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The effect of formal debt advice on financial management and knowledge: Insights from a new longitudinal study in Britain

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The Effect of Formal Debt Advice on Financial Management and Knowledge: Insights from a New Longitudinal Study in Britain

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Non-Technical summary

Reducing personal debt could enormously benefit public health and the economy. Over-indebtedness, that is the presence of chronic, problematic debt, or debt that is a large part of a household income, has been linked to low productivity, poor decision-making, and poor mental and physical health. It is a difficult task to help people reduce their personal debt. Often borrowers are unaware of how to minimise the cost of their borrowing because they lack details on relevant interest rates or other necessary information or have the correct information, but do not know how to use it correctly.

Debt advice can, in principle, provide borrowers with useful information, as well as ways to use this information to debt under control. For this reason, over the last two decades, the UK and USA government have increased their investment in free debt advice services for over-indebted citizens. There is little empirical evidence on the effect of debt advice that can justify this investment. Some preliminary studies suggest that debt advice is likely to reduce the likelihood that borrowers relapse into debt problems and to increase the amount of debt borrowers manage to paid-back to creditors. However, more rigorous evidence is needed.

We provide evidence of the effect of formal debt advice for UK borrowers. In the UK, formal debt advice must come from providers who are authorised by the Financial Conduct Authority (FCA), as well as from professionals such as lawyers, insolvency practitioners and accountants. Our analysis uses new data from a Pilot Longitudinal Survey on Debt Advice (PLSDA) collected between October 2016 and January 2019 to investigate the effect of debt advice on a representative sample of over-indebted people in the UK.

To shed light on the causal effect of seeking formal debt advice, we exploit the fact that PLSDA respondents are repeatedly interviewed in three subsequently waves of data collection. We restrict the analysis to the second wave of data and we compare the outcomes of respondents who sought formal advice between the first and the second waves of data collection to the outcomes of those who did not seek formal debt advice between the first and the second wave, but did seek formal debt advice between the second and the third wave of data collection. In other words, we assume that people who seek and people who do not seek formal debt advice share common unobservable characteristics, but the exact timing people seek formal advice is random.

Our results suggest that there is a negative selection into formal debt advice: people who do seek debt advice are those who experience financial difficulties and struggle to keep up with bills and credit commitments. However, we find that formal debt advice is likely to mitigate, and possibly counteract, these difficulties. Our results suggest that formal debt advice increases the probability of adopting spending-reducing strategies and decreases the probability of unsuccessfully applying for credit. We also find evidence suggesting that formal debt advice increases knowledge and understanding of the steps needed to get out of debt, and ultimately leads to a better self-reported financial situation, well-being and even physical health.

The effect of formal debt advice on financial management and knowledge: insights from a new longitudinal study in Britain

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Abstract

Using data from a new sample of over-indebted people living in Britain who have not sought debt advice in the previous six months, we estimate the effect of seeking formal debt advice. Our results suggest that there is a negative selection into formal debt advice: people who do seek debt advice are those who experience financial difficulties and struggle to keep up with bills and credit commitments. However, we find that formal debt advice is likely to mitigate, and possibly counteract, these difficulties. Our results suggest that formal debt advice increases the probability of adopting strategies to reduce spending and decreases the probability of being turned down for credit. Formal debt advice also increases knowledge and understanding of the steps needed to get out of debt, and ultimately leads to a better self-reported financial situation, well-being and even physical health.

1 Introduction

Reducing personal debt could benefit economic and public health enormously. Over-indebtedness (the presence of chronic, problematic debt, or debt that is a large part of a household income) is thought to negatively affect people’s well-being. Many studies have linked over-indebtedness to low productivity (Kaur et al., 2019), poor decision-making (Ong et al., 2019), and poor mental and physical health (e.g., Bridges and Disney, 2010; Gathergood, 2012; Richardson et al., 2013; Turunen and Hiilamo, 2014; Clayton et al., 2015; Blomgren et al., 2016; Hojman et al., 2016; Ong et al., 2019).

It is a difficult task to help people reduce their personal debt. All too often, borrowers are unsure on how to minimise the cost of their borrowing because they lack details on relevant interest rates or other necessary information or have a cognitive bias (Bertrand and Morse, 2011; Lusardi and Mitchell, 2014; Ponce et al., 2017; Disney and Gathergood, 2013; Gathergood et al., 2019). Debt advice can help, in principle. It can de-bias the mindset of a borrower and provide the information needed to reduce their debt. This is why, over the last two decades, the UK and USA government have increased their investment in free debt advice services for over-indebted citizens (Pleasence and Balmer, 2007; Collins and Schmeiser, 2013). While there is little empirical evidence on the effect of debt advice that can justify such investment, debt advice has been found to have a positive impact on reducing the possibility of relapsing into debt problems (or at least delaying this), increasing the recovery rate of debt (the amount paid to creditors) and decreasing the cost on the recovery of debt (Europe Economics, 2018).

This paper provides evidence of the effect of formal debt advice for UK borrowers. In the UK, formal debt advice must come from providers who are authorised by the Financial Conduct Authority (FCA), as well as from professionals such as lawyers, insolvency practitioners and accountants.¹ Our analysis uses new longitudinal data from a Pilot longitudinal survey on debt advice (PLSDA). This study collected data between October 2016 and January 2019, investigating the effect of debt advice on a representative sample

¹Debt advice is a regulated financial activity in the UK, so the provision must be authorised by the Financial Conduct Authority (FCA) and providers need to comply with a set of standards and a code of conduct.

of over-indebted people in the UK.

To shed some light on the causal effect of seeking formal debt advice, we exploit the longitudinal aspect of the PLSDA, together with an identification strategy in the spirit of Fadlon and Nielsen (2019). We restrict the analysis to wave two data and compare the outcomes of those who sought formal advice between wave one and two to the outcomes of those who did not seek formal debt advice between wave one and two, but did seek formal debt advice between wave two and three. This is equivalent to assuming that people who seek formal debt advice share common unobservable characteristics, but the exact timing they seek formal advice is random.

We contribute to the growing literature on the effect of debt advice, which shows mixed results. Debt advice has been found to be associated with reduced probabilities of foreclosure (Collins and Schmeiser, 2013), reduction of debt and account usage (Eliehausen et al., 2007; Europe Economics, 2018), a better self-reported financial situation (Pleasence and Balmer, 2007; Fumagalli et al., 2021) and increased well-being (Europe Economics, 2018; Fumagalli et al., 2021). However, debt advice has also been found to be associated with increased spending and increased probabilities of missing payments (Ding et al., 2008; Collins and Schmeiser, 2013; Fumagalli et al., 2021). Our study uses new data and focuses explicitly on *formal* debt advice.

Our results suggest that there is a negative selection into formal debt advice: people who do seek debt advice are those who experience financial difficulties and struggle to keep up with bills and credit commitments. However, we find that formal debt advice is likely to mitigate, and possibly counteract, these difficulties. Our results suggest that formal debt advice increases the probability of adopting spending-reducing strategies and decreases the probability of unsuccessfully applying for credit. We also find evidence suggesting that formal debt advice increases knowledge and understanding of the steps needed to get out of debt, and ultimately leads to a better self-reported financial situation, well-being and even physical health.

2 Data

We use data from the PLSDA: a study to test the feasibility of a large-scale longitudinal survey of indebtedness with a focus on how formal debt advice can affect long-term outcomes. The PLSDA was commissioned in 2016 by the Money Advice Service (MAS).² The PLSDA has three waves: i) wave one (recruitment) was collected between October 2016 and February 2017; ii) wave two was collected between September and December 2017; and iii) wave three was collected between November 2018 and January 2019.

Wave one was collected with the aim of selecting a representative sample of over-indebted people in the UK. To recruit sample participants, three different fieldwork approaches were used: i) Kantar’s face-to-face omnibus survey, ii) Kantar’s online omnibus survey; iii) an ad-hoc online survey.³

The three fieldwork approaches differ in their recruiting strategies and interview modes. The sample for the face-to-face omnibus survey was identified through random location sampling: each interviewer was asked to achieve a set number of interviews in a given area (typically a census output area). The recruitment was designed to generate a representative sample of the British population by adopting quotas. For the online omnibus and online ad-hoc survey, a sample from online panels run by Kantar were used (a panel of respondents who agreed to be surveyed for a reward). Given that respondents were self-selected, quotas were established to ensure that the overall profile of the interviewed sample closely matched the British population. Online self-completion questionnaires (WEB) were completed by respondents for both the online omnibus and online ad-hoc survey. Computer Assisted Personal Interviewing (CAPI) supported face-to-face omnibus survey interviews in participants’ homes.

At wave one, respondents were presented with two types of consent: to be contacted for a follow-up survey or and to be contacted by a not-for-profit financial advice agency. Not all the wave one respondents were invited to be interviewed at waves two and three. To be invited for wave two and three of the PLSDA, wave one sample members had to meet

²Since 2019, MAS is part of the Money and Pensions Advice Service (MaPS).

³The online ad-hoc survey was not initially planned: it was added to boost the number of online interviews due to a problem in obtaining permission to access contact details from the online omnibus.

three criteria. First, they had to be classified as over-indebted according to the standard definition of over-indebtedness used by MAS. To define someone as over-indebted, MAS asks a subjective and objective question. The subjective question is whether keeping up with bills and credit commitments feels like a ‘heavy burden’. The objective question asks if the individual has fallen behind with, or missed any payment for, credit commitments or domestic bills in at least three of the previous six months (IFF Research, 2012). The second criteria was that respondents had not sought formal debt advice in the previous six months. Thirdly, respondents had to provide their contact details, agreeing to be re-contacted for a follow-up survey and to be contacted by a not-for-profit financial advice agency.

The total sample obtained from the recruitment and used for wave two was 1,939, once duplicates (different unique IDs) and respondents recruited from a sister panel were excluded (due to a permissions’ disagreement). From the 1,939 people in the sample, 1,081 responded to the survey. At wave three, there was a change in the survey agency. As a result, 298 respondents had to be excluded as they didn’t gave consent to share their contact details with the new agency. Therefore, the resulting sample for wave three was 783 people. The final sample of respondents to wave three was 659.

3 Method

To identify the causal effect of seeking formal debt advice, one may want to compare the outcomes of those who sought formal debt advice and those who did not. However, people who seek, and do not seek, formal debt advice are different in many ways (from their gender and age to their financial circumstances, expectations on the usefulness of formal debt advice, access to other forms of debt advice, and self-confidence). What is more, most of these differences cannot be observed by a researcher. Therefore, comparing the outcomes of those who sought debt advice and those who did not does not allow us to separate the causal effect of seeking formal debt advice from the difference in the characteristics of those who sought debt advice and those who did not.

To shed light on the causal effect of seeking debt advice, we use the longitudinal aspect

of the PLSDA data, together with the following identification strategy in the spirit of Fadlon and Nielsen (2019). We restrict the analysis to wave two data and we compare the outcomes of those who sought formal advice between wave one and two to the outcomes of those who did not seek formal debt advice between wave one and two, but did seek formal debt advice between wave two and three. The identifying assumption is that people who seek formal advice share common unobservable characteristics, however, the exact timing they seek formal advice is random.

Ruling out the existence of unobserved characteristics determining the timing of formal debt advice seeking behaviours of people who eventually will seek formal debt advice is a strong assumption. For example, people may seek formal debt advice when their financial situation deteriorates, are contacted by a bailiff, or receive a court summon letter. Alternatively, they may decide to seek formal debt advice when their financial situation improves because this becomes less embarrassing. Our identification strategy does not allow us to rule out the bias deriving from endogenous selection into formal debt advice, however, it can help study the process of selection into debt advice and how the causal effects of seeking formal debt advice can exacerbate, or cancel out, the effects of this endogenous selection.

4 Results

Tables 1-11 look into the effects of seeking formal debt advice on debt management, financial situation, attitudes to debt and well-being. For each outcome, we report three specifications.

The first specification compares the outcomes of those who sought formal debt advice between wave one and two and the outcomes of those who did not. This is the most endogenous specification, as we only restrict the sample to the balanced panel. That is, people who responded both at wave two and three (for comparability with the following specifications). This means that in the group of those who did not seek formal debt advice between wave one and two, there are both those who did and those who did not seek formal debt advice between wave two and three.

The second specification removes from the sample of those who did not seek formal debt advice between wave one and two those who did not seek formal debt advice between wave two and three either. The assumption is that these people are too different from those who sought formal debt advice between wave one and two and, thus, they cannot serve as a comparison group. Compared to the first specification on the balanced panel, this specification is likely to be much less affected by the endogeneity of seeking formal debt advice, although this comes at the expense of a dramatic drop in the sample size.

The third specification adopts the above sample restrictions and also controls for observable characteristics at wave one, namely: age, gender, marital status, job status, and Government Office Regions (GOR) dummies (London, Wales and Scotland). This is the least endogenous specification, although the inclusion of controls puts additional pressure on sample size and degrees of freedom.

Table 1 looks at the effects of seeking formal debt advice on debt management in the year before wave two. Overall, seeking formal debt advice is associated with more active debt management. For example, the least endogenous specification suggests a 30 percentage point (pp) decrease in the probability of no action in the last year for those who seek formal debt advice (Table 1, fourth row from the bottom) and an increase of 0.6 of an action (Table 1, bottom row). However, Table 1 also shows that the point estimates of most coefficients go towards zero when the endogeneity of seeking formal debt advice is taken into account. This suggests that people who seek formal debt advice are already more likely to adopt active debt management strategies, and thus the results in Table 1 may be at least partially driven by selection.

Table 1: Effect of seeking formal debt advice on debt management past year: Wave two

Debt management past year, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Set up a repayment plan	0.359	0.049	0.000	658
Set up a repayment plan (sample restrictions)	0.348	0.071	0.000	168
Set up a repayment plan (sample restrictions + controls)	0.308	0.076	0.000	166
Set up a debt management plan	0.047	0.015	0.003	658
Set up a debt management plan (sample restrictions)	0.035	0.031	0.263	168
Set up a debt management plan (sample restrictions + controls)	0.056	0.033	0.091	166
Agreed a period of time where no payments have to be made	0.071	0.027	0.008	658
Agreed a period of time where no payments have to be made (sample restrictions)	0.045	0.045	0.320	168
Agreed a period of time where no payments have to be made (sample restrictions + controls)	0.055	0.049	0.264	166
Set up an Individual Voluntary Arrangement (IVA)	0.050	0.014	0.000	658
Set up an Individual Voluntary Arrangement (IVA) (sample restrictions)	0.035	0.031	0.263	168
Set up an Individual Voluntary Arrangement (IVA) (sample restrictions + controls)	0.037	0.034	0.274	166
Set up a Debt Relief Order (DRO)	0.069	0.012	0.000	658
Set up a Debt Relief Order (DRO) (sample restrictions)	0.059	0.031	0.058	168
Set up a Debt Relief Order (DRO) (sample restrictions + controls)	0.029	0.032	0.364	166
Set up a trust deed	0.000			658
Set up a trust deed (sample restrictions)	0.000			168
Set up a trust deed (sample restrictions + controls)	0.000			166
Set up a Protected trust deed	0.000			658
Set up a Protected trust deed (sample restrictions)	0.000			168
Set up a Protected trust deed (sample restrictions + controls)	0.000			166
Set up a debt arrangement scheme	0.000			658
Set up a debt arrangement scheme (sample restrictions)	0.000			168
Set up a debt arrangement scheme (sample restrictions + controls)	0.000			166
Filed for bankruptcy	0.007	0.009	0.471	658
Filed for bankruptcy (sample restrictions)	-0.000	0.017	0.987	168
Filed for bankruptcy (sample restrictions + controls)	0.004	0.018	0.830	166
Made a full and final settlement of debts	0.015	0.027	0.587	658
Made a full and final settlement of debts (sample restrictions)	0.034	0.035	0.324	168
Made a full and final settlement of debts (sample restrictions + controls)	0.054	0.037	0.150	166
Had debts written off	0.050	0.014	0.000	658
Had debts written off (sample restrictions)	0.059	0.026	0.025	168
Had debts written off (sample restrictions + controls)	0.061	0.028	0.033	166
Consolidated debts	-0.017	0.022	0.456	658
Consolidated debts (sample restrictions)	-0.049	0.033	0.140	168
Consolidated debts (sample restrictions + controls)	-0.046	0.035	0.189	166
Accessed benefits/credit options not previously aware of	0.060	0.015	0.000	658
Accessed benefits/credit options not previously aware of (sample restrictions)	0.034	0.035	0.324	168
Accessed benefits/credit options not previously aware of (sample restrictions + controls)	0.020	0.038	0.603	166
Agreed/increased overdraft limit with bank	-0.011	0.032	0.718	658
Agreed/increased overdraft limit with bank (sample restrictions)	-0.038	0.044	0.393	168
Agreed/increased overdraft limit with bank (sample restrictions + controls)	-0.043	0.047	0.365	166
Other	0.010	0.014	0.502	658
Other (sample restrictions)	0.024	0.017	0.162	168
Other (sample restrictions + controls)	0.032	0.018	0.069	166
No Action in the last year	-0.406	0.056	0.000	658
No Action in the last year (sample restrictions)	-0.330	0.070	0.000	168
No Action in the last year (sample restrictions + controls)	-0.290	0.073	0.000	166
Number of actions in the last year	0.708	0.088	0.000	658
Number of actions in the last year (sample restrictions)	0.586	0.141	0.000	168
Number of actions in the last year (sample restrictions + controls)	0.567	0.151	0.000	166

Table 2 presents the estimates on the probability of being behind with bills at wave two. Overall, the results show a positive association between being behind with bills and seeking formal debt advice. However, when the endogeneity of formal debt advice is addressed, the estimated coefficients drop dramatically. For example, the estimated coefficients for seeking formal debt advice on the probability of not being behind with bills and on the number of bills respondents are behind with (Table 2, bottom six rows) drop by around a half from the first (most endogenous) to the third (least endogenous) specification. In summary, we find that people who selected into formal debt advice are in a worse financial situation. However, by comparing models that allow differently for this selection, we also find evidence that these results may be due to selection.

Table 2: Effect of seeking formal debt advice on being behind with bills: Wave two

Behind with bills, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Rent/Mortgage	0.152	0.038	0.000	658
Rent/Mortgage (sample restrictions)	0.102	0.063	0.104	168
Rent/Mortgage (sample restrictions + controls)	0.089	0.068	0.193	166
Fuel	0.066	0.039	0.092	658
Fuel (sample restrictions)	0.020	0.059	0.742	168
Fuel (sample restrictions + controls)	0.043	0.064	0.504	166
Phone	0.078	0.032	0.016	658
Phone (sample restrictions)	0.069	0.050	0.172	168
Phone (sample restrictions + controls)	0.081	0.054	0.133	166
Water	0.096	0.042	0.022	658
Water (sample restrictions)	0.067	0.062	0.285	168
Water (sample restrictions + controls)	0.103	0.066	0.122	166
Council tax	0.146	0.042	0.000	658
Council tax (sample restrictions)	0.078	0.066	0.245	168
Council tax (sample restrictions + controls)	0.090	0.072	0.210	166
Credit or store card(s)	0.197	0.046	0.000	658
Credit or store card(s) (sample restrictions)	0.003	0.075	0.968	168
Credit or store card(s) (sample restrictions + controls)	0.035	0.081	0.669	166
Overdraft from a bank or building society	0.107	0.037	0.004	658
Overdraft from a bank or building society (sample restrictions)	0.031	0.062	0.615	168
Overdraft from a bank or building society (sample restrictions + controls)	0.034	0.067	0.619	166
Personal loan from bank/building society/credit union	0.059	0.026	0.026	658
Personal loan from bank/building society/credit union (sample restrictions)	0.058	0.041	0.164	168
Personal loan from bank/building society/credit union (sample restrictions + controls)	0.042	0.044	0.347	166
Payday loan	0.095	0.024	0.000	658
Payday loan (sample restrictions)	0.057	0.047	0.222	168
Payday loan (sample restrictions + controls)	0.024	0.049	0.616	166
Loan from door2door lender/Home credit (e.g., Provident)	0.049	0.026	0.058	658
Loan from door2door lender/Home credit (e.g., Provident) (sample restrictions)	0.058	0.038	0.130	168
Loan from door2door lender/Home credit (e.g., Provident) (sample restrictions + controls)	0.044	0.040	0.279	166
Loan from family or friends	0.039	0.032	0.225	658
Loan from family or friends (sample restrictions)	-0.015	0.051	0.772	168
Loan from family or friends (sample restrictions + controls)	-0.036	0.056	0.523	166
Other	-0.030	0.022	0.176	658
Other (sample restrictions)	-0.000	0.017	0.987	168
Other (sample restrictions + controls)	-0.000	0.018	0.999	166
None	-0.289	0.057	0.000	658
None (sample restrictions)	-0.138	0.069	0.047	168
None (sample restrictions + controls)	-0.134	0.074	0.072	166
Number of bills behind	1.053	0.181	0.000	658
Number of bills behind (sample restrictions)	0.526	0.282	0.064	168
Number of bills behind (sample restrictions + controls)	0.548	0.306	0.075	166

Tables 3 considers spending-reducing strategies adopted in the month before wave two interviews. The bottom two rows suggest that formal debt advice increases the number of such strategies adopted. According to our least endogenous specification (Table 3, bottom row), the size of this increase exceeds half of an improvement. Importantly, this table shows that the estimated effects increase when the endogeneity of advice seeking is taken into account. For example, the probability of making savings by shopping around or switching supplies (cutting back on spending) increases from nine (seven) to 15 (11) pp from the most endogenous to the least endogenous specification. Some of the coefficients even switch sign when the endogeneity of advice seeking is taken into account. For example, the coefficient for planning ahead for household bills and other expenses is initially negative (although statistically insignificant) in the most endogenous specification (Table 3, Row 4) and then becomes positive (and statistically significant, in spite of the small sample size) in our least endogenous specification (Table 3, Row 6).

Table 4 looks at correlations between seeking formal debt advice and whether the respondents report making spending-reducing improvements more often than six months earlier. The question used to derive the results in this table helps to further reduce endogeneity, as it compares the time when wave two is collected (that is more likely to be after seeking formal debt advice) to six months earlier. Indeed, the results in Table 4 generally suggest that formal debt advice increases the probability of adopting spending-reducing strategies. In short, results in Tables 3 and 4 suggest that people who find it difficult to reduce their spending select into formal debt advice, however, formal debt advice has the causal effect of incentivising the take-up of spending-reducing strategies.

Table 3: Effect of seeking formal debt advice on improvements in last months: Wave two

Improvements in last months, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Stick to a spending plan	-0.030	0.058	0.609	658
Stick to a spending plan (sample restrictions)	0.047	0.077	0.543	168
Stick to a spending plan (sample restrictions + controls)	0.045	0.084	0.592	166
Plan ahead for household bills and other expenses	-0.022	0.054	0.679	658
Plan ahead for household bills and other expenses (sample restrictions)	0.080	0.075	0.284	168
Plan ahead for household bills and other expenses (sample restrictions + controls)	0.163	0.078	0.038	166
Check your bank balance regularly	-0.025	0.034	0.463	658
Check your bank balance regularly (sample restrictions)	0.051	0.054	0.348	168
Check your bank balance regularly (sample restrictions + controls)	0.067	0.058	0.246	166
Make cut backs on spending	0.070	0.047	0.134	658
Make cut backs on spending (sample restrictions)	0.088	0.060	0.144	168
Make cut backs on spending (sample restrictions + controls)	0.106	0.064	0.098	166
Make savings by shopping around or switching suppliers	0.087	0.053	0.100	658
Make savings by shopping around or switching suppliers (sample restrictions)	0.101	0.068	0.136	168
Make savings by shopping around or switching suppliers (sample restrictions + controls)	0.148	0.071	0.039	166
No improvements in the last month	0.009	0.019	0.631	658
No improvements in the last month (sample restrictions)	-0.025	0.033	0.451	168
No improvements in the last month (sample restrictions + controls)	-0.034	0.036	0.336	166
Number of improvements in the last month	0.080	0.156	0.610	658
Number of improvements in the last month (sample restrictions)	0.368	0.215	0.090	168
Number of improvements in the last month (sample restrictions + controls)	0.530	0.227	0.021	166

Table 4: Effect of seeking formal debt advice on making improvements more often than six months ago: Wave two

Improvements, more often than before, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Spending plan, more often than six months ago	0.118	0.058	0.042	658
Spending plan, more often than six months ago (sample restrictions)	0.058	0.077	0.452	168
Spending plan, more often than six months ago (sample restrictions + controls)	0.053	0.082	0.523	166
Planned ahead, more often than six months ago	0.229	0.057	0.000	658
Planned ahead, more often than six months ago (sample restrictions)	0.189	0.075	0.013	168
Planned ahead, more often than six months ago (sample restrictions + controls)	0.217	0.080	0.008	166
Check bank balance, more often than six months ago	0.093	0.058	0.111	658
Check bank balance, more often than six months ago (sample restrictions)	0.010	0.077	0.897	168
Check bank balance, more often than six months ago (sample restrictions + controls)	0.048	0.081	0.552	166
Cut spending, more often than six months ago	0.155	0.057	0.006	658
Cut spending, more often than six months ago (sample restrictions)	0.091	0.072	0.207	168
Cut spending, more often than six months ago (sample restrictions + controls)	0.106	0.075	0.159	166
Save by shopping around, more often than six months ago	0.188	0.058	0.001	658
Save by shopping around, more often than six months ago (sample restrictions)	0.141	0.076	0.065	168
Save by shopping around, more often than six months ago (sample restrictions + controls)	0.173	0.081	0.034	166
No improvements more often than six months ago	-0.190	0.050	0.000	658
No improvements more often than six months ago (sample restrictions)	-0.086	0.051	0.092	168
No improvements more often than six months ago (sample restrictions + controls)	-0.081	0.054	0.136	166
Number of improvements more often than six months ago	0.783	0.219	0.000	658
Number of improvements more often than six months ago (sample restrictions)	0.488	0.265	0.067	168
Number of improvements more often than six months ago (sample restrictions + controls)	0.597	0.281	0.035	166

Table 5 looks at credit. Rows 10-13 show a positive correlation between seeking formal debt advice and falling behind with payments. However, this correlation is reduced when the sample of those who did not seek formal debt advice between wave one and two is restricted to those who sought formal debt advice between wave two and three. This, again, points towards a negative selection into formal debt advice: people who seek advice are those who need it the most.

Table 5 also suggests there may be positive effects of formal debt advice that (partially) offset this negative selection. For example, Row 4 shows that, in the balanced panel, those who seek formal debt advice are 10 pp more likely to apply for credit and being turned down than those who do not. When accounting for endogeneity of seeking formal debt advice, this result disappears and it is potentially reverted (Table 5 , Row 6). This may suggest a protective role of formal debt advice against applying for credit and being turned down. Equally, while the most endogenous specification suggests a negative association between seeking formal debt advice and not applying for credit (Table 5 , Row 7), this result disappears and it is potentially reverted when we account for endogeneity (Table 5, Row 9).

Table 5: Effect of seeking formal debt advice on credit: Wave two

Credit access, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Successfully applied for credit (last six months)	0.037	0.041	0.368	658
Successfully applied for credit (last six months) (sample restrictions)	0.008	0.059	0.894	168
Successfully applied for credit (last six months) (sample restrictions + controls)	0.006	0.064	0.923	166
Applied for credit, but turned down (last six months)	0.103	0.041	0.012	658
Applied for credit, but turned down (last six months) (sample restrictions)	0.018	0.065	0.777	168
Applied for credit, but turned down (last six months) (sample restrictions + controls)	-0.007	0.071	0.917	166
Did not apply for credit (last six months)	-0.140	0.053	0.008	658
Did not apply for credit (last six months) (sample restrictions)	-0.026	0.076	0.730	168
Did not apply for credit (last six months) (sample restrictions + controls)	0.001	0.082	0.988	166
Fell behind with/missed payments for three+ months (last six months)	0.352	0.053	0.000	655
Fell behind with/missed payments for three+ months (last six months) (sample restrictions)	0.220	0.076	0.004	167
Fell behind with/missed payments for three+ months (last six months) (sample restrictions + controls)	0.235	0.082	0.005	165
Size of loans/overdrafts/credit agreements	501.761	1,172.921	0.669	658
Size of loans/overdrafts/credit agreements (sample restrictions)	-1,279.837	1,711.028	0.456	168
Size of loans/overdrafts/credit agreements (sample restrictions + controls)	563.099	1,784.897	0.753	166
Size of arrears in bills/credit respondent is behind on.	360.917	405.154	0.373	658
Size of arrears in bills/credit respondent is behind on. (sample restrictions)	-289.890	516.817	0.576	168
Size of arrears in bills/credit respondent is behind on. (sample restrictions + controls)	-201.119	565.760	0.723	166

Table 6: Effect of seeking formal debt advice on experiencing financial difficulties: Wave two

Financial difficulties, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Having your landline phone cut off	0.006	0.020	0.778	658
Having your landline phone cut off (sample restrictions)	0.011	0.026	0.672	168
Having your landline phone cut off (sample restrictions + controls)	0.028	0.029	0.336	166
Having your mobile phone cut off	0.112	0.031	0.000	658
Having your mobile phone cut off (sample restrictions)	0.056	0.055	0.311	168
Having your mobile phone cut off (sample restrictions + controls)	0.074	0.058	0.204	166
Couldn't afford basics (food etc)	0.183	0.047	0.000	658
Couldn't afford basics (food etc) (sample restrictions)	0.099	0.072	0.172	168
Couldn't afford basics (food etc) (sample restrictions + controls)	0.078	0.078	0.324	166
Being contacted by the people and organisations you owe money to	0.258	0.051	0.000	658
Being contacted by the people and organisations you owe money to (sample restrictions)	0.205	0.075	0.007	168
Being contacted by the people and organisations you owe money to (sample restrictions + controls)	0.211	0.081	0.010	166
A court summons from the people you owe money to	0.111	0.026	0.000	658
A court summons from the people you owe money to (sample restrictions)	0.045	0.052	0.396	168
A court summons from the people you owe money to (sample restrictions + controls)	0.057	0.055	0.303	166
Being contacted by bailiffs	0.054	0.025	0.028	658
Being contacted by bailiffs (sample restrictions)	0.058	0.038	0.130	168
Being contacted by bailiffs (sample restrictions + controls)	0.060	0.041	0.147	166
Being evicted from your home	0.032	0.010	0.002	658
Being evicted from your home (sample restrictions)	0.023	0.024	0.326	168
Being evicted from your home (sample restrictions + controls)	0.018	0.026	0.493	166
Having your home repossessed	0.044	0.011	0.000	658
Having your home repossessed (sample restrictions)	0.035	0.026	0.184	168
Having your home repossessed (sample restrictions + controls)	0.048	0.028	0.088	166
Having your gas or electricity cut off	0.010	0.006	0.118	658
Having your gas or electricity cut off (sample restrictions)	0.012	0.012	0.325	168
Having your gas or electricity cut off (sample restrictions + controls)	0.017	0.013	0.185	166
Having a prepayment meter imposed for gas or electricity	0.001	0.017	0.961	658
Having a prepayment meter imposed for gas or electricity (sample restrictions)	-0.037	0.031	0.236	168
Having a prepayment meter imposed for gas or electricity (sample restrictions + controls)	-0.021	0.034	0.534	166
Having your credit card declined	0.068	0.032	0.033	658
Having your credit card declined (sample restrictions)	0.009	0.053	0.871	168
Having your credit card declined (sample restrictions + controls)	0.004	0.056	0.939	166
None	-0.340	0.056	0.000	658
None (sample restrictions)	-0.187	0.073	0.011	168
None (sample restrictions + controls)	-0.214	0.077	0.006	166
Number of financial difficulties experienced	0.877	0.136	0.000	658
Number of financial difficulties experienced (sample restrictions)	0.516	0.212	0.016	168
Number of financial difficulties experienced (sample restrictions + controls)	0.573	0.224	0.011	166

Table 6 considers the link between seeking formal debt advice and experiencing financial difficulties. The estimated coefficients suggest a positive correlation between financial difficulties and seeking formal debt advice. However, in almost all cases, these coefficients drop significantly when accounting for endogeneity. This drop is particularly clear in the case of the following circumstances: having a mobile phone cut off, not being able to afford basics, receiving a court summons, and having a credit card declined. In these cases, after accounting for selection, the estimated coefficient drops by 50% or more, becoming statistically insignificant. These results may indicate that people wait to seek debt advice until they experience a significant negative event (such as not being able to afford basics) that triggers the request for help.

The first 24 rows of Table 7 suggest that seeking formal debt advice improves self-reported financial outlook and attitudes to debt. For example, people who sought formal debt advice are more likely to report a better financial situation than six months before

(+23 pp in our preferred specification; see Table 7, Row 3), and more likely to feel in control of their finances (+26 pp in our preferred specification; see Row 18). These coefficients do not seem to be driven by selection effects: when accounting for heterogeneity most of the coefficients suggesting a desirable effect of formal debt advice become larger. In a number of cases, accounting for selection makes the coefficient turn from negative to positive. For example, the point estimates for the correlation between seeking formal debt advice and feeling in control of finances and the correlation between seeking formal debt advice and feeling that the level of debt is manageable are both negative when estimated on the balanced panel (Rows 19 and 22). However, these estimates become positive when endogeneity is controlled for (Rows 21 and 24).

When more objective indicators of financial outlook are considered (Table 7, bottom 12 rows), we generally find statistically insignificant coefficients irrespective of the method used. However, we do find that people who seek formal debt advice are 17 pp more likely than those who do not seek debt advice to know who to contact if they have a debt problem. The coefficient becomes larger when the endogeneity problem is addressed, suggesting that the effect is causal. This last result is in line with those in Table 8, showing a statistically significant positive correlation between formal debt advice and all indicators of understanding the key steps for getting out of debt. Also these coefficients generally become larger when accounting for endogeneity. This points towards the existence of a positive causal effect of seeking formal debt advice and understanding the steps needed to reduce personal debt.

Table 7: Effect of seeking formal debt advice on self-reported financial outlook and attitudes to debt: Wave two

Debt management past year, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Better financial situation	0.174	0.051	0.001	658
Better financial situation (sample restrictions)	0.207	0.070	0.004	168
Better financial situation (sample restrictions + controls)	0.231	0.074	0.002	166
Keeping up with bills/credit commitments heavy burden	-0.033	0.057	0.558	655
Keeping up with bills/credit commitments heavy burden (sample restrictions)	-0.101	0.076	0.188	167
Keeping up with bills/credit commitments heavy burden (sample restrictions + controls)	-0.127	0.078	0.103	165
Keeping up with bills/credit commitments burden all the time/most times	0.086	0.057	0.132	658
Keeping up with bills/credit commitments burden all the time/most times (sample restrictions)	-0.016	0.072	0.824	168
Keeping up with bills/credit commitments burden all the time/most times (sample restrictions + controls)	-0.049	0.077	0.526	166
Finding managing financially quite/very difficult	0.006	0.057	0.922	658
Finding managing financially quite/very difficult (sample restrictions)	-0.106	0.077	0.169	168
Finding managing financially quite/very difficult (sample restrictions + controls)	-0.122	0.078	0.119	166
Better off in a year's time	0.071	0.055	0.198	658
Better off in a year's time (sample restrictions)	0.050	0.076	0.506	168
Better off in a year's time (sample restrictions + controls)	0.088	0.079	0.268	166
More in control of finances	0.170	0.055	0.002	658
More in control of finances (sample restrictions)	0.229	0.073	0.002	168
More in control of finances (sample restrictions + controls)	0.261	0.077	0.001	166
I feel in control of my finances	-0.038	0.056	0.505	658
I feel in control of my finances (sample restrictions)	0.112	0.070	0.109	168
I feel in control of my finances (sample restrictions + controls)	0.104	0.072	0.154	166
My level of debt feels manageable to me	-0.005	0.057	0.932	658
My level of debt feels manageable to me (sample restrictions)	0.159	0.071	0.027	168
My level of debt feels manageable to me (sample restrictions + controls)	0.169	0.075	0.027	166
I know who to contact if I have a debt problem	0.150	0.056	0.007	658
I know who to contact if I have a debt problem (sample restrictions)	0.162	0.071	0.024	168
I know who to contact if I have a debt problem (sample restrictions + controls)	0.167	0.077	0.031	166
I follow a household monthly budget	-0.060	0.057	0.292	658
I follow a household monthly budget (sample restrictions)	-0.013	0.077	0.869	168
I follow a household monthly budget (sample restrictions + controls)	-0.004	0.083	0.962	166
I am very organised when it comes to managing my money day to day	-0.039	0.058	0.498	658
I am very organised when it comes to managing my money day to day (sample restrictions)	0.000	0.078	0.996	168
I am very organised when it comes to managing my money day to day (sample restrictions + controls)	0.055	0.082	0.504	166
I always make sure I have money saved for a rainy day	-0.065	0.050	0.195	658
I always make sure I have money saved for a rainy day (sample restrictions)	-0.101	0.066	0.126	168
I always make sure I have money saved for a rainy day (sample restrictions + controls)	-0.104	0.068	0.125	166

Table 8: Effect of seeking formal debt advice on understanding: Wave two

Understanding, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Understands fees	0.244	0.055	0.000	572
Understands fees (sample restrictions)	0.188	0.079	0.019	152
Understands fees (sample restrictions + controls)	0.194	0.084	0.023	151
Understands own steps	0.168	0.059	0.004	611
Understands own steps (sample restrictions)	0.173	0.078	0.028	160
Understands own steps (sample restrictions + controls)	0.222	0.083	0.008	158
Understands own rights	0.156	0.055	0.005	609
Understands own rights (sample restrictions)	0.175	0.076	0.023	161
Understands own rights (sample restrictions + controls)	0.187	0.082	0.024	159
Understands creditors' rights	0.128	0.056	0.024	615
Understands creditors' rights (sample restrictions)	0.095	0.078	0.223	163
Understands creditors' rights (sample restrictions + controls)	0.110	0.084	0.195	161
Understands how to increase own income	0.206	0.058	0.000	598
Understands how to increase own income (sample restrictions)	0.288	0.076	0.000	157
Understands how to increase own income (sample restrictions + controls)	0.325	0.080	0.000	155
Understands who to contact	0.310	0.058	0.000	612
Understands who to contact (sample restrictions)	0.313	0.075	0.000	160
Understands who to contact (sample restrictions + controls)	0.319	0.079	0.000	159
Understands how to manage a chance	0.186	0.059	0.002	607
Understands how to manage a chance (sample restrictions)	0.200	0.078	0.011	160
Understands how to manage a chance (sample restrictions + controls)	0.193	0.082	0.019	158
No steps understood	-0.250	0.055	0.000	658
No steps understood (sample restrictions)	-0.232	0.065	0.000	168
No steps understood (sample restrictions + controls)	-0.242	0.070	0.001	166
Number of steps understood	1.392	0.326	0.000	528
Number of steps understood (sample restrictions)	1.422	0.422	0.001	142
Number of steps understood (sample restrictions + controls)	1.477	0.449	0.001	141

Table 9 looks at well-being and health. For well-being, we find that seeking formal debt advice is positively correlated with indicators of satisfaction, happiness and having a worthwhile life, and negatively correlated with the indicator of anxiety. These coefficients increase - often very substantially - when endogeneity is taken into account (see the case

of anxiety, Rows 13-15). We also find some indication that formal debt advice improves health: the coefficient for seeking formal debt advice on the probability of reporting good health increases quite noticeably when accounting for endogeneity (from two to 15 pp). Additionally, the coefficient for seeking formal debt advice on the probability of reporting a long-lasting physical or mental health condition switches sign from positive in the balanced panel (Table 9, Row 19) to negative in our least endogenous specification (Table 9, bottom row). To summarise, Table 9 suggests positive effects of formal debt advice on well-being and health, partially masked by a negative selection into advice-seeking behaviour (people with lower well-being or worse health are more likely to seek formal debt advice).

Table 9: Effect of seeking formal debt advice on well-being and health: Wave two

Well being and health, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
How satisfied with life nowadays	0.231	0.286	0.418	658
How satisfied with life nowadays (sample restrictions)	0.422	0.375	0.261	168
How satisfied with life nowadays (sample restrictions + controls)	0.568	0.390	0.147	166
To what extent you feel things you do in life are worthwhile	0.036	0.301	0.904	658
To what extent you feel things you do in life are worthwhile (sample restrictions)	0.339	0.384	0.378	168
To what extent you feel things you do in life are worthwhile (sample restrictions + controls)	0.525	0.410	0.202	166
How happy you felt yesterday	0.410	0.305	0.179	658
How happy you felt yesterday (sample restrictions)	0.679	0.419	0.107	168
How happy you felt yesterday (sample restrictions + controls)	0.922	0.430	0.034	166
Index of positive Well-being	0.678	0.814	0.405	658
Index of positive Well-being (sample restrictions)	1.441	1.064	0.177	168
Index of positive Well-being (sample restrictions + controls)	2.016	1.104	0.070	166
How anxious you felt yesterday	-0.016	0.349	0.963	658
How anxious you felt yesterday (sample restrictions)	-0.674	0.453	0.138	168
How anxious you felt yesterday (sample restrictions + controls)	-1.078	0.481	0.027	166
In good health	0.020	0.058	0.734	658
In good health (sample restrictions)	0.072	0.077	0.357	168
In good health (sample restrictions + controls)	0.146	0.075	0.054	166
Long lasting physical/mental health condition	0.019	0.058	0.745	658
Long lasting physical/mental health condition (sample restrictions)	-0.025	0.077	0.742	168
Long lasting physical/mental health condition (sample restrictions + controls)	-0.082	0.074	0.270	166

Lastly, Tables 10 and 11 consider worries (in general and about housing). They largely confirm the conclusions above: people who worry more are more likely to seek formal debt advice. For example, while in the balanced panel people who seek formal debt advice are found to be 10 pp less likely to experience ‘no worries’ (Table 10, third row from the bottom), the coefficient drops substantially when accounting for endogeneity. Formal debt advice may mitigate these worries. In the balanced panel we find a positive correlation between seeking formal debt advice and worrying about one’s mental health (Table 10, Row 13). This correlation becomes negative when accounting for endogeneity (Table 10, Row 15). The same pattern can be seen in Table 11, where the positive correlation

Table 10: Effect of seeking formal debt advice on worries in the previous six months: Wave two

Worry past six months, formal debt advice, wave two				
Outcome	point estimates	standard error	p-value	N
Worry about relationship with children/family members	0.009	0.050	0.854	658
Worry about relationship with children/family members (sample restrictions)	0.030	0.067	0.654	168
Worry about relationship with children/family members (sample restrictions + controls)	0.013	0.069	0.852	166
Worry about relationship with spouse/partner	-0.017	0.052	0.744	658
Worry about relationship with spouse/partner (sample restrictions)	-0.091	0.071	0.204	168
Worry about relationship with spouse/partner (sample restrictions + controls)	-0.044	0.068	0.519	166
Worry about relationship with friends	0.063	0.040	0.114	658
Worry about relationship with friends (sample restrictions)	0.008	0.060	0.901	168
Worry about relationship with friends (sample restrictions + controls)	-0.035	0.063	0.583	166
Worry about own physical health	0.107	0.058	0.065	658
Worry about own physical health (sample restrictions)	0.107	0.077	0.166	168
Worry about own physical health (sample restrictions + controls)	0.043	0.081	0.596	166
Worry about own mental health	0.099	0.056	0.081	658
Worry about own mental health (sample restrictions)	0.073	0.077	0.343	168
Worry about own mental health (sample restrictions + controls)	-0.014	0.077	0.852	166
Worry about work/lack of work	0.075	0.054	0.167	658
Worry about work/lack of work (sample restrictions)	0.136	0.071	0.058	168
Worry about work/lack of work (sample restrictions + controls)	0.120	0.076	0.116	166
Worry about legal difficulties	0.120	0.021	0.000	658
Worry about legal difficulties (sample restrictions)	0.129	0.040	0.002	168
Worry about legal difficulties (sample restrictions + controls)	0.125	0.044	0.005	166
Worry about housing	0.107	0.042	0.010	658
Worry about housing (sample restrictions)	0.078	0.063	0.213	168
Worry about housing (sample restrictions + controls)	0.058	0.067	0.386	166
Worry about other	-0.010	0.020	0.638	658
Worry about other (sample restrictions)	-0.013	0.026	0.633	168
Worry about other (sample restrictions + controls)	-0.013	0.029	0.648	166
No worries	-0.100	0.046	0.029	658
No worries (sample restrictions)	-0.051	0.052	0.333	168
No worries (sample restrictions + controls)	-0.026	0.056	0.644	166

Table 11: Effect of seeking formal debt advice on worries about housing: Wave two

Worry about housing, wave two				
Outcome	point estimates	standard error	p-value	N
Worried about becoming homeless	0.052	0.036	0.152	658
Worried about becoming homeless (sample restrictions)	0.008	0.055	0.880	168
Worried about becoming homeless (sample restrictions + controls)	-0.004	0.060	0.942	166
Worried about home being repossessed	-0.027	0.025	0.272	658
Worried about home being repossessed (sample restrictions)	-0.085	0.038	0.026	168
Worried about home being repossessed (sample restrictions + controls)	-0.063	0.041	0.126	166
Worried about being evicted	0.129	0.036	0.000	658
Worried about being evicted (sample restrictions)	0.055	0.062	0.374	168
Worried about being evicted (sample restrictions + controls)	0.051	0.067	0.452	166
Worried about needing to move to cheaper accommodation	0.011	0.038	0.777	658
Worried about needing to move to cheaper accommodation (sample restrictions)	-0.051	0.056	0.361	168
Worried about needing to move to cheaper accommodation (sample restrictions + controls)	-0.008	0.061	0.889	166
Other concerns about housing	0.067	0.042	0.111	658
Other concerns about housing (sample restrictions)	0.067	0.059	0.258	168
Other concerns about housing (sample restrictions + controls)	0.051	0.063	0.419	166
No worries about housing	-0.137	0.056	0.014	658
No worries about housing (sample restrictions)	0.024	0.078	0.761	168
No worries about housing (sample restrictions + controls)	0.012	0.085	0.891	166
Number housing related worries	0.221	0.084	0.009	658
Number housing related worries (sample restrictions)	0.045	0.128	0.723	168
Number housing related worries (sample restrictions + controls)	0.035	0.140	0.802	166

between the incidence of worries about housing and formal debt advice disappears (and often switches sign) when we account for the endogeneity of the act of seeking formal debt advice.

5 Conclusions

Our results suggest a negative selection into formal debt advice: people who do seek formal debt advice are those who experience more financial difficulties and struggle to keep up with bills. We find evidence suggesting that formal debt advice is likely to alleviate these difficulties. For example, seeking formal debt advice is associated with an increased probability of adopting strategies to reduce spending, a decreased probability of unsuccessfully applying for credit, an increased probability of knowing who to contact for help and an understanding of the steps required to reduce over-indebtedness. Perhaps more importantly, we find a positive association between seeking formal debt advice and a better self-reported financial situation, ability to cope with debt, well-being and even physical health. As these associations become stronger when addressing the problem of endogenous selection into formal debt advice, we conclude these effects are likely to be causal. In fact, as we are probably unable to remove all the endogeneity, these results are likely to be the lower bounds of the true causal effects.

The results also highlight that individuals are more likely to see formal debt advice the more worried they are about their financial situation, as well as potentially the greater the severity of their debt problem. That is, an individual's perception of their debt is a significant factor in their decision to seek help. This has been a challenge for debt advice provision, which tries to get people into debt advice as early as possible. Making debt problems more pressing to prompt over-indebted people to act is not a feasible solution; there is evidence that aggressive communications have a detrimental effect on the well-being of debt advice clients who may already be under stress. While regulation changes are happening to further protect people in problem debt, the question remains on how best to persuade individuals to seek debt advice sooner rather than later. Two possible strategies are: i) making people more aware of the benefits of getting debt advice; and ii) providing a financial incentive, such as freezing interest payments on debt for a period if the individual agrees to have formal debt advice (the UK government's 'Breathing Space' initiative is a good example).⁴

⁴<https://www.gov.uk/government/news/breathing-space-to-help-millions-in-debt>.

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A Additional tables

Table A.1: Variables definition: Advice

Variable	Description	Availability	
		W2	W3
Advice			
Advice: past year	Equal to one if respondent has sought advice in the past twelve months, zero otherwise	Yes	No
Advice: Since last interview	Equal to one if respondent has sought advice since last interview, zero otherwise	No	Yes
Advice: online (6 months)	Equal to one if respondent has sought advice online in the past twelve months, zero otherwise	Yes	No
Advice: online (since last interview)	Equal to one if respondent has sought advice online since last interview, zero otherwise	No	Yes

Table A.2: Variables definition

Variable		Description	Availability	
			W2	W3
Debt management				
5	Actions, past year	Equal to one if respondent has done the stated action in the past twelve months, zero otherwise	Yes	No
6	Actions, since last interview	Equal to one if respondent has done the stated action since last interview, zero otherwise	No	Yes
Bills behind				
7	Bills behind	Equal to one if respondent is behind with said bill , zero otherwise	Yes	Yes
Expenditure reducing strategies				
8	Improvements: past month	Equal to one if respondent has made the stated improvement in the previous month, zero otherwise	Yes	No
9	Improvements: Always or often	Equal to one if respondent has made the stated improvement always of often, zero otherwise	No	Yes
10	Improvements, more often	Equal to one if respondent has made the stated improvement more often than 6 months before, zero otherwise	Yes	Yes
Credit access				
11	Credit access	Variable equal to 1 if the respondent has applied for credit in the last six months, zero otherwise	Yes	No
12	Credit access	Equal to one if the respondent has applied for credit and has been rejected in the last six months, zero otherwise	Yes	No
13	Credit access	Equal to one if the respondent has applied for credit and has not been rejected in the last six months, zero otherwise	Yes	No
14	Credit access	Variable equal to 1 if the respondent has applied for credit since last interview, zero otherwise	No	Yes
15	Credit access	Equal to one if the respondent has applied for credit and has been rejected since last interview, zero otherwise	No	Yes
16	Credit access	Equal to one if the respondent has applied for credit and has not been rejected since last interview, zero otherwise	No	Yes
17	Arrears	Equal to one if respondent has fell behind on payments for credit commitments or domestic bills for any three or more months in the previous six months, zero otherwise	Yes	Yes
18	Size of debt	Get the mid points of a variable collected in bands	Yes	Yes
19	Size of arrears	Get the mid points of a variable collected in bands	Yes	Yes
Financial difficulties				
20	Financial difficulties	Equal to one if respondent has experimented the said financial difficulty in the last six months, zero otherwise	Yes	Yes
Financial outlook and attitudes to debt				
21	Financial satisfaction	Equal to one if financial satisfaction is better than six months ago, zero otherwise.	Yes	No
21	Financial satisfaction	Equal to one if financial satisfaction is better than at the time of last interview, zero otherwise.	No	Yes
22	Debt burden	Equal to one if respondents says debt is a heavy burden, zero otherwise	Yes	Yes
23	Debt burden (frequency)	Equal to one if respondents says debt was heavy burden all the times or most times in the last twelve months, zero otherwise	Yes	No
24	Debt burden (frequency)	Equal to one if respondents says debt was heavy burden all the times or most times in the time since last interview, zero otherwise	No	Yes
25	Financial stress	Equal to 1 if respondent finds if difficult to manage financial stress, zero otherwise	Yes	Yes
26	Better Outlook	Equal to one if better outlook in a year's time, zero otherwise	Yes	Yes
27	More in control over debt	Equal to one if respondent feels more in control than six months ago, zero otherwise	Yes	No
28	More in control over debt	Equal to one if respondent feels more in control than the time of last interview, zero otherwise	Yes	No
29	In control of finances	Equal to one if respondent agrees or strongly agrees they feel in control of finances, zero otherwise	Yes	Yes
30	Debt manageable	Equal to one if respondent agrees or strongly agrees their debt feels manageable, zero otherwise	Yes	Yes
31	Know who to contact	Equal to one if respondent agrees or strongly agrees they know who to contact, zero otherwise	Yes	Yes
32	Follow household montly budget	Equal to one if respondent agrees or strongly agrees they follow a household monthly budget, zero otherwise	Yes	Yes
33	Very organized	Equal to one if respondent agrees or strongly agrees they are very organized in day-to day money management, zero otherwise	Yes	Yes
34	Precautionary savings	Equal to one if respondent agrees or strongly agrees they save for rainy days, zero otherwise	Yes	Yes
Understanding				
35	Understanding	Equal to one if respondent understands the said step, zero otherwise	Yes	Yes

Table A.3: Variables definition: Well-being and health

Variable	Description	Availability	
		W2	W3
Well-being and health			
36 Well-being	ONS Wellbeing question: satisfaction 10 points scale	Yes	Yes
37 Well-being	ONS Wellbeing question: life worthwhile 10 points scale	Yes	Yes
38 Well-being	ONS Wellbeing question: happiness 10 points scale	Yes	Yes
39 Well-being	ONS Wellbeing question: anxiety 10 points scale	Yes	Yes
Worries			
40 worry, past 6 months	Equal to one if the respondents has worried about the item in the previous 6 months, zero otherwise	Yes	No
41 worry, since last interview	Equal to one if the respondents has worried about the item since last interview, zero otherwise	No	Yes
42 concerns about housing in the past 12 months	Equal to one if the respondent was concerned about the item in the previous 6 months, zero otherwise	Yes	No
43 concerns about housing since last interview	Equal to one if the respondent was concerned about the item since last interview, zero otherwise	No	Yes