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Walking a Tightrope: Using Financial Diaries to Investigate Day-to-Day Financial Decisions and the Social Safety Net of the Financially Excluded

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Abstract

Financially vulnerable, low-income individuals are more likely to experience financial exclusion as they are unable to access financial services that meet their needs. How do they cope with economic instability, and what is the role of social networks in their coping strategies? Using financial diaries, we explore the day-to-day monetary transactions (n=16,889) of forty-five low-to-moderate income individuals with restricted access to mainstream lending in Glasgow, UK, over a six-month period. Our sample includes users of microcredit and financial advice, and nonusers of these services. Findings reveal that informal lending to avoid the pernicious effects of short-term illiquidity was pervasive among these individuals. However, taking informal loans often strains valuable social capital and keeps people from building up a formal credit footprint. Our findings suggest that financially vulnerable population would benefit from policies focusing on alternative financial mechanisms to help stabilize income-insecure individuals in the short-term.

Keywords

financial exclusion; poverty; social networks; financial diaries; microcredit; RoSCAs; informal finance

The ability to access and use financial services that are appropriate to one's needs is essential for a healthy financial life (Morduch and Siwicki 2017). Changes in the nature of work and employment insecurity (Friedman 2014), among other factors, such as welfare policies, are contributing to high month-to-month income volatility (Farrell and Greig 2016; Hannagan and Morduch 2016; Hills, McKnight, and Smithies 2006). Those for whom incomes are low particularly struggle to manage increasing short-term income fluctuations; restricted access to high-quality and affordable financial services frequently combine with a lack of assets and savings that limit their ability to stabilize consumption over time (Morduch and Schneider 2017; Tomlinson 2018), therefore increasing financial insecurity and vulnerability. One way in which low-income individuals may deal with this insecurity is reliance on the help of family and friends. There is a strong association between social capital (in the form of private social networks) and individuals' insurance against income volatility (Pericoli, Pierucci, and Ventura 2015). The nature and extent of social networks can determine the ability to access a combination of formal and informal credit sources to manage income fluctuations more effectively (Lenton and Mosley 2013; Siwicki 2019).

While the literature has highlighted the problem of income volatility for those on the verge of financial exclusion, who are unable to access affordable financial products and services that meet their needs, as well as their reliance on personal networks (see the introduction to this special issue), empirical evidence about the relative importance of social networks and other strategies in households' financial management is scarce. Yearly population surveys, such as the Scottish Household Survey, allow us to observe which financial instruments people are using; however, little is known about how informal strategies are used to cope with dips in income or peaks in expenditure. Traditional studies of financially excluded individuals in the UK, using surveys, bank account records, or in-depth

interviews are also not frequent enough to capture the detail of individuals' financial management strategies or the underlying rationales for their behavior.

This article discusses the day-to-day financial management of people with low-to-moderate income, living below the UK median household income threshold, and their experiences of using social capital to smooth consumption, by analyzing their financial diaries maintained over a six-month period. Our aim is to explore in depth how financial insecurity and income and expenditure volatility affect decision-making. Our research objectives are:

1. To generate detailed financial data using diaries over a six-month period with individuals with low-to-moderate income to observe if and how they cope with financial instability.
2. To examine the extent to which formal and informal social capital-based financial instruments are used, how these financial networks are mobilized and operationalized, and how their use is managed and negotiated in the context of everyday lives of the financially excluded.

In the next section, we discuss the relationship between income volatility, financial exclusion, and the use of social capital to smooth consumption. We then describe our data and the financial diary methodology. Our results show the major role that social networks play in the lives of our diarists and offer insights about how these are used to deal with life events such as job loss, bereavement, or divorce. Finally, the discussion and conclusion section outlines the need to provide individuals living on the verge of financial exclusion with more effective and affordable services to prevent the damage of individuals' already limited social networks. Our findings suggest that financially vulnerable individuals would benefit from antipoverty policies that focus on helping them to better cushion for life events.

Background

Recent studies have highlighted the importance of (increasing) short-term income volatility on the lives of the low-to-moderate income groups of the population. While high month-to-month income fluctuations have been observed in both the UK (Hills, McKnight, and Smithies 2006; Tomlinson 2018) and the United States (Farrell and Greig 2016; Hannagan and Morduch 2016), short-term stability is essential for financial security and intergenerational economic mobility (Morduch and Schneider 2017; Siwicky 2019).

Individuals can achieve short-term financial stability, defined as having the means to cope with everyday shocks, while still progressing toward financial goals (Morduch and Siwicky 2017), mainly through: (a) income regularly exceeding expenses, (b) savings, (c) credit and (d) social networks (Siwicky 2019).

In 2017, half of the UK adult population showed characteristics of potential financial vulnerability, such as limited financial resilience; low financial capability; suffering a health-related problem that affects a person's day-to-day activity; or a recent life event, such as redundancy or job loss, unexpected reduction in working hours, bankruptcy, relationship breakdown, serious accident or illness, bereavement, or becoming the main carer of a close family member (Financial Conduct Authority 2018). This vulnerability is more acute for the low-to-moderate income group, aggravated by low income and irregular unreliable pay combined with frequent expenditure peaks (Financial Conduct Authority 2018; Tomlinson 2018). For this poorer population group, high-quality, flexible, and affordable financial services, such as saving or credit products, are essential to manage uncertainty and better cope with both fairly predictable and unexpected everyday challenges. However, an estimated 1.3 million UK adults did not have a bank account in 2017 (Financial Conduct Authority 2018), and around half the population experience more nuanced forms of financial exclusion in that they are unable to access or use mainstream financial services that are

appropriate to their needs (e.g., a lack of home contents insurance or savings accounts, which in turn limits access to other products such as mainstream credit) (Bunyan, Collins, and Torrasi 2016). Financial exclusion is a dimension of social exclusion (Wilson 2012) and unequal access and use of financial services have been linked to income and socioeconomic inequality and poverty (Affleck and Mellor 2006; Beck and Demirgüç-Kunt 2008). Economic theory and empirical evidence indicate that inclusion in financial systems can enhance individual welfare through: (a) improved risk-management, consumption smoothing, and cushioning against “asset-depleting” strategies after an economic shock; and (b) efficient allocation of capital, partly by allowing access to riskier, potentially highly profitable, investments (Honohan 2008).

Poorer communities in the UK are historically more likely to experience financial exclusion with limited options (particularly of saving and credit products) available to them. To help fill this void, UK and Scottish governments have actively encouraged the development of credit unions and community development finance institutions (CDFIs), which have emerged as an affordable alternative to high-cost, subprime lending and mainstream banks, to help tackle financial exclusion (Lenton and Mosley 2013; McHugh, Baker, and Donaldson 2019; McHugh et al. 2014; McKillop, Ward, and Wilson 2007). Credit unions have traditionally focused on the provision of savings products while some CDFIs offer microcredit—small, fast, affordable loans that do not require collateral or credit history. However, these organizations do not exist at the scale needed to address exclusion, and pockets of the population remain underserved (Bunyan, Collins, and Torrasi 2016). In the absence of providers that can help individuals to smooth their income and prevent illiquidity, the poor rely primarily on a host of informal credit providers (Collins et al. 2009; Siwicki 2019).

The economic development literature has traditionally argued that social capital, in terms of social networks, positively impacts consumption smoothing (Townsend 1994; de la Rocha 2001, 2006), and the same argument has recently been made for the UK (Pericoli, Pierucci, and Ventura 2015). Individuals with higher social capital are likely to be able to smooth their consumption by drawing on cash transfers from relatives and friends or in-kind exchanges. At the same time, experimental evidence has found that risk-pooling in groups of microcredit borrowers increases with higher social interaction (Feigenberg, Field, and Pande 2013). However, income and asset-poor individuals are also usually network poor—their personal networks include mostly resource-poor people in terms of knowledge, wealth, skills, power and information—so the extent to which they can benefit from social networks is limited (Van Eijk 2010; de la Rocha 2006).

Our study analyzes high-frequency financial transaction data of forty-five financial diaries, including subjective rationales and field notes, which were collected monthly over six months, from financially excluded individuals in Glasgow. The most populous city in Scotland was considered ideal to undertake this study as it has traditionally been one of the most socioeconomically deprived in the UK; home to the ten most deprived neighborhoods in Britain (Stewart et al. 2018) with extreme health inequalities between the richest and poorest being well documented (Marmot 2007). Glasgow also has more varied and complex financial products and services for low-income groups when compared to other UK cities.

The high frequency of financial diaries, repeated interaction with diarists, and the consequent building of rapport and trust between the research team and the participants enabled us to develop a detailed understanding of individual coping strategies, including the financial role of social networks in the lives of the financially excluded.

Data and Methods

Sampling

To gain access to individuals on the verge of exclusion, sampling was focused on users of nonmainstream financial products (Wilson 2012), such as microcredit and financial advice, as well as on a group of individuals with similar socioeconomic characteristics who were nonusers of these financial products. The sample was recruited through client referrals of a number of service providers working with our target population in Glasgow: (1) Grameen in the UK—a microfinance institution (MFI) that supplies microloans to individuals to undertake productive ventures; loans are distributed via group lending, which involves borrowers organizing themselves into groups of five; (2) Scotcash—a not-for-profit social enterprise offering personal microloans and inclusive services such as assistance to open basic and savings bank accounts and financial advice; (3) Glasgow Central Citizen’s Advice Bureau (CAB)—a publicly funded charity offering financial advice; (4) Money Advice Scotland (MAS)—an umbrella organization that promotes the development of free, independent, impartial, and confidential debt advice and financial inclusion; and (5) Glasgow Housing Association (GHA)—a not-for-profit organization and Scotland’s largest social housing and property management group. GHA works in close partnership with both Scotcash and CAB and its clients are in a similar financial situation as CDFI clients and financial advice user groups.

A qualitative sampling frame was applied for referral organizations and a purposeful sampling strategy was adopted to maximize variation in terms of individuals’: (a) participation in financial inclusion programs—business microcredit (n=16), personal microcredit (n=10), money advice (n=9) and nonusers of such initiatives (n=10); (b) sociodemographic characteristics such as age, gender, ethnicity, and household composition; (c) disability and health status; and (d) neighborhoods in and around Glasgow. Despite our

offering incentive payments that paid the highest on completion of all six diaries, due to the sensitivity of the data collected, recruitment and retention were challenging. Snowball sampling, i.e. referrals from study participants, was also used to complement referrals from organizations. Attrition was 21 percent and 45 diarists (out of 57) were included in the analysis. The study was approved by the Ethics Committee of Glasgow School for Business and Society, Glasgow Caledonian University.

Table 1 presents descriptive statistics the of participants' sociodemographic characteristics who completed four or more financial diaries (n=45). All research participants were on low-to-moderate incomes, with the majority (82 percent) receiving means-tested welfare benefits. All participants were financially vulnerable so they had at least one of the following characteristics: limited financial resilience, low financial capability, a long-term health condition or disability, or experienced a recent serious life event such as job loss, relationship breakdown, illness, bereavement, or becoming the main carer of a family member (Financial Conduct Authority 2018).

-- Table 1 here --

Diaries and interviews

Monthly financial diaries were administered with 45 diarists living in and around the city of Glasgow. Financial diaries are systematic records of all daily income and expenditure transactions, as well as gifts, assets, and liabilities, aimed at understanding the money management strategies of low-income populations over time (Collins et al. 2009). Originally applied in developing countries, this method has recently been used in advanced nations such as the United States (Morduch and Schneider 2017) and, for the first time with this study, in the UK (McHugh, Biosca, and Donaldson 2017). Similar to the U.S. Financial Diaries

(Morduch and Schneider 2017) and Portfolios of the Poor (Collins et al. 2009), in Glasgow the term *diaries* is used to reflect the high-frequency of data collection and not the diarists logging transactions themselves. Through diary data, we explore the financial lives of low-to-moderate income, financially vulnerable individuals, including unique information on behavior and use of financial products. Additionally, information about individuals' financial transactions were used as prompts to generate qualitative data in relation to participants' lives, social networks, life events, and periods of difficulty.

Phased data collection took place from February 2016 until March 2017. Diaries were constructed through 306 diary-interviews that took place, in participants' homes or work or the university, every month. The aim was to collect diaries over a six-month period; however, the duration of data collection varied across participants: four-month diaries (n=3), six-month diaries (n=39), and seven-month diaries (n=3). A baseline questionnaire was administered to collect information on demographic and socioeconomic characteristics of the participants, including information on social capital, financial knowledge and behavior, level and sources of income, and coping strategies, among others. This initial information enabled the construction of a profile for each participant. A similar questionnaire was administered at the end to assess changes in financial lives. The financial transactions (n=16,889) were recorded and captured in a database adapted from an instrument developed by Microfinance Opportunities.¹ The predefined variables captured for each transaction were: purpose, amount (in £), direction of transaction (outflow/inflow), method of payment (cash, card, financial transfer, etc.), and channel (in person/online/phone). The database also had an open "additional comments" section. For financial transactions, we coded predefined details of the organization or individual involved in the transaction. For example, for informal finance exchanges, we coded the relationship between the individual and the diarist (relative, friend,

etc.) and their gender. Data were then exported into Stata software for quantitative descriptive analysis.

Several mechanisms were put in place to control the quality of the diary data. To minimize recall bias, participants were sent weekly reminders in addition to being visited monthly to collect diaries. Diarists' bank statements and receipts were also frequently provided and cross-checked with reported transactions. Inconsistencies in income and savings against expenditure as well as other misreporting errors were tracked and addressed on subsequent visits to the diarist. Data on cash-in-hand and savings were used to assess any margins of error between sources and uses of funds with their causes explored with diarists.

To systematically collect information with a high level of detail and consistency across diarists, and also due to the limited English language and literacy skills of some diarists, three skilled researchers were responsible for recording every income and expenditure transaction that was annotated by the diarists or appeared in bank statements during the preceding month, as well as assets, liabilities, and life events. Subjective comments on each transaction were recorded in the database, such as, for example, the motivation behind asking for a loan.

Our research team also used the diaries to inform qualitative questions based on financial transactions that were recorded in the form of field notes and then collated in "life event sheets" for each diarist (life events occurring in between data collection points). This information was used to understand the reasons behind participants' financial behavior that could not be observed by analyzing income and expenditure patterns alone; for example, why and how they used informal lending. One of the main advantages of the financial diary method was the high levels of trust that developed between researchers and participants through ongoing engagement. In these diary-interviews, diarists shared perceptions and

personal details of their lives that were often crucial for the interpretation of the quantitative data.

Data analysis

A mixed-methods approach was used to analyze diary data. First, the descriptive statistics of monthly income and expenditure transactions were examined for each diarist; transactions capturing the use of different financial products—regulated and nonregulated by the Financial Conduct Authority (FCA)—and their association with participant’s characteristics and key events and shocks (identified through the qualitative data) were explored. Second, we purposively sampled individual cases based on intensity and diversity of financial products used and analyzed the selected cases using corporate finance tools (cash flow statements and monthly balance sheets). Finally, the quantitative interpretation of the results was combined with the qualitative individual stories collected in life event sheets, researcher field notes, and diarist notes on financial transactions, to provide context into diarists’ (financial) lives and rationales for their financial behaviors (Collins et al. 2009). Pseudonyms are used to maintain diarists’ anonymity.

Results

The financial diaries of our 45 participants reveal the intricate financial management strategies used either to cope with periods of cash illiquidity or for investment purposes. This complexity is better understood through the analysis of participants’ perceptions of their financial lives and accounts of their decision-making processes. Diarists needed to use sophisticated money management strategies mainly due to their general economic insecurity, precarious employment, and frequent month-to-month income and expenditure swings.

Managing day-to-day finances

In the context of low, but also unstable income streams, finance was crucial for diarists to smooth consumption patterns. As shown in Table 2, finance-related transactions—those including credit, savings, insurance, and other financial services—were the third most frequent overall (10 percent, n=1,758), after groceries (26 percent, n=4,359) and entertainment (13 percent, n=2,141). In terms of total value, finance-related transactions were also third (£129,741), after benefits (£225,001), and employment income (£133,504). On average, diarists were making decisions related to financial services such as buying insurance or taking or paying back a loan approximately every other day, with most of these transactions being related to credit (72 percent), followed by insurance (12 percent), and savings (8 percent). Only four diarists in our sample did not have a current loan (9 percent). Furthermore, a majority of participants (80 percent, n=36) were simultaneously using at least two types of financial providers during the study, both FCA-regulated and nonregulated. Over the data collection period, study participants were using three credit products on average and one diarist was found to be managing eight loans simultaneously.

-- Table 2 here --

In our sample, managing multiple loans was associated with a lack of access to mainstream financial products; even if all diarists had a bank account they were experiencing nuanced financial exclusion. Most of our participants could not borrow from mainstream financial institutions because of low salaries, unstable employment, part-time or self-employment, having a poor credit history or being “credit invisible,” i.e., not having a credit history. Those diarists who did not have a bank loan or a low-cost mortgage were more likely to be managing a portfolio of regulated subprime loans (rent-to-own, car loans, pawn brokers, catalogue, doorstep, etc.), coupled with informal loans from relatives and friends. The wide

range of financial providers used as well as the percentage of diarists using them at baseline is shown in Table 3.

-- Table 3 here --

Throughout the diaries, the role of relatives and friends in assisting with financial instability and helping prevent illiquidity among our sample of individuals was central (see Table 3). This is corroborated by baseline data: when participants were asked what they would do if they had a financial emergency and needed £1000 in a hurry, nearly half of the sample (n=18) replied they would turn to a relative or friend. The next most common response was “I wouldn’t be able to cope,” selected by one third (n=15) of diarists. Only 9 percent (n=4) of diarists would be able to use savings to cover the emergency expenditure. Instead we observed how diarists mobilized their social networks not only as a coping strategy after a life event or shock but also, more generally, during relatively longer periods of difficulty and financial instability. The six months of coded financial data show, for most diarists, extensive and strategic use of social capital as a safety net. Personal and organizational social networks were mobilized and created to access loans through three main financial mechanisms: (i) nonregulated informal loans, (ii) rotating credit and savings associations (RoSCAs), and (iii) FCA-regulated group microfinance.

Informal mechanisms for managing short-term illiquidity: Rich in friends, poor in nothing?

From all credit transactions recorded, those related to loans with family and friends were the most frequent (34 percent), followed by those with rent-to-own organizations (14 percent). When possible, illiquidity situations were managed through family and friends because participants valued that informal loans were relatively easy to access, fast, and small and repayment was flexible. Table 4 shows that 34 diarists (76 percent) reported at least one informal transaction during the study period (4 diarists did not use any form of credit and 7 used other forms of credit but not informal). The average number of informal transactions

during the study period was 12, with one diarist reporting 80 informal transactions during a six-month period. Table 4 also shows that nearly half (47 percent) of the credit transactions reported during the study were informal, with the importance of informal finance depending on access to other more formal forms of credit. For example, microcredit users rely on other credit forms, while recipients of financial advice and nonusers rely mainly on informal sources.

-- Table 4 here --

During the six months of data collection, transactions reveal that most diarists repeatedly relied on a person or a small group of very close people of similar socioeconomic characteristics who usually lived nearby. Examples of this are Sabrina and Uma, who were both immigrant single mothers with young families, in their forties, combining part-time employment and self-employment. They were also neighbors and, like many of our diarists, they relied on each other frequently for financial support. Financial transactions between them are an example of how our diarists borrowed or lent money to peers; most of their transactions were small (sometimes only £5) and via electronic transfer as the money needed to reach the bank account fast as it was usually to pay a direct debit or standing order of a bill coming through the following day. Overall, informal loan transactions were slightly more than £70 on average (see Table 4), frequently repaid in less than a week and used to cover short-term cash shortages. Table 4 shows that on average £870 was exchanged informally by each participant using informal finance during the six months (n=34), with some reporting figures as low as £20 and others close to £4,000.

Informal loans were also interest free but most diarists perceived costs in terms of having to reciprocate to ensure the link remained a reliable source for future needs, even when their own economic situation was insecure. One of the consequences of this tension was that 73 percent of diarists (33 out of 45) used others' credit cards and catalogue

subscriptions as a form of payment or to lend to others at least on one occasion during the study. For example, Rebecca, a 21-year-old single mother from Glasgow used her mothers' credit card repeatedly during the study period, paying back the outstanding balance (around £100) every month. This was effectively used as a credit line depending on the needs: urgent household repairs, furniture for a new flat, social activities, soft-play sessions for her toddler and other general (but essential) day-to-day expenses. This behavior poses important risks to an already vulnerable group in two ways. First, it might affect their/others' credit scores and contribute to deepening financial exclusion in poorer communities. Second, if the borrower is not able to pay back on time to the person who has taken debt on their behalf, they risk losing their already limited social support network. We found that the repayment schedules of informal financial arrangements were frequently not discussed between lender and borrower at the time that the exchange took place. While for repeated transactions between friends, distinguishing between a loan and a gift was straightforward, some diarists found it difficult, in particular if it was a new lender/borrower or in situations where the borrower was perceived to be struggling.

Not all of the diarists in the study had a core network to support them financially. This is in line with the argument in the literature that people in poverty have smaller support networks (Van Eijk 2010). Additionally, even when available, support networks were frequently income and asset poor, which posed additional constraints. Throughout his financial diaries, Paul, a 53-year-old Scottish male from Easterhouse, one of the most deprived areas in Glasgow, and his sister transferred money back and forth to cushion against illiquidity. Paul's sister was the only person who provided a safety net for him, but Paul was aware that his sister, a pensioner, could not always help as she had her own financial problems. For most research participants, borrowing from family and friends was perceived as a last resort and they were reluctant to do so: they knew it was a lot to ask from people also

living in difficult circumstances but, lacking access to alternative forms of finance, they perceived they had no choice.

Parties are not just about fun: Amina's safety net

To show the complexity of financial management strategies used by our diarists, we present the case of Amina. Amina is a single mother of a toddler and a baby born during the study (month 4). She is originally from West Africa but has been living in the UK for almost 20 years. She is self-employed and runs a clothes shop in central Glasgow. When she became a study participant, Amina was five months pregnant. She had been unable to work since the start of the pregnancy and this was severely affecting her life. Income from the shop she owned had lowered substantially during her pregnancy months. Suffering from pains and discomfort, she was not physically fit to work the hours required to make the shop profitable.

However, she did not want to close the shop down as she felt she could make it profitable again after delivering her second child and going back to work. This was her only source of income and she wanted to be self-employed. Given that business income kept decreasing until after she delivered her baby in month four of the diaries, Amina was constantly thinking about strategies to cope with the decrease in her income and the expenditure associated with a new baby. When we met her, she had just taken a business microloan to buy stock for her shop for when she could return to work. However, the productive nature of this loan did not help her with managing illiquidity.

-----Figure 1 here -----

Figure 1 includes Amina's total personal and business income and expenditure every month during the study. During these months, she had been carefully pondering which expenses were necessary and which could be postponed and matched to her income. To cope, she had already taken small loans from subprime lenders as well as her core informal network. Lacking access to other credit options, she thought of a plan. Even though she was

not feeling physically up to it, Amina organized a big party for her newborn. She knew that, for cultural reasons, relatives and friends would help with food, drinks, favors, and organizing the party. Amina's monthly budget for month four, shown in Table 5, reveals that for this party she not only managed to persuade friends and relatives to lend her money (£600) to stabilize her situation (diversifying sources of flexible free loans), but she also spent less (£224) than she received as gifts (£700), making a £476 profit. In the end, this strategy of organizing a party, which may seem irrational for an outsider given Amina's economic situation, was more effective than any of her alternatives: it was faster, she made a profit, and had a flexible repayment schedule adapted to her needs and health problems. Amina found a strategy to capitalize on her extended network when she had no other options left to stabilize her economic situation.

-----Table 5 here -----

Savings for a purpose: join a menage

Another relationship-based financial instrument, used by seven of our 45 diarists, were RoSCAs, popularly known as “moneyrounds” or, in Scottish Gaelic, “menage.” This is a traditional unregulated financial mechanism of saving and credit, which, in its simplest form, consists of a group of individuals who come together and make regular cyclical contributions to a common fund, which is then given as a lump sum to one member in each cycle. These are prevalent in developing country contexts (Ambec and Treich 2007) and have been observed in immigrant populations in advanced countries such as the United States and the UK (Light and Pham 1998). In our study, three out of seven of the diarists who used RoSCAs at some point during the study were Scottish. The majority of users were single mothers; all menage participants were female, except for one single young man who was introduced to menage by his mother as a means of saving to pay for accumulated arrears. RoSCAs were mainly used as a means to save lump sums of money that users perceived they

could not have saved otherwise. Menage users had clear objectives for their participation (for example, paying car-related expenses—insurance, MOT, road tax—traveling to visit family, or buying Christmas presents). The menages we encountered in the study were not continuously operating; some were only mobilized when an individual of the core network (group of close friends) or members of the church congregation experienced a life event that had financial implications, such as weddings, bereavement, partnership breakups, or an emergency. In this case, the groups were mobilized as a safety net to quickly raise a lump sum of money that diarists would not be able to borrow from individuals in their network. Menage users perceived additional advantages over more “structured” savings products that they could access in the market; like with informal loans the trust between members allowed for additional flexibility. On emergency occasions when money was tight, individuals could negotiate with the member getting the lump sum and defer payment or even default if it had not been their turn yet; the only consequence of this being the defaulted money would be deducted when their payment was due. The amount paid into menages by Scottish participants was modest (around £10/month), while the more sophisticated ones, ran electronically by immigrants living across the country, were up to £200/month (which were doubled-up to £400 by taking two rounds). These differences are likely due to the reasons behind financial exclusion for the two populations. While Scots lacked access to mainstream financial services because of their low incomes and poor credit records, immigrants frequently did not have credit histories, which made them “credit invisible.” The duration of the menages varied depending on the number of members (up to fifteen members). The highest amount of money paid in a moneyround to a participant was £3,000. These financial mechanisms operated on the basis of trust and participants were selected carefully: all menage participants could veto a potential new entrant and, to minimize risk, new entrants’ turn to receive the money came last or close to last. Gender, marital status, having children,

race, and religion were all mentioned as selection criteria. For example, one menage was exclusively for single mothers and another only for families with children. In the words of one of the South-East Asian menage participants: “You don’t handle money with white people, you rather keep your business with your own people.” The definition of “own people” was broad and the menage included African and Asian first- and second-generation immigrants.

Capitalizing on social networks: Microcredit for business

Self-employed participants were able to capitalize on and expand their core social networks by accessing business microcredit. The financial product offered by Grameen in the UK required that prospective borrowers formed groups of five people to meet every week for loan repayment. If someone in the group defaulted on their loan, the group would be dissolved and no further loans provided. The selection of the group members was based on trust so all group members needed to be in the core network of another group member. The group meetings and trust relationships were generally associated with higher flexibility and pooling of resources. Frequently, diarists who were members of one of these Grameen in the UK groups would pay for each other’s installments if one of them could not afford to pay that week. In turn, they received (and expected) reciprocal behavior from group members. This additional flexibility provided by the social network cushioned participants against defaulting on their loans and compensated for a relatively rigid microcredit product design.

Discussion and Conclusion: Until Debt Do Us Part?

This study has shown the crucial role that relatives and friends play in the everyday finances of relatively poor, financially excluded individuals. Social networks are mobilized in different ways to manage cash flows and avoid the pernicious effects of short-term illiquidity. However, this can result in the networks of the more vulnerable, frequently small and also

resource-poor, being damaged because of financial matters. While the importance of social exchange between neighbors, relatives, and friends as a survival strategy for the low-income population resonates well with the development literature, some authors have highlighted that being excluded from, for example, the labor market will affect the financial and social resources of individuals and, subsequently, their ability to be part of a relationship of reciprocity (de la Rocha 2006). This article builds on this by exploring the association between financial exclusion and social networks. The alternatives for the financially excluded are few or nonexistent. Our results confirm the importance in the UK of credit over savings to cope with financial insecurity (Hood, Joyce, and Sturrock 2018) with only 22 percent of UK adults not holding credit of any kind in 2017 (Financial Conduct Authority 2018). These results also align well, given the sociodemographic characteristics of our participants, with the fact that 24 percent of UK adults had less than £1,000 as a savings buffer in 2017 (Financial Conduct Authority 2018). Other forms of finance, mainstream and subprime, are found to be complementary to those provided by social networks. Individuals end up managing a portfolio of loans and making continuous financial decisions, which are particularly complex in terms of their relatively large amounts, their future implications, and because they cannot be easily reversed. These findings have implications for the nature of social networks, policy, and practice.

Social networks can provide credit in times of need and lead to increased participation in risk-pooling within formal and informal institutions, such as microcredit group lending and RoSCAs. Repeated interactions between members, through use of these financial products, create more space for solidarity and flexible arrangements. However, this sophisticated use of social networks can have detrimental effects on already low levels of social capital in these communities and increase individuals' exclusion from mainstream finance.

The pervasiveness of social networks for financial stability has the potential to alter the qualitative nature of the individuals' relationships. Instead of drawing on friends and family occasionally or in an emergency our data suggest that informal lending is common and well-established. If money comes to define relationships, the relationship can be put under pressure. A further unintended consequence is that individuals do not have the opportunity to build up their formal credit footprint and will more likely remain "credit invisible." Thus, despite having sophisticated financial management skills, these individuals will continue to be excluded from the mainstream and unable to access financial products and services, such as mortgages and insurance products, which could enhance their life.

Policy and practice: What should be done?

Our financial diary data highlight that low-to-moderate income individuals living on the verge of financial exclusion do not always have enough cash to cover their basic needs and they turn to (in)formal lending to manage their financial (in)stability. Indeed, individuals' financial lives are so complex that diarists are making financial-related decisions approximately every other day, which represents a significant cognitive burden.

This article reveals that social networks, instead of the state, operate as the main safety net of financially excluded individuals. The importance of social networks for financial stability, even in advanced economies such as the UK, indicates that (a) the design of the current welfare system does not cope well with growing income volatility and financial insecurity, and (b) there is a gap in the provision of credit. Policy can respond to this by tackling the bigger, systemic issue of meeting basic needs and providing better cushioning for financial instability or responding to the gap in the provision of finance. Our focus here is on ways to address the latter issue.

One way to reduce the reliance on social networks is to promote “alternative” economic spaces that prioritize the interests and well-being of their users, such as CDFIs (McHugh, Baker, and Donaldson 2019). However, these institutions need to be supported by the governments, as it is difficult to sustainably offer financial products to low-to-moderate income individuals (Wilson 2012). To succeed, these financial inclusion policies need to be part of a more general policy agenda to address growing levels of financial insecurity in different income-levels of the population. The reliance on social networks also conditions how relationships are understood in poorer communities and incentivizes individual behaviors that can harm social networks and promote financial exclusion even further. Alternative high-quality, affordable, fast, safe, and flexible financial products that allow individuals to build up credit histories are required to help the financially insecure. These should be combined with antipoverty policies that are better adapted to the needs of those who do not have enough slack to cope with the ups and downs of everyday life.

Note

¹ Microfinance Opportunities is a global non-profit committed to understanding the financial realities of low-income households. See <https://www.microfinanceopportunities.org/>.

References

- Affleck, Arthur, and Mary Mellor. 2006. Community development finance: A neo-market solution to social exclusion? *Journal of Social Policy* 35 (2): 303–19.
- Ambec, Stefan, and Nicolas Treich. 2007. Roscas as financial agreements to cope with self-control problems. *Journal of Development Economics* 82 (1): 120–37.
- Beck, Thorsten, and Asli Demirgüç-Kunt. 2008. Access to finance: An unfinished agenda. *The World Bank Economic Review* 22 (3): 383–96.
- Bunyan, Sabrina, Alan Collins, and Gianpiero Torrissi. 2016. Analysing household and intra-urban variants in the consumption of financial services: Uncovering "exclusion" in an English city. *Journal of Consumer Policy* 39 (2): 199–221.
- Collins, Daryl, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven. 2009. *Portfolios of the poor: How the world's poor live on \$2 a day*. Princeton, NJ: Princeton University Press.
- de la Rocha, Mercedes. 2001. From the resources of poverty to the poverty of resources? The erosion of a survival model. *Latin American Perspectives* 28 (4): 72–100.
- de la Rocha, Mercedes. 2006. Vanishing assets: Cumulative disadvantage among the urban poor. *The ANNALS of the American Academy of Political and Social Science* 606 (1): 68–94.
- Farrell, Diana, and Fiona Greig. 2016. Paychecks, paydays, and the online platform economy: Big data on income volatility. JP Morgan Chase Institute ID 2911293. Rochester, NY: Social Science Research Network. <https://papers.ssrn.com/abstract=2911293>.
- Feigenberg, Benjamin, Erica Field, and Rohini Pande. 2013. The economic returns to social interaction: Experimental evidence from microfinance. *The Review of Economic Studies* 80 (4): 1459–83.

- Financial Conduct Authority. 2018. The financial lives of consumers across the UK: Key Findings from the FCA's Financial Lives Survey 2017. Available from <https://www.fca.org.uk/publication/research/financial-lives-consumers-across-uk.pdf>.
- Friedman, Gerald. 2014. Workers without employers: Shadow corporations and the rise of the gig economy. *Review of Keynesian Economics* 2 (2): 171–88.
- Hannagan, Anthony, and Jonathan Morduch. 2016. Income gains and month-to-month income volatility: Evidence from the U.S. financial diaries. In *Economic mobility: Research and ideas on strengthening families, communities and the economy*. St. Louis, MO: Federal Reserve Bank of St. Louis.
- Hills, John, Abigail McKnight, and Rachel Smithies. 2006. Tracking income: How working families' incomes vary through the year. Centre for Analysis of Social Exclusion reports (32). London: London School of Economics and Political Science. Available from <http://sticerd.lse.ac.uk/case>.
- Honohan, Patrick. 2008. Cross-country variation in household access to financial services. *Journal of Banking & Finance* 32 (11): 2493–2500.
- Hood, Andrew, Robert Joyce and David Sturrock. 2018. Problem debt and low-income households. London: The Institute for Fiscal Studies. Available from <https://www.ifs.org.uk/publications/10336>.
- Lenton, Pamela, and Paul Mosley. 2013. Financial exit routes from the "poverty trap": A study of four UK cities. *Urban Studies* 51 (4): 744–62.
- Light, Ivan, and Michelle Pham. 1998. Beyond creditworthy: Microcredit and informal credit in the United States. *Journal of Developmental Entrepreneurship* 3 (1): 35–51.
- Marmot, Michael. 2007. Achieving health equity: From root causes to fair outcomes. *The Lancet* 370 (9593): 1153–63.

- McHugh, Neil, Rachel Baker, and Cam Donaldson. 2019. Microcredit for enterprise in the UK as an "alternative" economic space. *Geoforum* 100 (March): 80–88.
- McHugh, Neil, Olga Biosca, and Cam Donaldson. 2017. From wealth to health: Evaluating microfinance as a complex intervention. *Evaluation* 23 (2): 209–25.
- McHugh, Neil, Morag Gillespie, Jana Loew, and Cam Donaldson. 2014. First Steps towards self-employment – microcredit for enterprise in Scotland. *Scottish Affairs* 23 (2): 169–91.
- McKillop, Donal G., Anne-Marie Ward, and John O. S. Wilson. 2007. The development of credit unions and their role in tackling financial exclusion. *Public Money and Management* 27 (1): 37–44.
- Morduch, Jonathan, and Rachel Schneider. 2017. *The financial diaries: How American families cope in a world of uncertainty*. Princeton, NJ: Princeton University Press.
- Morduch, Jonathan, and Julie Siwicki. 2017. In and out of poverty: Episodic poverty and income volatility in the US financial diaries. *Social Service Review* 91 (3): 390–421.
- Pericoli, Filippo, Eleonora Pierucci, and Luigi Ventura. 2015. The impact of social capital on consumption insurance and income volatility in the UK: Evidence from the British Household Panel Survey. *Review of Economics of the Household* 13 (2): 269–95.
- Siwicki, Julie. 2019. Short-term financial stability: A foundation for security and well-being. Aspen Institute Financial Security Program. Aspen CO: The Aspen Institute. Available from https://assets.aspeninstitute.org/content/uploads/2019/04/Short-Term-Financial-Stability_Report.pdf.
- Stewart, Joanna, Mark Livingstone, David Walsh, and Richard Mitchell. 2018. Using population surfaces and spatial metrics to track the development of deprivation landscapes in Glasgow, Liverpool, and Manchester between 1971 and 2011. *Computers, Environment and Urban Systems* 72 (November): 124–33.

- Tomlinson, Daniel. 2018. Irregular payments: Assessing the breadth and depth of month to month earnings volatility. Resolution Foundation Report.
<https://www.resolutionfoundation.org/publications/irregular-payments/>.
- Townsend, Robert. 1994. Risk and insurance in village India. *Econometrica* 62 (3): 539–91.
- Van Eijk, Gwen. 2010. Does living in a poor neighbourhood result in network poverty? A study on local networks, locality-based relationships and neighbourhood settings. *Journal of Housing and the Built Environment* 25 (4): 467–80.
- Wilson, Therese Ann. 2012. Supporting social enterprises to support vulnerable consumers: The example of community development finance institutions and financial exclusion. *Journal of Consumer Policy* 35 (2): 197–213.

TABLE 1: Demographic characteristics of diarists by group (%)

	Business microloan (n=16)	Personal microloan (n=10)	Financial advice (n=9)	Non Users (n=10)	Total (n=45)
Female	75	60	78	50	67
Disabled / Long-term sick	19	60	44	30	36
Employed / Self-employed	75	0	56	30	44
On means-tested benefits	75	90	89	80	82
<i>Ethnicity</i>					
White British	19	90	100	60	60
African	56	0	0	30	27
Other	25	10	0	10	13
<i>Age groups</i>					
20-35	19	40	11	30	24
36-45	56	10	44	30	38
46-55	19	40	22	30	27
>55	6	10	22	10	11
<i>Household composition</i>					
Lone parent w/ dependent children	50	40	56	0	38
Couple w/ dependent children	25	10	22	50	27
Single	0	50	22	50	27
Separated/ Widowed	19	0	0	0	7
Family abroad	6	0	0	0	2

TABLE 2: Distribution of transactions (incomings and outgoings) per category

Category	Frequency	Percent
Food	4,359	25.82
Entertainment	2,141	12.68
Financial	1,758	10.41
Benefits	1,287	7.62
Bills	1,283	7.6
Transport	1,059	6.27
Household	1,035	6.13
Gift	562	3.33
Clothing	540	3.2
Employment income	445	2.64
Miscellaneous	415	2.46
Housing	268	1.59
Taxes	245	1.45
Business	238	1.41
FinWell incentives	231	1.37
Gambling	223	1.32
Other	792	4.69
Total	16,881	100

TABLE 3: Financial instruments used by group (%)

Financial instruments	Business microloan (<i>n=16</i>)	Personal microloan (<i>n=10</i>)	Financial advice (<i>n=9</i>)	Non Users (<i>n=10</i>)	Total (<i>n=45</i>)
Microcredit	100	100	0	0	58
Relatives and friends	38	50	44	10	36
Overdraft	38	30	44	20	33
Credit card	38	0	56	20	29
Rent-to-own	38	20	11	10	22
Student loans	25	0	11	30	18
Menage (RoSCA)	25	0	22	10	16
Credit union	19	10	11	10	13
Store card	25	10	0	0	11
Mortgage	6	10	22	10	11
Car loan	19	0	0	10	9
Catalogue	6	0	22	10	9
Pawn	6	10	11	10	9
Bank loan	19	0	0	0	7
Doorstep	6	0	11	0	4

TABLE 4: Informal transactions over six months by group

Informal transactions	Business microloan	Personal microloan	Financial advice	Non Users	Total
Average frequency	12	16	29	4	12
Minimum frequency	1	1	2	1	1
Maximum frequency	34	35	80	12	80
Ratio of informal over all credit transactions (frequency)	29%	36%	70%	54%	47%
Average amount (£)	1386	879	851	364	870
Minimum amount (£)	50	90	338	20	20
Maximum amount (£)	3922	2303	1578	853	3922
Average amount per transaction (£)	116	55	29	91	72
<i>Number of diarists reporting informal transactions</i>	15	8	5	6	34
<i>N</i>	16	10	9	10	45

FIGURE 1. Amina’s aggregate personal and business income and expenditure monthly

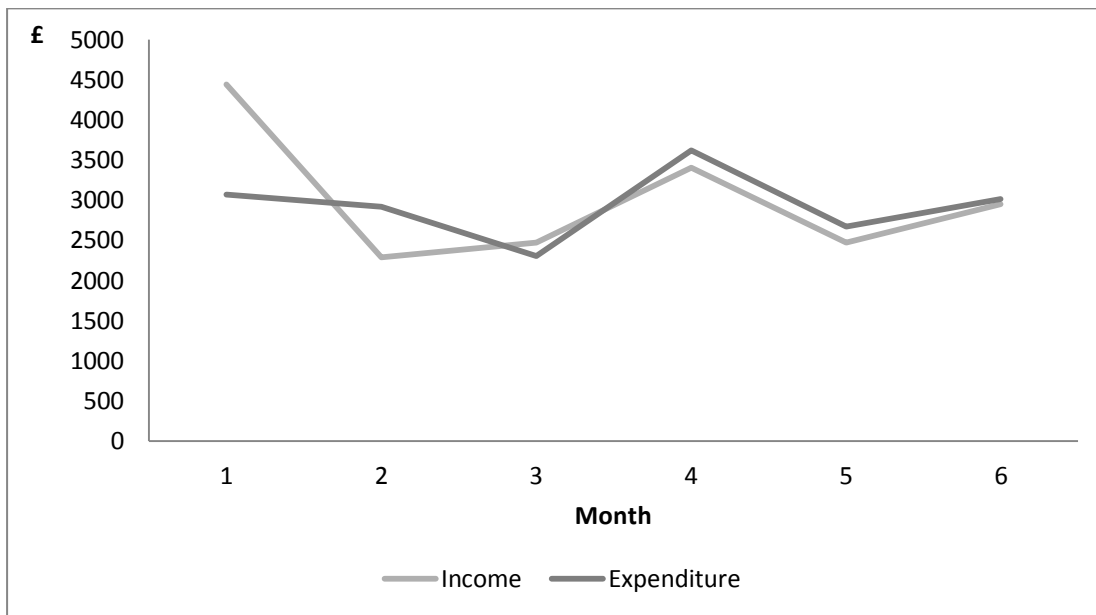


TABLE 5: Amina's monthly budget for month 4 (in £)

Sources of funds	3423	Uses of funds	3622
Housing benefit	315	Rent	315
Business revenue	235	Council tax	30
Tax credit	1385	Council tax arrears	17
Child benefit	140	Electricity and gas	50
JSA	33	Electricity arrears	50
<i>Loan family/friends</i>	<i>600</i>	Landline and internet	100
<i>Gifts for new baby</i>	<i>700</i>	Mobile phone	10
GCU incentives	15	Groceries	230
		Childcare	570
		Insurance	62
		Baby (car seat, nappies...)	445
		<i>Baby party</i>	<i>224</i>
		Toiletries	26
		Lottery	32
		Loans family/friends	420
		Rent-to-own	108
		Subprime credit card	60
		Doorstep loan	192
		Business operational expenses	232
		Business tax	51
		Business loan	198
		Business rent	200