



UNIVERSITY OF EDINBURGH  
Business School

# The Financial Health of NHS Workers

Final Report

Prepared for Salad Projects by

**Professor Tina Harrison and Dr Galina Andreeva<sup>i</sup>**

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## Foreword by Salad Projects Founder

Frustrated by the lack of affordable credit available, and with 8.5 million over-indebted and 5.8 million credit score invisible individuals in the UK, Salad Projects was established with a mission to democratise access to affordable credit.

Open Banking technology (with no reference to credit scores as the basis for determining the affordability of a loan) has the potential to democratise credit to millions by lending solely on what is affordable based on the income and expenditure showing in the applicants banking data for up to two years previously.

Salad Money, which lends exclusively to NHS workers using Open Banking data (lending between £500 and £1,000 at an APR of 34.9% when sponsored by NHS Trusts) has a unique data set for each and every applicant, providing the opportunity for unparalleled and granular insight into the financial lives of NHS workers covering some 20,000 plus applicants.

Salad Projects can legitimately use this information and has democratised this data, on an anonymised basis, to give civil society an independent analysis of the many factors giving rise to a lack of financial resilience for those NHS workers who then become reliant on persistent overdrafts and high-cost credit. Salad Projects commissioned the University of Edinburgh to independently report on the financial lives of NHS workers using the anonymised Open Banking data collected by Salad Money.

This independent report from the University of Edinburgh makes for very difficult reading for all of us concerned about the financial welfare of NHS workers. It confirms that NHS workers are heavily reliant on persistent overdrafts and high-cost credit, where the APR on those loans is as high as 1,333%.

All lenders have a responsibility to advance only affordable loans and demonstrate that fair treatment of customers is at the heart of their business model. As a result of these independent academic findings, it should now be a matter of urgent concern for the FCA as to whether lenders are meeting those responsibilities and communicating with consumers in a fair, clear and not misleading way.

However, NHS workers have a real desire to become less reliant on persistent overdrafts and high-cost credit. In response to this demand, Salad Projects has built and developed Money Mind - a unique, and free online financial tool exclusively for all NHS workers.

Harnessing the power of up to two years' worth of Open Banking data, Money Mind offers NHS workers a review of their spending patterns in a simple and easy to understand format. Money Mind also allows NHS workers to compare and monitor their spending versus the anonymised data of their NHS colleagues in a unique feature. This enables NHS workers to identify and make the changes in their spending to avoid persistent overdrafts and high-cost credit.

The report from the University of Edinburgh also highlights the importance and reliance on benefit income for NHS workers. Despite this need, there is approximately £16 billion of unclaimed benefits annually in the UK. To ensure that NHS workers receive all of the benefits they are entitled to, Money Mind also includes a benefits tool. This tool compares the actual benefits received as seen in the Open Banking data, with the entitled benefits based on the NHS worker's specific circumstances. Money Mind then advises users of which additional benefits may be claimed.

In democratising Salad Money's anonymised applicant data, Money Mind has the capability to ensure that all NHS workers get all the benefits to which they are entitled. Money Mind can enable NHS workers to understand and monitor discretionary spending against anonymised colleagues, deliver affordable credit, and shine a light on the practice of lenders. Salad Projects believes with the support of NHS Trusts it will assist in building much needed financial resilience for NHS workers.

This ground-breaking annual report will give a unique insight into the financial lives of NHS workers, allowing NHS Trust employers the opportunity to take an annual litmus test on their financial resilience. It is our hope that the report will subsequently allow NHS Trust employers to implement interventions necessary to alleviate the emotional distress arising from a reliance on persistent overdrafts and high-cost credit.

Alan Campbell  
**Founder**  
**Salad Projects**

20<sup>th</sup> January 2021

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## Executive summary

Salad Projects commissioned researchers from the University of Edinburgh Business School to conduct analysis of the financial health of NHS workers. This report provides a unique insight into the financial lives of a significant number of NHS workers. The analysis is based on 15,303,444 banking transactions of 9,516 individuals all of whom have applied to Salad Money for a loan and have made their data available via Open Banking. Of the 9,516 individuals that made an application to Salad Money, 32% (3,068) were approved for a loan.

For 90% of individuals, we are able to observe at least 12 months of transaction data. Some limitations with the data set must be noted. The observed accounts may not give a complete picture of an individual's or household's financial situation; they provide a snap-shot in time and we may not see the full extent of an individual's relationship with a particular financial product; the categorisation engines used in Open Banking may not perfectly categorise all transactions. Hence, we may miss or under-report certain information as a result.

The sample comprises a significant sub-set of NHS workers with a profile consistent with those employed in NHS Bands 1-5. Band 5 includes many newly qualified clinical professionals, such as nurses. It should be noted that the sub-set is not a random or representative sample of NHS workers, there is a self-selection bias; individuals applying for short-term loans are more likely to be experiencing financial problems already.

### Low financial resilience

The report raises serious concerns about the financial resilience of a good proportion of these individuals. Almost two-thirds (60%) have evidence of returned direct debit payments at some point, with one-quarter (26%) having evidence of returned direct debits in at least three out the last six months of data available. According to the FCA's Financial Lives Survey, this is a key indicator of individuals 'in difficulty' and is more than double the proportion (11%) 'in difficulty' in the wider UK population with a similar age profile.

The analysis also shows that despite being 'in difficulty' a significant proportion have evidence of credit and loan use, many are using multiple (especially high-cost) loan providers and a significant proportion are in persistent overdraft.

There is further evidence to suggest that at least half would struggle to sustain an unexpected expenditure of £100 in a month without causing their bank account to go into overdraft, or to go further into overdraft. With only 4% showing evidence of payments into savings and investments, it may be safe to assume that the majority of individuals do not have significant savings to fall back on.

### Reliance on benefits

Half (50%) are receiving benefits which make up a significant proportion of income for many. Universal Credit and Working Tax Credit are contributing the most to incomes, each on average contributing 13% to total annual income for those that receive them. For one-quarter, Universal Credit is making up 18% or more of total annual income, and Working Tax Credit is making up 20% or more of total annual income.

There is evidence that benefit payments are smoothing incomes and boosting end-of-month bank balances on average by 50%. For over half (52%), benefits are improving end-of-month account balances by 75% or more and contributing to reducing already overstretched monthly bank balances.

## **High use of credit and loans**

Use of credit and loan products is extremely high with 93% using one or more type of credit or loan, compared with 75% in the wider UK population (according to the Financial Lives Survey). Loans are being used by 91%, with traditional 'high street' banks accounting for less than 10% of loan providers. More than 100 other lenders are being used, with a significant number of high-cost lenders among them where the APRs can be as high as 1,333%.

There is significant evidence of use of multiple loan providers: more than half (58%) are using up to three loan providers and over two-thirds (68%) are using up to 4 loan providers, with over one-third (36%) using 5 or more loan providers.

Loans and repayments make up on average 7% of total outgoings. For the heaviest 25% of loan users, repayments account for 10% or more of total outgoings. To put this into context, individuals are spending on average 8% of outgoings on housing and 10% on groceries and housekeeping, with the heaviest 25% of spenders in those categories spending at least 12% and 14% respectively.

## **Persistent overdraft use**

A significant proportion (80%) of individuals' accounts are in overdraft for at least some of the time. On average, these individuals' accounts went into overdraft 65% of months or at least six out of every 10 months. For the heaviest 25% of overdraft users, their accounts went into overdraft almost every month (96% of months).

Almost two-thirds (63%) of all individuals (or 80% of all overdraft users) have at least three consecutive months where the account was in negative balance on at least one occasion.

On average, accounts are in overdraft for about 6 days per month. Around one fifth of individuals (21%) spent 10 or more days in overdraft per month, and 52% (64%) were in overdraft for 5 days or less per month. Only 19% did not go into overdraft at all.

On average, it is costing £23 per month for individuals to maintain their overdrafts and £29 or more per month for the heaviest 25% of overdraft users (i.e. those spending 10 or more days in overdraft per month).

## **Gambling**

Just over two-thirds of individuals (68%) have at least one gambling transaction in their account history, skewed towards a small number of heavy gamblers.

On average, individuals show evidence of gambling activity two days per month, with half gambling at most one day per month, and the heaviest 25% gambling more than 2 days per month.

The average amount spent on gambling per month is £10; 40% are spending on average £20 or less per month on gambling and one quarter of heaviest gamblers (25%) are spending £100 or more per month on gambling. Only 4% (363 individuals) have spent more than 25% or more of their annual outgoings on gambling.

Despite some individuals showing evidence of significant income from gambling, overall the net gains from gambling on average are negligible or negative.

# 1. Introduction

This report provides an analysis of the financial lives and behaviour of 9,516 NHS workers that have applied to Salad Money for a loan, of which 32% were accepted. Our analysis is based on all individuals, including those whose applications were unsuccessful. Salad Money uses Open Banking data and not credit reference scores to make lending decisions, and lends exclusively to NHS staff. Through Open Banking Salad Money collects, where available, every transaction going through an applicant's bank account for up to a maximum of two years. It is a rich and powerful dataset providing a detailed insight into the financial lives of individuals.

Our analysis is based on 15,303,444 transactions collected from 9,516 unique applicants to Salad Money. While the number of applications received by Salad Money is far greater, a significant minority of individuals have made more than one application for a loan; duplicate data have therefore been removed. A small number of individuals also have more than one bank account linked to the applications. We have based our analysis on the bank account which we consider to be the primary account, the account into which salary/earnings is paid and/or which contains the fullest or most recent transaction record.

For almost 90% of individuals, we have at least one year of transaction data to observe. However, there are some limitations to the data set that need to be acknowledged and taken into account in reading the results. First, the observed accounts may not give a complete picture of an individual's financial situation. These data capture financial transactions typically from a bank/current account and may not capture other financial behaviours outside of a bank account (for example, payments made towards loan repayments or into savings via payroll deduction would not be captured). Second, the data gives a snap-shot in time and we may not see the full extent of an individual's relationship with a particular financial product. For example, in many cases we can observe loan repayments, but for some we do not know the value of the loan advanced to the individual because this was received outside the period observed, hence, we may miss certain information as a result.

Further, the data categorisation engines may not be perfect, moreover, there is no standard categorisation and the algorithms used to categorise financial transactions vary. The data in this dataset were supplied via two Open Banking categorisation engines: Yapily primarily, with a smaller proportion of transactions from Credit Kudos. Some categories exist in Yapily that do not exist in Credit Kudos, for example, and some categories are more inclusive than others. In some cases, where possible, we have referred to the transaction reference. However, for some transactions it is not obvious from the transaction reference what the transaction is. The purpose of this report is not to improve the categorisation engine. We simply note these inconsistencies. Our analysis is therefore somewhat constrained by the accuracy and comparability of the categorisation and we may have missed and under-reported on some behaviours as a result. We note these limitations where they may affect interpretation of the results we present.

Finally, it should be noted that this sub-set of NHS workers is not a random or representative sample of NHS workers, there is a self-selection bias: individuals that are applying for short-term loans are likely to be experiencing financial problems already,

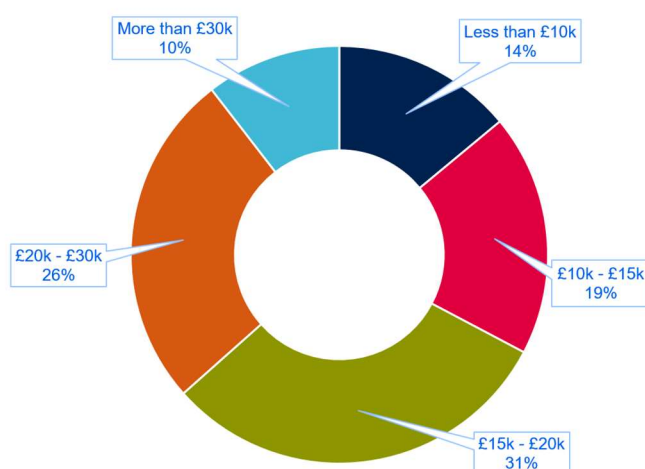


## 2. Sample characteristics

The sample on which this report and analysis is based comprises 9,516 individuals, all of whom are employees of the NHS. It is important to note that the sample is not a representative sample of all NHS workers; it is a self-selecting sample of individuals who have applied to Salad Money for a loan, rather than a random sample. Notwithstanding, the sample comprises a significant number of NHS workers and provides an important and unique insight into a sub-set of the wider NHS population and their financial lives and health. To put the sample into context, we provide an analysis of the composition of the sample and, where possible, make comparison to the characteristics of the wider NHS population.

An analysis of take-home income (based on NHS earnings paid into individuals' accounts) indicates that the sample is skewed towards the lower NHS pay grades. Figure 1 shows that one-third (33%) of the sample is taking home an annual income of less than £15,000. Just under one-third (31%) are taking home an annual amount of between £15,000 and £20,000. Assuming full-time pay and allowing for income tax and on-costs this equates in the main to NHS salary Bands 5 and lower. The mean annual basic pay per person in NHS England in the 12 months to the end of June 2020 was £29,146, and mean annual earnings (including overtime etc.) was £33,834.<sup>1</sup>

**Figure 1: Take-home earnings (n=9,516)**



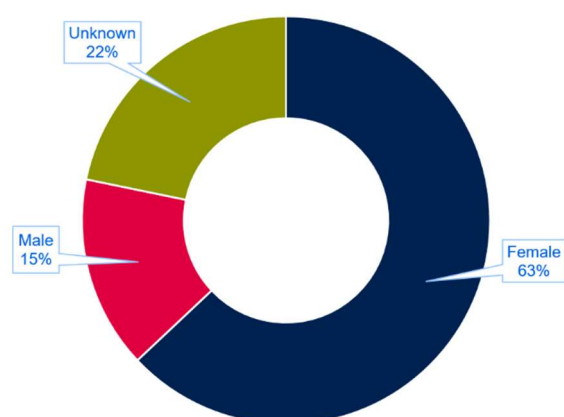
NHS staff in grades 1-5 make up over half of the NHS workforce (56%), totalling in excess of 700,000 staff by headcount.<sup>2</sup> Newly qualified nurses enter the workforce at Band 5. As of April 2020, a newly qualified Band 5 nurse earns £24,907. The Royal College of Nursing estimates that the average salary of a nurse is somewhere between £33,000 and £35,000. This sample of NHS staff is therefore significant, although may not be entirely representative of all NHS workers within salary Bands 1-5.

<sup>1</sup> [Agenda for change - pay rates | Health Careers](#)

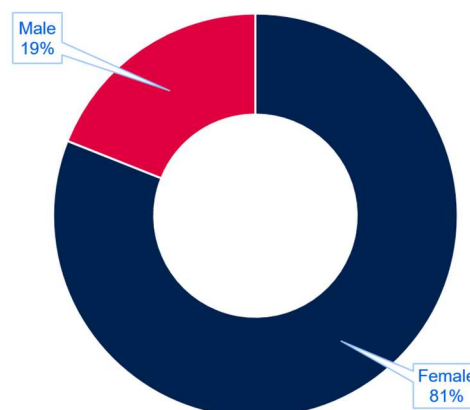
<sup>2</sup> [https://digital.nhs.uk/data-and-information/supplementary-information/2020/all-staff-by-grade\\_ah3436](https://digital.nhs.uk/data-and-information/supplementary-information/2020/all-staff-by-grade_ah3436)

Figures 2 and 3 show that the sample comprises a high proportion of women, which mirrors the breakdown in NHS Bands 1-5. For 22% of the sample the gender is unknown. Of those where gender is known, 81% are female and 19% are male. In NHS Bands 1-4, 80% are women, 20% are men and in Bands 5-7, 82% are women and 18% are men. Within the total NHS workforce, 77% are women and 23% are men.<sup>3</sup>

**Figure 2: Gender (n=9,516)**



**Figure 3: Gender (n=7,444)**



**Figure 4: Age (n=9,516)**

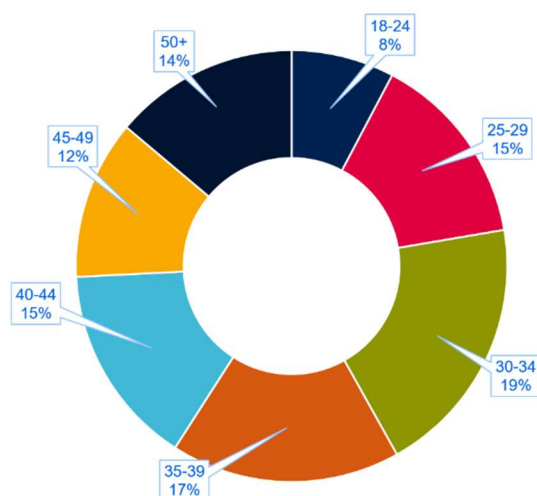
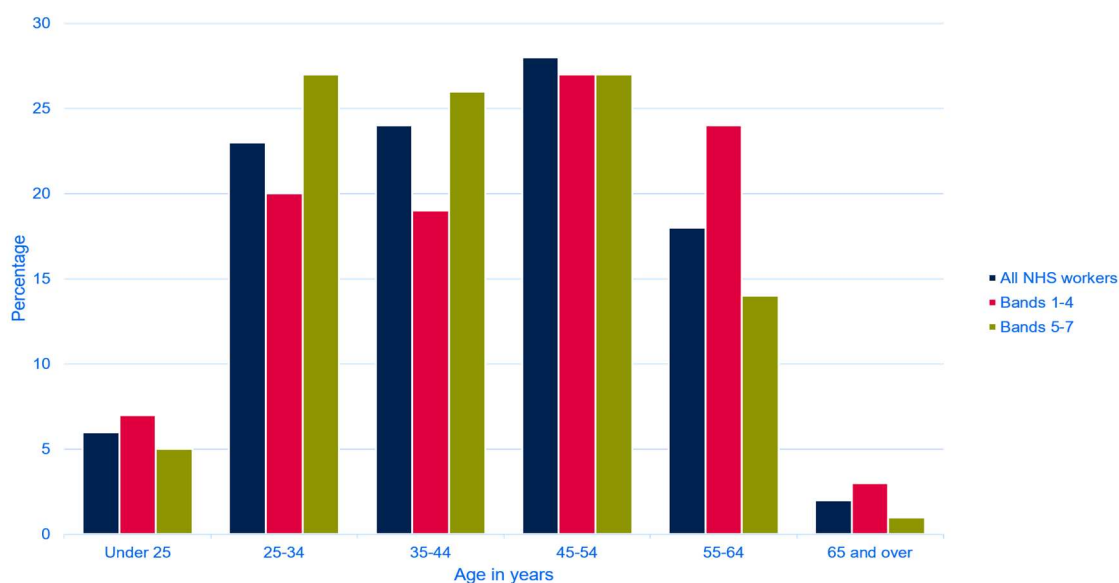


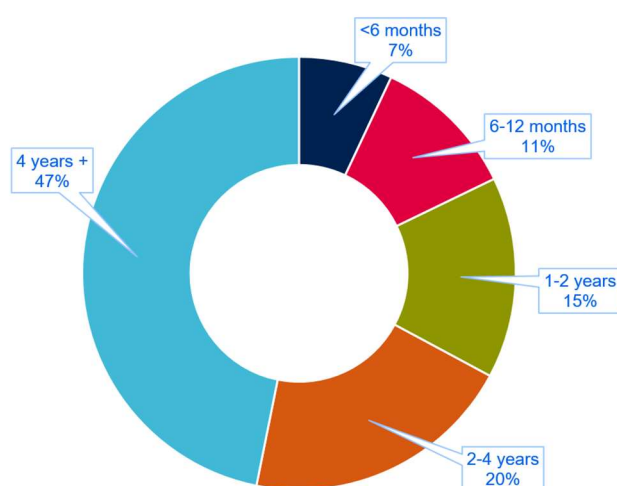
Figure 4 shows the age distribution within the sample and Figure 5 shows the age distribution in the total NHS workforce and Bands 1-4 and 5-7 for comparison. The sample comprises a higher proportion of younger individuals compared with both the total NHS workforce and those employed in Bands 1-4 and Bands 5-7. The average age for both men and women in the NHS workforce is 43. Almost three-quarters (74%) of the sample is under the age of 45 compared with 53% in the total NHS workforce, 46% in Bands 1-4 and 58% in Bands 5-7.<sup>3</sup>

<sup>3</sup> <https://www.nhsemployers.org/-/media/Employers/Documents/Plan/DIVERSITY-AND-INCLUSION/EQW19/Gender-in-the-NHS-infographic.pdf>

**Figure 5: Age distribution of NHS workers<sup>4</sup>**



**Figure 6: Employment length**

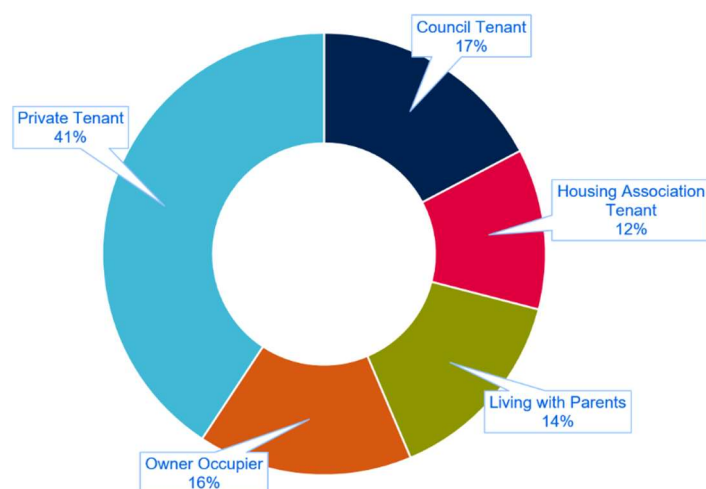


In terms of employment length, Figure 6 indicates that just under half the individuals in the sample (47%) have been in employment for more than 4 years, and one-third (33%) have been employed for 2 years or less.

Regarding residential status, 70% are living in rented accommodation, the majority of which are living in private rented accommodation. Only 16% of the sample comprises owner-occupiers, and 14% live with parents.

<sup>4</sup> Adapted from : <https://www.nhsemployers.org/-/media/Employers/Documents/Plan/DIVERSITY-AND-INCLUSION/EQW19/Age-in-the-NHS-infographic.pdf>

**Figure 7: Residential status**



In summary, the sample comprises a sub-set of NHS workers with earnings consistent with those employed in Bands 1-5. Band 5 includes many newly qualified clinical professionals, such as nurses.

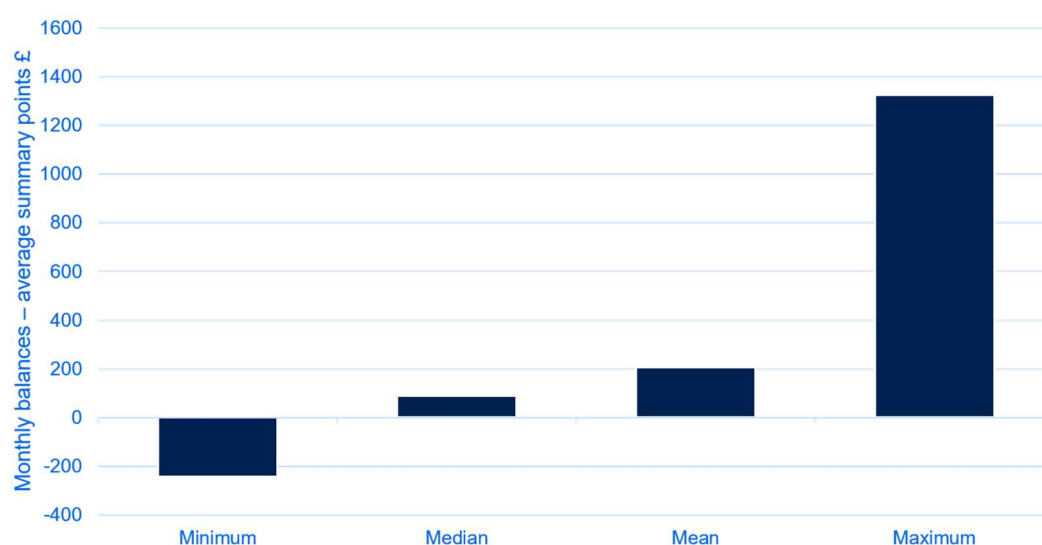
The gender profile of the sample is consistent with that in comparable earnings' Bands in the NHS, but the sample comprises a younger age profile. The majority of individuals in the sample have been in employment for a relatively

short time (less than four years) and a significant proportion are renters with only a small proportion of homeowners.

### 3. Financial resilience

Financial resilience generally is defined as the ability to cope with a sudden income shock or unexpected increase in expenditure. It can also include the ability to meet regular bills and credit demands. To provide a broad understanding of the financial health and resilience of this sample of NHS workers, we start by providing an analysis of account balances. Figure 8 shows the average (mean) of all monthly minimum, median, mean and maximum account balances per individual.

**Figure 8: Average of summary points for monthly account balances**



The average of all individuals' mean monthly account balances is £208, the average median (mid-point) monthly account balance is £91 (meaning that half have an average monthly account balance below this figure and half above it). The average minimum monthly account balance is -£243 and the average maximum account balance is £1,327. Maximum account balances are likely to be at their highest when salary and other significant income payments are made into the account each month.

Within these averages there is considerable variation. For example, the bottom 25% of average median monthly account balances are below or equal to zero, while the highest 25% of average monthly balances are £284 or greater. In terms of the range of minimum and maximum monthly account balances, the bottom 25% of average minimum monthly account balances are -£247 or lower; three-quarters (75%) of average minimum monthly account balances are at or below zero, suggesting that most months individuals are experiencing zero or negative account balances. In terms of the maximum monthly account balance, the lowest 25% of average maximum monthly account balances are £560 or less, and the highest 25% are £1,710 or more.

Overall, this suggests that for most individuals their account balance is at its highest when salary and other significant income payments are made into the account. At least half of all individuals experience at least one day, when the account balance is either zero or in overdraft during the month, most likely before the next salary payment. Average monthly incomes from earnings amount to £944, rising to £1,939 taking into account benefits and pensions.

Figures 9, 10 and 11 show examples of individual account balances to give a sense of the varying patterns.

**Figure 9: Individual account balance example 1**

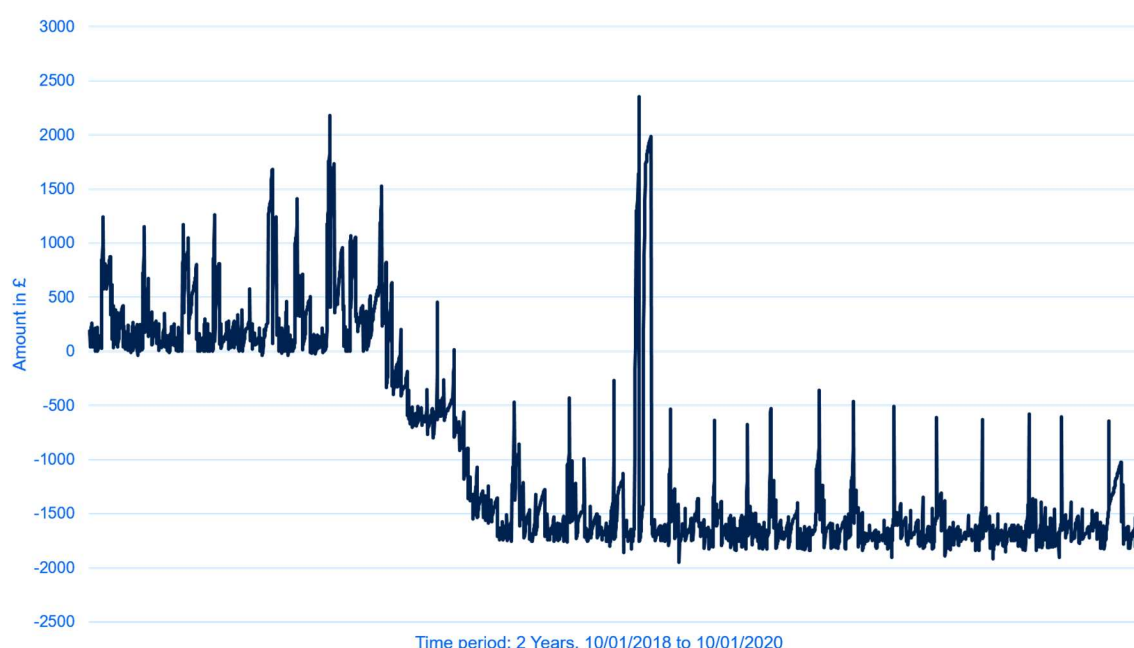
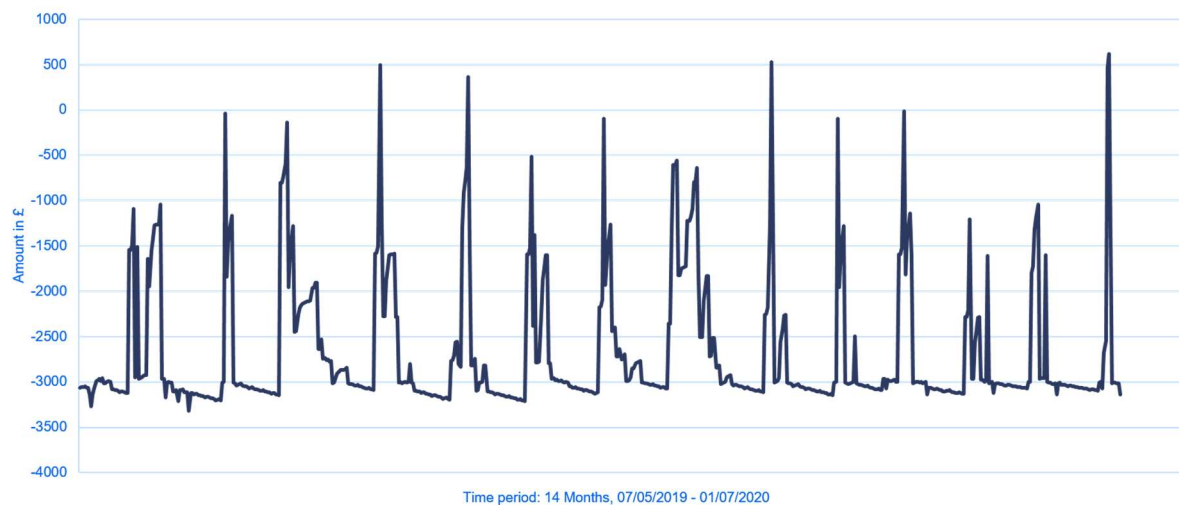
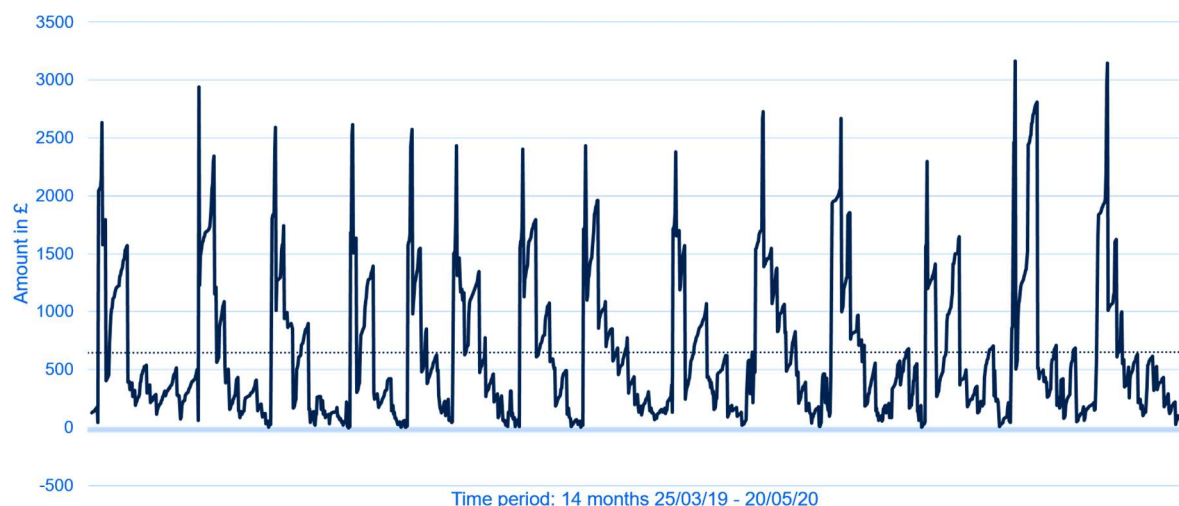


Figure 9 shows an account with a steep decline into overdraft. Despite a significant injection of funds at one point, the regular salary is not sufficient to enable this individual to recover from the overdraft over the two years observed. Figure 10 shows an account in continual overdraft. Over the 14 months observed, the account only goes out of overdraft on four occasions. Figure 11 never goes into overdraft, but the minimum balance hovers just above zero or very close to zero by the end of each month. On closer inspection, this account balance remains positive by regular borrowing from other sources.

**Figure 10: Individual account balance example 2**



**Figure 11: Individual account balance example 3**



According to the FCA Financial Lives Survey,<sup>5</sup> 65% of all UK adults are defined as 'financially resilient', 27% are defined as 'surviving financially' and 8% are defined as 'in difficulty'. Financially resilient individuals are those who are not in the 'surviving financially' or 'in difficulty' groups, identified by a small number of indicators. We are not able to replicate all the measures used by the Financial Lives Survey from the available data, but we can provide an approximation to the key indicators.

A key indicator of those 'in difficulty' is whether individuals in at least three of the last six months have missed paying domestic bills or meeting credit commitments. We use returned direct debits as a measure of missed bills. It is not a perfect indicator since we do not know whether the direct debits are for domestic bills or credit commitments, but it is nonetheless an important indicator of the state of an individual's bank balance. Returned direct debits occur when a company attempts to take money from an account (in accordance with an agreed direct debit mandate), but there not sufficient funds in the account to cover the amount requested.

We examined the incidence of returned direct debits for all individuals across all months of data available, and specifically within the last six months of data for each individual. Almost two-thirds of the sample (60%) had evidence of returned direct debit payments in their accounts. Just over one-quarter (26%) had evidence of returned direct debits in at least three out the last six months of data available, suggesting that potentially up to one-quarter of these individuals could be defined as 'in difficulty'. This is considerably higher than 8% identified by the Financial Lives Survey in the wider UK population and 11% on average for under 45 year olds (who make up three-quarters of this sample).

A key indicator of those who are 'financially surviving' is whether mortgage and/or rent increases of less than £100 per month would be a struggle to meet (and individuals do not have investable assets of £50,000 or more). Since we only have access to bank account data, we do not know what savings individuals may have to draw on, but it is likely that savings might be limited. Only 4% of the sample have evidence of outgoing transactions categorised as 'savings or investments'. Given the number of homeowners (and therefore mortgage payers) in the sample is very small (at 16%), we considered instead the impact of an unexpected expenditure of £100 on the account, which has broadly the same effect.

We used the average of the user-monthly median (mid-point) account balance as the reference point, which is £91 (see Figure 8). This means that half of the individuals on average have a monthly account balance above £91 and half have an average monthly balance below this. This suggests that at least half the individuals would struggle to meet an unexpected expenditure of £100 in a month and would be forced into overdraft unless they had savings to fall back on.

Combined with the insight (in sections 5 and 6) showing the high use of credit and loans and persistent overdraft use, as well as limited evidence of saving activity, it may be safe to assume that many individuals do not have significant savings to fall back on. Taken together, this suggests a significant concern for the financial resilience of these individuals.

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<sup>5</sup> <https://www.fca.org.uk/publication/research/financial-lives-consumers-across-uk.pdf>



## 4. Income

Income is derived from a number of sources. We categorise income into five different types:

- All income – which take into account all incomings into the bank account;
- Earnings – income derived from NHS salaries primarily;
- Earnings, benefits or pension – salary payments plus benefits and/or pension;
- Benefits – income from benefits on their own;
- Other inflows – captures other incomings not defined as earnings, benefits or pension and which make up the rest of total incomings.

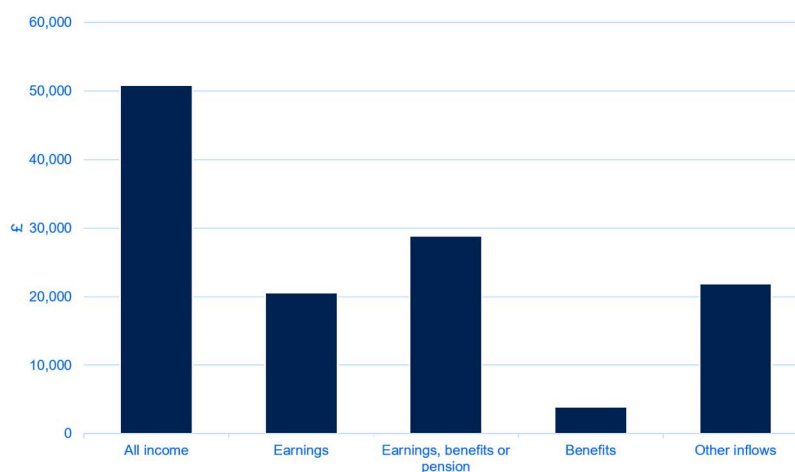
Figure 12 shows that average total annual incomings amount to just over £50,000, income from earnings alone averages £20,600, including income from benefits and/or pensions the figure increases to just under £29,000. Benefits alone contribute on average just under £4,000 to annual incomes. Other inflows amount to an annual average of £21,000 and include, amongst other things, bank transfers and credit and loan payments into accounts.

Average total monthly incomings amount to £1,939. Average monthly earnings come to £944, with income from benefits and/or pensions this increases to £1,095. Average income from benefits alone comes to £131, and average monthly income from other inflows amounts to £843.

Figure 13 shows annual average incomes by residential status. Income from earnings is similar for council and housing association tenants and those living with parents (over £18,000), but higher for owner occupiers (just under £25,000) and private tenants (£21,000). Income from benefits is higher for all renters, particularly council and housing association tenants, where average annual benefits amount to more than £5,500 compared to those either living with parents (£1,700) or owner occupiers (£2,500).

Figure 14 shows that all incomes increase with age and level off around age 40, with the exception of income from earnings which shows a gradual upward trend with age.

**Figure 12: Mean annual income by income type**



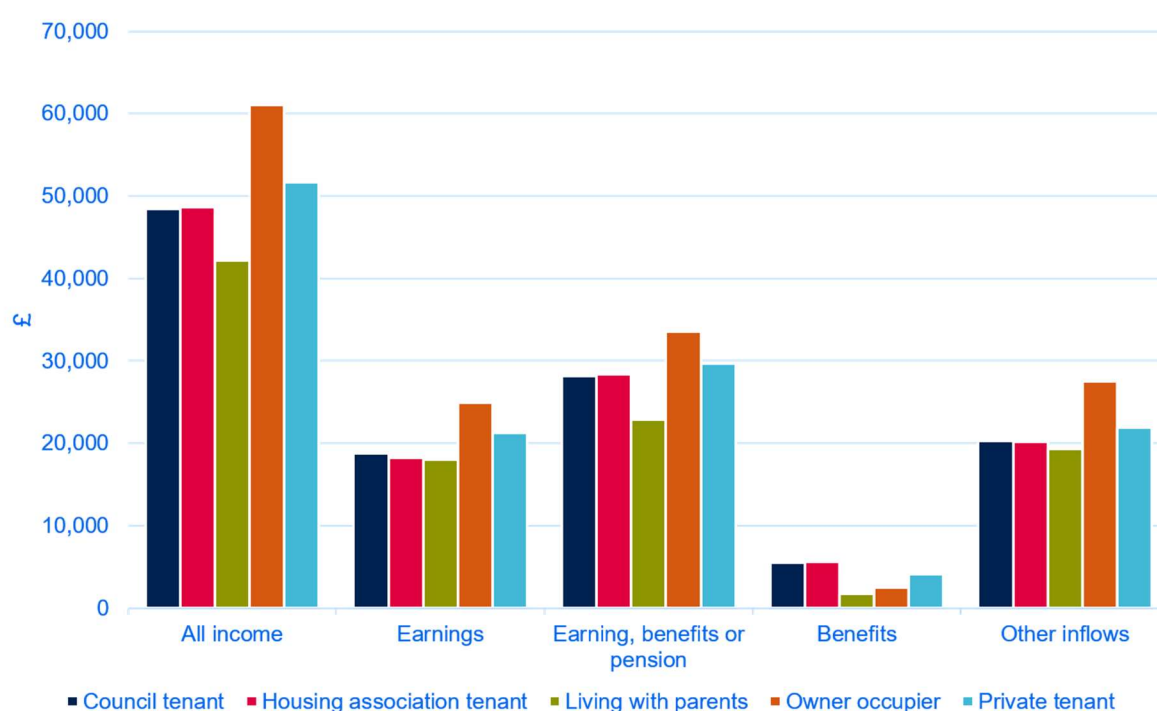


Half the sample (50%) are receiving benefits, which make up a substantial component of total income for many individuals. Females derive more income from benefits than males: this is largely due to benefits related to children.

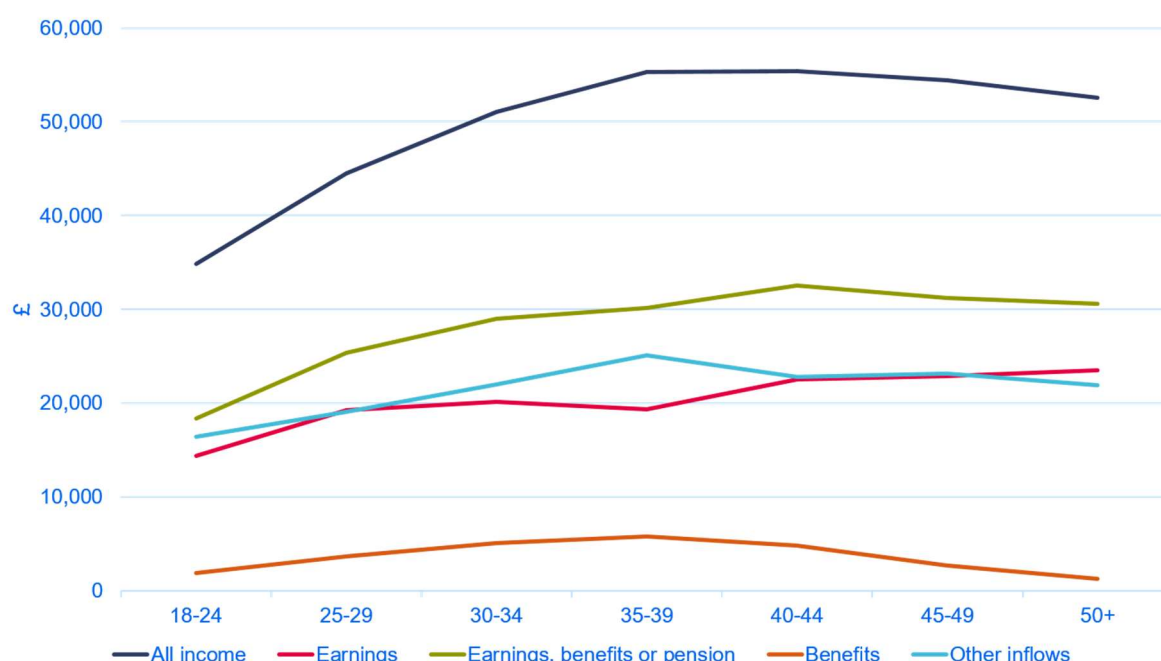
Table 1 shows the range of benefits received and the number and proportion of individuals from the total sample of 9,516 who are receiving them. A number of individuals will be receiving more than one type of benefit. The benefits most widely received are Child Benefit (received by 35% of individuals), Universal Credit (received by 22%), Child Tax Credit (received by 13%) and Working Tax Credit (received by 13%).

In terms of the impact of the value of benefits on total income, Universal Credit and Working Tax Credit have the greatest impact, each contributing on average 13% to total annual income for those that receive it. For one-quarter of individuals (at the 75<sup>th</sup> percentile), Universal Credit is making up 18% or more of their total annual income, and Working Tax Credit is making up 20% or more of total annual income. For any individual, the maximum proportion of total annual income from Universal Credit is 92% and from Working Tax Credit it is 62%. Child Benefit, although widely received, contributes relatively less toward total annual incomes on average.

**Figure 13: Mean annual income categories by residential status**



**Figure 14: Mean annual income categories by age**



**Table 1: Benefits as a proportion of total income**

Benefit type	N in receipt	% in receipt	Benefits as a proportion of total annual income				
			Mean	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	Max
Carer allowance	150	1.58%	6%	3%	5%	7%	23%
Child benefit	3,335	35.05%	4%	2%	4%	5%	100%
Child tax credit	1,277	13.42%	7%	1%	4%	10%	44%
Disability benefit	610	6.41%	9%	5%	8%	12%	75%
Employment support allowance	137	1.44%	10%	2%	7%	13%	61%
Housing benefit	9	0.09%	6%	2%	3%	7%	16%
Income support	74	0.78%	4%	1%	2%	4%	39%
Jobseekers allowance	66	0.69%	2%	0%	1%	2%	15%
Pension credit	10	0.11%	7%	1%	6%	11%	16%
Universal credit	2,125	22.33%	13%	3%	8%	18%	92%
Working tax credit	1,241	13.04%	13%	4%	10%	20%	62%
Other benefits	667	7.01%	2%	0%	1%	2%	40%

In addition to understanding the overall contribution of benefits to total income, we also attempted to understand the extent to which benefits are potentially smoothing total incomes. Without knowledge of the exact dates on which individuals' incomes and benefits are paid, it is very challenging to do this accurately. As an alternative approach, we examined the extent to which benefits are boosting individual monthly account balances. Specifically we examined the impact of all benefits received in a month on the account

balance at the end of the month, calculated as the percentage improvement in the end-of-month account balance.

Using this approach, it seems that benefit payments are boosting end-of-month account balances on average by 50%. For over half (52%) of all individuals in receipt of benefits, the benefits are improving their end-of-month account balances by 75% or more. Bearing in mind that the average minimum monthly account balance is -£243 (Figure 8) benefits are contributing to reducing already overstretched account balances.

## 5. Credit and loan use

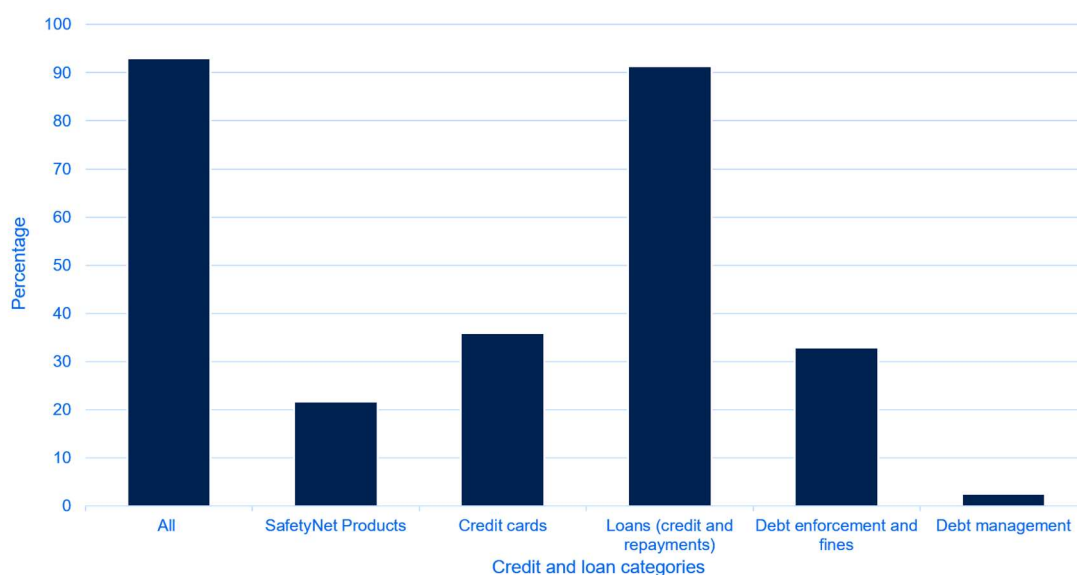
Credit users are defined as all individuals with transactions in the following categories: 'credit card payments', 'credit loans', 'debt-enforcement and fines', 'debt management', 'loans and repayments', plus SafetyNet customers (i.e. those with the term 'SafetyNet' in the transaction reference).

Almost all individuals in the sample (93%) are using one or more type of credit or loan. Only 7% do not have evidence of credit use in their bank account transactions. These individuals may still be credit users, but we have not been able to determine this from the available data.

The FCA Financial Lives Survey reports that 75% of UK adults hold at least one FCA regulated credit or loan product (or they have done so in the last 12 months). By comparison, the incidence of credit and loan use in this sample is noticeably higher than in the broader UK population.

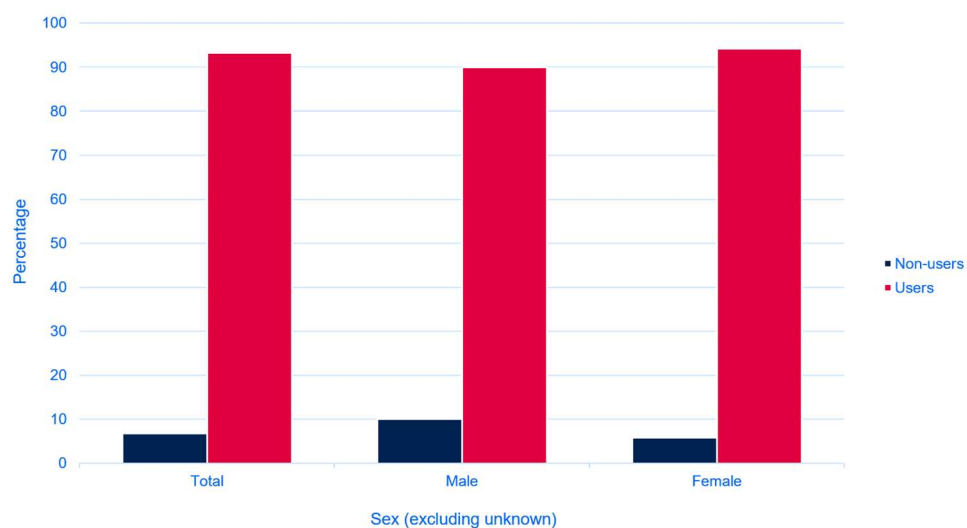
Figure 15 shows the breakdown of credit use by type of credit or loan product category. The largest category of use (91%) is loans (comprising both credit received and repayments). Over one-third (36%) are making payments to credit cards, and a similar proportion making payments to debt enforcement and fines. Just over 20% are using SafetyNet products, which are from a single provider.

**Figure 15: Credit use by type of credit/loan**

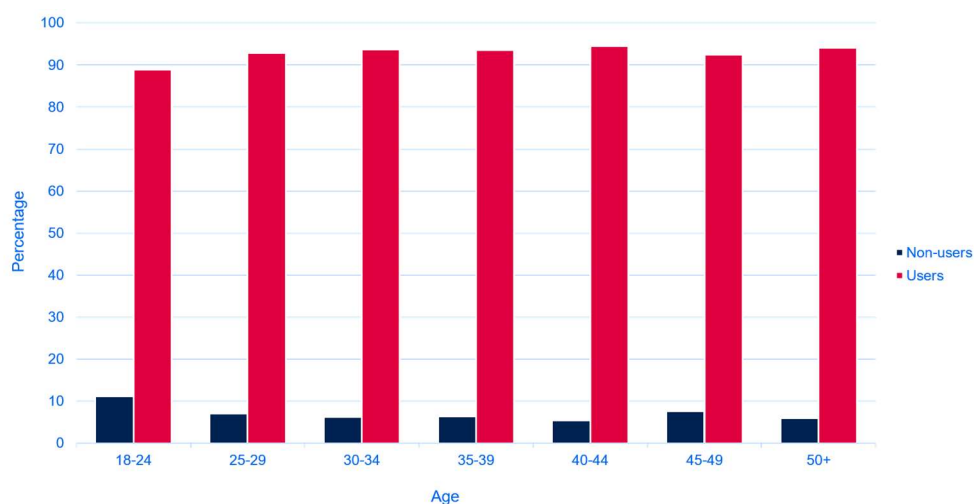


Analysis of total credit and loan use by gender, age and residential status (see Figures 16 to 18) shows that use is consistently high across all groups. Younger individuals and males have a slightly higher proportion of non-users of credit, but overall the proportion of users within all groups is higher than the UK average of 75%, as defined by the FCA Financial Lives Survey.

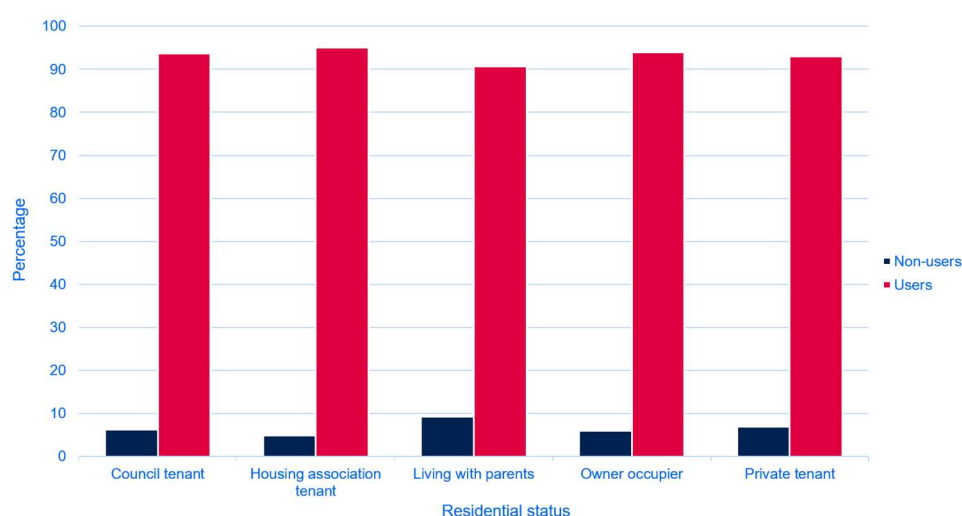
**Figure 16: Credit use by gender**



**Figure 17: Credit use by age**



**Figure 18: Credit use by residential status**



Looking at credit use by bank, Figure 19 shows that customers of challenger banks Monzo and Starling have a much higher proportion of non-users of credit than other 'traditional' bank customers: 16% of Monzo and 20% of Starling customers in this sample do not have evidence of credit use, compared with an average of 7% across the total sample. It is not possible to know from this analysis why Monzo and Starling customers make less use of credit. These numbers may not be representative of the total population of Monzo and Starling customers. If they are, it would be interesting to know whether it has anything to do with the features of their banking apps that facilitate more personalised money management than other banking apps.

NatWest customers comprise the highest proportion of credit users; only 4% of NatWest customers in this sample are not using credit. It should be noted, however, that individuals may or may not be using credit from the bank they bank with. This does not indicate that individuals are making high use of credit from NatWest, for example. Indeed, further analysis below shows that use of credit and loans from traditional banks is low compared to credit and loans from non-traditional providers and high-cost credit providers.

**Figure 19: Credit use by 'banks with'**

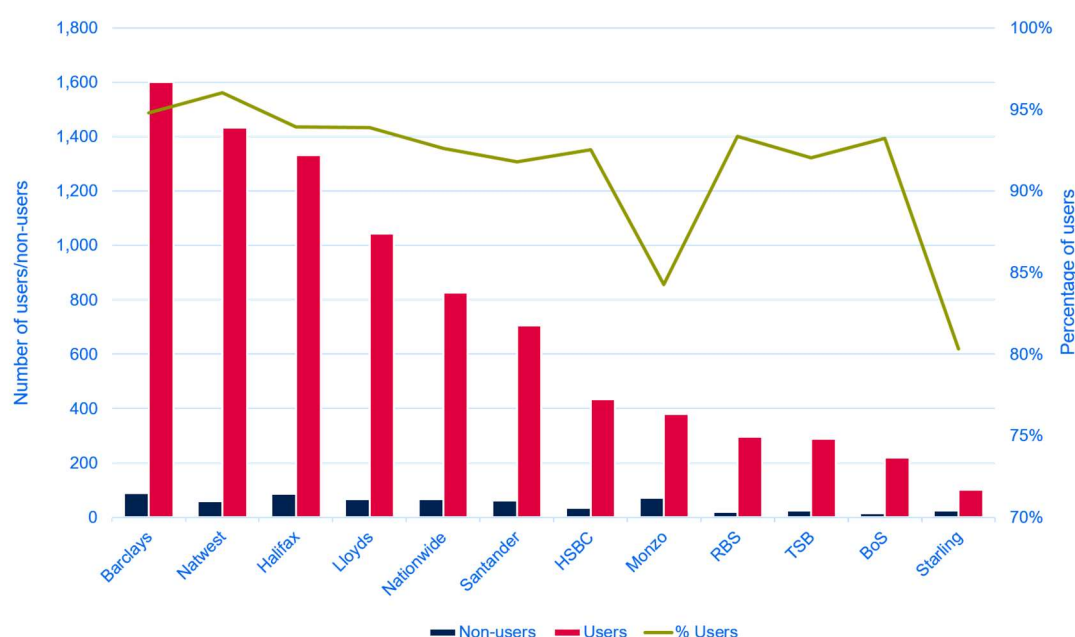


Table 2 shows the proportion of total annual outgoings spent on credit and loans. Loans and repayments as a total group make up on average 7% of total outgoings for the 90% of users followed by SafetyNet products accounting for 6% of total outgoings for the 22% that use it. SafetyNet products is a single credit provider, whereas loans and repayments includes more than 100 individual lenders. For the heaviest 25% of loans users, repayments account for 10% or more of total outgoings and 9% or more for the 25% heaviest users of SafetyNet products. Credit card payments make up a much smaller proportion of total outgoings at 4% on average, but individuals may be making minimum payments rather than repaying balances in full. To put this into context, individuals are spending on average 8% of outgoings on housing and 10% on groceries and housekeeping, with the heaviest 25% of spenders in those categories spending at least 12% and 14% respectively.

**Table 2: Proportion of total outgoings on credit and loans**

Credit type	N users	% users	Credit payments as a proportion of total annual outgoings				
			Mean	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	Max
Credit card payments	3,427	36%	3%	0%	1%	4%	100%
Debt enforcement and fines	2,797	29%	1%	0%	1%	1%	33%
Debt management	254	3%	3%	1%	2%	4%	33%
Fees and charges	6,491	68%	1%	0%	0%	1%	95%
Insolvency provider	133	1%	2%	1%	2%	3%	12%
Loans and repayments	8,525	90%	7%	2%	5%	10%	72%
Safetynet products	2,074	22%	6%	1%	3%	9%	46%

## 5.1 Credit card use

Just over one-third (36%) of individuals in the sample are credit card users. This compares with 62% in the wider UK population, according to the FCA Financial Lives Survey, although the figure is 19% when transactors are excluded (those that pay off their credit card in full every or most months). It is not possible to know from the credit card transactions in this dataset whether individuals are paying the minimum amount or settling credit card balances in full each month. However, based on the high amount of other credit and loan use within the sample, it may be safe to assume that many are not paying balances in full each month.

Individual credit card providers were identified by means of Natural Language Processing (NLP) analysis of the transaction reference.<sup>6</sup> In total, there were 74,106 transactions within the category of 'credit card payments' from 3,427 users. Traditional (High Street) banks account for 35,449 transactions or 48% of these transactions. Table 3 shows the frequencies and percentages of transactions by traditional providers. The two most frequently used cards from traditional providers are Barclaycard and Capital One, used by 26% and 10% of all users respectively. Table 3 also shows the number of cards held by each individual from traditional providers. Most users (47%) have just one card from a traditional provider with less than 10% having two or more cards.

**Table 3: Credit card use by traditional provider**

Provider	# Transactions	Percent
CAPITAL ONE	19558	26.39%
BARCLAYCARD	7675	10.36%
HSBC	1962	2.65%
HALIFAX	1625	2.19%
AMERICAN EXPRESS	1020	1.38%
VIRGIN MONEY	928	1.25%
TESCO	768	1.04%
MBNA	631	0.85%
LLOYDS	528	0.71%
NATWEST	420	0.57%
SANTANDER	211	0.28%
M&S	112	0.15%
RBS	11	0.01%
TOTAL	35449	47.84%

(Base = 74,106 credit card transactions)

# Card providers	Frequency	Percent
0	1487	43.39%
1	1611	47.01%
2	277	8.08%
3	40	1.17%
4	6	0.18%
5	5	0.15%
6	1	0.03%

(Base = 3,427 credit card users)

Newer (or non-traditional) credit card providers account for 33,970 credit card transactions or 46%. Table 4 shows the frequency of transactions and number of cards held with new providers. Of the newer providers, Vanquis and Aqua credit cards account for the highest number of transactions at 19% and 17% of all credit card transactions respectively, with

<sup>6</sup> After normalising, all the words were parsed into n-grams (words) with n=1,2,3, and their frequencies were calculated. The combination of words (n-grams) with higher frequencies were inspected manually for the incidence of the lender/bank names (e.g. VIRGIN MONEY or HSBC).

Marbles accounting for 8% of transactions. The majority of users (49%) are using just one newer credit card provider (a similar proportion to those using traditional credit card providers) but there is a higher proportion of individuals using two newer credit card providers (14%). Table 5 shows the total number of credit card providers used per individual across all providers. Over half (57%) of all credit card users are using just one credit card provider, 23% are using two credit card providers and 10% three credit card providers.

**Table 4: Credit card use by new provider**

Provider	# Transactions	Percent
VANQUIS	14098	19.02%
AQUA	12599	17.00%
MARBLES	5978	8.07%
NEWDAY	930	1.25%
FLUID	271	0.37%
TANDEM	94	0.13%
<b>TOTAL</b>	<b>33970</b>	<b>45.84%</b>

# Card providers	Frequency	Percent
0	1234	36.01%
1	1670	48.73%
2	467	13.63%
3	53	1.55%
4	3	0.09%

(Base = 3,427 credit card users)

(Base = 74,106 credit card transactions. 6.32% of credit card transactions could not be attributed to a provider due to imprecise transaction reference)

**Table 5: Number of credit card providers used (all providers)**

# all card providers	Frequency	Percent
-	223	6.51
1	1942	56.67
2	793	23.14
3	342	9.98
4	90	2.63
5	26	0.76
6	7	0.2
7	3	0.09
8	1	0.03

(Base = 3,427 credit card users; for 6.51% of users the provider could not be identified for their credit card transactions)

## 5.2 Loans

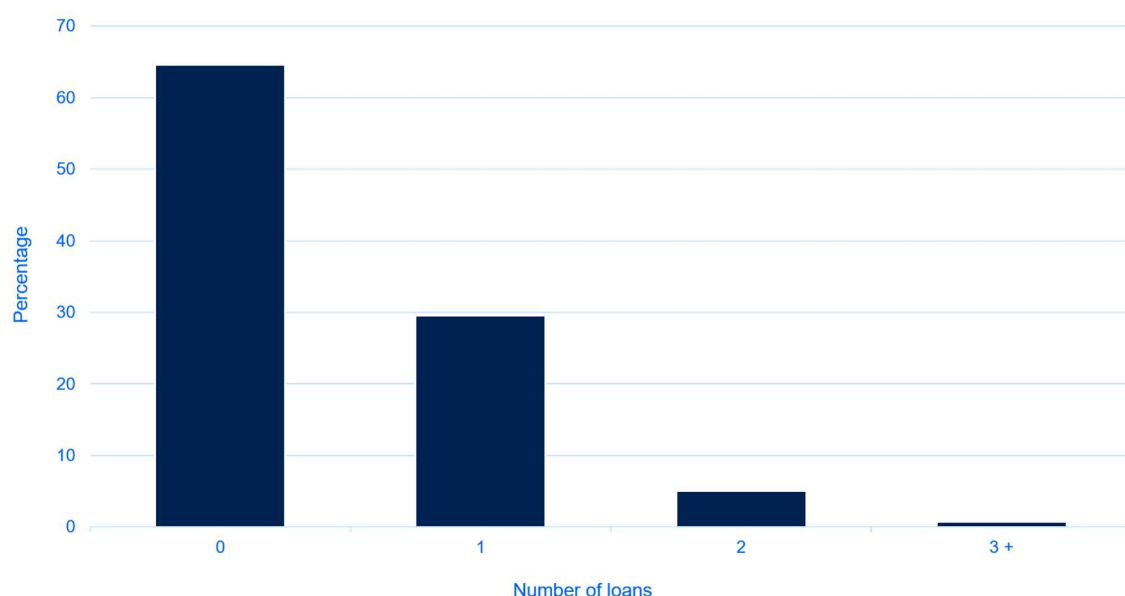
Within the categories 'credit loans' and 'loans and repayments', 557,416 transactions were identified from 8,693 users or 91% of the total sample. The loan providers were identified by means of Natural Language Processing (NLP) analysis of transaction references as before.

Traditional lenders account for 52,840 transactions or 9.48% of all loans. New lenders account for 408,777 transactions or 73.33% of all 'loans'. For 17.19% of loan transactions it



was not possible to attribute them to a loan provider due to vague/imprecise transaction references. Figure 20 shows the number of traditional lenders used per individual, and Table 6 shows the number and proportion of transactions by each lender. Capital One accounts for the largest proportion of transactions at 6%, with the other providers accounting individually for less than 1% of transactions each.

**Figure 20: Number of traditional lenders used per user**



**Table 6: Credit/loan transactions with traditional lenders**

Provider	# transactions	%
CAPITAL ONE	34196	6.13%
TESCO	5451	0.98%
NATWEST	2939	0.53%
RAC	2939	0.53%
BARCLAYS	2526	0.45%
HSBC	1685	0.30%
MBNA	944	0.17%
SANTANDER	878	0.16%
VAUXHALL FINANCE	394	0.07%
NATIONWIDE	365	0.07%
RBS	359	0.06%
AA	109	0.02%
LLOYDS	50	0.01%
BMW FINANCE	4	0.00%
VIRGIN	1	0.00%
TOTAL	52840	9.48%

In addition to the traditional lenders, more than 100 other providers were identifiable. Figure 21 shows the number of loan providers used per individual from these lenders. It is evident that there is considerable use of multiple loan providers across the sample: 58% are using up to three loan providers and over two-thirds (68%) are using up to 4 loan providers with over one-third (36%) using 5 or more loan providers over an average period of one and a half to two years. With a few exceptions, the majority are high-cost lenders, a number of which are charging APRs as high as 1,333% (e.g. LendingStream).

Some of the companies specialise in facilitating retail purchases and help to spread the purchase repayment over a small number of payments (e.g., Clearpay, Klarna). They claim they do not charge any interest, if repayments are made on time, but they do charge for late repayments. We cannot determine from this dataset whether individuals that use such products are using them interest-free or not.

**Figure 21: Number of new lenders used per user**

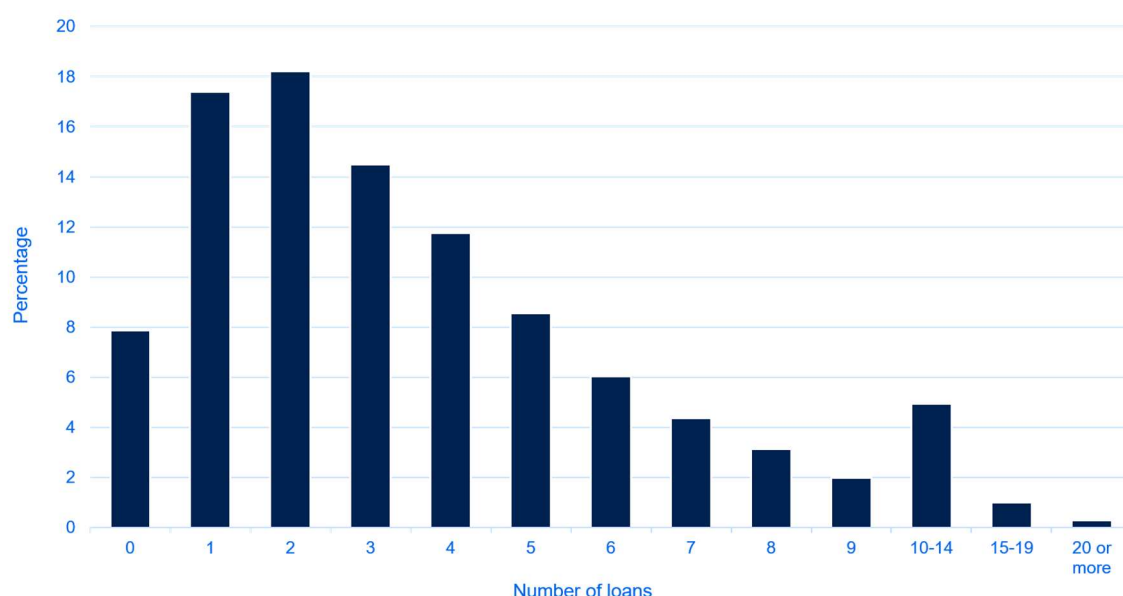


Table 7 gives a breakdown of the proportion of transactions accounted for by each lender. Clearpay (a service that enables retailer customers to purchase and pay in instalments) accounts for 12% of all transactions, followed by SafetyNet (a revolving credit facility) that accounts for over 9% of all transactions, and used by 22% of individuals in the sample. The other lenders individually account for less than 5% of all loan transactions.

**Table 7: Credit/loan transactions with newer lenders**

Provider	# trans	%	Provider	# trans	%
CLEARPAY	68070	12.21%	PIGGYBANK	1878	0.34%
SAFETYNET	51348	9.21%	MONEYBOAT	1838	0.33%
LOWELL	25591	4.59%	FIRST RESPONSE	1592	0.29%
KLARNA	22527	4.04%	CASH4UNOW	1585	0.28%
VANQUIS	15930	2.86%	FERRATUM	1567	0.28%
AMIGO	13597	2.44%	CREDITSPRING	1353	0.24%
LENDINGSTREAM	13335	2.39%	CAPQUEST	1336	0.24%
SUNNY	12760	2.29%	LENDABLE	1272	0.23%
BRIGHTHOUSE	12540	2.25%	TAPPILY	1243	0.22%
LAYBUY	11295	2.03%	1PLUS1	1222	0.22%
118 118	10299	1.85%	LOANSDIRECT	1191	0.21%
MORSES CLUB	8741	1.57%	HARVEY & THOMPSON	1156	0.21%
PROVIDENT	8592	1.54%	FREDRICKSON	1065	0.19%
SATSUMA	8339	1.50%	WAGEDAY	1031	0.18%
CABOT	5401	0.97%	PREMIUM CREDIT	1018	0.18%
247 MONEYBOX	5040	0.90%	EQUITA	995	0.18%
DRAFTY	4908	0.88%	WONGA	926	0.17%
LOANS2GO	4852	0.87%	DOT DOT	913	0.16%
VERY	4685	0.84%	RATESETTER	897	0.16%
EVERYDAY	4671	0.84%	ELDERBRIDGE	895	0.16%
LIKELY	4510	0.81%	CASHPLUS	882	0.16%
MRLENDER	4315	0.77%	STEPCHANGE	853	0.15%
CREATION	4098	0.74%	BUDDY	846	0.15%
MYJAR	3915	0.70%	ROSSENDALES	834	0.15%
NEWDAY	3583	0.64%	PAYPLAN	802	0.14%
MONEYBARN	3148	0.56%	ZOPA	776	0.14%
MOORCROFT	3012	0.54%	QUIDIE	774	0.14%
BAMBOO	3006	0.54%	FERNOVO	756	0.14%
UNCLEBUCK	2793	0.50%	MONEYLINE	729	0.13%
OAKAM	2706	0.49%	CASHFLOAT	707	0.13%
LOANSATHOME	2648	0.48%	POUNDSTO POCKET	618	0.11%
WESCOTT	2620	0.47%	AKINIKA	588	0.11%
SNAP	2522	0.45%	AVANT	539	0.10%
ADVANTAGE	2438	0.44%	QUIDMARKET	538	0.10%
PEACHY	2286	0.41%	GRANITEFINANCE	509	0.09%
ZILCH	2246	0.40%	SWIFTSTERLING	493	0.09%
QUICK QUID	2144	0.38%	NOVALOANS	477	0.09%
NAYLORS	2105	0.38%	BWLEGAL	457	0.08%

Table 7 continued

Provider	# trans	%	Provider	# trans	%
ONSTRIDE	445	0.08%	SCOTCASH	89	0.02%
CLOSEBROSMOTFIN	373	0.07%	HARTLEY	76	0.01%
KABAYAN	343	0.06%	SKYE	73	0.01%
MONEYWAY	340	0.06%	MYMONEYPART- NER	72	0.01%
ANICO	334	0.06%	INSTANT	56	0.01%
DIVIDEBUY	328	0.06%	BUFFA	44	0.01%
CREDITFIX	322	0.06%	ORBITDEBT COLLECT	40	0.01%
LIVELEND	288	0.05%	QUICKLOANS EXPRESS	38	0.01%
RAMSDEN	283	0.05%	LOANMARKETING	19	0.00%
QUIDCO	282	0.05%	AQUA	16	0.00%
UTOPIA	251	0.05%	PAYDAYLOANS NET	16	0.00%
MOTORMILE	199	0.04%	VALOUR	16	0.00%
GUARANTORMYLOAN	161	0.03%	UPLOAN	11	0.00%
SALARYFINANCE	157	0.03%	CREDITPERFECT	8	0.00%
BLACKHORSE	135	0.02%	LOANHUB	7	0.00%
PERALOANS	95	0.02%			
MAKABAGO	93	0.02%	New Total	408777	73.33%

The number and the share of loans from new providers are noticeably higher compared to traditional banks. There might be many different explanations for this and we cannot deduce them from the data. We do not observe the credit applications or credit history therefore cannot tell whether individuals have applied to traditional banks for loans. They may not meet the criteria for creditworthiness or affordability as set by traditional lenders. Alternatively, they may not believe that they are eligible for traditional loans, or simply respond to marketing campaigns that are more visible. We do not observe many credit union transaction which may be connected to the (lack of) visibility of affordable lending.

Tables 8 and 9 provide an indication of the multiple use of credit and loans from non-traditional providers from two individual case examples.

**Table 8: Case 1 - Example of multiple credit and loan use**

<b>Period observed</b>	<b>24 months, from 10/01/2018 to 10/01/2020</b>
<b>Gender</b>	<b>Male</b>
<b>Age</b>	<b>35 Years</b>
<b>Annual take home income</b>	<b>£18,130</b>
<b>Total loans/credit received</b>	<b>£9,505.38</b>
<b>Total loans/credit repaid</b>	<b>£12,793</b>

The account shows a regular monthly take-home income of around £1,200 to £1,500. For the first 9 months observed, the account is healthy; it does not go into overdraft. The account first goes into overdraft early September 2018. Within two months, the account is fluctuating between £1,500 to £1,700 negative balance and remains at this level for the following 14 months observed. There is one brief moment, in January 2019, when a payment of £4,000 is made into the account. This is not from a formal lender and is possibly an informal loan from a family member or friend. Immediately after, roughly the equivalent total value is paid out in multiple loan repayments to 12 different companies, the largest single payment of £672 to SafetyNet Credit.

**Table 9: Case 2 - Example of multiple credit and loan use**

<b>Period observed</b>	<b>14 months, from 03/12/2019 to 20/05/2020</b>
<b>Gender</b>	<b>Female</b>
<b>Age</b>	<b>43 years old</b>
<b>Annual take home income</b>	<b>£31,420</b>
<b>Total loans/credit received</b>	<b>£6,017</b>
<b>Total loans/credit repayed</b>	<b>£10,688</b>

The account shows a regular monthly income of around £2,500-£3,000. Based on the account balance the account looks healthy; over the 14-month period observed the account never goes into overdraft. Over the 14-month period, she receives £6,017 in credit from loans, the majority of this, £4,638, was received from one lender, SafetyNet, and the remaining £1,379 from several other loan providers, none of them traditional banks.

She made £10,688 total payments towards loans and repayments: £4,727 was repaid to SafetyNet and £5,960 to a number of other loan companies (mainly Lendingstream). During the first 6-8 months observed, she appears to have been paying back loans from other organisations, hence the higher proportion repaid to other lenders, mostly Lendingstream.

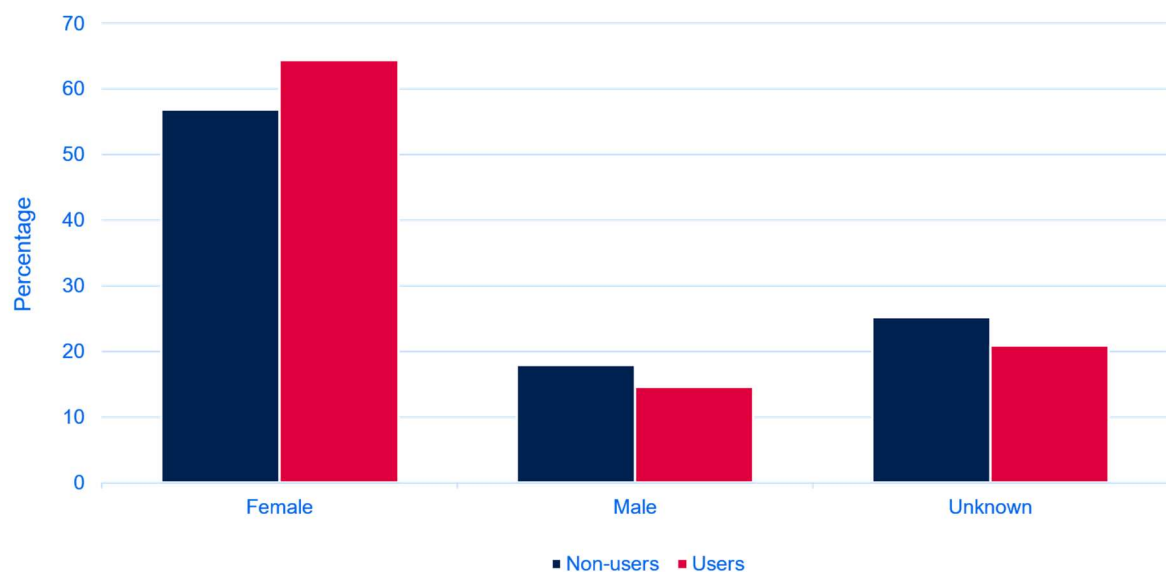
The first SafetyNet transaction observed was on 3<sup>rd</sup> December 2019, and heavy SafetyNet use followed with multiple transactions per month over the next 6 months. In total, there are 31 incoming transactions from SafetyNet and 17 repayments occurring in very short succession with many of the repayments occurring within a few days of funds being received; some credits/repayments occurred on the same day.

## 6. Overdraft use

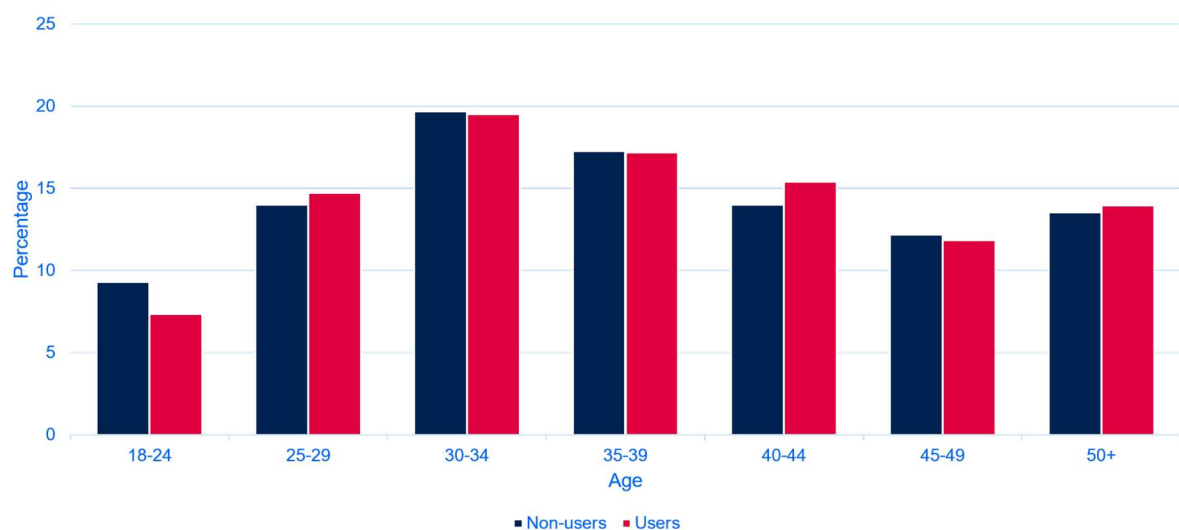
Over the period observed, 80% of individuals' accounts were in overdraft for at least some of the time. Our definition of overdraft is any instance of a negative balance irrespective of its magnitude.

Figures 22, 23 and 24 compare overdraft users in the sample with non-users by gender, age and residential status. Females show a slightly higher tendency to be overdraft users. In terms of age, those aged 18-24 years old show a slightly lower tendency to be overdraft users, whereas those aged 40-44 show a slightly higher tendency to be overdraft users. In terms of residential status, those living with parents show a slightly lower tendency to be overdraft users, consistent with the lower use among the younger age group.

**Figure 22: Overdraft use by gender**



**Figure 23: Overdraft use by age**



**Figure 24: Overdraft use by residential status**

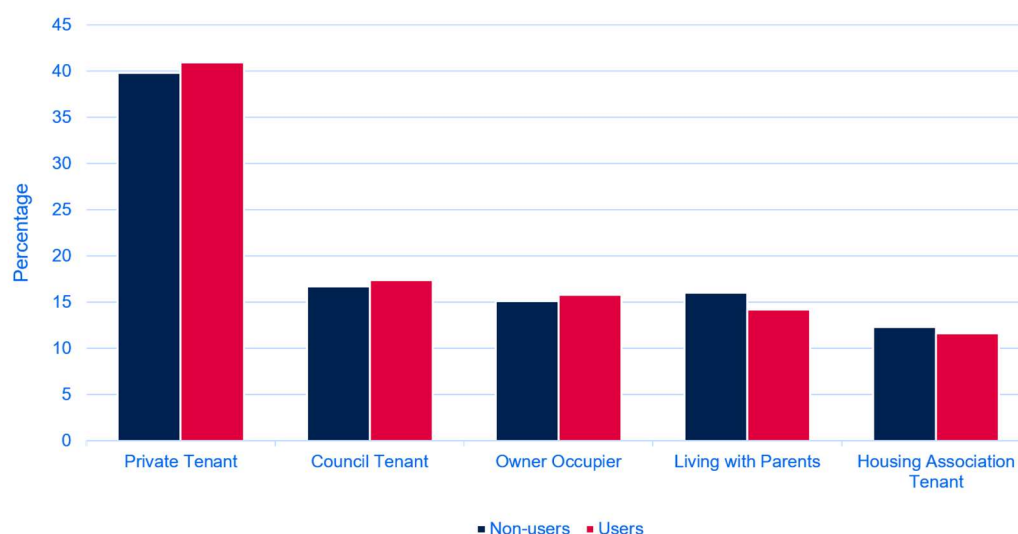


Table 10 shows overdraft use according to the bank individuals bank with. The table includes only banks with 100 or more customers (in this sample). There is some variation in the banks used, with Barclays, NatWest, Halifax and Lloyds showing the higher number of customers in the sample and consequently the higher number of overdraft users. For example, there are 1,690 Barclays customers in the sample of which 1,556 have used an overdraft, accounting for 20% of all overdraft users in the sample.

Within each bank's customers, the proportion using an overdraft, however, varies by bank. The proportion of overdraft users among TSB, Monzo and Starling customers is considerably lower than for the other banks (at 30%, 20% and 5% respectively). Customers of Barclays, Halifax, Lloyds and Bank of Scotland show the highest proportion of overdraft use (at 92%, 91%, 91% and 89% respectively).

There is also variation by bank in terms of the average number of days per month that overdraft users spend in overdraft. For example, overdraft users at HSBC, Royal Bank of Scotland and Bank of Scotland on average spend over 7 days per month in overdraft. Some of these numbers (especially for Starling Bank) are very small and hence unlikely to be reliable. Although Barclays accounts for the largest number of customers and overdraft users within the sample, the average number of days per month in overdraft are among the lowest at less than 5 days per month.

**Table 10: Overdraft use by 'banks with'**

<b>Banks with</b>	<b># customers</b>	<b># with overdraft</b>	<b>% with overdraft</b>	<b>% of all overdraft users</b>	<b>Average # days per month in overdraft</b>
<b>Barclays</b>	1690	1556	92	20.24	4.6
<b>Natwest</b>	1492	1250	84	16.26	6.6
<b>Halifax</b>	1418	1287	91	16.74	6.6
<b>Lloyds</b>	1111	1008	91	13.11	6.5
<b>Nationwide</b>	893	763	85	9.93	3.4
<b>Santander</b>	768	624	81	9.93	6.9
<b>HSBC</b>	470	344	73	4.48	7.8
<b>Monzo</b>	452	90	20	1.17	3.1
<b>RBS</b>	317	265	84	3.45	7.3
<b>TSB</b>	314	93	30	1.21	6.0
<b>Bank of Scotland</b>	237	212	89	2.76	7.2
<b>Starling</b>	127	6	5	0.08	7.3

Out of all 15,303,444 transactions observed in our sample almost 22% were with negative account balances. We refer to these transactions as 'transactions in overdraft'. Subsequent analysis refers to the users for whom negative balances were observed ('overdraft users').

On average, one quarter (24%) of total transactions for overdraft users were with negative balances. For 25% of overdraft users, less than 1% of their total transactions were in overdraft. For the heaviest 25% of overdraft users, 46% or more of their observed total transactions were in overdraft.

To provide an indication of the persistency of overdraft use, we examined both the monthly ratio of transactions in overdraft and the number of months where accounts were in overdraft. On average, the proportion of transactions in overdraft from all transactions in a given month was 26% of all months for overdraft users. For the heaviest 25% of months with overdraft use, just over half (52%) of the monthly transactions were in overdraft.



From the total number of months observed for each individual, on average individuals' accounts went into overdraft 65% of months, roughly six in every 10 months. For the heaviest 25% of overdraft users, their accounts went into overdraft almost every month (96% of months).

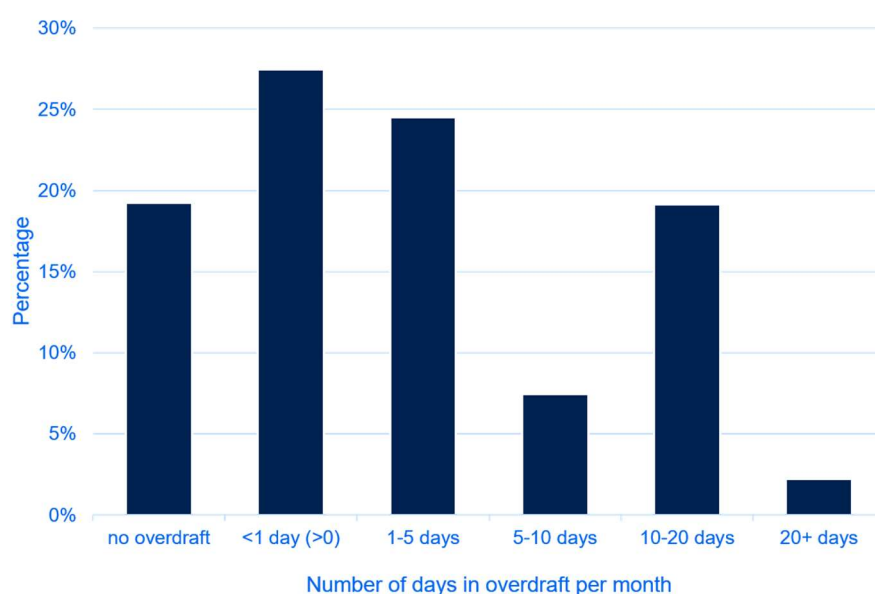
Almost two-thirds (63%) of all individuals (or 80% of all overdraft users) have at least three consecutive months where the account was in negative balance on at least one occasion.

Looking at the number of days per month that accounts were in overdraft, Figure 25 shows that over half (52%) were in overdraft for 5 days or less per month, and one fifth (21%) spent 10 or more days in overdraft per month. Only 19% did not go into overdraft at all. The average number of days per month in overdraft across all overdraft users was six.

**On average, individuals' accounts are in overdraft 6 days per month.**

**21% spent 10 or more days per month in overdraft.**

**Figure 25: Number of days per month in overdraft**



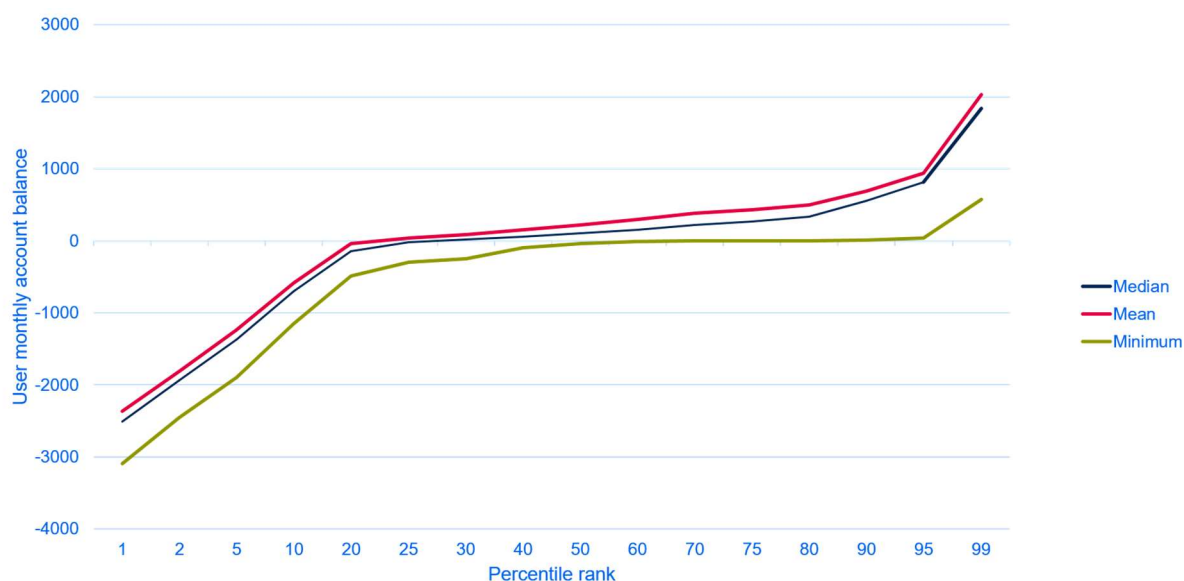
**On average, three-quarters of overdraft users have a minimum monthly balance of 15 pence or less.**

**One-quarter have an average minimum monthly balance of -£299 or lower.**

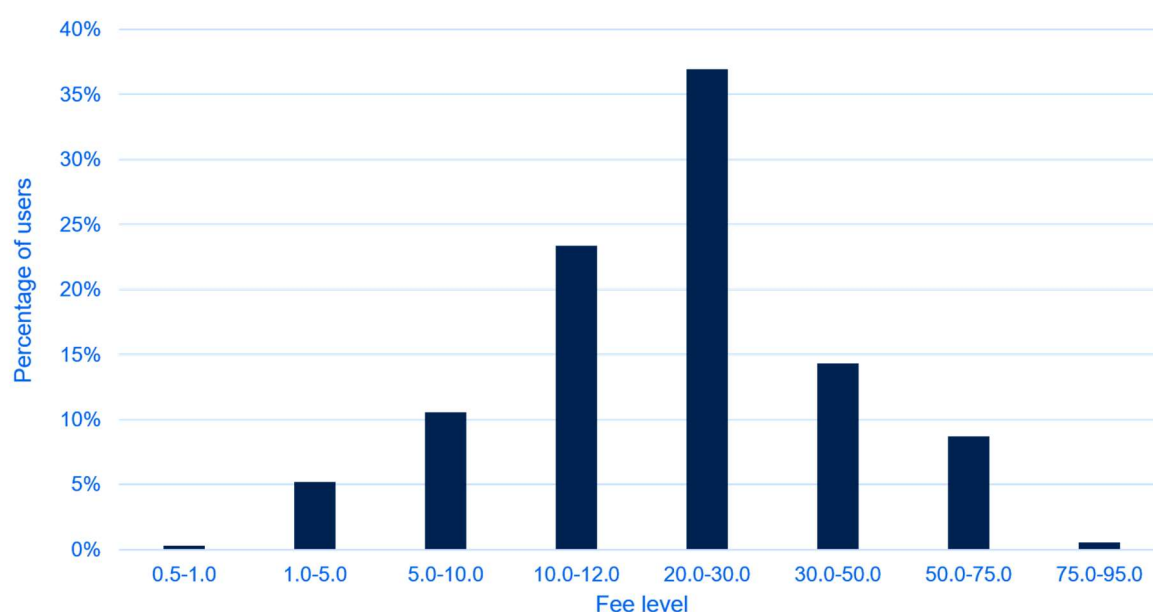
In addition to analysing the amount of time spent in overdraft it is also important to assess the amount or value by which the account was overdrawn. To understand this we analysed the average, minimum and maximum monthly balances per individual (see Figure 26). The average of all overdraft users' mean monthly account balances is £164, the average median monthly account balance is £38 (meaning that half of individuals' average monthly account balances are above this amount and half are below it). The average minimum monthly account balance is -£312 and the average maximum account balance is £1,365. Maximum account balances are likely to coincide with salary payments.

Within these averages there is considerable variation: the bottom 25% of average median monthly account balances are -£17 or less, while the highest 25% are £271 or greater. In terms of the minimum and maximum monthly account balances of overdraft users, the bottom 25% of average minimum monthly account balances are -£299 or lower; 75% of average minimum monthly account balances are 15p or less, suggesting that most months individuals are experiencing zero or negative account balances. In terms of the maximum monthly account balance, the lowest 25% of average maximum monthly account balances are £689 or less, and the highest 25% are £1,724 or more.

**Figure 26: Average median, mean and minimum monthly account balances**



**Figure 27: Monthly overdraft fee levels per user**



Finally, we examined the overall cost to individuals of maintaining these overdraft levels (see Figure 27). On average, it is costing overdraft users £23 per month in overdraft fees. The

bottom 25% of overdraft users are paying £15 or less per month in overdraft fees and for the heaviest 25% of overdraft users the cost of using the overdraft is £29 or more per month.

## 7. Gambling

Just over two-thirds of individuals in the sample (68%) have at least one gambling transaction in their account history, comprising either money spent on gambling or income from gambling. The data do not capture cash transactions on gambling and may therefore under-represent the extent of gambling activity.

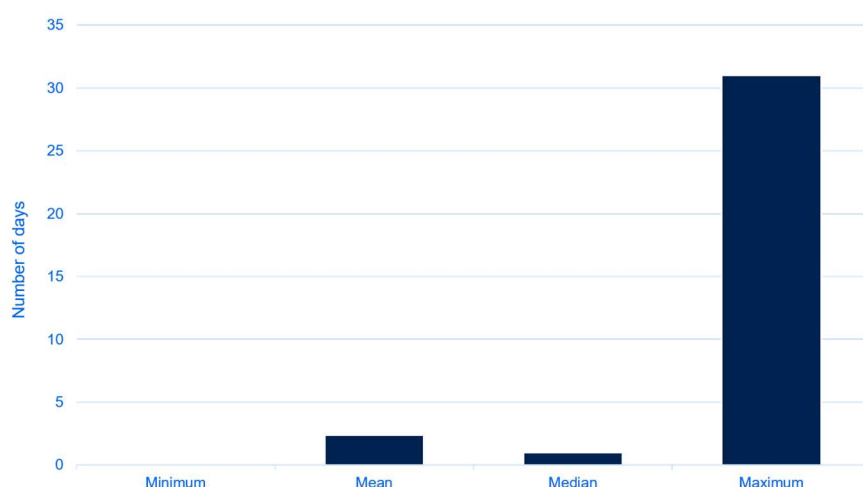
Based on 6,451 individuals with gambling transactions, the mean total number of gambling transactions per individual is 140, skewed towards a very small number of high gambling users.

Overall, the minimum total number of gambling transactions observed per individual was one and the maximum total was 7,479. Half of gambling users had 18 or fewer gambling transactions in total; the lowest 25% of gambling users had four or fewer gambling transactions in total, and the top 25% of gambling users had a total of 83 or more gambling transactions.

Due to the varying numbers of months' of data per individual, a more meaningful analysis is the proportion of gambling transactions relative to all transactions. On average, 6% of all transactions per individual were on gambling. For 50% of individuals, no more than 1% of transactions were on gambling. For the heaviest 25% of gambling users, 5% of all transactions were on gambling. The maximum proportion of transactions on gambling by any individual was 86%.

Looking at the average number of gambling transactions per month, the mean number of gambling transactions per user per month is 8. Half of all gambling users have less than one gambling transaction per month (i.e. these individuals are not gambling every month). The heaviest 25% of gambling users have four or more gambling transactions per month.

**Figure 28: No of days of gambling per month**



The average number of days of gambling activity per month is two. Half of all gambling users have evidence of gambling activity on one day per month or less (i.e. they are gambling at most one day per month). The highest 25% have evidence of gambling transactions on two or more days in a month with the maximum number of days for any individual at 31 (i.e. they were gambling every day in a month).

Figure 29 shows the average amount per month spent on gambling: 40% are spending on average £20 or less per month on gambling and one quarter (25%) are spending £100 or more per month on gambling.

**Figure 29: Average monthly amount spent on gambling**

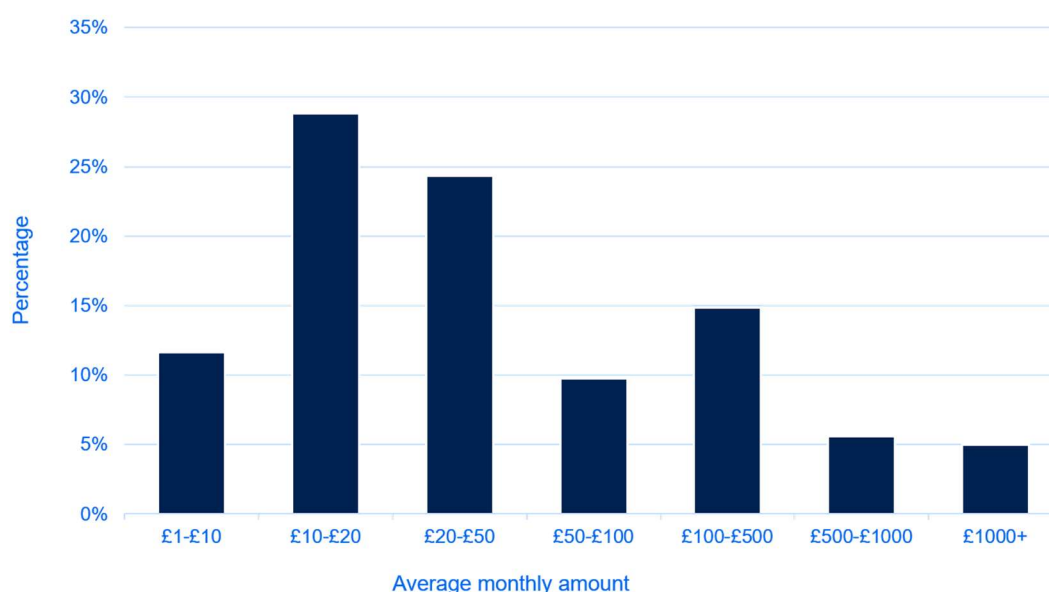


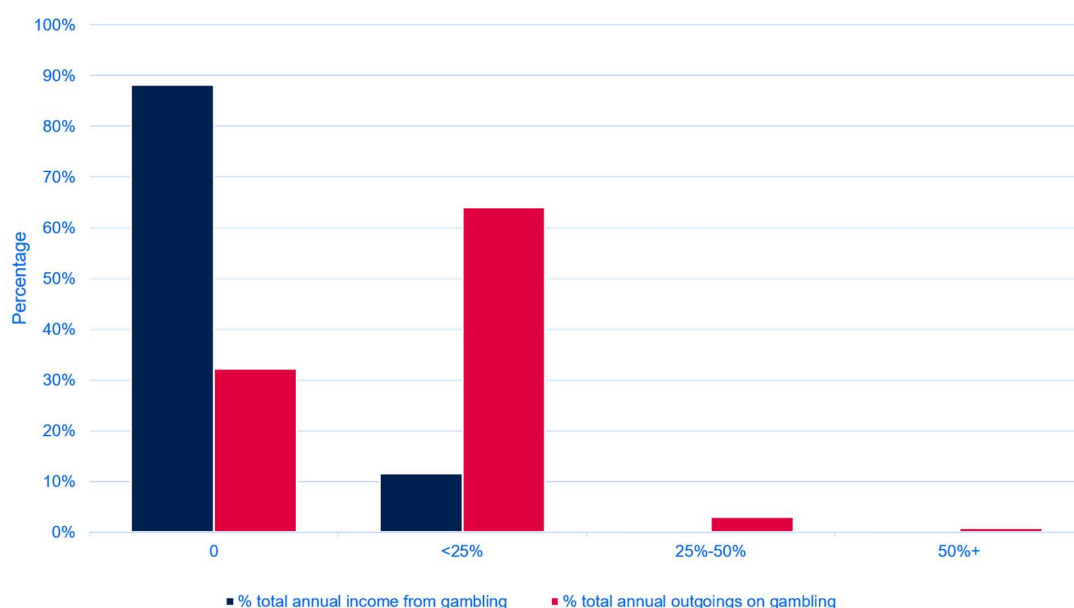
Figure 30 shows total annual expenditure on gambling as a proportion of total annual outgoings. Just under one-third (32%) of individuals have not spent anything on gambling over the account periods observed. Just under two-thirds (64%) have spent less than 25% of their total annual outgoings on gambling. Only 4% (363 individuals) have spent more than 25% or more of their annual outgoings on gambling. On average individuals spent 5% of their total expenditure on gambling. Males spent more of their total outgoings on gambling than females; 8% compared to 4%.

Figure 30 also shows annual income from gambling as a proportion of total annual income. The vast majority (88%) have not made any money from gambling. Discounting those that have not spent any money on gambling, 17% of those who have spent money on gambling have not made any money. This needs to be read with some caution as individuals may elect to have gambling winnings paid into a different bank account. 12% of individuals have made less than 25% of total annual income from gambling. Less than 0.5% have made more than 25% of total annual income from gambling.

On average 3% of total annual income was derived from gambling with the maximum proportion of total income any user derived from gambling at 60%. Males on average were

more likely to derive more income from gambling than females: on average, 5% versus 2% of total annual income.

**Figure 30: Gambling expenditure/income as a % of total annual outgoings/income**



The top 10 most frequently used gambling companies among the sample are (in rank order): Skybet, Bet365, Tombola, Jackpotjoy, National Lottery, Mecca, William Hill, Paddy Power, Gala Bingo, Heartgames.

## 8. Conclusion

This report analyses the banking transaction data of 9,516 individuals, all of whom have applied to Salad Money for a loan. The sample comprises a significant sub-set of NHS workers with a profile consistent with those employed in NHS Bands 1-5. This sub-set is not a random or representative sample of NHS workers, there is a self-selection bias: individuals applying for short-term loans are more likely to be experiencing financial problems already.

The report raises some serious concerns about the financial resilience of individuals. Around one quarter of individuals are identified as 'in difficulty' and at least half may struggle to cover an unexpected expenditure of £100 within a month without going into overdraft or further into overdraft. With only 4% showing evidence of saving, many would appear to have a very limited savings buffer.

Use of credit and loans is particularly prevalent, in particular multiple use of non-traditional and high-cost loan providers. Traditional 'high street' banks account for less than 10% of the loans used by these individuals. At the same time, individuals are making persistent use of overdraft from high street banks.

It is not possible to know from this analysis why high street banks feature less prominently in the loan providers used by these individuals. Individuals may or may not have applied to the high street banks, they may have been refused a loan, they may not meet the lending/affordability criteria for these institutions, or it may be that other (high-cost) options

are more accessible and marketed more readily. For whatever reason, a significant proportion of individuals, many of whom show signs of low financial resilience, are using multiple high-cost credit options and are also paying regular charges to maintain costly overdrafts.

The high use of credit and loans and overdraft use observed is not sustainable. More credit may not be the answer or the best solution for individuals who are already overindebted. Individuals need more support and financial education to enable them to better manage their financial situations, to make better (and more affordable) choices, and reduce their reliance on costly short-term credit. The lower incidence of credit and loan use among Monzo and Starling customers is interesting and raises questions about whether the digital tools/apps used by these banks are in any way helping individuals to manage their money better and understand their financial situations better.

Increasingly, lenders are making use of Open Banking data to make lending decisions. We suggest these lenders should also continue to use the data to monitor the impact of their lending decisions on individuals' financial circumstances. Banks have had the same data for a long time already. All financial providers that have access to the kind of data observed in this report cannot and must not ignore the financial difficulties of individuals and should proactively seek to help their customers who are showing signs of financial vulnerability. The launch of Salad Project's Money Mind tool is a welcome development to enable these NHS workers to understand and manage their financial situations, to make the changes in their spending to avoid persistent overdrafts and reliance on high-cost credit.

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