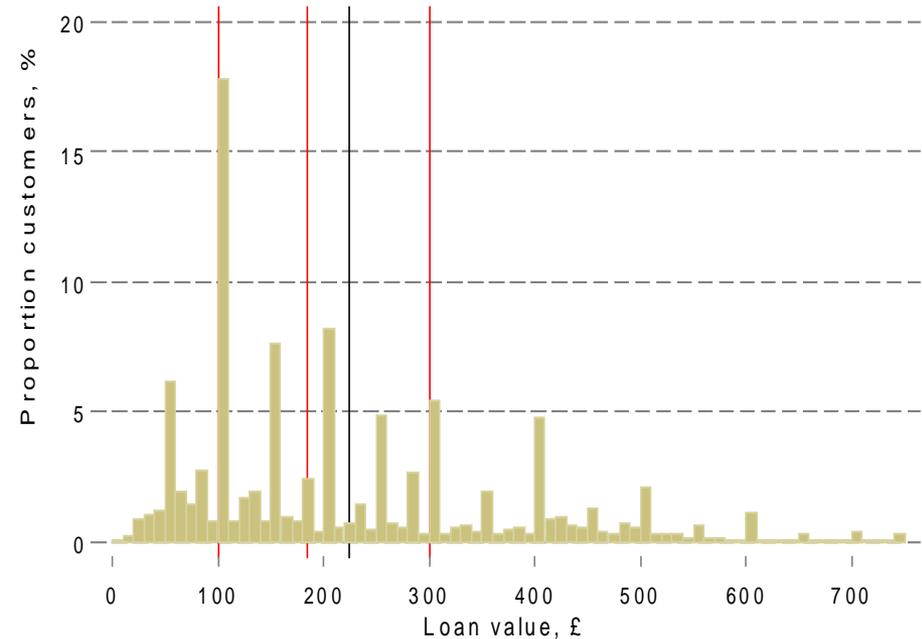


All new customers who took out their first loan in 2012

First loan



Second loan



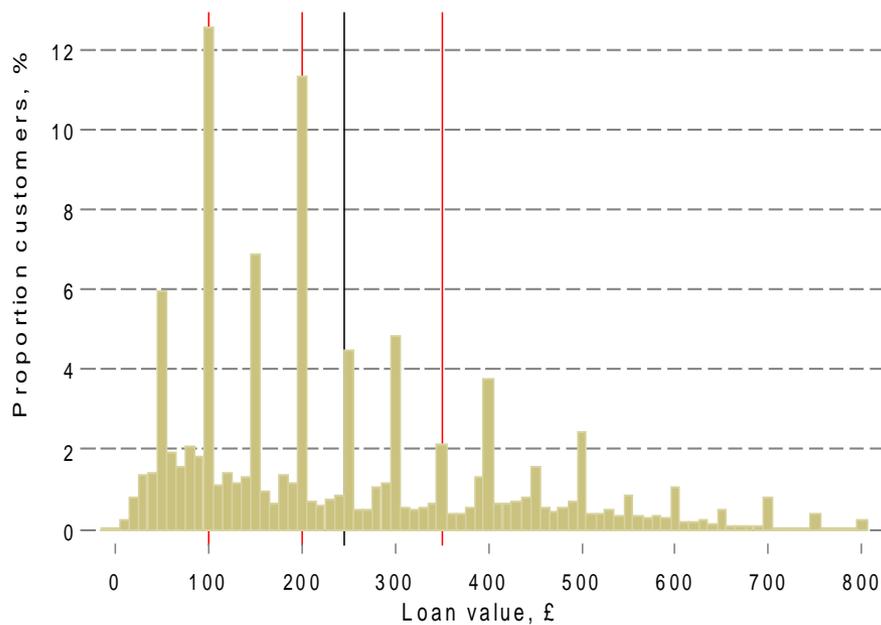
Red lines: 25 percentile, median, 75 percentile. **Black line:** average (mean). Top 1% of observations is not shown

Loan value: first loan vs later loans – distribution (II)

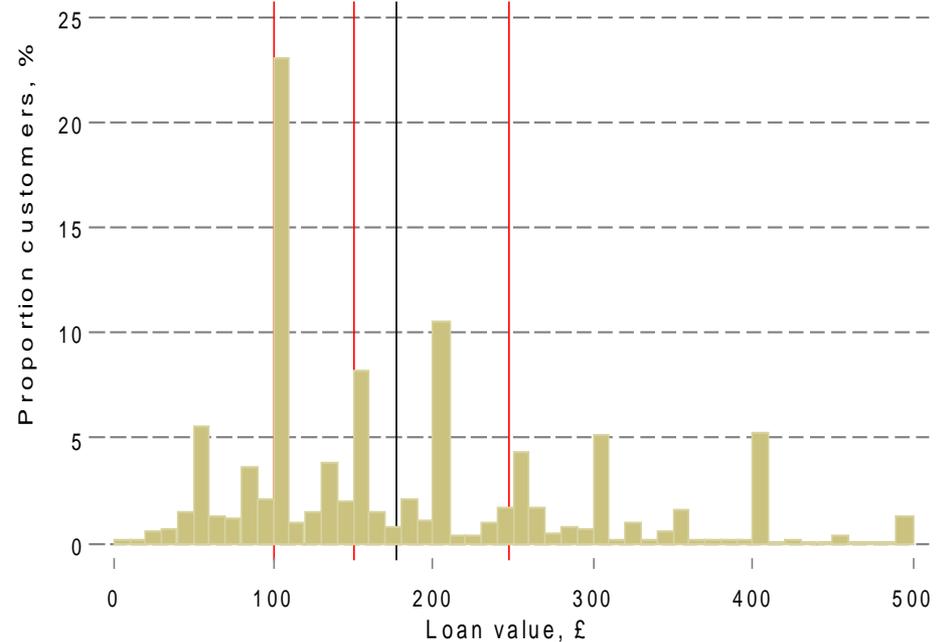


All new customers who took out their first loan in 2012

Third loan



All loans

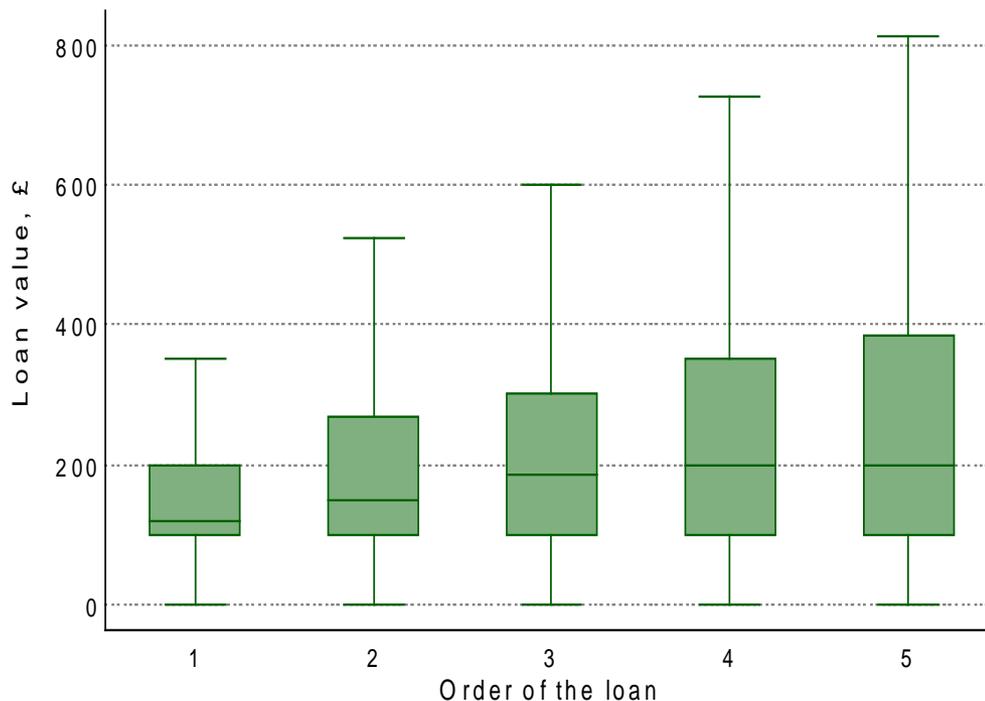


Red lines: 25 percentile, median, 75 percentile. **Black line:** average (mean). Top 1% of observations is not shown

Loan value: first loan vs later loans (I) – multiple borrowers



In slides in Part III we compared the value of all customers' first loans with the value of the second loans of all customers. As a result, the set of customers whose loans are included in the distribution will vary from one loan to the next (because not all customers took out multiple loans). In the analysis presented on this and following charts, we look only at **“multiple” borrowers: customers who entered in 2012 and took out 5 or more loans with the same lender before 31/08/2013 ***



Average loan values tend to increase

Average loan values:

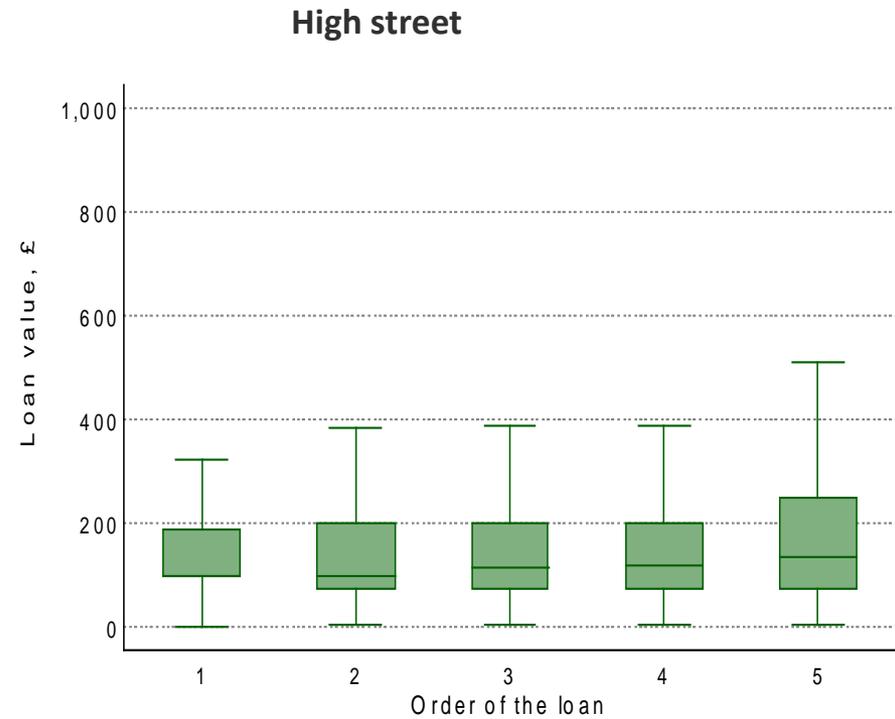
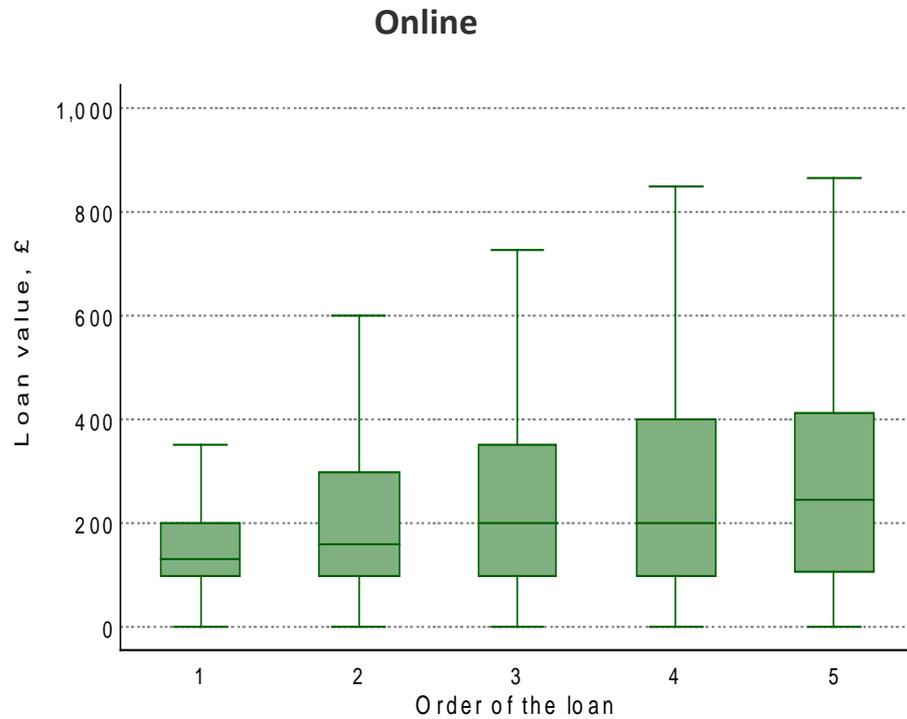
157 195 223 246 269

* Covers 68% of loans (observations) of new customers who entered in 2012, and represent 27% of unique customers who entered in 2012.

Loan value: first loan vs later loans (II): online vs high street



Customers who entered in 2012 and took out 5 or more loans until 31/08/2013 *



Mean values:

161 210 242 269 297

142 145 157 168 179

* For online segment multiple borrowers represent 66% of loans (26% of customers). For high-street: 75% of loans (34% of customers)

Loan value: first loan vs later loans (III):



[✂] vs [✂]

Customers who entered in 2012 and took out 5 or more loans until 31/08/2013

[✂]

[✂]

[✂]

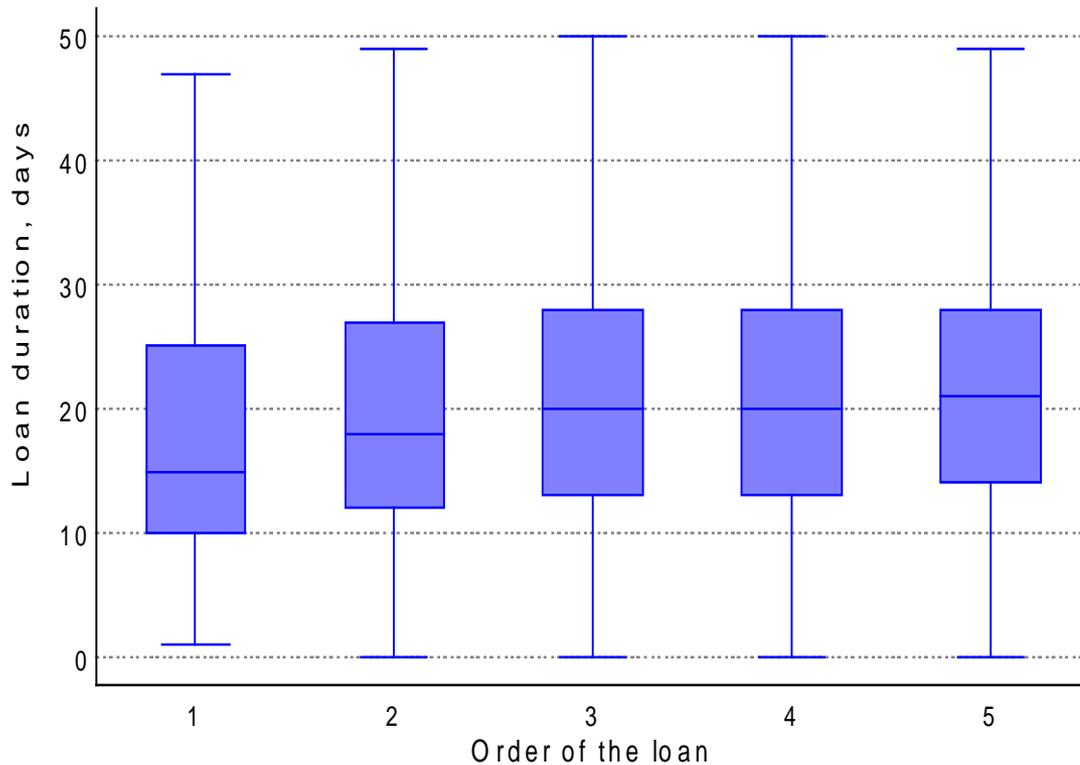
[✂]



Loan duration: first loan vs later loans (I) – multiple borrowers



Customers who entered in 2012 and took out 5 or more loans until 31/08/2013 *



Loan durations tend to slightly increase from loan 1 to 3

Average duration: 18.2 19.6 20.1 20.6 21.2

* Covers 68% of loans (observations) of new customers who entered in 2012, and represent 27% of unique customers who entered in 2012.

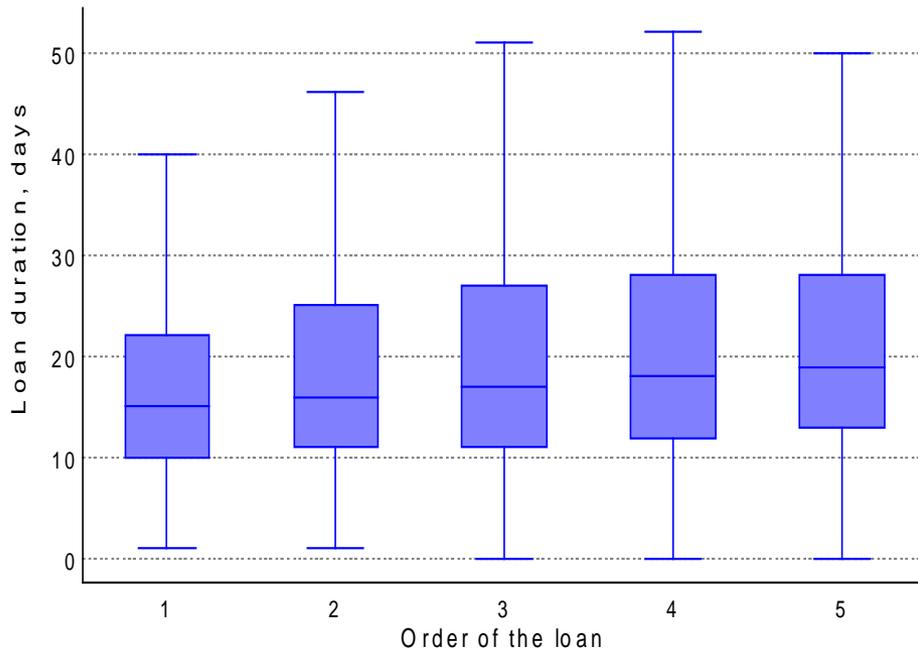


Loan duration: first loan vs later loans (II): online vs high street – multiple borrowers

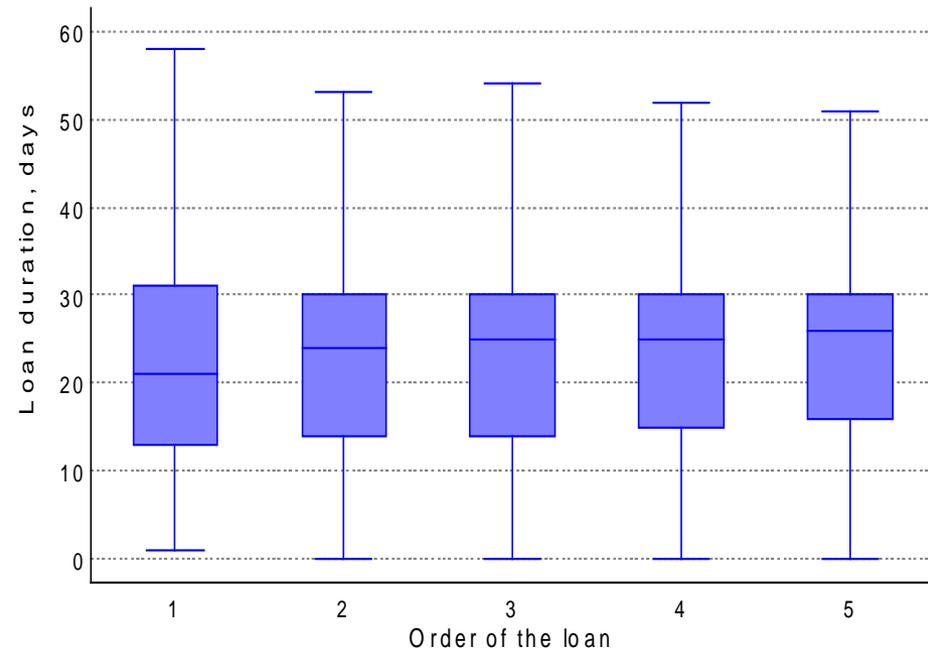


Customers who entered in 2012 and took out 5 or more loans until 31/08/2013 *

Online



High street



Mean: 17 19 19 20 20

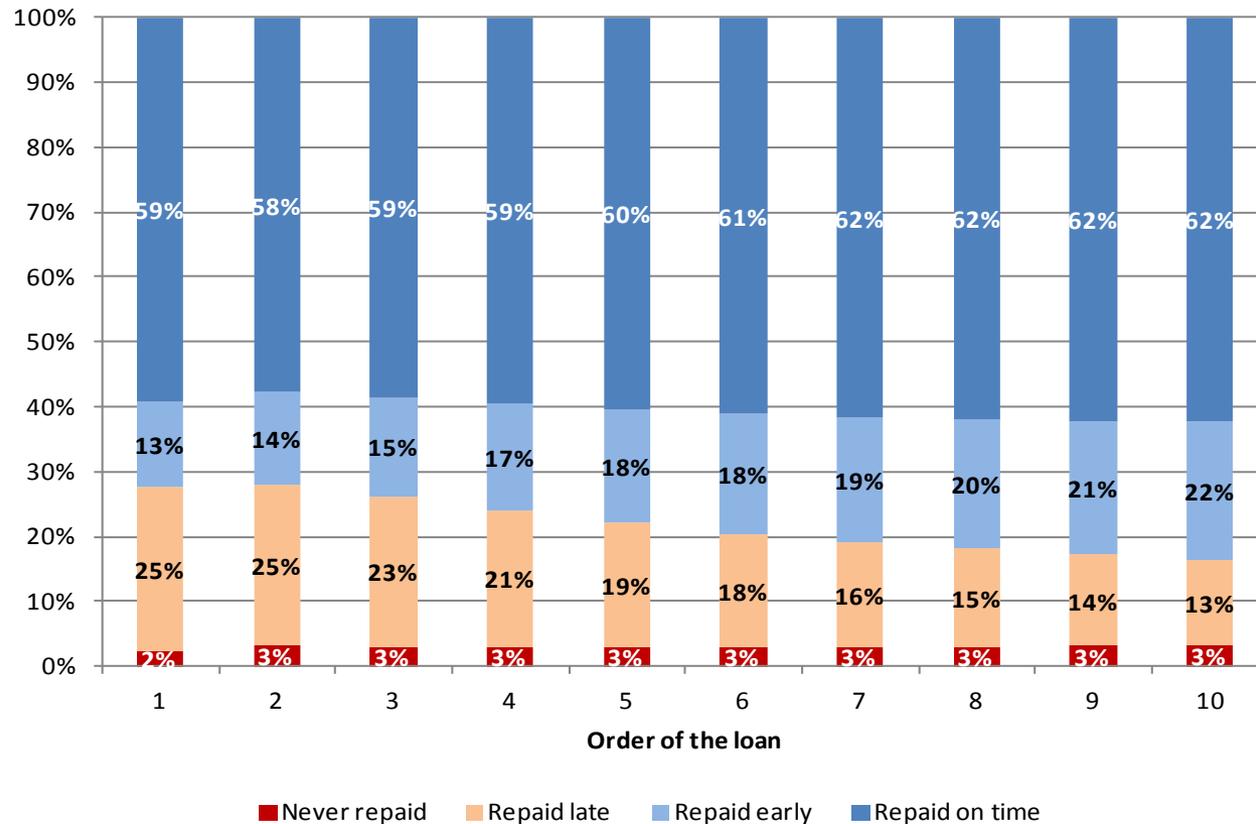
21 23 23 23 24

* For online segment multiple borrowers represent 66% of loans (26% of customers). For high-street: 75% of loans (34% of customers)



Repayment (I) – by loan order

Repayment profile of loans (by number) for customers for whom this loan is NOT the last.



The chart is based on all loans (Jan'12-Aug'13) of all customers who took out their first loan in 2012

Explanation:

Under “loan #1” – repayment of “loan #1” for all customers who took out one loan and later came back for at least one more loan.

Under “loan #6” – repayment of “loan #6” for all customers who took out 6 loans and later came back for at least one more loan.



Repayment (II) – by loan order

Repayment profile of loans (by number) for customers for whom this loan is LAST.

The chart is based on all loans (Jan'12-Aug'13) of all customers who took out their first loan in 2012

Explanation:

Under “loan #1” – repayment of “loan #1” for all customers who took out ONLY one loan and never came back.

Under “loan #6” – repayment of “loan #6” for all customers who took out 6 loans and never came back.

Repayment profile for a loan of any order (at least 1 to 10) is generally worse if the loan is “last” for a given customer

