



Resilience of cooperatives during global pandemics – Short-term effects of Covid-19 on lending behaviour of British credit unions

Pål M. Vik^{a,*}, Joanna Curtis^b, Karl T. Dayson^c

^a University of Salford, Room 302, Maxwell building, Salford M5 4BR, United Kingdom

^b Blackwood Homes and Care, Head Office, 160 Dundee St, Edinburgh, EH11 1DQ, United Kingdom

^c University of Salford, Offices of the Vice Chancellor, the Old Fire Station, 45 The Crescent, Salford M5 4WT, United Kingdom

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ABSTRACT

Cooperative financial institutions are believed to be less vulnerable to business and economic fluctuations linked to recessions and crises. This paper examines the short-term effects of Covid-19 on the British credit union sector drawing on survey data for 58 credit unions and follow-up interviews with 21 credit union managers. Loan demand, and the volume and value of loans were significantly lower in March and April 2020 after the introduction of government restrictions than in March and April 2019. Bad debt provisioning was also significantly higher in April 2020 than in April 2019. There was no significant difference for loan interest income between April 2019 and April 2020. The findings suggest that credit unions were affected by the pandemic in the same way as other financial institutions. For the majority of the credit unions, the decline in lending may be explained by a drop in consumer demand rather than restrictions put on the supply of credit. It is too early to conclude if the adverse economic conditions caused by Covid-19 will negatively affect the sustainability and ability of the sector to generate surpluses or if the cooperative model will shield the sector from resulting economic fluctuations, as suggested by the literature.

1. Introduction

The resilience of cooperative financial institutions is an important research topic for several reasons. Firstly, cooperative lenders make up an important part of the financial sector globally. By the end of 2020, there were 86,451 credit unions globally serving 375 m members with \$3,208bn in assets. In Europe, there were over 3382 credit unions with aggregate assets of \$34.9bn and 8.5 m members ([World Council of Credit Unions, 2020](#)). Secondly, cooperatives are often hypothesised to be an antidote to the boom-and-bust models of capitalist enterprise ([Hoyt & Menzani, 2012](#)). Credit risk caused by moral hazard and information asymmetries are reduced through limited geographical spread and common identity of credit union members. The lack of profit and share options for management reduces incentives for risk-taking behaviour ([Ward et al., 2021](#); [McKillop et al., 2020](#)). Thirdly, many cooperatives emerged to serve groups marginalised by or unable to access services in neoliberal market-based economies ([Hoyt & Menzani, 2012](#)). In Britain, many credit unions were set up to serve low-income households unable to access mainstream finance ([McKillop et al., 2007](#); [Jones, 2006](#)).

The global Coronavirus outbreak constitutes a test of the resilience of cooperative financial institutions. Covid-19 and the lockdown and social distancing measures adopted by governments led to unprecedented falls in economic output across the globe. The pandemic negatively affected the global economy through loss of life and long-term illness, which resulted in reduced productivity, business closures, disruption of trade and the devastation of the tourist industry. Global output per capita fell by 4.4 % in 2020 due to Covid-19 ([International Monetary Fund, 2021](#)). Global maritime trade fell by an estimated 7–9.6 % in the first 8 months of 2020 ([Verschuur et al., 2021](#)).

There is an emerging academic and grey literature that provides insights into the operational and financial impacts of Covid-19 on credit unions and cooperatives ([Cooperatives Europe, 2020](#); [Jones et al., 2020](#); [Tortia & Troisi, 2021](#)). However, these studies do not use pre-pandemic financial data as a benchmark to quantify the magnitude of the effects on demand, income and losses to analyse how Covid-19 has affected the financial performance and sustainability of cooperatives. The study by [Francesconi et al. \(2021\)](#) is an exception as they analyse financial data before and after Covid-19, but they focus on agricultural cooperatives in Southeast Africa.

* Corresponding author.

E-mail addresses: p.m.vik@salford.ac.uk (P.M. Vik), joannacurtis@blackwoodgroup.org.uk (J. Curtis), k.t.dayson@salford.ac.uk (K.T. Dayson).

This paper makes an important empirical contribution by exploring the short-term effects the pandemic and associated government restrictions had on the credit union sector. It draws on an online survey of 58 credit unions in Britain and follow-up telephone interviews with 21 survey respondents. The research was conducted in May and June 2020. This is a unique dataset of the credit union movement in Britain, as existing datasets such as the quarterly and annual returns collected by Bank of England, only contain balance sheet and income statement data. We also explore potential institutional determinants of these effects. As the first study on the effects of Covid-19 on loan demand, lending and income of the British credit union sector, the article fills a gap in knowledge on how the pandemic has affected the credit union sector. It also contributes to wider academic debates around the effects of crises and economic downturns on cooperative financial institutions.

British credit unions are mutual financial organisations that provide loans, savings and other services to its members. Credit union membership is limited to people with a common bond or interest with each other (Forker et al., 2014). The common bond is set out in legislation and the three most common forms of common bonds are residential (community), employment and associational (Forker et al., 2014). Although the underlying principles date back to the British cooperative movement in the mid-nineteenth century, the first credit unions in the country were established in the early 1960 s. British credit unions have a diverse membership, including middle-class households (Martin, 2018), however, many were originally set up to serve low-income consumers unable to access mainstream finance (Jones, 2006). There are around 240 credit unions in Britain. They are typically registered as having an employment or a residential-based common bond: Employer-based credit unions primarily serve workers from one or multiple employers and include some of the largest credit unions in Britain. Community-based credit unions provide services mainly to people living or working in a defined geographical area and tend to be smaller than employer-based institutions.

We find that the number of loan applications, and the volume and value of loans was significantly lower in March and April 2020, after the introduction of government restrictions in the UK, compared with March and April 2019. Bad debt provisioning was also significantly higher in April 2020 than in April 2019. There was no significant difference for loan interest income between April 2019 and 2020. For most credit unions, the reduction in lending is a result of a fall in demand for consumer loans, caused by Covid-19, rather than a consequence of restrictions imposed by lenders in response to adverse economic conditions.

The remainder of this paper is organised into seven sections. The second section examines the economic impacts of Covid-19 on the UK economy. The third reviews the academic literature on the effects of Covid-19 on financial services and credit unions as well as the resilience of the cooperative business model. The fourth details the methods and data, whilst the fifth presents the results. The sixth section discusses the results, and the seventh section concludes.

2. Economic effects of Covid-19

In response to the spread of Covid-19 and its potential impact on the health system, the UK, Scottish and Welsh governments introduced national lockdowns on March 24, 2020, which were gradually eased during June and July.¹ Households were asked to stay at home except for exercise and essential purchases. Workers were asked to work from home unless involved in essential activities, nonessential shops were ordered to close, and schools were shut. As a result, consumer spending fell by 10.6 % in 2020 as the pandemic and subsequent restrictions reduced both the ability and the willingness of people to go out and

spend (Harari & Keep, 2021). Consequently, many households with steady incomes accumulated significant savings (Bank of England, 2020b) or used the additional disposable income to repay unsecured debt, which fell each month between March and November 2020 (Francis-Devine, 2021). The Bank of England estimates that between March and November 2020, households accumulated £ 125bn of additional savings, equivalent to 8 % of total annual household income. The savings rate of households increased from 6 % in the fourth quarter of 2019–23.4 % in the second quarter of 2020 (Harari & Keep, 2021).²

The reduction in spending led to significant falls in output and sales by businesses. The worst affected sectors were the accommodation and food sector, which experienced 91 % lower output in April 2020 compared to February 2020, and the arts and entertainment sector, with output 49 % lower in May 2020 than in the February 2020 (Harari & Keep, 2021). There was a rise in unemployment and reduced working hours and income, as employers cut their payroll and furloughed workers in response to the pandemic. Workers on UK payrolls fell by 649,000 between March and June 2020.³ A survey of 6000 adults by Gardiner & Slaughter (2009) found that 3 % of employees had lost their jobs by early May 2020. According to the Covid-19 module of the UK Household Longitudinal Survey, a quarter of the respondents were working fewer hours by April 2020 (Benzeval et al., 2020). The effects on employment levels were cushioned by schemes such as the UK Government Job Retention Scheme (better known as the furlough scheme). Between 1st of March and 31st of May 2020, the scheme supported 8.7 m workers with total claims of £ 17.5bn (HMRC, 2020).

The impact on household finances was uneven. The household income for some consumers was unaffected enabling them to save more and pay off debt. Households in the poorest fifth of the population were hardest hit by the pandemic experiencing a 15 % fall in median household earnings (around £160 a month) (Bourquin et al., 2021). They were also less likely to make mortgage, rent and council tax payments after the onset of Covid-19 (Bourquin et al., 2021).

3. Impact of the Coronavirus pandemic on financial services and credit unions

Globally, bank consumer and business loan growth rates declined during the first three quarters of 2020, with sharper falls in lending in the areas most affected by Covid-19 (Çolak & Öztekin, 2021). Similarly, a US study found that banks more exposed to the pandemic saw a greater reduction in small business lending (Beck & Keil, 2022). A study of European banks by Özlem Dursun-de Neef and Schandlbauer (2021) found that better capitalised institutions experienced a greater decline in lending compared with less well capitalised banks. They argue this suggests that banks with low capital have an incentive to lend more during periods of contraction to help weaker borrowers and to enable the banks to avoid loan write-offs (Özlem Dursun-de Neef & Schandlbauer, 2021). In the UK, consumer lending fell significantly during the lockdowns in spring 2020 and winter 2020–21 (Bank of England, 2022).

There was an expectation at the beginning of the pandemic, that bad debts would increase significantly. Evidence from the US suggests that banks that were more exposed to the pandemic and lockdown measures saw an increase loan loss provisions and non-performing loans (Beck & Keil, 2022). In Europe, non-performing loans for the household and corporate sector fell during the pandemic but are expected to increase when fiscal government support programmes are phased out (European Central Bank, 2021). Overall, the UK banking sector was less affected by the pandemic compared with the financial crisis of 2007 and experienced a much smaller drop in output than other sectors (Harari & Keep, 2021).

² Refers to the difference between total household post-tax income and expenditure, expressed as a percentage of post-tax income.

³ <https://www.bbc.co.uk/news/business-53427304>

¹ As the dataset only covers up-until April 2020, we have not discussed subsequent lockdowns and restrictions.

There are very few empirical studies on the impact of Covid-19 on the credit union sector in Britain and elsewhere. There are a handful of studies and surveys on the cooperative sector more generally that provide a useful if incomplete picture of the impact of Covid-19. A survey of cooperatives in Europe found that all respondents were affected in terms of business activities, turnover, and workforce, including discontinuation of activities, and staff working from home (Cooperatives Europe, 2020). Although some respondents benefited from unexpected business opportunities and 12.5 % experienced an increase in turnover, the majority reported that turnover was “substantially lower...or a little lower than normal” (Cooperatives Europe, 2020, p. 5). In their comparison of the performance and resilience of social cooperatives and other not-for-profit organisations in Italy during Covid-19, Tortia and Troisi (2021) find that cooperatives were less likely to make staff redundant compared with other organisational forms. They attribute this to the “shared decision-making, employee involvement, and the adaptability of the work process” of the cooperative model (Tortia & Troisi, 2021, p. 78).

We are not aware of any peer reviewed outputs specifically on the impact of the Coronavirus pandemic on credit unions in Britain. The available evidence in the grey literature suggests Covid-19 has affected the loan and savings portfolio, the operating model and the support that credit unions provide to their communities (Jones et al., 2020). From September 2019 to September 2020, the total value of outstanding loans fell by 2.3 %, share balances increased by 13.6 % and the average amount of arrears rose by 18.7 % across British credit unions (Bank of England, 2021). In England, the value of the outstanding loan portfolio increased by 2.4 % (Bank of England, 2021). Jones et al. (2020) conducted a survey of 24 credit unions in Great Britain covering March and April 2020, the first two months of the first lockdown in the UK. They found that the pandemic led to several operational changes, including the closure or reduction in opening hours of branches, the implementation or increased use of remote delivery (cashless payments, electronic signature), and the introduction or greater use of technology for collaborative working (cloud-based systems, business communication platforms) (Jones et al., 2020). The credit unions also provided additional support to members and communities, including emergency loans, additional forbearance to borrowers, proactive communication with vulnerable members, and donations and support to local community groups and charities (Jones et al., 2020). McCarthy (n.d.) provides similar examples of additional support provided by credit unions to their members and communities in Ireland.

More broadly, academics have been investigating the sensitivity of credit unions to business cycles and fluctuations in the economy compared with non-cooperative models, especially the shareholder model (Birchall & Ketilson, 2009; Coen et al., 2019; Ward et al., 2021). The cooperative model reduces the drive for greater profit and hence greater risk. Smith and Woodbury (2010) argue that a possible explanation for the insularity of the credit union model is that the banks’ shareholder model leads to greater drive for profit, as shareholders are protected against risk through diversified portfolios. Conversely, credit union CEOs are selected by credit union boards, which are selected by members and not remunerated. There is also less incentive to take risks as gains are spread across many members (rather than a small group of investors). The reliance on members’ deposits rather than capital markets may encourage credit unions to focus on retained profits and limiting risk-taking (Birchall & Ketilson, 2009). However, the dependence on depositors combined with the exposure to borrowers with common characteristics, make it more difficult to diversify funding and credit risk compared with banks (Coen et al., 2019).

The insularity of the credit union business model to business cycle fluctuations is largely borne out by the literature. Many studies find that credit unions are more likely to survive compared with other business models (Birchall & Ketilson, 2009; McKillop et al., 2020). Their growth rates are more stable and less prone to significant fluctuations in line with business cycle fluctuations compared with other types of businesses

(Smith & Woodbury, 2010; Walker, 2016; Lu & Swisher, 2020). It should be stressed that most of this research is focused on the US, partly because credit union failures are less common elsewhere (Coen et al., 2019). In the UK, it is common for failing credit unions to be taken over by financially healthier institutions rather than to be allowed to fail (Coen et al., 2019).

On the whole, the evidence suggests that the cooperative business model is more resilient during financial and economic crises compared with other business models. In Wagner and Winkler’s (2013) analysis of the impact of the global financial crisis on the microfinance sector, credit unions were significantly less affected by the crisis. In the US, the assets, deposits and loans of medium-sized credit unions grew at a faster rate than banks in 2009 and 2010 (Lu & Swisher, 2020). This was also the case for assets and deposits for large credit unions, but their loans only exceeded that of banks for 2009 (Lu & Swisher, 2020). This is supported by analyses by Walker (2016), which find that US credit unions increased their lending and assets following the 2007 financial crisis, whilst community banks reduced their lending during the same period. Drawing on comparative analysis of data on US credit union and bank lending and delinquency for 1986–2009, Smith and Woodbury (2010) conclude that credit unions were much less susceptible to business cycle fluctuations in both directions. They estimate that credit unions’ aggregate portfolios were 25 % less sensitive to macroeconomic shocks than banks (Smith & Woodbury, 2010). Their peaks were lower, and floor was higher relative to banks. Credit union lending was also not correlated with the unemployment cycle (Smith & Woodbury, 2010). Conversely, in the UK, the size of the credit union and the national unemployment rates materially influences on the likelihood of credit union failure (Coen et al., 2019).

4. Data and methods

We draw on survey data from 58 British credit unions as well as telephone follow-up interviews with 21 credit union managers. The survey data was collected over a two-week period at the end of May 2020. The survey contained questions about the credit union (size, age, services, region), the impact of Covid-19 on the loan portfolio volume, loan portfolio quality and interest income, liquidity and viability, actions taken in response to the pandemic, and monthly data on lending, applications, and income for February-April 2019 and 2020 (the questionnaire is included in Appendix A). We used a self-selection sampling approach. The credit union trade bodies, the Association of British Credit Unions and the Scottish League of Credit Unions, and the government funding agency, Fair4All Finance, emailed a link to the survey to their members and beneficiaries. The sample consists of credit unions that chose to fill in the survey on their own accord.

Table 1 compares the sample and the population of credit unions (based on credit union returns data from the Bank of England) on key

Table 1
Credit union sample and population characteristics.

	Credit unions in sample	British credit unions*	% coverage
FTE staff (Number) ^a	535	1661	32.2 %
Outstanding loan portfolio (£)	£ 474 m	£ 988 m	48.0 %
Active borrowers (Number)	173,515	410,039	42.3 %
Savings balance (£)	£ 733 m	£ 1681 m	43.6 %
Branches (Number)	102	-	-
Country			
England	37 (64 %)	146 (62 %)	-
Scotland	18 (31 %)	79 (32 %)	-
Wales	3 (5 %)	15 (6 %)	-
Number of providers	58	240	20.6 %

^a Full-time equivalent

* Bank of England 2018 annual credit union return data

indicators.

Our sample represents around 20 % of the credit unions in Britain and is broadly similar in terms of countries. The credit unions were considerably larger - more than twice the size – than the average British credit union in terms of number of active borrowers, loan portfolio and savings balance. Most of the largest credit unions were included, whilst fewer of the very small institutions were represented. This is significant as smaller credit unions are more vulnerable to failure (Coen et al., 2019) and more likely to serve low-income consumers (Jones, 2006) worst affected by the pandemic (Bourquin et al., 2021).

We used the Wilcoxon signed-rank test to compare monthly demand, lending, loan arrears and interest income in February-April 2020 with the previous year to determine the impact of the pandemic on the sample. The main assumptions for using this test, which we tested for, are that the dependent variable should be ordinal or continuous, the independent variable should consist of two categorical, related groups, meaning the same subjects are featured in both groups, and the distribution of the differences between the two groups needs to be symmetrical in shape (White et al., 2018).

We conducted qualitative follow-up interviews with managers from 21 of the credit unions recruited through the survey (Table 2).

Relative to the survey sample, managers of smaller community credit unions in England were overrepresented among the interviewees, whilst no Welsh credit union managers were represented. The interviews were semi-structured and relied on an interview guide (included in Appendix B), covering background about the credit union, changes in ways of working in response to Covid-19, impact on lending activity, loan portfolio quality, liquidity and viability, and support received. The interviews lasted between 30 and 60 min.

5. Results

Table 3 shows the short-term effects of, and actions taken by the credit unions in response to the pandemic.

The most reported short-term effects of Covid-19 were furloughing staff and temporarily closing branches (52 %). Many credit unions were forced to close branches due to the introduction of national lockdown measures. The furloughing of staff and temporary closure of branches were closely interlinked. 60 % of those that temporarily closed branches also furloughed. The credit unions that furloughed staff, had a higher average number of branches: 2.4 compared with 1.1 compared with those not furloughing staff.

The propensity to close branches increased with the number of

Table 2
Overview of interviewees.

Interviewee A	Manager, small community credit union, England
Interviewee B	Manager, small community credit union, England
Interviewee C	Manager, small community credit union, England
Interviewee D	Manager, small community credit union, Scotland
Interviewee E	Manager, small employer-based credit union, England
Interviewee F	Manager, medium-sized community credit union, England
Interviewee G	Manager, medium-sized community credit union, England
Interviewee H	Manager, medium-sized community credit union, Scotland
Interviewee I	Manager, medium-sized community credit union, England
Interviewee J	Manager, medium-sized community credit union, England
Interviewee K	Manager, medium-sized community credit union, England
Interviewee L	Manager, medium-sized community credit union, Scotland
Interviewee M	Manager, medium-sized community credit union, Scotland
Interviewee N	Manager, medium-sized credit union, England
Interviewee O	Manager, medium-sized employer-based credit union, England
Interviewee P	Manager, large community credit union, England
Interviewee Q	Manager, large community credit union, England
Interviewee R	Manager, large community credit union, England
Interviewee S	Manager, large community credit-union, England
Interviewee T	Manager, large employer-based credit union, England
Interviewee U	Manager, large employer-based credit union, England

*Small = in 33rd percentile of sample for value of outstanding loan portfolio (<£1.5 m); Medium = 66th percentile (£1.5 m-£2.9 m); Large = ≥£ 3 m

Table 3
Short-term effects on and actions taken by credit unions.

Actions taken in response to Coronavirus	N	%
Furloughed staff/redundancies	30	52
Temporarily closed branches	30	52
Introduced deposit restrictions	5	9
Tightened lending criteria	15	26
Support received in connection with Coronavirus		
Received some form of support	34	59
Government Job Retention Scheme	8	14
Fair4All Covid-19 Resilience Fund	12	21
Third Sector Resilience Fund	5	9
Credit Union Resilience Fund	4	7
Local authority scheme	13	22
Charitable foundation grant	1	2
Rent, bill or loan payment holiday	2	3
Changes in customer savings compared with this time last year		
Decreased	0	0
Remained the same	12	21
Increased	44	76
No response	2	3
Changes in payment holiday requests compared with this time last year		
Decreased	0	0
Remained the same	3	6
Increased	52	90
No response	3	5
Confidence about future		
Able to meet short-term costs next 6 months	36	62
Forecast breaching regulations or covenants next 6 months	8	14
Confidence trading this time next year		
-Very confident	34	59
-Fairly confident	18	31
-Not very confident	2	3
-Not at all confident	1	2
-Do not know	3	5
Total	58	100

branches. Those temporarily closing branches had on average 2.5 branches compared with 1.2 for those not closing branches. The interviews suggest that many of the credit unions, especially larger, employer-based credit unions, did not have any branches at the start of the pandemic as their customers prefer to use and access services remotely. Instead, these credit unions had an office that members could use if they needed to execute transactions in branch.

Around a quarter of the sample had tightened lending criteria to reflect changes in customers’ circumstances, especially those working in affected sectors (e.g., retail, hospitality) as well as uncertainty about the impact of Covid-19 on household finances. More commonly, however, credits unions kept their lending criteria unchanged, but some customers were no longer able to qualify for a loan as their circumstances had changed (interviewees G, P, M, N).

Nearly 60 % of the sample had received some form of financial support in connection with the pandemic. The most common forms of support were from local authorities (22 %) and Fair4All Finance’s resilience fund (21 %). Typically, such financial support was intended to help the credit unions cover loan losses, income losses and additional expenses.

Nearly 80 % (79 %) reported that customer savings had increased during the pandemic, because, according to the managers interviewed, their members were less confident about and had fewer opportunities to spend money. 95 % of the credit unions in the sample had seen an increase in payment holiday requests. Many credit unions reported, in the follow-up interviews, that they usually would not have any or very few such requests prior to the pandemic:

We’ve had around about 30 payment holiday requests and on our loan agreement it does state that we don’t offer payment holidays... So, our payment holiday requests has pretty much increased by 100 % because we don’t grant them (Interviewee C).

The majority – 63 % – of the credit unions in the sample reported

being able to meet short-term costs in the next six months without additional support. Although almost all interviewees reported falling capital asset ratios – a key regulatory ratio – only 14 % were forecasting to breach regulatory requirements or loan covenants in the next six months. Nearly 90 % were very or fairly confident that they would be trading this time next year. Many of the managers interviewed expressed uncertainty about the future impact of Covid-19 but were confident about their credit union’s future because of a strong pre-pandemic financial position. They also believed their members would not be adversely affected by the pandemic, as they were largely public or associated sector employees:

We’re lucky in terms of sectors we serve. So, a lot of key workers, you know, who are in stable employment. Many are continuing to work... Payment holidays are less than 5 % and many of those are now starting to repay... If it came to it, we would just pay less dividend... We’ve always been a profitable credit union... Also, with staff that have been furloughed, many have been furloughed because they can’t go into people’s homes so it’s not like their job is at risk once furlough ends... We’re well capitalised. Our bad debt is really good. (Interviewee Q).

Credit unions that were small, not yet fully sustainable and whose customers had been directly affected by the pandemic expressed greater concerns about their future viability:

We’ve gone from under 1 % [in bad debt provisions] in February, so before lockdown, to 12.7 % at the end of April. To put that into context that takes our capital asset ratio from something very healthy...to 7 % as a ballpark figure. We’re only allowed to take into our assets 25 % of the re-evaluation reserves. So, when we’ve...adjusted that figure down, the capital asset ratio comes down to 2 %. That is obviously less than the regulator wants to see. That really is quite a serious position... As far as we’re concerned for our size of credit union, our absolute minimum is 3

%. We like to keep it at 5 %. If this carries on, it would be serious ... (Interviewee B).

Table 4 shows the descriptive statistics for the loan portfolio data.

The level of demand, measured by the number of applications received, and the volume and value of loans issued fell substantially from April 2019 to April 2020. The median number of applications fell from 170 to 83 (a 51 % fall) and the mean fell from 381 to 210 (a 45 % fall). Similarly, the average number of loans fell by 144 (or 49 %) and the median number of loans fell by 69 (equivalent to 58 %). The value of loans disbursed decreased more sharply with both the median and mean values falling by around 70 %. Because the value of lending fell more sharply than the number of loans disbursed, the average size of loans decreased too. The credit unions in the sample made smaller loans, according to the follow-up interviews, to help their members meet unexpected costs and shortfalls in income caused by the pandemic:

The value of new lending was around half what it was last year so we’ve had a lot of existing borrowers coming back to borrow again and less new borrowers than we would normally expect and across both groups the amount of borrowing has been down (Interviewee R)

The picture for February and March is more mixed. The number of applications did not change much from February 2019 to February 2020. There was a decline in the median number of loans disbursed but a slight increase in the median value of loans reflecting higher average loan sizes. The number of loan applications, volume of lending and, especially, the value of loans declined from March 2019 to March 2020. Still, around a third of the sample reported increases in the number and value of loans. This helps explain the large differences in change for mean and median values, especially for the change in the number of loans issued in March 2019 and March 2020, which reflects three

Table 4
Descriptive analysis of variables.

	February 2019	2020	March 2019	2020	April 2019	2020
<i>Number of new loan applications (n = 46)</i>						
Median	158	157	181	147	170	83
Mean	325	336	357	337	381	210
SD	480	546	532	570	569	380
Min	5	2	1	2	6	1
Max	2415	3125	2916	3453	2860	2395
<i>Number of new loans disbursed (n = 54)</i>						
Median	125	105	157	92	134	56
Mean	227	229	255	249	291	147
SD	331	376	374	446	464	300
Min	5	2	0	2	5	1
Max	1842	2351	2240	2759	2315	1844
<i>Value (£) of new loans disbursed (n = 54)</i>						
Median	109,762	114,188	134,827	118,651	138,064	41,295
Mean	343,834	328,251	375,953	297,963	405,121	123,566
SD	658,697	632,995	690,099	530,524	792,543	228,400
Min	4000	3000	10,000	2000	10,201	800
Max	2737,824	3074,563	2924,377	2416,077	3183,411	1177,000
<i>Average value (£) of disbursed loans (n = 46)</i>						
Median	879	930	878	854	872	643
Mean	1479	1383	1768	1458	1338	1257
SD	1938	1454	3448	1870	1417	1838
Min	246	158	145	170	254	86
Max	9595	6108	23,000	10,385	8238	10,000
<i>Value of loan interest income (n = 51)</i>						
Median	33,070	35,321	34,559	36,979	37,392	33,580
Mean	84,420	89,243	88,013	96,820	86,131	84,722
SD	143,179	144,623	149,175	155,453	149,269	142,261
Min	1730	2562	1327	2547	1927	2267
Max	706,000	652,000	652,000	664,000	702,000	628,000
<i>Bad debt provisioning (%) (n = 41)</i>						
Median	-	-	-	-	4.46	5.30
Mean	-	-	-	-	6.24	7.67
SD	-	-	-	-	6.24	6.86
Min	-	-	-	-	0.20	0.40
Max	-	-	-	-	33.00	34.00

outliers experiencing fairly significant growth in the number of loans issued.

Table 5 shows the results of the Wilcoxon signed-rank test on loan application, volume, value, income, and bad debt provisioning pre- and post-pandemic. The table displays the mean values.

The number of loan applications for March ($Z = -2.235, p = 0.025$) and April ($Z = -4.671, p < 0.001$) was significantly lower in 2020 compared with 2019. There was no significant difference between February 2019 and 2020 ($Z = -0.344, p = 0.731$). Similarly, whilst there was no significant difference in loan disbursement between February 2019 and 2020 ($Z = -0.538, p = 0.590$), the number of loans disbursed in March ($Z = -2.470, p = 0.014$) and April ($Z = -5.898, p = 0.000$) was significantly lower in 2020 than 2019. There was no significant difference in the value of loans between February 2019 and 2020 ($Z = -1.382, p = 0.110$). The value of lending was significantly lower in March and April 2020 than in the same months in 2019 ($Z = -3.362, p < 0.001$ and $Z = -6.376, p < 0.001$ respectively).

The follow-up interviews with managers suggest that a combination of uncertainty, fewer spending opportunities and lower household incomes explain the significant fall in demand and lending. Some customers experienced drops in household income, as household members had been made redundant, furloughed, or reduced hours or overtime (interviewees G, J, O, U). This had, according to interviewees, especially affected younger people, workers in the worst affected sectors and those in flexible or more precarious forms of employment. Some employer-based credit unions noted that people in some sectors were affected by fewer or no opportunities for overtime during Covid-19, as they had relied on this to sustain their living standard (interviewees T, U). Additionally, government coronavirus restrictions restricted the opportunities for many credit union customers to spend money on

Table 5
Lending volume, value, income and provisioning Feb-April 2019–20.

	Mean 2019	Mean 2020	Difference	Z value	Sig. value
<i>Number of new loan applications (n = 46)</i>					
February	325	336	11	-0.344	0.731
March	357	337	-20	-2.235	0.025*
April	381	210	-171	-4.671	<0.001*
<i>Number of new loans disbursed (n = 54)</i>					
February	227	229	2	-0.538	0.590
March	255	249	-6	-2.470	0.014*
April	291	147	-144	-5.898	<0.001*
<i>Value of new loans disbursed (n = 54)</i>					
February	345,834	328,251	-17,583	-1.597	0.110
March	375,953	297,963	-77,990	-3.362	<0.001*
April	405,121	123,566	-281,555	-6.376	<0.001*
<i>Average value of disbursed loans (n = 46)</i>					
February	1479	1383	-96	-1.382	0.167
March	1768	1458	-310	-1.797	0.072
April	1338	1257	-81	-3.043	0.002*
<i>Value of loan interest income (n = 51)</i>					
February	84,520	89,234	4823	-2873	0.004*
March	88,014	96,820	8807	-4218	<0.001*
April	86,131	84,722	-1409	-1289	0.197
<i>Bad debt provisioning (%) (n = 41)</i>					
April	6.24	7.67	1.43	-3.616	<0.001*

Notes: The number of respondents providing data for each variable varied as not all credit unions collected or were able to report on all indicators. We asked the respondents about the level of bad debt provisioning in April 2019 and April 2020 rather than asking respondents to provide monthly data.

* $P \leq 0.05$

holidays, leisure, and hospitality:

At the other end of the spectrum, we have people continuing to work so their salaries are paid as normal because they work as normal. However, they have not been able to go out and spend it. (Interviewee U).

Uncertainty about the effects of Covid-19 on household finances, employment or overall economy also encouraged customers to postpone or cancel purchases and home improvement projects:

When we ask why they're not taking loans. They say, "well what are we going to spend it on." We usually do a lot of loans for cars. They're always buying a new motor or doing their car up. Holiday is another big thing. (Interviewee T).

The fall in lending was, according to interviewees, the result of a fall in demand rather than a contraction of credit in response to worsening market conditions. This is supported by the fact that, although all lenders experienced significant falls in lending, only a quarter of respondents tightened lending criteria in response to the pandemic.

Loan interest income was significantly higher in February and March 2020 compared with the same months in 2019 ($Z = -2.873, p = 0.004$ and $Z = -4.218, p < 0.001$ respectively). Interest income was lower in April 2020 compared with April 2019, but the difference was not statistically significant ($Z = -1.289, p = 0.197$). This is surprising given the significant fall in the value of loans disbursed in March and April. It should be noted that 28 of the 51 credit unions providing this data reported lower interest income in April 2020 compared with April 2019. Further, interest income is significantly lower in April 2020 than in March 2020 ($z = -3.984, p < 0.001$) suggesting a downward trajectory. Conversely, interest income was significantly higher in April 2019 compared with March 2019 ($z = -2.997, p = 0.003$). The interviews also suggested that income on the whole had held up. The most likely explanation for the lack of a significantly lower interest income in April 2020 compared with 2019 is that several of the credit unions in the sample had a larger outstanding loan portfolio at the beginning of 2020 compared with the previous year (interviewee P, Q, U, S; follow-up email correspondence with interviewees I, K, R and T, February 2023). Lower value of lending will translate into a lower interest income by reducing the outstanding loan portfolio, but this effect may not be immediate. We cannot confirm this using our survey, as we did not collect data on the value of the outstanding loan portfolio for the sample for 2019. The British credit union sector had a 9% larger loan portfolio – from £ 970 m to £ 1.1bn – in the first quarter of 2020 compared with quarter one for 2019 (Bank of England, 2020a).

Bad debt provisioning rates were significantly higher in April 2020 compared with the same month in the previous year ($z = -3.616, p < 0.001$). This suggests that credit unions were expecting an increase in arrears and write-offs. The majority credit unions reported an increase in payment holiday requests. According to the credit union managers, some borrowers were making such requests because their finances had been hit by Covid-19:

There are a small number of people who have been impacted because they've been made redundant, furloughed on 80% of pay or they're self-employed... Those have been badly affected and from our point of view we've deferred loan payments and we have tried to be as sympathetic as possible. (Interviewee G).

Others, especially low-income borrowers, had stopped paying due to the expectation that payment holiday for mortgages requested by the FCA applied to credit union consumer loans too (interviewees A, C, G). Some credit unions also proactively offered payment holidays and forbearance.

6. Discussion

The results of this study suggest that Covid-19 has significantly affected the lending activity of British credit unions. The demand for loans, as measured by the number of loan applications, was significantly lower in March and April 2020, following the introduction of

government Covid-19 restrictions in March 2020, compared to equivalent months in 2019. The number and value of loans disbursed also fell significantly in March and April 2020 compared with the same months in 2019. This is not surprising given that, overall, UK consumer spending and credit contracted in Spring 2020. Credit unions significantly increased their provisioning for bad debts from April 2019 to April 2020 reflecting an expectation of higher future levels of loan losses. Conversely, loan interest income was not significantly lower following the pandemic. This is most likely because several of the credit unions in the sample had a larger outstanding portfolio at the beginning of 2020 compared with 2019.

The results are broadly in line with the evidence on the effects of the pandemic on the banking sector and financial markets. Globally, bank business and personal lending fell during Covid-19 (Çolak & Öztekin, 2021). In the UK, consumer lending fell sharply during the lockdowns in spring and winter of 2020 (Bank of England, 2022). Overall, banks did not experience an increase in arrears (European Central Bank, 2021), due to continued fiscal support programmes aimed at firms and households (Apergis, 2022) or because poorly capitalised banks lent to struggling borrowers to avoid balance sheet losses (Özlem Dursun-de Neef & Schandlbauer, 2021). In line with the grey literature on the impact of the pandemic on the credit union and cooperative sector, we find evidence of significant operational changes, such as branch closures and the furloughing of staff (Jones et al., 2020; Cooperatives Europe, 2020; McCarthy (n.d.)).

It is too early to conclude if the adverse economic conditions caused by the pandemic will negatively affect the sustainability of the credit union sector, or if the cooperative model will shield the sector from the resulting economic fluctuations, as some empirical studies have found (e.g., Coen et al., 2019; Smith & Woodbury, 2010). The credit unions in the sample did not escape the dampening effects of the pandemic on consumer lending more generally. However, we suggest this is not a reflection of the particularities of the credit union model or its susceptibility to economic fluctuations. For the majority of our sample, the decline in lending was the result of a fall in the demand for consumer loans rather than restrictions credit unions imposed on supply in response to adverse economic conditions.

Our findings, we suggest, are relevant for credit union sectors that have low levels of market concentration with relatively small institutions serving small geographical areas. However, one must be cautious in generalising the findings due to the following limitations and weaknesses. The sample is not a random sample, but self-selecting, which may reduce the representativeness of the sample as the respondents may vary significantly from those choosing not to take part. The sample is also small reducing the accuracy of the data. Furthermore, the data captures lending activity for a very short period into the pandemic, whilst the full effects are only likely to materialise over a longer time period. Finally, smaller credit unions are underrepresented in the sample. It is possible that the impact of Covid-19 is greater on smaller credit unions, as they are more susceptible to failure (Coen et al., 2019).

7. Conclusion

The evidence and data presented in this paper suggests that Covid-19 has had significant short-term effects on British credit unions. There has been a significant decline in demand and value of lending, and an increase in bad debt provisioning and payment holiday requests. Similar to the banking sector, Covid-19 had significant short-term effects on demand and lending in the credit union sector. Comparisons of data for February-April 2019 and 2020 show statistically significant falls in demand for and in the number and value of loans. The reduced spending and consumption causing the fall in demand and lending was linked to a reduced need and opportunity (as shops were forced to close and holidays were cancelled), greater uncertainty (leading households to postpone or cancel planned expenditure) and reduced household income

(due to furlough and reduced hours).

Credit union members saved more, with 79 % of credit unions reporting an increase in customer savings, and there is anecdotal evidence from the interviews that many members also made over-payments on existing loans. This would be in line with the significant fall in outstanding consumer credit debt in the UK, indicating that, overall, households were repaying their debts rather than taking out additional loans.

Credit unions significantly increased their bad debt provisioning rates and 95 % reported an increase in requests for loan payment holidays. However, it is too early to tell if payment holidays will translate into defaults or if the increased provisioning will become loan losses. There were several government interventions that may have delayed or softened the effects of Covid-19 on the financial circumstances of credit union borrowers, such as the furlough scheme, restriction on debt enforcement actions and increased creditor forbearance. Further, the effects of Covid-19 on bad debt are also likely to vary depending on the credit unions' exposure to the customer groups most adversely affected by the epidemic.

Despite lower demand, decline in lending and higher provisioning, interest income levels were holding up and most of the credit unions were confident about their future. Loan interest and fee income was lower in April 2019 than in April 2020, but the difference was not statistically significant. The significant reduction in lending will result in reduced future interest income. Most of the respondents were fairly (31 %) or very confident (59 %) that they would still be trading this time next year. Only 14 % forecast breaching regulatory ratios in the coming six months.

It is premature to conclude about the effects of Covid-19 on the sustainability of the sector. The survey and follow-up interviews were only conducted two months after the government introduced lockdown measures at the end of March. Further, at the time of the interviews and survey, there was considerable uncertainty about the nature, duration and economic consequences of the epidemic and the associated government restrictions. This underlines the need for further research into the longer-term effects of Covid-19, especially on smaller credit unions.

Although Covid-19 affected lending activity across the sample, the follow-up interviews suggested that credit unions that were smaller, not fully sustainably or those serving customers were most vulnerable to the effects of the pandemic. Given the role of smaller community credit unions in serving financially excluded and disadvantaged communities, it is important for policy makers and regulators to carefully monitor and study how economic shocks, such as Covid-19, affect credit union service provision across different communities. Individual credit union closures or mergers may have little impact on the overall sector but may reduce access to important services for certain communities.

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CRediT authorship contribution statement

Pål M. Vik: Conceptualisation, methodology, investigation, formal analysis, writing – original draft, writing – review & editing Joanna Curtis: Formal analysis, writing – original draft, writing – review & editing Karl Dayson: Conceptualisation, methodology, writing – original draft, writing – review & editing.

Declaration of Competing Interest

None.

Data availability

Data will be made available on request.

Appendix A. Questionnaire

- 1) What is name of your organisation? ____ [For verification purposes only]
- 2) When was your organisation founded? _____
- 3) What is the size of your organisation in terms of...?

- a) Number of FTE employees ____
- b) Outstanding loan portfolio/book £ _____
- c) Number current borrowers _____
- d) Current savings balance/share balance _____
- e) Number branches ____ (excluding community hubs/collection points)

4) What services and products do you provide? [Tick all that apply]

- a) Personal loans
- b) Business/social enterprise loans
- c) Housing loans/mortgages
- d) Savings or linked savings product
- e) B2B services (e.g. back office services etc.)
- f) Other, please specify: _____

- 7) What is your average loan size? £ ____
- 8) What is your average loan term? (weeks or months please specify) ____
- 9) How does your volume of lending compare with this time last year...?

a) Number of loan applications received

	2019	2020
February		
March		
April		

b) Loan volume (number of loans disbursed)

	2019	2020
February		
March		
April		

c) Loan value (amount of lending disbursed) (£)

	2019	2020
February		
March		
April		

8) In your view, how does the following compare with this time last year...?

a) Scale of demand

- i) Much lower
- ii) Lower
- iii) About the same
- iv) Higher
- v) Much higher

b) Quality of loan applications

- i) Much lower
- ii) Lower
- iii) About the same
- iv) Higher
- v) Much higher

9) What is the provision for bad debt in April 2020? What was the provision for bad debt in April 2019? (% of loan book)

	April 2019	April 2020
Bad debt provisioning rate (%)		

10) How much does your organisation normally recover from the eligible loan deduction scheme per month?

- a) £___
- b) Don't know
- c) Not applicable (do not use)

11) How does the interest and fee income (£) compare with this time last year?

Fee & interest income (£)	2019	2020
February		
March		
April		

12) Are you forecasting a breach in regulatory requirements (capital/asset ratio) or loan covenants under the current circumstances?

- a) Yes
- b) Please provide more detail
- c) No
- d) Not applicable

13) How long will your organisation be able to meet short-term costs and obligations under the current circumstances without additional support?

- a) Number of months: ____
- b) Don't know
- c) Indefinitely

14) Compared with this time last year, have you experienced changes in any of the following? Are you concerned about this trend?

	Increased	No change	Decreased	Change (%)	Concerned
					Yes
			Not applicable		No
					Not applicable
Customer/member savings					
Loan payment holiday requests					

15) Have you taken any of the following actions in response to the Coronavirus? [Tick all that apply]

- a) Furloughed staff (if yes, what percentage of staff have been affected)
- b) Made staff redundant (if yes, what percentage of staff have been affected)
- c) Permanently closed branch services
- d) Temporarily closed branch services
- e) Introduced new products
- f) Introduced restrictions on share deposit amount
- g) Tightened lending criteria
- h) Halted debt recovery procedures
- i) Other action, please specify: _____

16) Have you received any of the following support in connection with the Coronavirus?

- a) Government Job Retention Scheme (UK)
- b) Fair4All Covid-19 Resilience Fund (England only)

- c) Third Sector Resilience Fund (Scotland only)
- d) Credit Union Resilience Loan Fund (Scotland only)
- e) Local authority support scheme
- f) Grant from charitable foundation
- g) Rent, bill or loan payment holiday
- h) Forgiveness of rent, bills or loan interest or principal
- i) Other, please specify _____

17) How confident are you that you will be operating and trading this time next year?

- a) Very confident
- b) Fairly confident
- c) Not very confident
- d) Not at all confident
- e) Don't know

Appendix B. Interview guide

1. Can you start by telling me a bit about your organisation? If not covered, ask about:

- a. Who are your members/borrowers and what do they borrow for?
- b. Key supporters and shareholders

- 2. What changes have you made in response to Covid-19 to the way in which your organisation operates (e.g. branch closures, flexible working, restrictions on new loans, restrictions on share deposits etc.)?
- 3. What have the most important effects of Covid-19 on your organisation? What have you done in response to it? What signals have you had from your customers/members about the impact on their finances/circumstances?
- 4. How, if at all, has Covid-19 impacted your organisation? If not covered, ask about impacts on...

- a. Loan demand (volume, nature, quality)
- b. Interest income (ask about trend in data for lending to fall but interest income to hold)
- c. Portfolio quality (arrears, payment holiday requests, restructured loans, late payments etc.)
- d. Share withdrawals
- e. Payroll deductions
- f. Linked savings
- g. Nonfinancial income (other trading income, investment income)

Ask if seen increase in loan demand and volume so far in May.

- 5. What support, if any, have you received from government or other organisations to help you weather the current crisis? If not raised, ask about...
 - a. Government furlough scheme
 - b. Grants
 - c. Loans
 - d. Equity/quasi-equity injection
 - e. Tax/rate relief
 - f. Loan principal or interest postponement or forgiveness
 - g. Rent relief, postponement or forgiveness
- 6. What has been the impact of Covid-19 on short-term liquidity? How long will you be able to meet short-term obligations under the current circumstances? What specific short and long-term support would improve your organisation's liquidity?
- 7. What has been the impact of on the solvency of your organisation? How long will you be able to meet long-term obligations under the current circumstances? What short and long-term interventions would help your organisation remain solvent?
- 8. What do you see as the greatest long-term threats and challenges to the sector connected to the crisis? What changes, if any, do you think the sector needs to make to survive the crisis and thrive in the long run (e.g. structural, services provided, purpose, operating models etc.)?

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