The Economic Impact of Debt Advice

A Report for the Money Advice Service

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Executive Summary

Introduction

The Money Advice Service is an independent service, with statutory objectives to 'enhance the understanding and knowledge of members of the public about financial matters (including the UK financial system), and to enhance the ability of members of the public to manage their own financial affairs'. It has a statutory role to co-ordinate delivery of debt advice in the UK, which includes the provision of grant-funding to advice organisations and research work. The Money Advice Service seeks to understand the economic impact of debt advice. In this context Europe Economics, an independent micro-economics consultancy, developed this analysis.[1]

Baker Tilly's research, "Transforming Lives", which was published by StepChange,[2] broke new ground in analysing the social impact that debt advice can have. Following on from this work, we analysed the existing literature on the impact of indebtedness and unmanageable debt, and the social and economic impact that debt advice can have. In parallel to our work, bespoke consumer research was commissioned by the Money Advice Service from YouGov (the YouGov survey). Europe Economics collaborated with the Money Advice Service and YouGov in the design of the questionnaire. Our analysis of these data fed into our work.

Economic impacts of debt advice

Debt advice has a positive impact on an individual's financial difficulties, but also on many other aspects of life. We summarise below all the economic impacts of debt advice that we identified.

Our research compares the experience of debt advice seekers with a counterfactual comprised of indebted individuals who have not sought advice. This approach enables a robust isolation of advice's economic impact. We have quantified impacts only where we had robust and reliable evidence to do so, e.g. because the dataset available to us had sufficient numbers having characteristics specifically relevant to the impact in question (or to robustly show that such effects were absent). This means that our study underestimates the total economic impact that debt advice has. We identify these areas in our study and we also identify possible avenues for future research that could help complete the analysis of debt advice's impact.

We start with those impact areas where the evidence is clearest.

Improved mental and physical well-being

Debt advice has a direct, beneficial social impact on health through improving the state experienced by those suffering from particular health conditions and, in doing so, alleviating part of the service costs incurred by the health system. We were able to estimate from the YouGov Survey how advice had beneficial impacts upon the incidence of depression, anxiety and panic attacks. Combing these impacts with estimates of the healthcare system costs of treating these conditions and the scale of the advised over-indebted population indicate that the benefit in terms of reduced mental health care costs due to debt advice is between £50 and £93 million per annum.

Debt advice, by reducing the incidence of mental health problems, also improves individuals' quality of life. An episode of a psychiatric disorder such as a major depressive disorder, dysthymia, social phobia or generalised anxiety disorder will lead to a negative quality-adjusted life year (QALY) impact. Using £20,000

[1] See http://www.europe-economics.com/.

[2] Clifford, J. Ward, K. Coram, R. and Ross, C. (2014) "StepChange Debt Charity: Social Impact Evaluation of certain projects using Social Return on Investment" StepChange Debt Charity.

as the monetary value of a QALY,[3] we estimate that avoiding an episode related to depression or anxiety would have a QALY impact of £600–£800 per person. This equates to £24–£52 million per annum of additional social benefit.

Improved productivity

Financial distress is a significant cause of lowered productivity in the UK, either through absenteeism- or presenteeism-based effects. How resolving those financial difficulties (e.g. through advice) can lead to a recovery in productivity is less clear. Whilst such a recovery seems a reasonable inference to draw, the evidence in support of this proposition is more limited. We took the mental well-being improvements identified in our work as a proxy for relief of the 'stress' that would be sufficient to cause employment-related issues, and used this to estimate the productivity gain associated with receiving debt advice. Using past estimates of the cost of the absenteeism and presenteeism, and bearing in mind the lower employment rate amongst over-indebted people relative to the UK population,[4] the annual loss of absenteeism and presenteeism avoided due to the provision of debt advice is estimated at £67–£137 million per annum.

Work-related problems may prompt advice-seeking. Equally, it may be that seeking advice and the advice process act as a short-term source of stress. In other words, admitting to the severity of the situation and taking action to deal with debt problems could — temporarily at least — be more stressful than a 'coping' strategy based around ignoring them. The primary research shows that the advised are more likely to have experienced work-related problems, which are possibly induced by this stress. In turn, this would mean that any positive effects of advice on employment take time to appear — or that factors (other than debt intensity, etc.) are resulting in differences between the advised and unadvised sub-populations in the primary research.

Future research would benefit from enabling more clearly the assessment of "before and after" advice effects on the over-indebted. Ideally, in order to truly capture such impacts one would need to follow a consistent group of individuals in real-time, including both advice-seekers and non-seekers. The possibility of lagging effects of debt advice suggests a long-term horizon as a necessary condition for such research.

Improved creditor recovery and more efficient recovery processes

Debt advice can have a beneficial impact on creditors through improving the recovery rate on problem debt and also by lowering the costs to creditors of pursuing debtors. The estimated present value of the benefit per debt management plan (DMP) is £2,020–£3,670 and in an insolvency solution is £1,760–£2,610 (being both the additional recovery of debts by creditors and also savings in the cost of recovery). We estimate that around 84–123,000 DMPs were started in 2016 and that around 56,000 people started an Individual Voluntary Arrangement (IVA) or Trust Deed. We used these data to estimate that the per annum benefit associated with receiving debt advice is around £268–£596 million per annum in additional creditor recovery and reduced costs. DMPs and insolvency solutions such as IVAs and Trust Deeds are the only solutions with sufficient data to allow robust estimation. Therefore, given that other debt solutions also exist, our estimate must be an underestimate of this impact.

On the other hand, the benefits arising for creditors are not purely social benefits (as is the case with the other impact areas). In fact, more than half of the creditor's benefit arises from debtors making additional payments, i.e. these are simply transfers between parties. They should be treated differently to, say, benefits arising from advised individuals experiencing mental health improvements. The exception to this is the share that arises due to decreased recovery costs since this does not take place through an implicit transfer payment from the debtors to the creditors. These latter benefits still amount to be £135–237 million. It is

[3] Phillips, C. (2009) "What is a QALY?"

[4] The percentage of respondents in full- or part-time employment was 59 per cent for the unadvised and 63 per cent for the advised. This difference is statistically significant at the one per cent level. The employment rate at the time the survey was undertaken was 74.2 per cent.

worth stressing that this estimate incorporates a number of assumptions due to being built upon limited data. The breadth of the estimate highlights this uncertainty.

Reduced risk of entry to further debt cycles

Borrowers can become trapped in debt. One identifiable benefit of advice is to reduce the risk of borrowers entering further debt cycles, i.e. how advice impacts upon the 'recycling' of debt episodes. However, debt advice might only be deferring debt recycling rather than preventing it. The primary research was not helpful here, lacking sufficient time dimension to explore this beyond the pre-existing literature. For the quantified estimates of the benefits of debt advice we drew on the approach adopted in past research but using the impacts estimated for this study. We estimate the social impact for the debt advised due to deferring the entry of a second debt cycle to be in the range if £25-48 million (being split £13–26 million for consumers, and £12–22 million for creditors). The impact upon the transfer payments between creditors and debtors will also be non-trivial, albeit not a social benefit. We estimate this as £12–£32 million.

Other potential impacts of debt advice

As we have noted, there are many impact areas where the economic benefits are less clear or currently less well-evidenced. We now discuss these.

Impact on small business

The self-employed can sometimes inter-mingle their business and personal affairs, e.g. using personal borrowing to fund the former. Advice promotes individual well-being and can be expected to promote business continuity. However, we are not able to quantify robustly the scale of the business continuity effect. Research to date in this area has either lacked an appropriate counterfactual or — as with the primary research connected with this study — indicate that advice is being sought too late, i.e. in a "last resort" manner when an individual is facing substantial problems.

Further research could specify an appropriate control group, i.e. as with our study, but with more focus on the self-employed in order to generate larger sample sizes, and hence more robust results — ideally this would be on a longitudinal basis.

Improvements in family relationships

A link between financial difficulties and relationship breakdown is strongly supported by the literature and the primary research. But the evidence for debt advice helping to resolve such relationship difficulties is less strong. The key issue is one of the timing of the advice in terms of the breakdown of the relationship. Indeed, separation from a partner can cause indebtedness and it has been argued that such an event can act as a trigger for seeking advice. The primary research is consistent with this view, revealing an association between advice seeking and the presence of relationship problems.

Parental disengagement can have very serious implications for the future welfare, well-being and success of children. The disentanglement of indebtedness from other drivers is not straightforward, and the evidence base linking debt advice, and its ability to resolve such issues, is limited.

Relationships, once damaged, can be extremely difficult to repair — more so indeed than one's financial situation. Our conclusion is that a beneficial impact of debt advice on restoring any such damaged relationships remains unproven. Indeed, any potential link between debt advice resolving, at least partly, someone's financial difficulties and reducing relationship breakdown has not yet been robustly demonstrated, i.e. the advice may simply come too late.

Impact on reduced risk of homelessness

People with unmanageable debt are more vulnerable to losing their home either directly (e.g. through repossession) or indirectly (lacking the reserves to respond to changes in situations such as being dismissed from work or reductions in their income). As with some other impact areas it is difficult to disentangle debt

advice from other explanatory (i.e. confounding) factors and to distinguish cause and effect (i.e. reverse causality) where the onset of a problem may prompt advice-seeking. Advice cannot then prevent that problem, although it could help ameliorate its impact.

We found robust evidence for advice making a difference here to be in short supply. The supporting evidence is often drawn from studies based on a handful of interviews. However, stakeholders identified late stage debt advice as being potentially highly beneficial. This might be timed around the date set for a court hearing and, aside from the potential for avoiding housing issues, court time could also be saved. Whilst the primary research does not contribute significantly to the evidence base, intriguingly it does show that those individuals with more intensive (i.e. high) advisor involvement in the debt advice process were less likely to have had their home repossessed, and less likely to have moved to a cheaper home, compared to those with low advisor involvement. This suggests that at least a sub-group of the advised could be benefitting from increased involvement of the advisers. It is also consistent with the idea that the onset of housing problems could trigger seeking advice and that — likely because it is done too late — only very intensive engagement by the adviser is likely to make a difference. Whilst this is very interesting, it is not clear from the data available to us whether this sub-group were facing more or less severe housing problems before seeking advice than the rest of the advised (or even the unadvised). We are not therefore able to estimate a quantitative effect robustly. As with other areas, future research into "before and after" effects over a long-term horizon would be beneficial.

Impact on timing of care home entry

One further idea is debt advice could result in delayed entry into a care home, which would materialise through the avoidance of mental and physical health deterioration. We have not found evidence to support this idea. Indeed, the view of a relevant stakeholder is that the likelihood of the posited effect "seems remote", i.e. compelling new research would be necessary to support this impact. Additional hypothesized benefits for the elderly (such as on mental health) have been covered as parts of other impact areas.

Impact on desperation crime

We know that only a fraction (less than one in five) of those with unmanageable debt seek advice. Desperation crime could be acting as an alternative coping strategy for some affected individuals. Several studies confirm a link between poverty and petty crime but the evidence in the literature establishing a discrete, direct link between indebtedness and petty crime is weak. No link between advice, in particular, and petty crime (or its avoidance) has been shown. The evidence base does not support an unambiguous identification of an impact. Crime is a highly sensitive area to explore, and to identify a link with advice would further require access to highly confidential records, i.e. the names of the advised, to enable links to be made to crime reports.

Recovery in credit access

Consumers' credit ratings can have a significant impact on their choice of credit products. The impact of debt advice in this area may not be immediately beneficial to consumers and might even result in initial negative shocks, i.e. a further reduction in credit score compared to not receiving debt advice, if it leads to, say, a DMP. Taking such steps could later translate into quicker and/or more effective post-advice recovery compared to not receiving advice. This ambiguity makes it particularly difficult to model the impact area robustly.

This area is hard to explore through primary research as the credit scores provided by credit reference agencies would be key to any such analysis, but are still largely unknown by consumers. An ideally configured empirical research project would examine the relationship between debts (including loan pricing) and credit scores over time dependant on different courses of action. This would require matching such credit scores (typically a non-public resource, although this is changing) and panel data on a cohort of over-indebted people. Whilst this would be a non-trivial task given the requirement to source highly confidential data from multiple sources (credit reference data do not reflect whether someone sought debt advice per se), it could reveal a

substantial additional benefit from earlier recovery in credit access for those individuals going through the debt advice process.

The role of the credit cycle

Debt becoming burdensome or unmanageable does not follow a simple relation to either outstanding credit levels or even to aggregate levels of problem debt (i.e. debts written off, or in arrears). The ways in which the credit and economic cycles impact upon over-indebtedness (and hence the need for advice amongst the indebted population) are complex as there are interactions between excessive optimism amongst both consumers and creditors as the economy grows, and income shocks for borrowers and deleveraging by creditors in a contraction. The direct evidence for the cycle affecting the benefits attributable to advice is weak, but that the employment effects would change is at least plausible. There are ways in which further research could help unpick some of this complexity, particularly, as with many of the impacts, if the conducted research had a time series component.

Summary

We have found sufficient evidence to quantify robustly various impacts we believe may be associated with debt advice provision. The aggregated social gain, excluding transfer payments between debtors and creditors, would then be £301–568 million. These estimates are summarised in the following table.

Table 0.1: Estimated impacts

Impact area	Low end of impact range (in £ millions)	High end of impact range (in £ millions)
Mental health	74	145
Employment and productivity	67	137
Debt recycling — consumer impacts	13	26
Consumer benefits	**154**	**307**
Creditor recovery	268	596
Debt recycling — creditor impacts	24	54
Creditor benefits before transfer payments	292	651
Of which transfer payments	*(144)*	*(390)*
Creditor benefits	**147**	**261**
Total social gain excluding transfer payments	**301**	**568**

Note: Total social gains are calculated as the sum of consumer and creditor impacts subtracting transfer payments.

As discussed above, there are other impacts for which the data available to us were not sufficient to allow quantification, i.e. our study underestimates the total economic impact that debt advice has.

1 Introduction

The Money Advice Service is an independent service, with statutory objectives to 'enhance the understanding and knowledge of members of the public about financial matters (including the UK financial system), and to enhance the ability of members of the public to manage their own financial affairs'. It has a statutory role to co-ordinate delivery of debt advice in the UK. This includes the provision of grant-funding to advice organisations and research work. As part of its research, the Money Advice Service sought to understand the economic impact of debt advice. Europe Economics, an independent micro-economics consultancy, developed this analysis, which is presented in this report.[5]

1.1 Structure of this report

This study aims to enhance the understanding of the Money Advice Service, and also relevant stakeholders, into what the impacts of debt advice are, what drives these impacts, and what their scale is. Our report:

- Presents background information on debt advice, the different types of debt solutions and presents an overview of the debt advice domain. This is set out at Chapter 2.
- Chapter 3 sets out the methodology adopted in this study. This summarises the impact areas of interest, the different research strands that we adopted, and how we approached the modelling of impacts where robust data were available.
- In order to complement existing research on indebtedness and debt advice, a consumer survey was commissioned by the Money Advice Service in parallel with our work. We were responsible for the design of this survey, with contributions from YouGov and the Money Advice Service. About 3,800 indebted individuals completed the survey, approximately split evenly between those who had sought advice in the previous two years and those who had not. At Chapter 4 we briefly describe the survey's results.[6]
- Chapter 5 describes the insights gained from stakeholders, the secondary research and, where applicable, the consumer research. These insights underpin our assessment of the economic impacts of debt advice. These impacts are described qualitatively and also quantitatively, where the evidence is robust and unambiguous. We also identify possible avenues for additional research to clarify various remaining areas of uncertainty.

Alongside the primary research commissioned in parallel with this study, we have conducted an extensive review of the literature related to the impacts of both indebtedness and debt advice. A bibliography listing these reference works is in the appendix at Chapter 6. At Chapter 7 we provide additional information on the statistical models adopted to analyse the data generated by the primary research.

[5] See http://www.europe-economics.com/.

[6] YouGov SROI Survey data (2016).

2 Background

This section presents the current state, and the underlying trends, observed in the personal debt advice sector in the UK. We begin with an introduction to the potential problems and adverse consequences associated with personal debt — or at least being over-indebted — and hence the importance of debt advice.

2.1 Debt and indebtedness

Personal debt has a positive economic role in smoothing consumption over an individual's lifetime (e.g. borrowing to finance current consumption based upon an expectation of a higher expected income in the future), funding investment (e.g. in a university education), and in meeting unplanned expenditures.

There are different types of personal debt that can broadly be categorised into the three following types:

- Mortgage debt.
- Consumer debt — credit card debt; overdrafts, personal loans, payday loans etc.
- 'Cost of living' debt — utility bills, rent, council tax and water.

Personal debt has risen significantly in the UK, amounting to £1.52 trillion at the end of January 2017. This is up from £1.46 trillion at the end of January 2016. The average total debt (including mortgages) was about £28,400 per adult, an increase per adult of about £800 over the situation of a year before.[7] Average outstanding debts are above average earnings.[8]

The vast majority of personal debt relates to mortgages. The overall value of outstanding residential loans amounted £1,330 billion at the end of January 2017, an increase of 2.7 per cent over the position in January 2016.[9]

A particular concern for policymakers has been the increase in non-mortgage consumer debt. These loans are often unsecured and can be associated with high interest rates. These debts are considered most at risk of spiralling out of the borrower's control and hence enter into a 'vicious circle',[10] where the debt becomes unmanageably high. Outstanding consumer credit at January 2017 was £194 billion, 7.6 per cent above the level in January 2016. Quoted interest rates on new personal credit have declined substantially in the past few years and were at historic lows in Q4 2016.[11]

Debt advice can help people engage in solutions to resolve their debt problems and help them avoid illegal moneylenders that would further worsen the situation. Previous research has also recognised other potential beneficial impacts of debt advice as a result of resolving unmanageable debt situations.[12] The negative impacts of being over-indebted can extend far beyond monetary consequences. These have been claimed to include

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7 This calculation references the Office of National Statistics' population estimates, using its estimates of the population aged 16 and above for the relevant years, increasing the latest available mid-year estimate in line with population growth to estimate the adult population at January 2017.

8 The Money Charity (2016) "The Money Statistics".

9 These data are from the Bank of England's Table 5.2 (Seasonally Adjusted).

10 The Centre for Social Justice (2013) "Maxed out. Serious personal debt in Britain" A policy report by the CSJ Working Group.

11 Bank of England (2017) "Credit Conditions Review Q4 2016".

12 See for example: Clifford et al. (2014); Financial Conduct Authority (2014) "Consumer credit and consumers in vulnerable circumstances"; Wells, J., Leston, J. and Gostelow, M. (2010) "The Impact of Independent Debt Advice Services on the UK Credit Industry" Friends Provident Foundation; and YouGov (2012) "Money Advice Service: Final Report".

effects on mental and physical health, relationship and family stability, employment prospects and crime rates etc.[13] Turley and White (2007) concluded that desperation was a significant motivating factor for seeking advice, and this was a result of the culmination of the impacts of being over-indebted. The impacts of debt advice were identified as threefold:[14]

> "Where sought, advice was clearly having a very beneficial impact on respondents' emotional outlook. Receiving advice also had helped increase levels of knowledge and confidence about how to tackle a debt problem, and respondents felt better equipped to negotiate with creditors alone. Seeking advice had also importantly improved a respondent's financial situation by helping to calculate realistic and affordable payment plans."

The Money Advice Service recently estimated that the UK has approximately 8.3 million over-indebted individuals. Whilst all these people could have benefitted from debt advice, the most recent data suggest that only 21 per cent sought any form of debt advice.[15]

2.2 What is debt advice

This section introduces the services provided by debt management companies (DMC) and provides an overview of the most common debt solutions that are available to indebted individuals in the UK.

Three different debt advice service models can be distinguished, namely:[16]

- self-help;
- assisted self-help; and
- full assistance.

Table 2.1 summarises the type of debtor and type of advice that is associated with each of the above service models.

Table 2.1: Debt advice service model

Service models	Type of debtor	Type of advice
Self-help	Can deal with creditors and capable of repaying debt	Provision of information
Assisted self-help	Can deal with creditors	Provision of more suitable information after interview with debtor
Full assistance	Not financially confident or more complex debt problems	Typically advised face-to-face and given support to negotiate with creditors

Source: Wells et al. (2010).

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[13] Clifford et al. (2014).

[14] Turley, C. and White, C. (2007) "Assessing the impact of advice for people with debt problems" Briefing Paper, London: Legal Services Research Centre.

[15] Money Advice Service and CACI (2017) "A Picture of Over-Indebtedness". MAS conducted 19,937 interviews on an online omnibus survey representative of the UK adult (aged 18+) population in June and July 2017. About 13.6 per cent of the over-indebted population and 1.2 per cent of the not-over-indebted population were found to have sought advice in the last year. Proportions were applied to robust 2016 CACI models calculating the total number over-indebted adults in the UK, equating to 21 per cent.

[16] Wells et al. (2010).

The main channels for delivery of advice are face-to-face, by telephone and online. Although there is no established interaction between the debt advice models and the different delivery channels of debt advice,[17] it can be supposed that online advice has an association with 'self-help' whereas face-to-face advice may imply greater adviser involvement.

Online and telephone-provided advice are becoming more common as channels of delivery. This development has been supported by the introduction of new tools. For example, the StepChange Debt Charity (StepChange) uses an online tool, 'Debt Remedy', which is provided to its clients. It allows StepChange's clients to anonymously input their information online and receive advice from StepChange debt advisers.[18] Similarly, 'My Money Steps' is a comprehensive tool used by the National Debt Line.[19] The Debt Advice Foundation has also developed a range of free tools and guides on how to manage money more effectively and to calculate the extent of debt problems.[20]

Debt advice seekers can have multiple debts.[21] Understanding the complexity of a client's debt is vital so as advisers can help their clients more efficiently. There are several methods available to resolve different debt situations that affected individuals are experiencing. These can be classified into formal and informal debt solutions. Informal debt solutions provide means for debtors and creditors to reach an agreement and are not legally binding, nor do they guarantee cessation or enforcement actions.[22] These solutions include:

- Debt management plan (DMP).
- Token Payment Plan (TPP).
- Debt consolidation.
- Debt write-off.
- Informal arrangements with creditors.
- Full and final settlement of debts.

The formal solutions vary between Scotland on the one hand and England, Wales and Northern Ireland on the other. The formal insolvency solutions are:

- Bankruptcy in England, Wales and Northern Ireland, a similar solution is sequestration in Scotland.
- Debt Relief Order in England, Wales and Northern Ireland (DRO), a similar solution is the Minimal Asset Process (MAP) bankruptcy in Scotland;
- Individual Voluntary Arrangement in England, Wales and Northern Ireland (IVA), a similar solution is the Trust Deeds in Scotland;
- Administration Order (AO); and
- Debt Arrangement Scheme (DAS), available only in Scotland.

These informal and formal debt solutions are described further in the following section.

2.3 Different types of debt solutions

This section explains the requirements and functions of the formal and informal debt solutions available in the UK. In 2016 there were an estimated 90,930 individual insolvencies in England and Wales. The most common type was IVAs (about 55 per cent) followed by DROs (29 per cent), with bankruptcy orders being

[17] London Economics (2012) "Debt advice in the UK: A final report" for the Money Advice Service.

[18] http://www.stepchange.org/DebtRemedy.aspx.

[19] https://www.mymoneysteps.org/.

[20] http://www.debtadvicefoundation.org/debt-tools.

[21] Arrangement such as mortgage debt; consumer debt - credit card debt; overdrafts, personal loans, payday loans etc.; and cost of living — utility bills, rent, council tax and water.

[22] ICF (2017) "Review of the Literature concerning the Effectiveness of Current Debt Solutions. Final Report for the Money Advice Service".

the balance (i.e. 16 per cent). Bankruptcy's share has been declining for several years (such orders represented about 29 per cent of individual insolvencies in England and Wales in 2012). In Northern Ireland there were in about 2500 individual insolvencies in 2016. IVAs were the most prominent form (about 47 per cent), followed by bankruptcies (about 38 per cent) and then DROs (about 15 per cent of the total).[23] Although the legislation in Northern Ireland is very similar to that in England and Wales, it can be seen that the frequency of different forms of insolvency does differ with bankruptcy being relatively more common as the form insolvency takes in the former.

Scotland had a total of around 9,700 individual insolvencies in 2016.[24] Trust Deeds represented about 55 per cent of this total, with the balance being sequestration (awards of bankruptcy). Within sequestrations, about 42 per cent were in the MAP format (MAP replaced LILA, or Low Income, Low Assets, in 2015). A description of some of the most common debt solutions is presented in Table 2.2.

[23] Insolvency Service (2017) "Statistics release: Insolvency Statistics October–December 2016". Accessed via: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/586287/Q4_2016_statistics_release_-_commentary.pdf.

[24] Accountant in Bankruptcy, Quarterly Scottish Insolvency Statistics, summing across Q4 of 2015–16 and Q1–3, 2016–17. Accessed via: https://www.aib.gov.uk/quarterly-scottish-insolvency-statistics-october-december-2016.

Table 2.2: Debt solutions

Debt Solutions	Description
Administration Order (except Scotland)	Court order covering all outstanding debts with regular payments to the court made every month, which are then court distributed on a basis decided by the court. The remaining debts are written off after three years. Application requires at least one country court judgement to have been issued, less than £5,000 in debt and at least two creditors.
Debt Relief Order (Minimal Asset Process Bankruptcy in Scotland)	Creditors are prevented from recovering debts for 12 months unless permission is granted. The remaining debt is written off after 12 months unless circumstances have changed. Solution for low-income debtor with low assets and less than £20,000 in debt. Legally binding arrangement delivered in partnership with debt advisor.
Individual Voluntary Arrangement (UK except Scotland)	Creditors receive a reduced payment arrangement for a set period of time (normally five years), with payments made by debtor to insolvency practitioner who makes payments to creditors. The remaining debt is then written off. Debts must be above £10,000. Legally binding, proposal submitted by debtor to creditors, requiring 75 per cent approval.
Trust Deeds (Scotland only)	All or part of debtors' assets are transferred to trust, where managed by trustee for benefit of creditors. Debtor makes monthly payments for distribution to creditors. Lasts at least four years, with any money still outstanding at end then written off. Only unsecured debts qualify. An insolvency practitioner must be involved to draw up proposal and submit to creditors for approval.
Bankruptcy **(in Scotland this is termed Sequestration)**	Public official (a trustee) takes control over debtor's assets and can sell or use them to repay liabilities. The debtor is restricted from certain activities during the period. Debts are written off at end of set period (normally one year). Voluntary and involuntary declaration of bankruptcy exists where the court is officially responsible to make the bankruptcy order.
Debt Arrangement Scheme (Scotland only)	Government-run debt management tool. Regular payments are made to a payment distributor, the latter then paying out to creditors. Mostly unsecured debts. Debtor must be willing to repay debts, have surplus income and use recognised adviser.
Debt Management Plan	Creditors are asked to accept lower payments and make other concessions such as freezing interest payments etc. A monthly payment is made to the debt management provider who distributes it between creditors. The arrangement is not legally binding but requires a debt management provider.
Token Payment Plan	Short term agreement (say one year) after debtor's situation is subject to change. Token payment often set at £1 per month. Debtors need to request TPP from creditors. The agreement is not legally binding.
Debt consolidation	Refinancing option, effected through financial services firms. Debtors need to make request to creditors, who can refuse. The agreement is not legally binding.
Debt write-off	Partial or total write-off of debts. Debtors need to request write-off from creditors, who can refuse. The agreement is not legally binding.
Informal arrangements with creditors	Debtors request lower or slower repayment profile. Debtors need to make request to creditors, who can refuse. The agreement is not legally binding.
Full and final settlement of debts	A lump sum payment (at or below the level of outstanding debts) is by mutual agreement full and final settlement of outstanding debts due. Debtors need to make request to creditors, who can refuse. The agreement is not legally binding unless agreed by all parties to be so.

Sources: ICF (2017) "Review of the literature concerning the Effectiveness of Current Debt Solutions", Insolvency Service, and Accountant in Bankruptcy.

2.4 Debt advice provision

This section focuses on the key players within the debt advice service market and the division of the market between different types of players.

Debt advice providers consist of both fee-charging companies and free-to-client debt advisors. These offer a variety of debt solutions, through different channels. The free-to-client debt providers can be either funded by public bodies or by the private sector. The publicly funded debt advisors include Citizen Advice Bureaux (CAB) and the privately funded advisors include StepChange Debt Charity (StepChange), National Debtline, Payplan and Christians Against Poverty (CAP).

Fee-charging companies can be broken down as:[25]

- large and well-established organisations (e.g. The Paymex Group) that are typically members of a trade association;
- smaller or newer organisations; and
- claims management companies.

Claims management companies are a relatively new type of actor in the market for debt advice. Smaller fee-paid debt management companies and claims management companies have been subject to criticism in the past for poor customer service and for not acting in interest of their clients or creditors.[26] Regulatory action by the Financial Conduct Authority is seeking to remedy these defects, for example the Financial Conduct Authority refused authorisation to a large debt management firm which had more than 16,000 customers.[27]

Collard (2009) identified over 150 companies that offered DMPs for a fee, where approximately 130 of these were direct providers of DMPs as opposed to brokers or introducers to fee-charging DMCs.[28] Grant Thornton (2012), the Debt Managers Standards Association (DEMSA),[29] and industry experts estimated the number of DMCs in the industry to range between 300 and 350 in 2012.[30]

The Financial Conduct Authority has estimated that there are around 460,000 active DMPs across the commercial and not-for-profit sectors. The FCA estimates that these are split approximately 59 per cent in the free-to-client sector, with the balance involving fee-paying debt management firms. Insolvency Service Statistics show that in 2016, that there were over 100,000 individual insolvencies. IVAs and Trust Deeds were the most common form, with about 56,000 recorded in 2016. There were 28,000 DROs and MAP sequestrations. The balance, 19,000, came in personal bankruptcies and (non-MAP) sequestrations.[31]

[25] Wells et al. (2010).
[26] Wells et al. (2010).
[27] Financial Conduct Authority (2016) "Latest Consumers Firms Warnings - Helping consumers with debt management plans" Press Release, Published: 13/01/2016. See http://www.fca.org.uk/news/consumers/helping-consumers-with-debt-management-plans and Financial Conduct Authority "FCA contacting 16,000 customers of debt management firm, PDHL" Press Release, Published: 10/03/2016. http://www.fca.org.uk/news/fca-contacting-16000-customers-of-debt-management-firm-pdhl.
[28] Collard (2009).
[29] See http://www.demsa.co.uk/members/.
[30] Grant Thornton (2012) "Fee Charging Debt Management Market Assessment" A report commissioned by Debt Managers Standards Association.
[31] ONS Insolvency Statistics Q4 2016.

3 Methodology

3.1 Defining potential impact areas

We identified twelve impact areas that are considered within this study. The identification process involved a careful review of the seminal work in this field, by Clifford et al. (2014), which had previously identified several impact areas. This was complemented by extensive desk-based research in order to conclude on the impact areas to be considered, such as Turley and White (2007), Balmer et al. (2006) and Pleasence et al. (2007). As a result of the secondary research we determined the list of impact areas below, all of which — with the exception of impact on recovery in credit access and the effects of credit cycles — were also included in Clifford et al. (2014). The impact areas of interest are presented below:

1. Improved mental and physical health.
2. Impact on employment and productivity.
3. Impact on small businesses.
4. Impact on relationships with family and friends.
5. Impact on children.
6. Impact on the risk of losing home.
7. Impact on elderly (care home entry).
8. Impact on desperation crime.
9. Impact on future credit access.
10. Impact on creditor recovery.
11. Impact on risk of further debt cycles.
12. The impact of credit cycles.

We consider each impact area in detail in Chapter 5, where we discuss:

- past research in each area;
- the rationale for analysing them in the context of debt advice; and
- the anticipated impact of debt advice based upon our analysis of both the previous research and also on our own findings that draw, inter alia, on our analysis of the primary research conducted by YouGov.

3.2 Data

We have engaged in several steps in order to gather data for the analysis of different impact areas. These steps include:

- secondary research;
- stakeholder engagement; and
- primary research.

The insights gained from the secondary research are presented in Chapter 5 for each impact area separately along with any insights gained from our stakeholder engagement. The primary research consisted of a consumer survey of about 3,800 indebted individuals. We led the design of the questionnaire, in conjunction with the Money Advice Service and YouGov, with YouGov having responsibility for conducting the survey itself. The data gathering methods are presented in more detail in the subsequent sections.

3.2.1 Secondary research

Our review of the available literature was broken down into parts:

- first we considered academic literature and consultancy reports; and
- second, we examined the emergent thinking at relevant organisations, regulators and international bodies.

The key functions of this review were:

- To ensure that we have an up-to-date mastery of the relevant literature and sources including academic (both theoretical and empirical) and consultancy studies.
- Inform our view of the potential impacts of being over-indebted.
- Inform our views of the potential benefits of debt advice.
- Identify available data for estimating impacts of debt advice in the identified impact areas.
- Inform our views of what information that is missing in the secondary research and needs to be included in the primary research.
- Inform our understanding of the market environment and demand for debt advice.

We also sought to establish the extent to which existing research has progressed towards identifying relationships between impact areas, being indebted and receiving debt advice, as well as to identify any contradictions, gaps, and inconsistencies in the literature, and explore reasons for these. The full list of the literature we reviewed is presented in Chapter 6 and a summary of our findings is incorporated into each of the impact areas in Chapter 5.

3.2.2 Stakeholder engagement

We contacted several stakeholders in order to gain insight from their expertise across the different impact areas and to explore data availability. In particular, we engaged stakeholders in those areas where the available research was most limited to make them aware of our work and inquire about their willingness to participate. The associations and organisation that we spoke to includes:

- StepChange Debt Charity;
- Employment Related Service Association;
- Business Debtline;
- The Finance & Leasing Association;
- Age UK;
- Children's Society; and
- Experian.

These stakeholders provided us with qualitative views on the impact and effectiveness of debt advice and assisted us in the identification of data-sources and other potentially relevant stakeholders. We have also included a direct quote from one stakeholder regarding the impact on the elderly.

However, the stakeholders were not in a position to provide any additional robust evidence on the possible impacts of debt advice on areas such as children's health, the risk of being taken into care or on the effects on being able to find new employment.

3.2.3 Primary research

In parallel with this study, bespoke consumer research was commissioned by the Money Advice Service to support our research aims. This was intended to complement pre-existing research, offering in particular an opportunity to identify impacts that related to the provision of advice itself — rather than simply assuming that by resolving (or at least reducing) indebtedness advice would axiomatically reduce negative consequences associated with being indebted. Data were gathered on the incidence of various problems that the surveyed

over-indebted people might have faced, both in more recent times and in the past. Respondents were asked whether they have experienced a problem, at the time of answering or in the past, i.e. before and after their financial difficulties.

There were some impact areas that were not suitable for being included in the primary research for reasons that are presented below. These areas were:

- Impact on the elderly's entry to care homes.
- Desperation crime.
- Recovery in credit access (using credit scores as a proxy).
- Impact on creditor recovery.
- Likelihood of a further debt cycle.
- Impact of credit cycles.

Credit scores are not suitable for exploration through primary research as the credit scores provided by credit reference agencies are unknown (or at least not generally well known) by consumers. For similar reasons, we excluded care home entry, creditor recovery and debt recycling impact areas from the consumer research, as consumers are unlikely to have the information needed to provide a robust answer. However, data from the primary research was ultimately used to support the impact estimates for creditor recovery as well as further debt cycles even though these impact areas were not explicitly covered by targeted questions. Likewise, it is extremely difficult to collect reliable data on sensitive matters such as crime from the potential perpetrators. We instead engaged exclusively with the secondary research and stakeholders to explore the nature of all these potential impacts.

One concern with estimating the impact of debt advice is the causal link between indebtedness and the impact areas such as health and relationship. Reverse causality needs to be carefully considered, e.g. whether individuals with mental illness are less able to manage their financial affairs or whether financial difficulties cause the mental illness. Complete resolution of this is extremely difficult. We sought to establish a timeline placing the incidence of various problems within the context of respondents' financial difficulties. This enabled us to control for respondents who experienced a problem prior to their financial difficulties. In doing so, we do not disregard the potential for reverse causality — i.e. that the issues can cause over-indebtedness as well as being a potential result of it — but we do account for the fact that other factors could have led to these problems.

The questionnaire

We developed a questionnaire in collaboration with the Money Advice Service and YouGov that helped us ensure the functioning of the more complex and sensitive elements within the questionnaire. This questionnaire was live from 8th February until 22nd February 2016 and adhered to the following structure:

- Screening questions to establish the over-indebtedness of respondents and how recently they had sought debt advice (if at all).
- General demographic information, income levels, working status, and debt levels.
- Advice channels, actions taken to resolve financial issues (such as reducing payments or establishing a household budget), and the results of those actions.
- The changing state of, and where appropriate the impact of the respondent's financial situation, on:
  - Improved mental and physical health.
  - Impact on employment and productivity.
  - Impact on small businesses.
  - Impact on relationships.
  - Engagement of parents with children.
  - Reduced risk of losing home.

In total, YouGov completed 3,799 qualifying interviews. These were split as follows:

- 1,751 interviews with over-indebted respondents who had sought debt advice in the past two years (true incidence about 2 per cent of UK adult population).
- 2,048 interviews with over-indebted respondents who had NOT sought debt advice in the past two years (true incidence about 21 per cent of UK adult population).

Findings were re-weighted to ensure that the data represented the national gender and age profile of UK adults (aged 18 and over) in the sample groups.[32]

3.3 Modelling the impacts

3.3.1 Counterfactual

In this section we explain how we modelled the counterfactual in the analysis. A counterfactual is necessary when trying to estimate the impact of debt advice. In order to isolate any impacts that debt advice had from those that would have been achieved in any case (i.e. in the absence of advice), one needs to establish this alternative state of the world (i.e. to act as a control to assess incremental impacts against).

In the primary research the individuals were divided into two groups: the advised group and the unadvised group described in Chapter 4. Both groups were screened and classified as over-indebted. We can therefore use the unadvised group as our counterfactual in our analysis of these data, based on the assumption that the unadvised and advised over-indebted individuals are equal in all other aspects except having sought advice in the last two years. There is a possibility that the advice seekers are systematically different from the whole population of indebted people, e.g. they might be more financially capable or 'activist' and hence, more likely to have repaid their debt without advice compared to the rest. We examine the reliability of this assumption in Chapter 4.

Defining a counterfactual using data derived from the secondary research is more difficult. Many of the studies focused upon indebtedness rather than advice. Not all secondary sources were methodologically robust in how they assessed incremental impacts. It follows that establishing an appropriate counterfactual in this context is reliant on the available data and what that data can infer about the population it is based on. This mitigated against drawing robust inferences in some impact areas.

3.3.2 Statistical models

Statistical models can help identify the average effect that particular characteristics can have on variables of interest. In this case we want to explore the relationship of receiving debt advice with:

- Experiencing various problems that over-indebted people might be expected to face in their lives; and
- Experiencing a change in certain important areas of life, such as mental health.

Many of the variables that we explore are binary — i.e. they take values such as yes or no, 0 or 1. This form of variable requires the use of a particular set of econometric models, i.e. 'limited dependent variable models' and they are used to model the probability of particular outcomes being observed.

The model that we have selected in this case is a probit model. A probit (probability unit) model is a regression model where the dependent variable is binary, i.e. it can only take two values, zero or one.[33] We

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[32] YouGov (2016) "Social Return on Investment: Technical Report", prepared for the Money Advice Service by YouGov.

[33] A regression is a statistical process for estimating the relationships amongst a group of variables. The object, in this case, is to assess the effect, if any, that taking advice has on a particular outcome, such as an individual's mental health state.

estimated probit models for each of the impact areas explored in the primary research, testing a variety of different specifications. The hypothesis tested in our probit models is that the treatment (i.e. debt advice) influences the probability of an event (impact outcome variables). We employed two sampling approaches for our statistical analysis. The first approach was based on the entire control (non-advised) and treatment (advised) groups while the second approach implemented a Propensity Score Matching (PSM) process to control for sample-selection bias,[34] and therefore improve the comparability between control and treatment group. The nature of the econometric analysis is examined further in the Appendix at Chapter 7.

3.3.3 Quantification

In order to be robust any quantification of impacts would need to be based on the expected costs (of over-indebtedness) that debt advice might help to avoid or defer. We have considered both the secondary research and, where appropriate, the primary research. Where the sources were insufficient to allow robust model inputs we have described in qualitative terms what potential impact might be expected, and also identified, in brief, what additional research might help resolve remaining gaps in knowledge and evidence.

3.3.4 Sensitivity analysis

In most circumstances, the scale of impacts will not be known for certain. Impact assessments and analyses of the benefits of debt advice therefore need to take account of the risks and uncertainties surrounding any input estimates used in the monetisation of the identified benefits.

We have therefore conducted sensitivity analysis of the quantifiable impacts. Sensitivity analysis involves changing the value used for one input variable at a time, in order to investigate whether the conclusions of the analysis are affected. The input variables that undergo this type of analysis are the ones with the most pronounced methodological limitations which, ultimately, reduce our confidence. Ranges have been used when presenting estimated benefits and costs based on the results of sensitivity analysis. As an example, we used this method when quantifying health impacts. First, we identified changes in individual's health conditions captured in the primary research. In order to monetise these changes in the health condition we assigned a percentage value which represents the effect that experiencing a change is assumed to have on the annual cost of a health condition; these are presented below:

- Feeling a lot better would be associated with a decrease in costs between 20 and 50 per cent;
- Feeling a little better would be associated with a decrease in costs between 15 and 25 per cent; and
- Feeling a little worse would be associated with an increase in costs between 15 and 25 per cent.

Since these percentages are subjective, and the sensitivity analysis helps to account for the associated uncertainties.

3.4 Methodological limitations

This section explores the robustness and appropriateness of the data sources used in the impact analysis. Limited data availability was a key concern throughout. The previous research in this area is mainly based on qualitative approaches. The quantitative research that exists is largely reliant on small numbers of observations. This does not automatically invalidate them, but does impose limitations on quantifying effects. Furthermore, the majority of the secondary literature revised relates to the impacts associated with being over-indebted. This is an important difference to an assessment of the impact of advice: it cannot be simply

[34] Propensity Score Matching is a statistical matching technique that seeks to account for the factors that predict seeking advice in order to improve the comparability between the advised and the non-advised samples. Sample-selection bias is explained further in Appendix 7.

assumed that if being over-indebted causes X (or contributes to X), a subsequent reduction in indebtedness will reverse this. This can make unambiguous and robust attribution of impacts to debt advice difficult.

Primary research was conducted in parallel with this study. This provided an opportunity to expand the available evidence base — in at least some of the impact areas — and in particular to gather data directly related to the impacts of advice seeking itself. However there are potential limitations with any consumer research study. We discuss these below and discuss how we sought to mitigate these issues:

- Sampling bias. This can result from a non-representative sample (i.e. one that does not reflect the underlying population of interest). In this case, the online nature of the survey could mean it was not reflective of the 'offline' population distribution.[35] This likely explains the seemingly low proportion of face-to-face advice in the advised sub-sample. We consider the upshot of this further below, in Chapter 4. Particular demographic dimensions were specified before the launch of the survey and steps were taken by YouGov to mitigate any demographic differences from these targets so that the overall survey of about 3,800 respondents conformed as closely as possible to these. Even so, there are characteristics we were not able to account for (either because the incidence in the population of advice seekers was too low, or else they were not capable of being captured in a survey).
- Quality of the answers and survey design. People are more likely to respond honestly when they are sent a relevant and targeted survey with well-designed questions.[36] Participants to the survey were screened to ensure they all conformed — at least — to the Money Advice Service's definition of being indebted. However, non- responses were a feature in some areas (in particular disclosure of incomes). This limited the number of observations in some areas of interest.
- Causal effects estimation and inference. The data were collected at a single point in time meaning that changes over time were subject to recall bias. Whilst we sought to counter for by using temporal association in the cause and effect survey questions,[37] this is less satisfactory than following a consistent group of individuals in real-time.

As we have noted the available literature in this area is largely qualitative and often based on a limited number of interviews with the indebted. The latter can suffer from self-selection bias where participants are those especially motivated or interested in the research topic, meaning the results may not be representative. We discuss the robustness of the different sources of research available to us further when we describe the relevant impact areas in Chapter 5 below, specifically in terms of how this imposes limitations both on unambiguously identifying the qualitative impacts of debt advice and quantitatively estimating its effects.

[35] For a more general discussion, see Matsuo, H., McIntyre, K. P., Tomazic, T., & Katz, B. (2004) "The online survey: Its contributions and potential problems".

[36] Matsuo, H., McIntyre, K. P., Tomazic, T., & Katz, B. (2004) "The online survey: Its contributions and potential problems".

[37] London School of Hygiene and Tropical Medicine (2009). See http://conflict.lshtm.ac.uk/page_26.htm#Surveys_Limitations.

4 Survey Sample Characteristics

4.1 Characteristics of the over-indebted

As we have identified in our discussion of the methodology, constructing a counterfactual is a key step in inferring how people who received advice would have behaved in the absence of such advice. These inferences serve to isolate the incremental impact of the advice itself. Primary research conducted in parallel with this study has fed into our analysis of certain impact areas. This section considers the comparability of the two groups, which in turn speaks to the validity and limitations of that analysis.

We report below general demographic information on the two sub-populations (the advised and the unadvised, see Table 4.1: Sample characteristics). The distributions of both age and gender have been weighted by YouGov in order to make the sample groups of the survey representative of the broader populations of advised and unadvised.

Table 4.1: Sample characteristics

Characteristics	Advised	Unadvised	Difference	Total Sample
18-24	2%	6%	-4%***	4%
25-34	13%	15%	-2%*	14%
35-44	16%	23%	-7%***	19%
45-55	17%	26%	-9%***	22%
55+	53%	30%	23%***	41%
Share of female respondents	69%	59%	10%	64%
Average household income	26,741	27,444	-703	27,106
Average personal income	18,279	17,614	665	17,931
Average outstanding debt	14,579	10,267	4,312***	12,474
Average mortgage debt	93,173	89,953	3,220	91,477
Average Debt-Income ratio	3.26	0.39	2.87***	0.71

Source: EE analysis of YouGov SROI Survey data (2016). Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***.

There are notable differences between the advised and unadvised samples. The unadvised have a slightly higher average household income but a lower average personal income compared to the advised. The average outstanding debt value is significantly lower (£4,000 less on average) among the unadvised compared to the advised which can help explain why the advised population has a significantly larger debt-to-income ratio. There are also striking differences in age, with the unadvised tending to be younger whereas over half of the advised are aged over 55. The unadvised population has lower levels of average mortgage debt but this is not statistically significant.

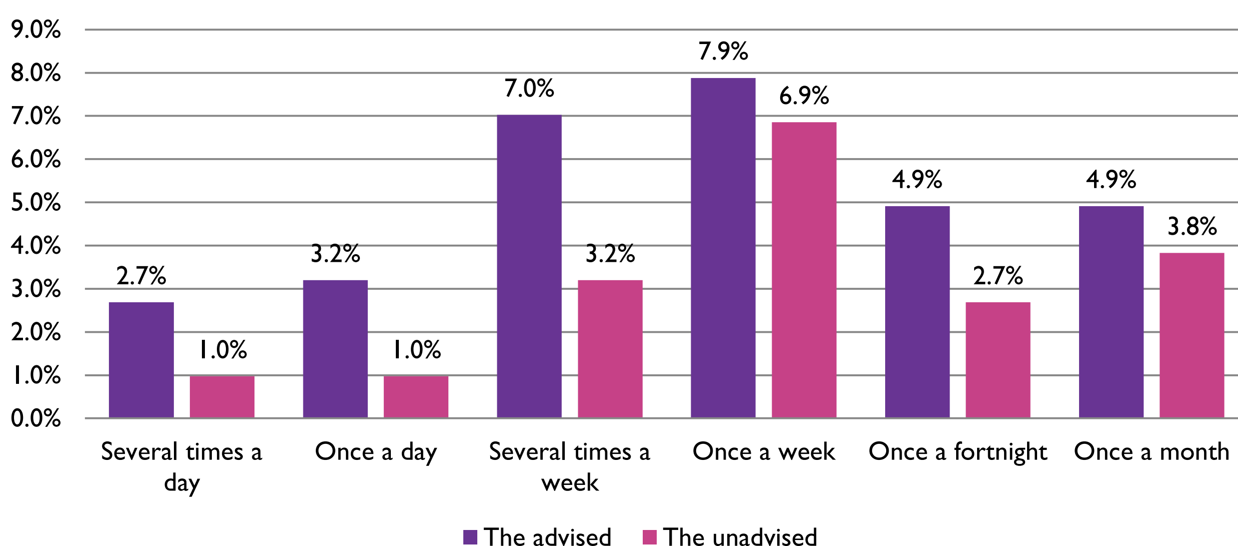
We also note that about 75 per cent of the advised and 54 per cent of the unadvised have more than one outstanding debt. Most of the outstanding debts are owed to banks or credit institutions, with credit card debts being the most frequent, followed by overdrafts, bank loans and mail order accounts. Outstanding utility bills (e.g. water, gas, electricity and rent) are also common.

We conclude that there are statistically significant differences in the debt levels between the groups. We have controlled for such differences in our subsequent statistical analysis, along with gender and age, in order to generate robust results.

Gambling

The survey also sought to explore risk attitudes. This was done by asking about respondents' gambling experience. Although the majority of both groups do not gamble at all (51.5 per cent of the advised, 75 per cent of the unadvised), the advised include a larger share of people who gamble at any given frequency. Within the advised, there is more than twice the proportion of individuals gambling several times a day/week compared to the unadvised. These traits may influence, not only the level of indebtedness, but potentially may also speak to the different coping strategies of the individuals.

Figure 4.1 Current gambling behaviour (over-indebted population)



Source: EE analysis of YouGov SROI Survey data (2016).

Conceptually, gambling could be a very interesting variable to introduce in the analytical framework of different impact areas. It could be used to make inferences regarding individuals' attitudes to risk which can have significant implications both regarding the motivation to take on debt and the manner in which debt is handled. However, the responses on this topic did not allow us to introduce this dimension into our analysis without considerably restricting the sample sizes used to examine different the impact areas.

This — or similar — proxies for the behaviour and coping strategies of individuals could be the fruitful subject of future research. Problem gamblers are much more likely to be in debt than the general population, and on average have higher debts.[38] Of course, one aspect of gambling in particular that could complicate its use in this way relates to the need to separate gambling as a signal of overall risk attitudes versus the capacity of gambling — or at least problem gambling — to directly lead to financial difficulties.

Characteristics of the sample compared to the indebted population

The sampling and research methodology adopted by YouGov was focused primarily upon the advised group, and also securing a broadly matching unadvised group (based on gender and age). Before turning to examine this group in more detail, we briefly discuss how both this group and the counterfactual group (i.e. those who are indebted but that did not seek advice) compare to the overall indebted population.

[38] Institute for Public Policy Research (2016) "Cards on the Table: The cost to Government associated with people who are problem gamblers in Britain".

Table 4.2: Over-Indebtedness by Age-Band

	Over-indebted adults in age-band as % of total over-indebted	Over-indebted as % of all adults in given age-band
18-24	13.4%	19.6%
25-34	25.3%	23.9%
35-44	20.6%	20.8%
45-54	19.3%	17.2%
55+	21.4%	8.7%

Source: Money Advice Service/CACI "Over-indebtedness 2017".

A comparison of the above table and Table 4.1 shows that the sampled groups are notably older than the overall over-indebted population. This is true of both the advised and the non-advised groups, but particularly the former. Those over 55 constitute about 30 per cent of the non-advised sample against 21 per cent of the over-indebted population — but fully 50 per cent of the advised. It is worth noting that the main goal of the non-advised sub-population in our work is to provide a counterfactual against which to assess the true nature of impacts experienced by those seeking advice, i.e. it is more important for the non-advised sample to be similar to the advised sample than to the total over-indebted population (the vast majority of whom do not seek advice).

It is not clear whether the advised sample is still broadly representative of the underlying advised population. That said, we are aware of some differences between the advised sample and the profile of those individuals receiving advice from one of the leading free-to-client charities, StepChange (which sponsored one of the seminal studies on the impact of debt advice that has partly inspired the commissioning of this research). The clients at StepChange are more likely to rent (65 per cent) than the advised in the YouGov sample (52 per cent), are younger (an average age of 41 against just under 50) and to be single (42 per cent against 22 per cent). On the other hand, the definition for over-indebtedness adopted in the primary research maps across from that set by the Money Advice Service, which is broader in its approach to financial difficulty.

It is important to realise that if there were any tangible differences between the advised population and the overall indebted population — and there was reason to expect these demographic differences to be reflected in the relative scale of any impact — then any extrapolation of the results presented here based on *extending* the reach of advice would need to be approached with caution.

4.2 The characteristics of debt advice

In this section we now focus mainly on the advised population.

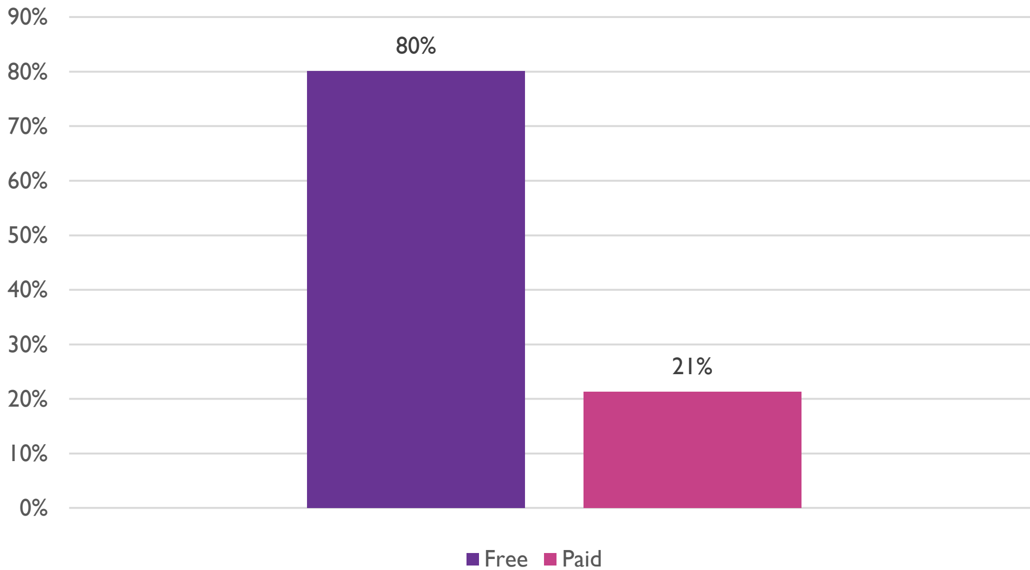
4.2.1 Free versus paid debt advice

The vast majority of those receiving advice did so through a free provider (about 80 per cent), see Figure 4.2. Only 21 per cent of the advised group paid for their advice (and almost half of these had also sought free advice, hence these do not total 100 per cent). The YouGov Debt Tracker (2016) shows a very high proportion of individuals seeking advice from at least one free-to-client source. Of these seeking professional advice, about 10 per cent opted for paid advice.[39] This was intentional, as we wanted the paid sample be of

[39] Debt Tracker is YouGov's quantitative syndicated study tracking consumer indebtedness and borrowing behaviour. The available data are nationally representative for both Great Britain and the UK with a large sample on a quarterly

sufficient size to enable at least some independent analysis (described more fully in the relevant parts of the analysis of impacts).

Figure 4.2: Free versus paid debt advice (advised population)

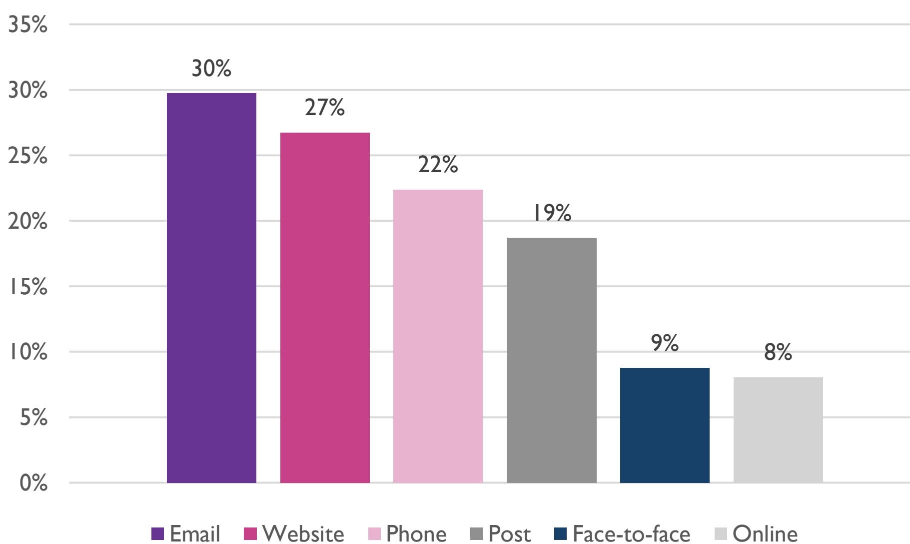


Source: EE analysis of YouGov SROI Survey data (2016)
Note: Answers "Other" and "Prefer not to say" have been excluded.

4.2.2 Channel

The advised generally used only one channel to access advice (this applied to three in four). Email was the most popular route (30 per cent), followed by other remote means of communication, see Figure 4.3. This likely reflects, at least in part, the online nature of the survey.

Figure 4.3: Advice channel (advised population)



basis. It has been running since 2008 and has tracked a number of key indicators for the duration of that time. For more information, see: https://yougov.co.uk/find-solutions/reports/trackers/debt/.

Source: EE analysis of YouGov SROI Survey data (2016).
Note: Answers "None" and "Don't remember" have been excluded.

The choice of channel does not have a statistically significant impact on the level of comfort and control that an individual stated as feeling over their financial situation. Nevertheless, the channel selections do vary from, for example, the YouGov DebtTracker (2016), where phone and face-to-face were much more common, against our sample where online interaction was the most common (see Table 4.3 below).

Table 4.3: Channel of advice result comparison

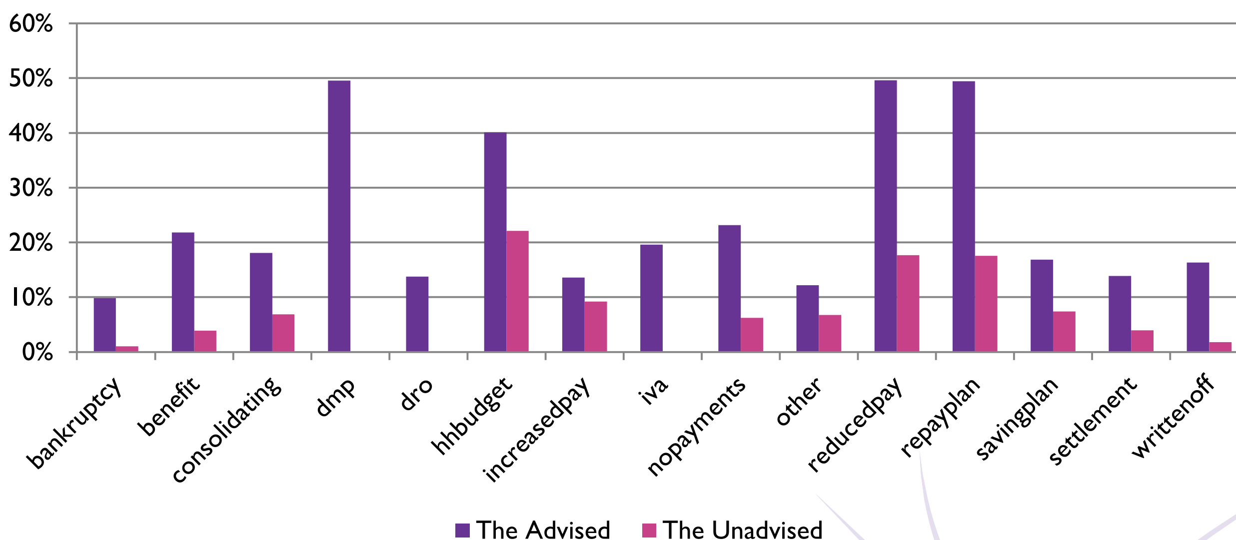
Channel	YouGov SROI	YouGov DebtTracker	Difference
Phone	38%	49%	-11%
Face-to-face	16%	35%	-19%
Website	46%	16%	30%

Source: EE analysis of YouGov SROI Survey data (2016) and YouGov DebtTracker (2016).
Notes: Both adjusted for non-replies and don't knows such that sum to 100 per cent. In the SROI, the channels represent first contact, whereas in the DebtTracker respondents are asked about preferred ways of communicating.

4.2.3 Actions to manage debt

A key element of the research was to understand what actions were taken by those experiencing financial difficulties. A subset of the available actions could be taken by individuals independent of receiving advice or not. As shown below in Figure 4.4, the advised were markedly more active. Popular actions included making reduced payments to creditors, setting up a DMP (an advised only action), and setting up a household budget. The advised have on average taken four actions on average and the unadvised have only taken one action.

Figure 4.4: Actions to manage debt (over-indebted population)



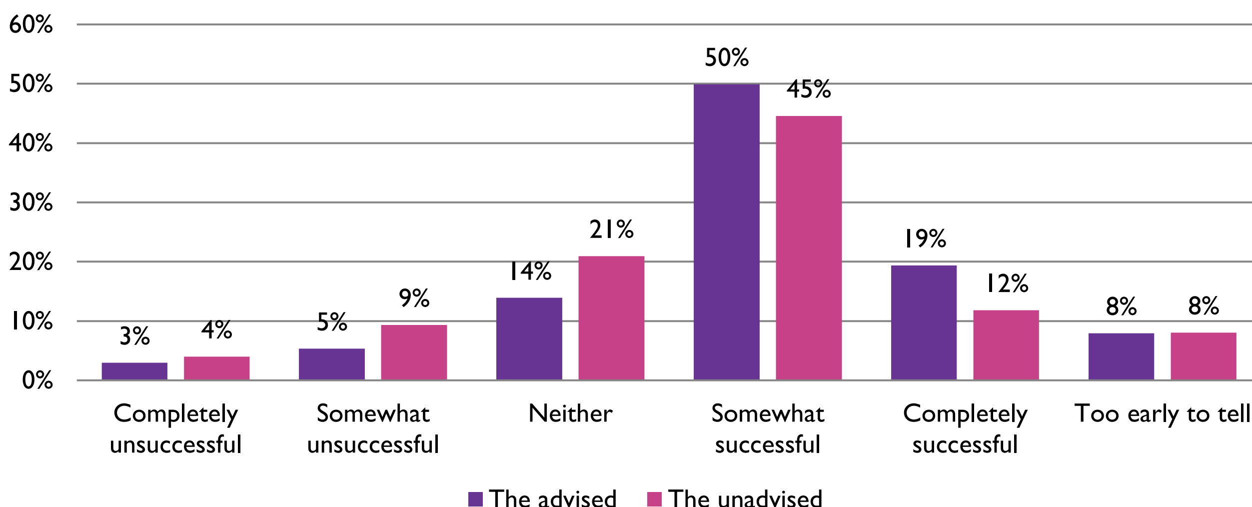
Source: EE analysis of YouGov SROI Survey data (2016).
Note: benefit: obtaining access to benefit options you were not previously aware of, consolidating: consolidating your debts; hhbudget: setting up a household budget; increasedpay: making increased payments to organisations you owe money to; nopayments: agreeing a period of time where no payments have to be made; reducedpay: making reduced payments to organisations you owe money to; savingplan: setting up a saving plan; settlement: making a full and final settlement of debts and writeoff: having your debts written off.

4.2.4 The effectiveness of actions on debt

The point of advice is to help resolve financial difficulties. We compare below, in Figure 4.5, how successful the advised and unadvised perceived the actions taken to have been in this regard. The majority of

respondents felt quite positive about the actions they took. The results are better for the advised group as compared to the unadvised group: for example almost 20 per cent of the advised population felt that their actions had been completely successful compared to 12 per cent of the unadvised. Equally, relatively fewer advised individuals felt that their actions had been unsuccessful.

Figure 4.5: Success rate of actions (over-indebted population)



Source: EE analysis of YouGov SROI Survey data (2016).

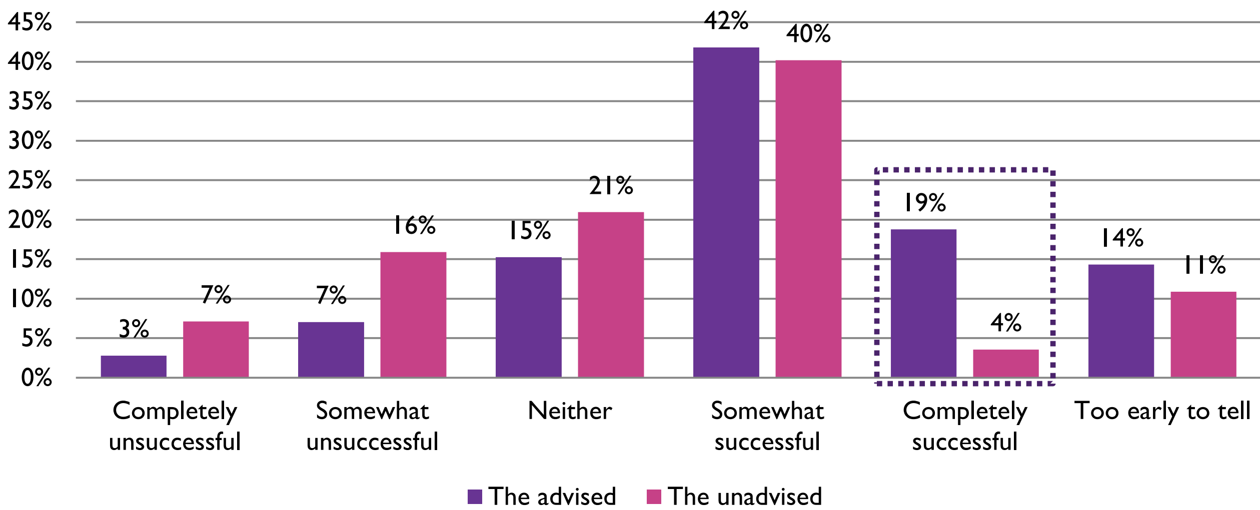
We now focus only on those reporting a debt-to-income ratio greater than one in Figure 4.6. The impact on the advised and unadvised group is more pronounced. The advised group show statistically significantly higher proportions considering the outcome as completely successful.[40] At the same time, there are less people in the advised group that characterise debt advice as 'completely' or 'somewhat' unsuccessful.

The first finding persists for other debt-to-income groups too. Analysis of other debt-to-income ratios — between 0.5-1, 0.25-0.5 and 0-0.25 — also generated differences between the groups in terms of how many where 'somewhat successful' and 'completely successful' in favour of the advised group.[41]

[40] In this segment the advised population consists of 290 and the unadvised of 126 number of observations.

[41] About 57 per cent of the advised and 44 per cent of the unadvised felt that the actions were 'somewhat successful' across all debt-to-income segments, except 48 per cent of the unadvised for those with the lowest ratio. In the two groups with debt-to-income ratios between 0.25-0.5 and 0-0.25, 16 and 22 per cent of the advised population indicated that their actions were completely successful, respectively. This is compared to the unadvised that responded that 6 and 15 per cent were 'completely successful' respectively.

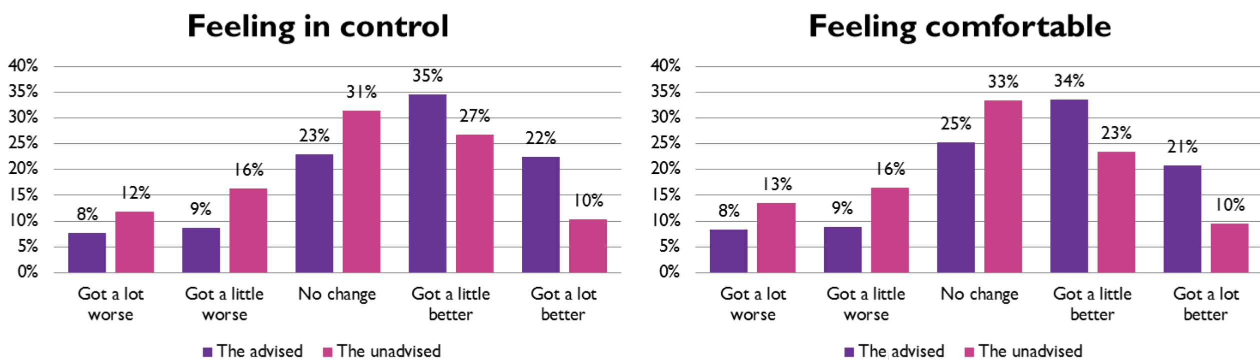
Figure 4.6: Success of debt advice (when debt-to-income ratio is greater than 1) (over-indebted population)



Source: EE analysis of YouGov SROI Survey data (2016).

The primary research also probed current feelings of being more (or less) comfortable with or in control of finances (relative to when their most recent financial difficulties began). The results reported in Figure 4.7 do not differ significantly between comfort and control: in both, the advised group has a statistically significant higher proportion of positive results. This shows that advice is making a significant contribution to improving the financial situation of the advice seekers (or, at the least, to their perceptions about their financial difficulties). This confirms other findings showing that debt advice is effective in improving individuals' financial circumstances, as well as increasing levels of knowledge and confidence about how to tackle a debt problem.[42]

Figure 4.7: Feelings regarding financial situation (over-indebted population)



Source: EE analysis of YouGov SROI Survey data (2016).

[42] See for example Pleasance, P. and Balmer, N.J. (2007) "Changing fortunes: results from a randomized trial of the offer of debt advice in England and Wales" Journal of Empirical and Legal Studies, 4(3), pp 654-673; Turley and White (2007); and Collard, S., Finney, A., Hayes, D. and Davies, S. (2012) "Quids in: the impact of financial skills training for social housing tenants", Bristol: University of Bristol.

5 The Economic Impact of Debt Advice

In this chapter we present our analysis of the various potential economic impact areas that have been associated with debt advice. This draws on all of the research streams identified in Chapter 3. We also note the area-specific methodology implemented, our conclusions and any monetary impact estimates, where the evidence is sufficiently robust and reliable to permit this.

This chapter also describes the potential links between indebtedness, the use of debt advice and financial capability. Whilst not an impact in itself, different levels of capability may influence how successful debt advice can be. We conclude by identifying avenues for further research to further enhance the analysis of the economic impact of debt advice.

5.1 Improved mental and physical health

5.1.1 Insights from secondary research on mental health

The development of mental health problems can be due to a number of factors — such as physical, social, environmental and psychological factors — acting interactively. Most of the empirical studies show (mainly through surveys) that stressful circumstances are the most commonly identified cause of mental illness and the majority of respondents believe that stress is a very, or somewhat, likely cause of mental illness. At the core of experiencing such stressful conditions one can often find specific life-events like:[43]

- Interpersonal loss: bereavement, separations, divorce, widowhood etc. (i.e. what are known as "exit events" that often precede depression, and may be more common in depressed samples than in other forms of psychopathology).
- Financial Problems: job losses, debt etc. (these are "dependent events", to which the person has contributed).

Drentea and Lavrakas (2000) explored how credit card debt and stress relating to debt is linked with health. They found that both credit card debt and debt stress are determinants of health.[44] Lavrakas et al. (2000; 2008) show that stress arising due to being indebted is associated with deteriorating health. In this study, 27 per cent of the surveyed population had ulcers or digestive-tract problems compared to 8 per cent of those with a low level of stress from debt (using a study-developed Debt Stress Index).[45] Similarly, Fitch et al. (2011) found that the more debts someone had, the greater the likelihood of developing a mental health problem.[46] There are also studies that investigate gender differences in the level of stress associated with debt; Dunn and Mirzaie (2012) found that women in their sample are subject to significantly more stress from their debts than men, even when controlling for debt-to-income ratio.[47] This is relevant in this context, where the

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[43] Hammen, C. (2005) "Stress and depression" Annual Review Clin. Psychol., 1, 293-319.

[44] Drentea, P., and Lavrakas, P. J. (2000) "Over the limit: the association among health, race and debt" Social science & medicine, 50(4), 517-529.

[45] Lavrakas, Paul J., Lucia Dunn, Jeff, Stec, and T.H. Kim (2000) "A Debt Stress Index for Measuring the Stress Associated with One's Total Debt" The American Statistical Association Proceedings, pg. 78-81; Lavrakas, and Tompson (2008) "New Research on the Measurement of Debt Stress" Midwest Association for Public Opinion Research.

[46] Fitch C, Hamilton S, Bassett P, et al. (2011) "The relationship between personal debt and mental health: A systematic review" Mental Health Review Journal 2011; 16, 4: 153-166.

[47] Dunn, L. F., and Mirzaie, I. A. (2012) "Determinants of Consumer Debt Stress: Differences by Debt Type and Gender" Working Paper, Center for Human Resource Research.

majority of the indebted covered by the YouGov survey (2016) are women (69 per cent of the advised and 59 per cent of the unadvised).

However, while a number of studies have explored a connection between debt and mental health, the time dimension remains relatively less well covered. Shen (2013) analysed empirically the impact of household credit card indebtedness on debt stress by constructing another debt stress index. Households were grouped into three different categories: long-run debtors, short-run debtors and non-debtors. The results indicate that there are time-varying impacts of credit card debt on stress level. Holding the debt level constant, debt stress for short-run debtors is more than twice that of long-run debtors. The results also show that debt-related stress responds more than proportionally to the level of credit card debt.[48]

Another strand of the literature has aimed at estimating the direct impact of debt on mental health. Sweet et al. (2013) investigate the links between multiple indices of financial debt and mental and general health outcomes. They find that individuals with high debt, on average, have an 11.7 per cent increase in likelihood of showing symptoms of stress, and a 13.2 per cent increase in exhibiting depressive symptoms relative to those with low debt.[49] Meltzer et al. (2012) estimate the prevalence of 'specific' mental disorders by type of debt and found that adults in debt were three times more likely than those who were not in debt to have 'Common Mental Disorders'.[50] Skapinakis et al. (2006) found that individuals who initially have no mental health problems but find themselves having unmanageable debts within a 12 month period have a 33 per cent higher risk of developing depression and anxiety related problems compared to the general population who do not experience financial problems.[51] In a study of those seeking debt advice from the Citizens Advice Bureau (Edwards, 2003), shows that 62 per cent of respondents reported that their problem led to stress, anxiety or depression.[52] The Money and Mental Health Policy Institute has recently sought to make the case for financial advice being better integrated into the delivery of mental healthcare.[53]

On the other hand, there are residual concerns about the causal relationship between mental health and distressed debt. Balmer et al. (2005) investigated the reverse link between mental illness and debt, where mental illness was seen as a cause of poor financial circumstances rather than the opposite. They found that the long-term mentally ill are indeed more susceptible to long-term debt.[54]

5.1.2 Insights from secondary research on physical health

Debt (and hence debt advice) could also impact upon people's physical health. Clifford et al. (2014) suggest the following relationship between debt and physical health:

> "The prolonged state of stress, due to the debt, will over time, cause deteriorating health conditions for some. Raised levels of cortisol and adrenaline over time increase the risk for cardiovascular conditions, and diabetes and can lower immune system functioning,

[48] Shen. S. (2013) "Consumer Debt, Psychological Well-being, and Social Influence" Dissertation, Ohio State University.

[49] Sweet, E., Nandi, A., Adam, E. K., & McDade, T. W. (2013) "The high price of debt: Household financial debt and its impact on mental and physical health" Social Science & Medicine, 91, 94-100.

[50] Meltzer, H., Bebbington, P., Brugha, T., Farrell, M., & Jenkins, R. (2012) "The relationship between personal debt and specific common mental disorders" The European Journal of Public Health, cks021.

[51] Skapinakis P, Weich, S et al. (2006) "Socioeconomic position and common mental disorders. Longitudinal study in the general population in the UK" British Journal of Psychiatry 189:109–117.

[52] Edwards (2003) "In too deep, CAB clients' experience of debt".

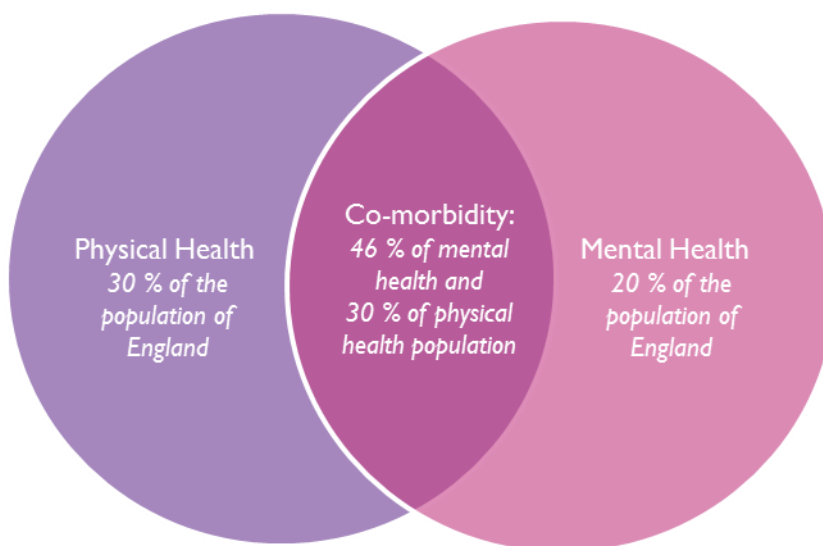
[53] Clarke, Tasneem, Acton, R. and Holkar, M. (2016) "The Other One in Four: How financial difficulty is neglected in mental health services".

[54] Balmer, N. et al. (2005) "Worried Sick: The Experience of Debt Problems and their Relationship with Health, Illness and Disability" Social Policy and Society, 5:1, 39-51.

which can result in serious illness. As the state of stress is reduced, the conditions for better health are created."

Many people with long-term physical health conditions also have mental health problems and vice versa. Mental health conditions that exacerbate (i.e. are co-morbid with) physical health problems can lead to significantly poorer health outcomes and reduced quality of life, see Figure 5.1.[55]

Figure 5.1: Relationship between mental and physical health conditions



Source: The King's Fund and Centre for Mental Health (2012) "Report. Long-term conditions and mental health: The cost of co- morbidities".

Stress is a known source of short- and long-term physiological changes that play an important part in several disease processes, in particular those involving metabolic and cardiovascular systems. Stress has also been argued to impact physical health indirectly by influencing behaviour such as diet, physical activity and substance use.[56] Therefore, it is reasonable to consider whether debt has an impact on, not only mental health itself, but also physical health — at least through the pathway of mental illness.

Sweet et al. (2013) find evidence that reporting high financial debt relative to available assets is associated with not only higher perceived stress and depression, but also worse self-reported general health, and higher diastolic blood pressure. These relationships are significant when controlling for prior socioeconomic status, psychological and physical health, and other demographic factors.

Although, the direction of the link between mental and physical health is not fully established, there are multiple studies that provide evidence on the prevalence of co-morbid mental health problems in cardiovascular disease, diabetes, COPD and chronic musculoskeletal disorders. Previous research has found commonalities between depression and a range of cardiovascular diseases such as cardiac disease, coronary artery disease, stroke, angina, congestive heart failure, or following a heart attack.[57] The estimates of

[55] Naylor C, Parsonage M, McDaid D, Knapp M, Fossey M, Galea A (2012) "Report. Long-term conditions and mental health. The cost of co- morbidities" The King's Fund and Centre for Mental Health.

[56] See for example: Sweet et al. (2013); Stults-Kolehmainen, M. A., & Sinha, R. (2014) "The Effects of Stress on Physical Activity and Exercise" Sports Medicine (Auckland, N.Z.), 44(1), 81–121; and Pampel, F. C., Krueger, P. M., and Denney, J. T. (2010) "Socioeconomic Disparities in Health Behaviors" Annual Review of Sociology, 36, 349–370.

[57] See for example: Fenton, W. S., & Stover, E. S. (2006) "Mood disorders: cardiovascular and diabetes comorbidity" Current Opinion in Psychiatry, 19(4), 421-427; Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B (2007) "Depression, chronic diseases, and decrements in health: results from the World Health Surveys" The Lancet, vol. 370, no 9590, pp 851–8; Gunn JM, Ayton DR, Densley K, Pallant JF, Chondros P, Herrman HE and Dowrick CF (2010) "The association between chronic illness, multimorbidity and depressive symptoms in an Australian primary

prevalence vary greatly from about 20 per cent to 50 per cent depending on the conditions studied and the assessment approach used. Anxiety problems are also common in cardiovascular disease.[58] Depression is also common among people with chronic musculoskeletal disorders.[59] Theis et al. (2007) found that 33 per cent of women and more than 20 per cent of men with all types of arthritis may have co-morbid depression.[60]

5.1.3 Insights from the primary research on mental and physical health

Through the primary research we sought to get data on the incidence of various mental and physical health problems. This was achieved by asking respondents whether they have been, now or in the past, diagnosed with any mental or physical health condition.[61] The time component allowed us to assess whether the condition was pre-existing (or not) the onset of financial difficulties. The survey also sought to differentiate between different degrees of change in the relevant conditions. We also sought to account for the sensitive nature of such conditions (which may lead to reduced incentives to visit a doctor and obtain a diagnosis) by asking whether respondents believed they currently suffer from any mental health conditions.

The second key input obtained from the primary research is the change in the respondent's current state of health compared to when their financial difficulties first started. By introducing such common points in the timeline of individuals' indebtedness we aimed at improving comparability between the advised (i.e. treatment) and the 'indebted but unadvised' (i.e. control) groups. Ensuring such comparability would then allow us to make a before-and-after comparison with the difference between the two states obtained from respondents answering whether, according to a healthcare professional, their condition had gotten better or worse. As explained above (and in more detail at Chapter 7 below) we used econometric modelling to estimate how much more likely it is for an individual receiving debt advice to experience an improvement (or a deterioration) compared to individuals not receiving advice.

Moreover, we sought to establish a timeline placing the incidence of a health condition within the context of respondents' financial difficulties. This enabled us to control for respondents who suffered from a condition prior to experiencing financial difficulties. In doing so, we do not disregard the potential for reverse causality — i.e. that health issues can also cause over-indebtedness — but we seek to account for the fact that if other factors led to these health conditions, the causal link between debt and health is likely to be weaker.

To summarise, the primary research offers us estimates of the following parameters:

- the incidence of different mental and physical health conditions on advice seekers and non-advice seekers (both of which are over-indebted); and

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care cohort" Social Psychiatry and Psychiatric Epidemiology, vol. 47, no 3, pp175–84; Benton, T., Staab, J. and Evans, D.L. (2007) "Medical co-morbidity in depressive disorders" Annals of Clinical Psychiatry, vol. 19, no 4, pp 289–303; and Welch, C.A., Czerwinski, D., Ghimire, B., Bertsimas, D. (2009) "Depression and costs of health care" Psychosomatics, vol. 50, no 4, pp 392–401.

[58] Goodwin RD, Davidson KW, Keyes K (2009) "Mental disorders and cardiovascular disease among adults in the United States" Journal of Psychiatric Research, vol. 43, no 3, pp 239–46.

[59] See for example: Lu, M. C., Guo, H. R., Lin, M. C., Livneh, H., Lai, N. S., and Tsai, T. Y. (2016) "Bidirectional associations between rheumatoid arthritis and depression: a nationwide longitudinal study" Scientific Reports, 6, 20647; and Sheehy, C., Murphy, E. and Barry, M. (2006) "Depression in rheumatoid arthritis — underscoring the problem" Rheumatology, vol. 45, no 11, pp 1325–7.

[60] Theis K.A., Helmick C.G., Hootman J.M. (2007) "Arthritis burden and impact are greater among U.S. women than men: Intervention opportunities" Journal of Women's Health, vol. 16, no 4, pp 441–53.

[61] The mental and physical health conditions provided in the answer options were the following: Depression, Obsessive compulsive disorder, Personality disorder, Anxiety, Panic attacks or phobias, Bipolar disorder, Post-traumatic stress disorder, Schizophrenia, Eating disorder and Dependency on drugs and/or alcohol; and Cancer, Heart disease/condition, Diabetes, Arthritis, High blood pressure, Asthma, Long-term back pains/problems, Chronic kidney disease, Chronic Obstructive Pulmonary Disease (COPD) and After-effects of a stroke.

- the increased/decreased likelihood of those receiving debt advice to experience improvements in their mental health conditions compared to those not receiving advice.

5.1.4 Quantitative and qualitative impacts

The advised and the unadvised groups

We were able to generate quantitative estimates drawing directly on the primary research. These are based on those health conditions for which we found statistically significant effects in our models. To be more specific, there were four models run for each mental and physical health condition, estimating the implications of receiving debt advice on the likelihood of:

- feeling a lot better;
- feeling a little better;
- feeling a little worse; and
- feeling a lot worse.

Table 5.1 reports the marginal effects obtained from our preferred model where statistically significant relationships were identified. The preferred model accounted for factors such as age, gender and the level of debt with respect to income of each individual. When one of the control variables had missing values the observation was excluded.

Table 5.1: Higher (lower) probability of an advice seeker, compared to a non-advice-seeker of feeling:

Condition	A lot better	A little better	A little worse
Depression	5.0%**	7.9%***	(10.4)%***
Anxiety	-	7.9%***	(11.3)%***
Panic attacks or phobias	8.2%**	-	(11.7)%***

Note: Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***. Heart disease and OCD also, in some cases, had statistically significant coefficients, however, these results were based on an insufficient number of observations to be confident, at this time, that these beneficial effects are real. There were no conditions with statistically significant results for those feeling a lot worse — hence, these are not reported. Cancer, asthma, diabetes, arthritis and kidney issues were also, in some cases only, found to have statistically significant effects but we were not able to identify a strong causal link to debt (advice) in the literature that would justify their inclusion.
Source: YouGov SROI survey of over-indebted (2016), data analysed by Europe Economics.

These findings drawing upon the primary research fit the qualitative analysis identified in the existing literature reasonably well.[62] Turley and White (2007) found that "where sought, advice was clearly having a very beneficial impact on respondents' emotional outlook" and the respondents noted that they felt more reassured, less anxious and less depressed, consistent with our results.[63]

These results have the advantages of being linked directly to debt advice (rather than to simply reversing the effects of indebtedness) and offering quantitative estimates. Nevertheless, they require further computation in order to generate monetised estimates. We employ the following steps in order to interpret the impact that these probabilities have on over-indebted individuals' health conditions:

- Step 1: We identify a reliable estimate from the literature capturing the per person annual cost that each condition implies for the UK healthcare system — our estimates are based on costs for the NHS forecasted by the King's Fund[64];

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[62] See also Pleasance and Balmer (2007).

[63] Turley, C. and White, C. (2007) "Assessing the impact of advice for people with debt problems" Briefing Paper, London: Legal Services Research Centre.

[64] Dhanasiri et al. (2008) "Paying the price: The cost of mental health care in England to 2026". Publication by King's Fund.

- Step 2: when required, these figures are adjusted for the rate of inflation contained within the King's Fund analysis;
- Step 3: the change in individuals' condition, captured by the possible responses given in the primary research (see Table 5.1) are assigned a percentage value which represents the effect that experiencing a change is assumed to have on the annual cost of a health condition. Whilst we have striven to be neutral here, due to the subjectivity around selecting these values we have identified three scenarios (high, medium and low impacts). These are presented below:
  - feeling a lot better would be associated with a decrease in costs of 20 (low), 35 (medium) or 50 (high) per cent;
  - feeling a little better would be associated with a decrease in costs of 15 (low), 20 (medium) or 25 (high) per cent; and
  - feeling a little worse would be associated with an increase in costs of 15 (low), 20 (medium) or 25 (high) per cent;
- Step 4: these assumed effects are then multiplied by the increased/(decreased) probability of belonging in each respective category. Two examples are presented below:
  - For depression: it is 7.9 per cent more likely for someone receiving debt advice to feel a little better; therefore we would multiply 7.9 per cent by 20 per cent (based on step 3). This implies a cost benefit of 1.58 per cent (i.e. 7.9 per cent more likely to feel a little better times 20 per cent less cost associated with the change in health status).
  - For anxiety: it is 11.3 per cent less likely for someone receiving debt advice to feel a little worse; therefore we would multiply -11.3 per cent by 20 per cent (based on step 3). This implies an avoided cost of 2.26 per cent (i.e. -11.3 per cent less likely to feel a little worse times 20 per cent less cost associated with the change in health status).
- Step 5: the benefits due to feeling better and the costs avoided due to not feeling worse are then aggregated and applied to the annual per person cost estimate for each condition;
- Step 6: we use the incidence percentages obtained from the surveyed group of debt advised in order to get an estimate of the percentage of individuals receiving debt advice in the entire UK population that would benefit from these changes; and
- Step 7: last, we take the adjusted per person benefit and multiply it by the implied number of individuals seeking debt advice that would be expected to suffer from each condition.

Table 5.2 summarises the estimated impacts by condition.

Table 5.2: Impacts on mental health care costs by condition

	Estimated number of affected individuals (A)	Annual health cost per person (B)	Percentage of benefit in low-high scenarios (C)	Estimated impact in middle scenario (A x B x C), £m
Depression	537,447	1,798[65]	3.74–7.06%	36.1-68.2
Anxiety	464,069	698[66]	2.89–4.81%	9.4-15.6
Panic attacks or phobias	188,404	698[67]	3.38–7.0%	4.4-9.2
Total				**49.9-93.0**

Note A: Estimated number of advice-seekers is obtained by applying the percentage of advice-seekers from the YouGov SROI survey that suffer from the condition, based on a medical professional, to the entire population of advice seekers.[68]
Note B: The annual service costs per person have been obtained from literature and have been adjusted for inflation and currency differentials.
Note C: These are obtained from step seven described in the paragraphs above and are based on Europe Economics analysis of YouGov survey data.
Source: Dhanasiri et al. (2008), and Europe Economics analysis.

QALY impacts

In addition to direct health system costs, the impacts on individuals' quality of life was also considered. It has been suggested that an episode of a psychiatric disorder such as dysthymia (i.e. chronic depression), social phobia or generalised anxiety disorder can lead to a negative QALY impact of 0.03 (and up) years; the corresponding value for a major depressive disorder is similar, at a 95 per cent confidence interval, at 0.03–0.04 QALYs.[69] We take the monetary value of a QALY as being around £20-£30,000,[70] avoiding an episode related to depression or anxiety could thus have a QALY impact of £600 up to £800 per person. Taking the £20k QALY value, this implies £24-£52 million of additional benefit.

Comparisons between advice seekers

We also examined differences *within* the advised group. This could identify impacts that particular types of advice might have and could help us distinguish between different forms of advice, e.g. high versus low advisor involvement.

In Table 5.3 we only present the regression results for those suffering from depression as an illustrative example of the health conditions we analysed; the same exercise was undertaken for all health conditions but it would not be practical for reasons of space to present all these results here. The results across all conditions provided few significant differences between the within advised sample groups. In general, those who sought free advice were less likely to feel much better and a little worse compared to those who paid for advice. On the other hand, they were more likely to feel much worse than those paying for advice. Whilst

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65 Dhanasiri et al. (2008) "Paying the price: The cost of mental health care in England to 2026" Publication by King's Fund, p.118. The numbers used reflect the inflation implicit in this paper adjusted to end 2016.

66 Ibid.

67 Due to lack of available information and because of the similarity of panic attacks to anxiety disorders we have assumed the annual service cost of this category to be equal to that of anxiety.

68 The entire population of advice seekers was estimated at around 1.5 million people based on an over-indebted population of 7.9 million (Money Advice Service (2017) and a 19 per cent rate of seeking advice among over-indebted people.

69 Saarni et al. (2007) "Impact of psychiatric disorders on health-related quality of life: General population survey" The British Journal of Psychiatry, 190(4), 326-332, March 2007.

70 In the UK, the National Institute for Health and Care Excellence makes judgements around the cost-effectiveness of healthcare interventions. Where the cost is less than £20k per QALY gained, the interventions are considered to be cost effective. Interventions costing in the range £20–£30k can also be seen as cost-effective. This is explained here: https://www.nice.org.uk/advice/lgb10/chapter/judging-the-cost-effectiveness-of-public-health-activities. More generally, the value of a QALY has been extrapolated from this to be £20–£30k.

this is an interesting finding, it would likely be an over-interpretation to infer that the quality or efficacy of free-to-client advice is more heterogeneous than paid advice.

The effects of still receiving advice as opposed to no longer consulting an advisor did not, in general, show a clear pattern. Those who were still receiving advice when the survey was conducted were more likely to feel a little better if they were suffering from OCD, arthritis, back pain and COPD. They were also less likely to feel worse if they were suffering from depression and chronic kidney disease. Those still in advice were more likely to feel much better if they have arthritis and less likely to feel much better if they have an eating disorder.

An exception related to depression. Here, those who sought advice longer than six months ago (six month to a year ago, a year to two years ago and more than two years ago) are less likely to feel worse than those who sought advice less than six months ago.

There were no significant differences in any of the conditions when we analysed the effects of the extent of advisor involvement.

Table 5.3: Regression output for depression (over-indebted population, debt advice seekers)

Dependent variable	Treatment variable	Observations		Coefficient sign		Significance	
		Baseline	Control	Baseline	Control	Baseline	Control
A lot better	free advice	868	631	n.a.	n.a.	n.a.	n.a.
A little better	free advice	868	631	n.a.	n.a.	n.a.	n.a.
A little worse	free advice	882	647	n.a.	n.a.	n.a.	n.a.
A lot worse	free advice	875	640	n.a.	n.a.	n.a.	n.a.
A lot better	still advised	942	674	n.a.	-	n.a.	***
A little better	still advised	942	674	n.a.	n.a.	n.a.	n.a.
A little worse	still advised	956	693	n.a.	n.a.	n.a.	n.a.
A lot worse	still advised	949	686	n.a.	n.a.	n.a.	n.a.
A lot better	6 months ago	488	359	+	n.a.	*	n.a.
A little better	6 months ago	488	359	n.a.	n.a.	n.a.	n.a.
A little worse	6 months ago	494	368	n.a.	n.a.	n.a.	n.a.
A lot worse	6 months ago	488	361	-	-	*	n.a.
A lot better	1 year ago	567	394	+	+	**	*
A little better	1 year ago	567	400	n.a.	n.a.	n.a.	n.a.
A little worse	1 year ago	572	407	n.a.	n.a.	n.a.	n.a.
A lot worse	1 year ago	568	403	-	n.a.	*	n.a.
A lot better	2 years ago	326	232	+	n.a.	*	n.a.
A little better	2 years ago	326	237	n.a.	n.a.	n.a.	n.a.
A little worse	2 years ago	330	243	n.a.	n.a.	n.a.	n.a.
A lot worse	2 years ago	322	238	-	n.a.	**	n.a.
A lot better	involvement	498	371	n.a.	n.a.	n.a.	n.a.
A little better	involvement	498	361	n.a.	n.a.	n.a.	n.a.
A little worse	involvement	505	382	n.a.	n.a.	n.a.	n.a.
A lot worse	involvement	503	378	n.a.	n.a.	n.a.	n.a.

Note: Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***. For presentational purposes we have chosen to only report the regression output for depression. Insignificant results are represented as n.a. in the table.

5.1.5 Conclusions

Debt advice has a direct, beneficial social impact on health through improving the state experienced by those suffering from health conditions and, in doing so, alleviating part of the service costs incurred by the health system. The health benefits associated with receiving debt advice range from £74 to £145 million per annum.

There are two elements to this calculation. First, there are savings in direct health system costs. Applying the current cost of treatment to the estimated reduction in mental health

cases due to debt advice gives us an estimated saving of £50-93 million. This saving related to depression, anxiety and panic attacks. Heart disease and OCD also, in some cases, displayed statistically significant health improvements but these results were based on very few observations, and so we excluded them from our analysis. Cancer, asthma, diabetes, arthritis and kidney issues were also, in some cases, found to have statistically significant effects but we were not able to identify a strong causal link to debt (advice) in the literature that would justify their inclusion.

Second, impacts on individuals' quality of life can be considered. It has been suggested that an episode of a psychiatric disorder such as dysthymia (i.e. chronic depression), social phobia or generalised anxiety disorder can lead to a negative QALY impact of 0.03 and up years; whilst the corresponding value for a major depressive disorder is 0.03 to 0.04 QALYs.[71] Using £20,000 as the monetary value of a QALY, the delivery of debt advice resulting in episodes related to depression or anxiety being avoided should result in £24–£52 million of additional social benefit.

Mental and physical health conditions also have an indirect effect on the employment status and the productivity of individuals. Based on estimates of such costs for depression and anxiety,[72] at face value the total benefit that could be associated with debt advice can reach up to £230 million. However, the methodology adopted in generating the inputs to this estimate are quite simplistic and do not reflect all the potential additional contingencies associated with being over-indebted — instead it is focused on all people with a mental health condition and the likelihood of being in employment. We do not consider it sufficiently robust to include such an estimate of the costs in our core analysis as that might lead to an overestimation of the return on debt advice. This study considers employment effects (focused on productivity) separately below.

While links between debt problems, broader social problems, and morbidity are increasingly established, there remains a scarcity of clear and reliable empirical evidence on the impact of debt advice. Balmer et al. (2007) claim to be the first to provide experimental evidence of a positive effect of debt advice. Our study contributes by providing empirical evidence on the effect of debt advice on multiple mental and physical conditions using a rather large sample compared to previous research (e.g. Balmer et al. used 400 observations and the analysis in "Impact of Debt Advice Research Project" by The Legal Services Research Centre was often based on less than 100 interviews).

Our research appear to show impacts on some of the physical conditions such as heart disease, cancer and diabetes. These results, however, were based on an insufficient number of observations to be statistically significant and the causal link was sometimes difficult to justify — we prefer to provide a more conservative estimate excluding these health conditions in our calculations. One potential line for future research studying the link between debt and health using a more focused approach on specific types of

[71] Saarni et al. (2007).
[72] Dhanasiri et al. (2008), p.118.

conditions and by establishing stronger causal links, ideally supported by medical expertise. Such an approach could monitor a sample spanning a longer time horizon (some symptoms might need more time to develop). One aspect that would be interesting to evaluate further is how the advised and the unadvised differ in terms of attitudes to risk and, more specifically, how these might be associated with both mental health and the level of indebtedness.

5.2 Impact on employment and productivity

5.2.1 Insights from secondary research

Stress — from all causes — is the main work-related health problem in Great Britain according to the Health & Safety Executive (2016) and has caused the loss of 11.7 million working days in 2015/16 (this is about 23.9 days per case).[73] There are additional costs from presenteeism, i.e. when physically present at work but not mentally present. The costs of presenteeism are difficult to estimate. Sainsbury's Centre for Mental Health (2007) estimated the costs of absenteeism and presenteeism. It is estimated that the cost to the UK economy of presenteeism and absenteeism due to mental health is about £23.5 billion per annum, with presenteeism accounting for £15.1 billion of this.[74] We explore here the idea that there could be productivity gains and an improved ability to maintain or gain employment as a result of an individual better managing his or her debt.

First, in terms of finding or keeping a job, Carpenter (2006) states that debt is a significant barrier to those finding or maintaining employment in the long-term. Similarly, the Greater London Authority (2011) describes how debt can prevent people maintaining newly found work if repayments are too high. Shildrick et al. (2010) emphasize that moving back into employment when indebted is difficult as benefits for low-income work do not factor in debt repayments. A StepChange survey indicates that up to 27 per cent of those of its clients previously without a job found it easier to sustain employment subsequently.

The second aspect to consider is how debt (and debt advice) might influence the productivity of those with a job. Financial difficulties have been shown to be a significant cause of stress across UK workers and can therefore have an effect on productivity.[75] Likewise, Clifford et al. (2014) argue for a causal link between debt and the loss of productivity and employment.[76] These studies show that people who had a higher level of financial stress were more likely to waste their time at work, and be more frequently absent from work compared to those with lower levels of stress.[77]

Another strand of the literature has suggested that financial scarcity influences cognitive behaviour, i.e. under scarcity people focus excessively on the most pressing needs.[78] Shah et al. (2015) show that scarcity can lead to attentional shifts that can help explain behaviour such as over-borrowing.[79] Mani et al. (2013) found that

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[73] Health & Safety Executive (2016) "Work related Stress, Anxiety and Depression Statistics in Great Britain".
[74] Sainsbury Centre for Mental Health (2007) "Mental Health at Work: Developing the business case".
[75] See for example: Kim, J., & Garman, E. T. (2004) "Financial stress, pay satisfaction and workplace performance" Compensation & Benefits Review, 36(1), 69-76; Williams, T. (2004) "Review of research into the impact of debt advice" Legal Services Research Centre (LSRC); and Evans (2016) "Working Well. How employers can improve the wellbeing and productivity of their workforce" Social Market Foundation.
[76] Carpenter H. (2006) "Repeat Jobseekers Allowance Spells" DWP; Greater London Authority (2011) "Treading Water: A report on the work of the London Debt Strategy Group and the changing nature of debt advice in London"; and Shildrick et al. (2010) "Low Pay, No-Pay Cycle: Understanding recurrent poverty".
[77] Kim and Garman (2004).
[78] Shah, A. K., Mullainathan, S., & Shafir, E. (2012) "Some consequences of having too little" Science, 338(6107), 682-685.
[79] Shah, A. K., Shafir, E., & Mullainathan, S. (2015) "Scarcity frames value" Psychological science.

thoughts about finances reduce cognitive performance among the poor, but not among individuals who are well-off.[80]

As far back as 1992, the Confederation of British Industry (CBI) estimated the cost of mental health and stress-related problems in the UK to be at £5bn through lost work days alone. The decline in productivity associated with over-indebtedness has been estimated to be 30 per cent of salary.[81] More recently, the Social Market Foundation examined how stress affects workers by reducing productivity, and how low financial resilience is a substantial contributing factor. The results are based on a longitudinal survey of 40,000 households across the UK and they show that:[82]

- 40 per cent of workers experience at least one form of stress that could reduce productivity, such as lack of concentration or loss of sleep;
- 34 per cent achieve less than they would like to due to poor mental health;
- 33 per cent have carried out their jobs less carefully than usual due to mental health issues;
- 16 per cent struggles to concentrate at times due to stress or other worries;
- Around 8 per cent of the workforce find themselves in financial difficulties and nearly 25 per cent believe they are just about managing their finances;
- 40 per cent of workers say that worrying about money has made them feel stressed over the last year;
- 25 per cent say that they have lost sleep as a result of worrying about their finances;
- 13 per cent have reported that financial difficulties have affected their ability to concentrate at work; and
- Six per cent report that they have missed work in the last years as a result of their financial difficulties.

The above is highly suggestive that financial difficulties can result in stress, the alleviation of which through debt advice can promote enhanced productivity. We follow Clifford et al. (2014) in using the estimates from the Sainsbury's Centre for Mental Health, which report that poor mental health leads to 2.8 days absence on average (per full time employee).[83] The Sainsbury's Centre for Mental Health (2007) uses an American report that shows a ratio of presenteeism to absenteeism in a 3:1 ratio. However, since only 50 per cent of US citizens receive sick pay — there tends to be more presenteeism. Consequently, to adjust to a UK context, a ratio of 1.5:1 was adopted, giving an average of 4.2 days lost (with a 54 per cent deduction for part-time employees).[84] The average cost of presenteeism is estimated to be around £145 per working day based on the average gross daily compensation of employees in the UK economy.[85] An adjustment for subsequent earnings growth would increase this by about 20 per cent, to about £174/ day, or £726 per affected full-time employee in 2016.

The cost of presenteeism is estimated to be larger than the cost of absenteeism as there is an inverse association commonly found between earnings and rates of sickness absence (that lower-paid workers take more time off work than higher-paid workers) that does not apply in the case of presenteeism. The cost of absenteeism was estimated at £335 per employee.[86] Again, uplifting this for subsequent earnings inflation gives a 2016 estimate of £402 per employee

The link between financial worries and mental wellbeing sheds light on the way that financial difficulties can affect productivity. Stress and loss of sleep lead to higher rates of absenteeism, whether through mental illness or simply by increased vulnerability to coughs and colds.[87] Recent research by Barclays put forward

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[80] Mani, A., Mullainathan, S., Shafir, E. and Zhao, J. (2013) "Poverty impedes cognitive function" Science, 341(6149), 976-980.
[81] Williams (2004).
[82] Evans (2016).
[83] Ibid.
[84] Ibid.
[85] Ibid.
[86] Ibid.
[87] Evans (2016).

the idea that half of all stress-related absence is caused fully and/or partly by financial difficulties in the UK. This corresponds to five million lost working days per year and the research suggest that absenteeism and presenteeism (as a result of financial difficulties) is adding an extra four per cent to payroll costs for UK firms.[88] According to the Credit and Debt Survey conducted in 2015, 5 per cent of the workers have missed work and 12.5 per cent struggle to focus when at work in the past year as a cause of their financial worries. This distraction is estimated to cost the UK economy £15 billion each year.[89] Interestingly, this is very similar to the earlier Sainsbury's Centre for Mental Health estimate of the cost of presenteeism.

5.2.2 Insights from primary research

In conducting the primary research we sought data on the occurrence of various employment problems by asking respondents whether they have experienced such issues since their financial difficulties began. We also asked the respondents whether they thought their financial difficulties were the causal factor of their problems and used this information in our regression analysis.

The primary research also gathered information on the current and prior working status of the respondents, and these are presented in Table 5.4. The majority of respondents are full-time employed but with a large share either part-time employed, long-term sick or disabled. The distribution of current working status of the unadvised and the advised groups is similar, although the advised have fewer respondents in full-time self-employed, part-time employed and the unadvised have slightly fewer respondents in part-time education and unemployed. The percentage of respondents in full- or part-time employment was 59 per cent for the unadvised and 63 per cent for the advised. This difference is statistically significant at the one per cent level. By comparison, the employment rate at the time the survey was undertaken was 74.2 per cent.[90]

The proportion of long-term sick and disabled respondents is notable in both groups but not unexpected in the over-indebted population. There is no statistical significant difference between the share of long-term sick individuals among the advised and the unadvised. The largest difference present between the groups is the share of full-time employed that is statistically significant. Other values of statistical significance are present for full-time education, part-time self-employed, and retired individuals. Hence, we control for the individuals' employment status in the impact analysis.

88 Barclays (2014) "Financial Well-being: The Last Taboo in the Workplace? Why organisations cannot afford to ignore the financial health of their employees".

89 Neyber/Opinium, Credit and Debt survey conducted 30 November – 7 December 2015, weighted base size for this question 5,053. The sample was limited to those in work.

90 ONS Labour Force Survey, UK employment rate for those aged 16-64 in Jan–Mar 2016.

Table 5.4: Current employment status

Employment Status	The advised	The unadvised	Difference
FT Education	4%	6%	2%**
FT Employment	43%	37%	-6%***
FT Self-employment	4%	5%	1%
PT Education	2%	1%	0%
PT Employment	13%	14%	1%
PT Self-employment	2%	4%	1%*
Retired	6%	9%	3%***
Unemployed	6%	5%	0%
Long-term sick	11%	10%	-1%
Not in employment for other reason (e.g. looking after home)	9%	9%	0%

Source: Europe Economics analysis of YouGov survey data. Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***.

The respondents were asked question regarding their previous and current employment status as well as whether they had faced any employment problems, phrased "have you faced any of the following employment problems since your recent financial difficulties began?" The respondents could choose any of the following problems:

- redundancy;
- dismissed from my job;
- had to stop work due to poor physical/mental health;
- disciplinary issues at work;
- left my job for a different job;
- had to take on another job and/or work extra hours to increase my earnings; and
- left my job for another reason.

We examined whether there was a statistically significant difference in the probability of experiencing these problems between those having received advice compared to the unadvised. The results of the regression models described in Chapter 7 are presented below.

The advised and the unadvised groups

The primary research did not reveal any improvements among the advised individuals when comparing them to the unadvised, using our regression models. Instead, we found significant differences between the groups, indicating that the advised are more likely to have experienced problems associated with employment and productivity (see Table 5.5). One concern is that unemployment or a change in employment circumstances can be a cause of an individual's debt problem as being unemployed or experiencing reduced income can lead to expenditures exceeding income.[91] Therefore, we control for employment prior to their financial difficulties.

The following statistically significant differences were observed:

- work dismissal;
- adding another job or changing job in order to keep up with finances;[92] and
- being more likely to have health problems restraining them from work.

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[91] Turley and White (2007).

[92] Adding another job was only significant when we controlled for gender and age and insignificant for the remaining model specifications.

The analysis showed no significant results on the probability of experiencing redundancy as a result of having received advice as opposed to not. Furthermore, the advised are more likely to have faced disciplinary issues at work (e.g. which we can speculate as due to presenteeism, but cannot robustly demonstrate) compared to the unadvised. The results remained unchanged when we used the PSM approach, which implies the findings are robust.

This could mean that the advice process is acting as a short-term source of stress, i.e. admitting to the severity of the debt situation could turn pressure into stress when you feel unable to cope and face new challenges. This would in turn imply that any positive effects of advice (which has a positive impact on the survey respondents' financial difficulties) on employment take time to appear — or that factors (other than debt intensity, etc.) are resulting in differences between the advised and unadvised sub-populations. For example, Turley and White (2007) argue that desperation is an important driver of seeking advice. Feeling such desperation for help was argued to be a result of the culmination of the impacts (including employment and education) of being over-indebted.[93]

The nature of the question created some limitations to our analysis of the primary research, as the information in the survey did not allow us to pin-point whether the employment problems happened before or after the individual sought advice. However, since the question was phrased to identify the employment problems as an effect of being over-indebted, we conclude that these problems were likely not the direct cause of the over-indebtedness, but we cannot establish whether facing such events drive individuals to seek advice or if the process of seeking debt advice — perhaps by being a further distraction or by requiring additional time commitments — is the cause of these issues. Another potential explanation is that seeking advice actually adds to stress (admitting to the severity of the situation and taking action to deal with it could — at least in the short-term — be more stressful than a 'coping' strategy based around ignoring it). However, given the other evidence available to us, we consider the former explanation to be more plausible.

Comparisons between advice seekers

In order to better understand the findings from the primary research, particularly the greater likelihood of problems for the advised compared to the non-advised, we also examined the differences within the advised group. This could identify significant impacts that particular types of advice might have and could help us distinguish between, e.g. paid versus free, or high versus low advisor involvement.

The results from the comparison of advice seekers are presented in Table 5.5. The analysis revealed that those receiving free, as compared to paid, debt advice are less likely to have been dismissed from their job or to have left work for another job. One inference might be that paid advice is sought as a "last resort" solution — which might even be motivated by significant life events, such as losing a job. If this is correct, then it may be a matter of the length of time subsequent to the advice being taken that would reveal any positive employment-related benefits related to such advice.

Those being advised still in the process of consulting an advisor (compared to those who have completed the process) are more likely to have experienced both redundancy problems and disciplinary issues when at work. Furthermore, the advised who sought advice six months ago are less likely to have health problems that constrain them from being at work (compared to the rest of the advised), so this may be influencing the results. The people who sought advice more than two years ago are more likely to have faced redundancy after their financial difficulties began compared to those who sought advice less than six months ago. This may reflect the changing state of the economy.

The intensity level of the debt advisor's involvement did not have a statistically significant impact.

[93] Turley, C. and White, C. (2007) "Assessing the impact of advice for people with debt problems" Briefing Paper, London: Legal Services Research Centre.

Table 5.5: Regression output for employment problems (over-indebted population, debt advice seekers)

Dependent variable	Treatment variable	Observations		Coefficient sign		Significance	
		Baseline	Control	Baseline	Control	Baseline	Control
Comparison between the advised and the unadvised							
Redundancy	advised	2470	1875	n.a.	n.a.	n.a.	n.a.
Dismissal	advised	2470	1914	+	n.a.	*	n.a.
Health	advised	2470	1914	+	+	**	**
Discipline	advised	2470	1914	+	n.a.	*	n.a.
Other job	advised	2470	1914	+	+	*	*
Add job	advised	2470	1914	n.a.	n.a.	n.a.	n.a.
Comparison between advice seekers							
Redundancy	free advice	1069	883	n.a.	n.a.	n.a.	n.a.
Dismissal	free advice	1069	896	-	-	*	*
Health	free advice	1069	896	n.a.	n.a.	n.a.	n.a.
Discipline	free advice	1069	896	n.a.	n.a.	n.a.	n.a.
Redundancy	still advised	1155	941	n.a.	n.a.	n.a.	n.a.
Dismissal	still advised	1155	953	n.a.	n.a.	n.a.	n.a.
Health	still advised	1155	953	n.a.	n.a.	n.a.	n.a.
Discipline	still advised	1155	953	n.a.	n.a.	n.a.	n.a.
Redundancy	6 months	627	512	n.a.	+	n.a.	*
Dismissal	6 months	627	520	n.a.	n.a.	n.a.	n.a.
Health	6 months	627	520	-	-	*	*
Discipline	6 months	627	520	n.a.	n.a.	n.a.	n.a.
Redundancy	1 year	682	546	+	+	*	*
Dismissal	1 year	682	553	n.a.	n.a.	n.a.	n.a.
Health	1 year	682	553	n.a.	n.a.	n.a.	n.a.
Discipline	1 year	682	546	n.a.	n.a.	n.a.	n.a.
Redundancy	2 year	403	329	+	+	**	**
Dismissal	2 year	403	336	n.a.	n.a.	n.a.	n.a.
Health	2 year	403	336	n.a.	n.a.	n.a.	n.a.
Discipline	2 year	403	336	n.a.	n.a.	n.a.	n.a.
Redundancy	involvement	606	516	n.a.	n.a.	n.a.	n.a.
Dismissal	involvement	606	522	n.a.	n.a.	n.a.	n.a.
Health	involvement	606	522	n.a.	n.a.	n.a.	n.a.
Discipline	involvement	606	522	n.a.	n.a.	n.a.	n.a.

Note: insignificant results are represented as n.a. in the table. For presentational purposes we do not report the regression output for 'Other job' and 'Add job' in the *within* the advised group analysis. Other job was significant with a negative sign when we analysed free advice compared to paid advice. All other treatment variables were insignificant for both dependent variables.

5.2.3 Quantitative and qualitative impacts

We have found widespread evidence to indicate that financial distress is a significant cause of lowered productivity in the UK. This can be either through absenteeism- or presenteeism-based effects. This is clear from both the primary and secondary research.

On the other hand, the evidence around how then resolving those financial difficulties (specifically through advice) can lead to a recovery in productivity, etc. is much less clear. Our reading of the evidence is that this is a reasonable inference to draw — but we do emphasise that the evidence directly in support of this proposition is limited (being drawn from studies based on a handful of interviews).

We noted above that the current values of the annual loss due to presenteeism and absenteeism are estimated at £726 and £402 (indexing previous estimates from the Sainsbury's Centre for Mental Health). The potential gain of avoiding such an employment problem is the average of these two, i.e. £564 per employee. These are estimates per employee. About one in six employees may have mental health problems at any given time.[94] At a rough approximation, this suggests that the cost per employee with a mental health condition could be about six times higher than the employee figures. Taking the average of the two impact areas then gives us about £3384 as the potential gain for an individual with a job from avoiding either presenteeism or absenteeism type problems.

Taking the mental well-being improvements calculated in the previous section as our proxy for the relief of that 'stress' (i.e. which would have been sufficient to cause employment-related issues) enables us to estimate the productivity gain associated with advice. We use the population estimates for those with depression, anxiety and panic attacks from Table 5.2 (column A) and the low and high estimates around the mid-point (column C in Table 5.2 above) to give a sense of the scale of the population within the advised with mental health issues, and of the potential benefit in reducing presenteeism and absenteeism.

The employment rate amongst the advice-seeking over-indebted is 50-55 per cent, based on the YouGov survey[95] (i.e. low compared to the UK population). The product of these assumptions, is an estimated effect of £67.5–£136.7 million.

Additional employment-related benefits could relate to reduced long-term sickness (i.e. reduced statutory sick pay) and reduced unemployment benefit. However the data we have does not allow robust identification (and hence quantification) of such effects being driven by debt advice.

5.2.4 Conclusions

Financial distress is a significant cause of lowered productivity in the UK, either through absenteeism- or presenteeism-based effects. This is clear from both the primary and secondary research. The question of how resolving those financial difficulties (e.g. through advice) can lead to a recovery in productivity, etc. is less clear. Whilst this is a

[94] Sainsbury Centre for Mental Health (2007) "Mental Health at work: developing the business case", Policy paper 8.

[95] This is a full-time equivalent figure. Part time work of 8-29 hours has been adjusted by a 47.5 per cent factor to reflect the difference between a full working week and the mid-point between 8 and 29 hours, i.e. 18.5 hours. The numbers of those working less than 8 hours have been adjusted downwards using a 15 per cent weighting. The employment rate amongst the advised (i.e. those with any employment, excluding those who are retired) is about 65 per cent. This is notably lower than amongst the UK adult population, where it is 74.2 per cent.

reasonable inference to draw, the evidence in support of this proposition is limited (being drawn from studies based on a handful of interviews).

The primary research showed that the advised are more likely to have faced work related problems than the unadvised. Work-related problems may prompt advice-seeking, as a type of significant life event that leads to 'desperation', and this could be a reasonable interpretation of these findings in the primary research. However, another potential explanation is that seeking advice actually adds to stress (i.e. admitting to the severity of the situation and taking action to deal with it could — at least in the short-term — be more stressful than a 'coping' strategy based around ignoring it). Another possible explanation is that any positive effects stemming from taking advice (which has a positive impact on the survey respondents' financial difficulties) on employment take time to appear — or that factors (other than debt intensity, etc.) are resulting in differences between the advised and unadvised sub-populations. These alternative interpretations are not mutually exclusive.

If we take the mental well-being improvements as a proxy for the relief of 'stress' that would be sufficient to cause employment-related issues, then this enables us to estimate the productivity gain associated with advice. Using these same scales of improvement as with mental health, as described above, the annual loss of absenteeism and presenteeism avoided due to the provision of debt advice is estimated at £67–£137 million.

While links between debt problems and broader social problems such as employment and productivity have been increasingly established, there is a scarcity of clear and reliable empirical evidence on the impact of debt advice. This study contributes to the by providing empirical evidence on the interaction between seeking debt advice and the employment problems that advice seekers and non-seekers are facing, illustrating the complexity of identifying impacts arising from debt advice.

Therefore, future research enabling assessment of more *before* and *after* advice effects on the over-indebted would be beneficial. In order to truly capture such impacts one would need to follow a consistent group of individuals in real-time, including both advice-seekers and non-seekers. The possibility of individuals facing lagging effects related to debt advice suggests any such research should be over a long-term horizon. The Money Advice Service is currently exploring the potential of conducting a longitudinal survey that would identify the long-term impacts of debt advice, understand any variance in impacts by demographic, delivery channel and organisation and identify the most effective outcomes that help to ameliorate over-indebtedness.

5.3 Impact on small businesses

5.3.1 Insights from secondary research[96]

The number of self-employed people in the UK was 4.8 million in the three months to January 2017, an increase of 148,000 compared to the same period from the year before.[97] Companies run by self-employed people currently employ around one third of the British workforce. Nevertheless, many of the self-employed are sole traders, where there is no legal distinction between them as individuals and their business entity. This can create a transmission channel between personal debt (e.g. using a second mortgage to fund a business) and business survival.

The number of private businesses increased by almost 100,000 in the year to early 2016 (i.e. start-ups exceeded closures by this amount). Sole traders represented about 60 per cent of the stock of all businesses, and businesses without employees (i.e. sole traders and also companies with no employees) were fully 75 per cent of the total count.[98] Self-employment remains largely male dominated, although the number of women self-employed is increasing.[99]

The Federation of Small Businesses' (FSB's) Small Business Index indicated that 10 per cent of the surveyed business owners expected to downsize, close or hand their business over the coming 12 months.[100] Business Debtline, a free debt advice service for self-employed and small businesses, helped over 25,000 small businesses and self-employed people in 2016, through phone calls and web chats, with 135,000 visitors to its website. Business Debtline survey business owners after speaking to them, six weeks subsequently and also 9–18 months later.[101] The results show that:

- Immediately post-advice, overwhelming proportions of advice-seekers are satisfied with the quality of the experience with Business Debtline (99 per cent for phone calls, 97 per cent for webchats) and the clarity of next steps to be undertaken (94 per cent for phone-based advice, 96 per cent for web chats).
- Six weeks later, 84 per cent of business owners had taken at least one action with their debts, with 88 per cent stating that they now knew more about how to renegotiate with creditors. Of those still trading six weeks later, 58 per cent attributed Business Debtline's advice as having contributed to that. About 76 per cent felt more in control of their financial situation.
- Amongst those surveyed 9–18 months later, 87 per cent of advice-seekers had achieved at least partial resolution of their debt problems, with 87 per cent considering the advice received as having been helpful in improving skills to better manage money and deal with debts. Almost all (93 per cent) expressed greater confidence in managing money post-advice. About two-thirds (65 per cent) reported improved well-being (and this rose to 79 per cent of those advice-seekers who had followed all of the recommended steps).

There have been significant changes to the debt levels of the advice-seekers seen by the Business Debtline. The proportion of clients who owe less than £5,000 and are struggling to repay their debts tripled since 2010. Those owing £10,000 to £15,000 also increased and now account for almost 20 per cent of clients. On

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[96] Unless otherwise indicates, this section contains information sourced from: Money Advice Trust (2016) "The cost of doing business. Supporting the self-employed and small businesses", a report by the Money Advice Trust.

[97] Labour Force Survey — Office for National Statistics, Retrieved: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/mar2017.

[98] Department for Business, Energy & Industrial Strategy (2016) "Business Population Estimates for the UK and Regions 2016".

[99] Department of Business Innovation and Skills (2016) "Small Business Survey 2015".

[100] FSB Small Business Index Q4 2016.

[101] The later round draws on a smaller sample (115 respondents) than the survey work undertaken at six weeks (463 respondents), and particularly relative to those surveyed post-advice (over 11,000).

the other hand, business owners with larger debts, say £30,000-£50,000, have decreased but still account for approximately 8 per cent of clients, respectively. People owing more than £100,000 had also decreased and accounted for five per cent of the advice-seekers seen in 2016.

5.3.2 Insights from primary research

We focus our attention here on those individuals identified as small business owners. The distribution of their business size is shown below in Table 5.6. The largest difference between the advised and unadvised occurs when the business size is consisting of just one person or over a 1000 people. There are statistically significant differences between the proportion of advised and unadvised that own a business of between 6 and 19 employees; the share of the unadvised population falling in this category is five per cent compared to only three per cent in the advised population. For other business sizes, the difference is either non-existent or minimal.

Table 5.6: Business size

Business size	The advised	The unadvised	Difference
1	8%	13%	5%***
2	1%	1%	1%
3 to 5	1%	2%	0%
6 to 9	2%	3%	1%*
10 to 19	1%	2%	1%**
20 to 34	2%	2%	1%
35 to 49	2%	2%	0%
50 to 99	3%	3%	0%
100 to 249	2%	3%	1%
250 to 499	2%	3%	1%
500 to 999	2%	3%	1%
1000 or more	12%	19%	7%***

Source: Europe Economics analysis of YouGov survey data. Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***.

The primary research sought data on the incidence of various problems that the self-employed may face by asking whether they had experienced such problems since their financial difficulties began. The respondents were also probed on whether they thought their financial difficulties were the causal factor. The respondents were allowed to choose any of the following problems:

- a business they owned had to close;
- they had to take a reduced income from their business/businesses;
- their business/businesses has experienced another difficulty; and/or
- their business/businesses have not experienced any difficulty.

The advised and the unadvised groups

We examined the probability of experiencing these problems being an advised individual as opposed to unadvised. The regression analysis showed that the advised group were significantly more likely to have a business that had to close down as a result of their financial difficulties compared to the unadvised group (see Table 5.7). The other self-employment problems did not show any significant differences in the probability of experiencing these events.

As with other similar results, this could be a reflection of the fact that being in a sufficiently bad financial situation or experiencing negative life events (e.g. small business having bad financial results) might be motivating the decision to seek advice as supported by Turley and White (2007).[102] If that were the case, then the models might be picking up significant relationships due to reverse causality (i.e. the mixing of cause and effect). The results remained unchanged when we used the PSM approach.

Comparisons between advice seekers

In order to better understand the findings from the primary research, particularly the greater likelihood of problems for the advised compared to the non-advised, we also examined the differences within the advised group. This could identify significant impacts that particular types of advice might have and could help us distinguish between, e.g. paid versus free, or high versus low advisor involvement.

The analysis within the advised group did highlight some significant differences, the results are presented in Table 5.7. The individuals who have received free advice are significantly less likely to have closed down their business as opposed to the one who have sought paid advice. Again, this is consistent with the thought that paid advice is sought as a "last resort" solution which might be motivated by significant life events.

The differences between those who are still in advice as opposed to not still in advice were both insignificant. Although the individuals who received advice a year ago were significantly less likely to have had to reduce their income from their businesses compared to those who first sought advice six months ago, this could be a possible reflection of the time lag in experiencing the beneficial impacts of debt advice. However, the difference between those who sought advice two years ago compared to six months ago was insignificant.

The analysis of the involvement level of the debt advisor suggest that those who had 'high involvement' were more likely to have had their business closed down compared to those who had low involvement. This likely reflects that someone who has experienced the closing down of their business is going to be worse off in terms of their financial situation, and their ability to manage it. This is somewhat supported by the positive correlation between having closed a business and the amount of outstanding debt, although the causal direction cannot be established. Having a worse financial situation is most likely reflected in the type of debt solution the individual is involved with, which in turn reflects the level of advisor involvement. However, it is important to note that the sample size is not sufficiently large to draw strong inferences here.

[102] Turley, C. and White, C. (2007) "Assessing the impact of advice for people with debt problems" Briefing Paper, London: Legal Services Research Centre.

Table 5.7: Regression output for business problems (over-indebted population, debt advice seekers)

Dependent variable	Treatment variable	Observations		Coefficient sign		Significance	
		Baseline	Control	Baseline	Control	Baseline	Control
Comparison between the advised and the unadvised							
Close down	advised	338	195	+	+	***	**
Less income	advised	338	197	n.a.	n.a.	n.a.	n.a.
Comparison between advice seekers							
Close down	free advice	139	100	-	n.a.	*	n.a.
Less income	free advice	139	100	n.a.	n.a.	n.a.	n.a.
Close down	still advised	149	103	n.a.	n.a.	n.a.	n.a.
Less income	still advised	149	103	n.a.	n.a.	n.a.	n.a.
Close down	6 months ago	65	44	n.a.	n.a.	n.a.	n.a.
Less income	6 months ago	65	44	n.a.	n.a.	n.a.	n.a.
Close down	1 year ago	94	60	n.a.	n.a.	n.a.	n.a.
Less income	1 year ago	94	60	-	-	*	*
Close down	2 years ago	56	40	n.a.	n.a.	n.a.	n.a.
Less income	2 years ago	56	36	n.a.	-	n.a.	*
Close down	involvement	79	57	+	n.a.	*	n.a.
Less income	involvement	79	57	n.a.	n.a.	n.a.	n.a.

Note: Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***. Insignificant results are represented as n.a. in the table.

5.3.3 Conclusions

The self-employed may inter-mingle their business and personal affairs, e.g. using personal borrowing to fund the former. Advice is expected to promote well-being (which we have discussed and quantified above) and also to promote business continuity.

The secondary research reveals that debt advice can impact businesses in a positive manner. For example, Business Debtline's research strongly indicates that its advice has helped its clients deal better with and even overcome their debt problems. Furthermore, insights from the primary research are suggestive of other benefits from debt advice: the longer the period subsequent to individuals receiving advice, then the less badly affected is their business income. Somewhat similarly, business owners who sought free advice were less likely to have closed down their business compared to those sought commercial advice: this is consistent with the hypothesis that paid advice is sought as a "last resort" solution which might be motivated by significant life events.

Unfortunately, a significant caveat here is the small sample size (below 100 observations) which is not sufficiently large to allow for reliable statistical inference.

We are not able to quantify robustly the scale of the business continuity effect (and hence not monetise any such effect). Research to date in this area has either lacked an appropriate counterfactual or — as with the primary research connected with this study — indicates that advice is being sought too late (i.e. in a "last resort" manner when an individual is facing substantial problems, as suggested by the work of Turley and White (2007).

Further research with increased focus on the self-employed, in order to generate larger sample sizes, could produce more robust results. Where business closure was involved, increased understanding of the role of advice and the ways in which mixing personal and company debts could complicate resolution would be valuable.

5.4 Impact on relationships

5.4.1 Insights from secondary research

A link between financial difficulties and relationship breakdown is supported by the literature. Studies examining the link between indebtedness and the breakdown of relationships indicate that financial strain can lead to marital instability.[103,104] An old study, Caplovitz (1979), indicates that 14 per cent of couples in financial difficulties believed their marriage had become worse and 34 per cent of couples with debt problems reported unstable marriages.[105] Dew (2011) found that consumer debt increased the likelihood of divorce by seven per cent for each 10-fold increase in debt. The likelihood of divorce was increased when couples have higher levels of debt.[106] More recently, Dew and Stewart (2012) showed how consumer debt has high salience of perceptions of financial conflict, especially for husbands.[107] Fisher & Lyons (2006) found that filing for bankruptcy almost doubles the likelihood of divorce, with a predicted probability of 1.8 per cent.[108] Furthermore, StepChange surveys have shown that financial difficulties put relationships under strain. For example, in research conducted jointly with The Children's Society in 2014, 57 per cent of parents surveyed stated that debt had put relationships under strain, with seven per cent of relationships breaking down.[109] The same research also indicated that a high proportion, 47 per cent, felt that debt advice has helped to ameliorate these problems. However, evidence on this link between advice and improvement remains limited.

Divorce itself can be costly. According to Aviva, the "hidden" cost of divorce (and separation) amounts up to £22,000 per person (or £44,000 per — former — couple). The study considered not only the direct costs of a break-up or divorce but also the indirect costs that people endure as a result of splitting up with their partner. This study suggests that about 40 per cent of newly separated people increase their expenses on items to treat themselves. According to more than 50 per cent of the respondents, it took more than six

[103] Olson, G. and Olson, D. (2003) "National Survey of Marital Strengths".
[104] See for example: (Sullivan et al., 1995; Sullivan, Warren, & Westbrook, 2000). Other researchers find that sharp declines in income and wealth brought about by events such as unemployment lead to divorce (i.e. Attewell, 1999; Johnson & Skinner, 1986).
[105] Caplovitz (1979) "Making Ends Meet. How Families Cope with Inflation and Recession" Sage Library of Social Research. Beverly Hills: Sage.
[106] Dew, J.P. (2011) "The association between consumer debt and the likelihood of divorce" Journal of family and economic issues, 32(4), 554-565.
[107] Dew, J.P. and Stewart, R. (2012) "A Financial Issue, a Relationship Issue, or Both? Examining the Predictors of Marital Financial Conflict" Journal of Financial Therapy, Volume 3, Issue 1.
[108] Fisher, J. D., and Lyons, A. C. (2006) "Till debt do us part: A model of divorce and personal bankruptcy" Review of Economics of the Household, 4(1), 35-52.
[109] StepChange and The Children's Society (2014) "The Debt Trap".

months for them to settle financially, however, the typical time to settle was 11.5 months.[110] The typical expenses identified by Aviva as following a relationship breakdown are presented in Table 5.8.

Table 5.8: Expenses following a relationship breakdown

Expense	Typical cost per person, £	Proportion who spent on this
Legal fees	1280	0.55
Annual child maintenance payments	3371	0.33
Buying a new home	94,100	0.17
Setting up new home e.g. furniture, white goods	5280	0.39
Buying a car / other vehicle	3880	0.11
Redecorating previous shared home	1370	0.1
Annual childcare costs as a result of separation	4320	0.08
Legal fees over child custody arrangements	3300	0.04
Post-separation holiday	1925	0.13
Gadgets / technology e.g. TV / sound system	1292	0.13
Learning a new skill / taking up a hobby	2105	0.12
Dating	1277	0.14
Entertainment / gifts for children	1595	0.07
Life coaching / therapy	1853	0.06
New clothes, jewellery, makeover	1483	0.08
Gym / personal trainer / get fit regime	1535	0.02

Source: Aviva (2014): http://www.aviva.co.uk/media-centre/story/17337/cost-of-divorce-reaches-44000-for-uk-couples/.

Other estimates encountered in literature are presented below:

- Getting divorced. The legal fees of getting a divorce differ across the UK and dependent on complexity. According to the Money Advice Service the total solicitor fees for a negotiated financial settlement ranges between £2,000 and £3,000.[111] The costs can reach up to £30,000 plus VAT or more for one that goes all the way to a contested final court hearing. There are also other (including ongoing) costs arising in a divorce (e.g. child support payments, etc.).
- Family breakup. The 2016 update of the Relationships Foundation's "Cost of Family Failure Index" estimates that the cost of family breakdown to the taxpayer to be as much £48 billion a year.[112]

It follows that divorce could also cause debts to become unmanageable (by increasing their scale, whilst — potentially — reducing incomes).

5.4.2 Insights from primary research

The primary research sought data on the occurrence of various relationship problems. Respondents were asked about what relationship problems they had experienced since their financial difficulties began. We also asked the respondents whether they thought their financial difficulties were the causal factor of their problems. The primary research also included information on the current and prior marital status of the respondents. Table 5.9 shows the rather similar distributions of different marital status between the advised and the unadvised. Almost all of the marital status categories exhibit no difference or only a slight variation.

[110] http://www.aviva.co.uk/media-centre/story/17337/cost-of-divorce-reaches-44000-for-uk-couples/.
[111] https://www.moneyadviceservice.org.uk/en/articles/how-much-does-divorce-or-dissolution-cost.
[112] The Relationship Foundation (2016) "Counting the Cost of Family Failure – 2016 Update".

For people living in a civil partnership and those separated but legally married, the difference between advised and unadvised is statistically significant at the one and five per cent level, respectively.

Table 5.9: Current marital status

Marital Status	The advised	The unadvised	Difference
Married	38%	40%	1%
In civil partnership	2%	1%	-1%***
Separated but legally married	3%	2%	-1%*
Living together	15%	17%	2%
In a relationship	7%	7%	0%
Single	22%	22%	-1%
Divorced	10%	10%	0%
Widowed	2%	2%	0%

Source: Europe Economics analysis of YouGov survey data Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***.

The respondents could indicate any of following relationship problems:

- Marital problems, which led to divorce.
- Marital problems, which led to separation (not divorce).
- Marital problems, which did not lead to divorce or separation.
- Problems in my relationship, which led to relationship breakdown.
- Problems in my relationship, which did not lead to relationship breakdown.
- I did not experience any of the above.
- I have not been in a relationship during my recent financial difficulties.

Relationship breakup was defined as the respondent selecting any of the following responses: marital problems that led to divorce, separation, or relationship breakdown. We also analysed each type of relationship breakdown separately.

The advised and the unadvised groups

The regression results show that the advised are more likely to have experienced a relationship event since their financial difficulties started compared to the non-advised. When analysing the types of breakdown separately, only the difference in separation rates across the groups was statistically significant. However, the advised are significantly less likely to have problems in their relationships that do not lead to separation than the unadvised (see Table 5.10). The results remained unchanged when we used the PSM approach.

The secondary research showed a clear relationship between financial difficulties and marital (or relationship) problems, and that this could ultimately result in divorce. The heightened probabilities of divorce are, however, relatively small. The results of the primary research do not contradict this — there is a high level of relationship strain across both sub-samples, which are both comprised of over-indebted individuals. Given the high costs around relationship breakdown (particularly divorce), we may simply be seeing such breakdown acting as a trigger for the seeking of advice, e.g. because of suddenly increased debts or reduced income. Turley and White (2007) argue that separation from a partner is a cause of being indebted and that such an event acted as a trigger for seeking advice.[113] This would mean that it was too late for advice to have any beneficial impact on that state of the relationship. It may also mean that any role that advice-seeking might

[113] Turley, C. and White, C. (2007) "Assessing the impact of advice for people with debt problems" Briefing Paper, London: Legal Services Research Centre.

have in preserving relationships (or in enabling new, more stable ones) would be undetectable in our dataset due to such confounding factors.

Comparisons between advice seekers

In order to better understand the findings from the primary research, particularly the greater likelihood of problems for the advised compared to the non-advised, we also examined the differences within the advised group. This could identify significant impacts that particular types of advice might have and could help us distinguish between, e.g. paid versus free or, high versus low advisor involvement. The results are presented in Table 5.10.

The within treatment group analysis revealed that those who have sought free advice were significantly more likely to have experienced problems in their relationship that did not lead to a breakup. None of the other models in the free advice analysis were shown to be significant.

None of the models showed any significant results in the analysis *within* the treatment group (the advised) for the still in advice treatment effect. However, there were some significant differences in relationship problems when we analysed the time since the advised first sought advice. Those who had sought advice six months to a year ago (six months ago) were significantly more likely to have experienced a divorce or a separation compared to those who sought advice less than six months ago. However, they were less likely to have experienced relationship problems that did not lead to a breakup, as were the ones that sought advice more than two years ago (two years ago) compared to the ones that had sought advice less than six months ago. These results are based on rather small sample sizes and hence the inferences that can be drawn from these models are limited.

People who received high levels of involvement from their advisor were significantly more likely to have experienced a relationship breakdown compared to those with lower levels of involvement. This may suggest that some people who have experienced a relationship breakup before seeking advice are in "worse shape" and need more help.

Table 5.10: Regression output for relationship problems (over-indebted population, debt advice seekers)

Dependent variable	Treatment variable	Observations		Coefficient sign		Significance	
		Baseline	Control	Baseline	Control	Baseline	Control
Comparison between the advised and the unadvised							
Marital problem	advised	564	564	+	+	***	***
Divorce	advised	564	548	n.a.	n.a.	n.a.	n.a.
Separation	advised	564	564	+	+	***	**
Breakup	advised	564	564	n.a.	n.a.	n.a.	n.a.
Problem no breakup	advised	564	564	-	-	***	*
Comparison between advice seekers							
Marital problem	free advice	289	289	n.a.	n.a.	n.a.	n.a.
Divorce	free advice	289	240	n.a.	n.a.	n.a.	n.a.
Separation	free advice	289	283	n.a.	n.a.	n.a.	n.a.
Breakup	free advice	289	289	n.a.	n.a.	n.a.	n.a.
Problem no breakup	free advice	289	289	+	+	***	**

Dependent variable	Treatment variable	Observations		Coefficient sign		Significance	
Marital problem	still advised	306	306	n.a.	n.a.	n.a.	n.a.
Divorce	still advised	306	301	n.a.	n.a.	n.a.	n.a.
Separation	still advised	306	301	n.a.	n.a.	n.a.	n.a.
Breakup	still advised	306	306	n.a.	n.a.	n.a.	n.a.
Problem no breakup	still advised	306	306	n.a.	n.a.	n.a.	n.a.
Marital problem	6 months ago	182	182	+	+	**	*
Divorce	6 months ago	182	178	n.a.	n.a.	n.a.	n.a.
Separation	6 months ago	182	178	+	n.a.	*	n.a.
Breakup	6 months ago	182	162	n.a.	n.a.	n.a.	n.a.
Problem no breakup	6 months ago	182	182	-	-	***	**
Marital problem	1 year ago	178	178	n.a.	n.a.	n.a.	n.a.
Divorce	1 year ago	178	149	n.a.	n.a.	n.a.	n.a.
Separation	1 year ago	178	118	n.a.	n.a.	n.a.	n.a.
Breakup	1 year ago	178	178	n.a.	n.a.	n.a.	n.a.
Problem no breakup	2 years ago	106	178	n.a.	n.a.	n.a.	n.a.
Marital problem	2 years ago	106	106	n.a.	n.a.	n.a.	n.a.
Divorce	2 years ago	106	84	n.a.	n.a.	n.a.	n.a.
Separation	2 years ago	106	46	n.a.	n.a.	n.a.	n.a.
Breakup	2 years ago	106	106	n.a.	n.a.	n.a.	n.a.
Problem no breakup	2 years ago	106	106	-	-	*	*
Marital problem	involvement	176	176	n.a.	n.a.	n.a.	n.a.
Divorce	involvement	176	157	n.a.	n.a.	n.a.	n.a.
Separation	involvement	176	172	n.a.	n.a.	n.a.	n.a.
Breakup	involvement	176	176	+	n.a.	*	n.a.
Problem no breakup	involvement	176	176	n.a.	n.a.	n.a.	n.a.

Note: Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***. Insignificant results are represented as n.a. in the table.

5.4.3 Conclusions

A link between financial difficulties and relationship breakdown is strongly supported by the literature and also the primary research. But the evidence for advice resolving such difficulties is limited. The key issue is one of timing.

The secondary research showed clear relationships between financial difficulties and marital (or relationship) problems, and that such difficulties could ultimately result in divorce. The heightened probabilities of divorce are, however, relatively small. The

results of the primary research do not contradict this — there is a high level of relationship strain across both the advised and the unadvised. Given the high costs around relationship breakdown (particularly divorce), we may be observing scenarios in which relationship breakdown is acting as a trigger for advice seeking, e.g. a costly divorce resulting in suddenly increased debts or reduced income and consequently motivating advice seeking. Indeed, Turley and White (2007) argues that separation from a partner is a cause of being indebted and that such an event acted as a trigger for seeking advice. The primary research supports this view.

We have neither been able to establish a robust causal link between advice seeking and the prevention of relationship breakdown in either the review of secondary materials nor in the primary research. As such, we are not able to quantify any such impact. Research to date in this area has either lacked an appropriate counterfactual or — as with the primary research connected with this study — indicates that advice is being sought too late; i.e. in a "last resort" manner when an individual is facing substantial problems.

This study's contribution lies in highlighting the potential dynamic relationship between advice seeking and relationship breakdown, i.e. the primary research suggests that some of the over-indebted do not seek help until their situation has become overwhelmingly bad.

There are a number of ways in which further research could investigate the contribution of resolving financial difficulties towards recovering a relationship that would otherwise breakdown or be on the verge of breakdown. For example, the timing of the advice could be studies more precisely, e.g. was advice sought before or after the relationship has reached a crisis point? New research could also explore further the role of relationship breakdown in triggering debt advice being sought, for example whether debt advice is sought post-separation or not. Similarly, investigation around the impact on the development of new relationships (e.g. finding a new partner after a relationship breakdown), and also on the impact on non-familial relationships (e.g. maintaining friendships), could enrich the understanding of debt advice. Again, further investigation would be merited around the influence of other factors, such as debt-to-income levels and advisor involvement, where small sample sizes have limited the conclusions we have been able to draw.

Any such future study would again need to specify an appropriate control group, i.e. following the methodology of our study, but with a greater focus on family compositions and relationships in order to generate larger sample sizes, and hence more robust results. Furthermore, this would ideally involve a longitudinal methodology as one would need to follow the advised before and after advice — where both resolving your financial difficulties and recovering your relationship are most likely rather slow processes.

5.5 Impact on children

5.5.1 Insights from secondary research

Problem debt could also have an impact on the children in a household as they face the risk of disengagement, associated with their parents' behaviour. Such disengagement (i.e. poor mental health in childhood caused by poverty and debt) can have long-term impacts on the child such as increasing the risk for depression, substance abuse and criminal activity as an adult.[114]

The specific impacts of debt on children in any individual household will vary according to the severity of financial difficulties within the household, the duration of these and the coping strategies employed by parents and children themselves. The diversity of debts owed has also been found to be a factor.[115] The child welfare implications of debt problems can be seen to fall into three broad types: negative financial effects; disruption effects, and emotional or psychological effects.[116] More specifically, the types of welfare effects experienced by children include:[117]

- going to school hungry, causing them to lack concentration during lessons;
- living in overcrowded conditions (which affects the ability of children to find quiet space to undertake homework);
- missing out on holidays, school trips, and other social events (e.g. birthdays); and
- having fewer new material possessions, including clothing, than other children.

More broadly, the quality of family relationships (particularly between parents and children) can be adversely affected. However disentangling these effects from poverty is not straight-forward. Recent analysis by the Children's Society of the Millennium Cohort Study and the Society's Well-being survey found that financial difficulties influenced children's feelings of well-being, and that the increasing number of different debt types (e.g. rent, utilities, credit cards, etc.) had an additional adverse effect on those subjective views for children in low-income households in financial difficulties.[118]

Parental disengagement has a moderate but consistent influence on children's learning outcomes (e.g. Dearing et al., 2006; Flouri, 2006; Hill & Taylor, 2004; Nye, 2006; OECD, 2012; Singh et al., 1995; Sui-Chu & Williams, 1996; Sylva, Sammons, & Siraj-Blatchford, 1999; Van Voorhis et al., 2013).[119] There have been several approaches to defining disengagement in the literature. Fox and Olsen (2014) provided a summary of various definitions used in the literature, presented in Table 5.11 below.

[114] Daschiff, C. et al. (2009) "Poverty and adolescent mental health" Journal of Child and Adolescent Psychiatric Nursing, Vol. XXII p 23-32.

[115] Pinter, Ilona, Ayre, D. and Emmott, E. (2016) "The Damage of Debt The impact of money worries on children's mental health and well-being". Published by the Children's Society.

[116] Gibbons, D. (2014) "The child welfare implications of problem debt" The Centre for Responsible Credit.

[117] Ibid.

[118] Pinter, Ilona, Ayre, D. and Emmott, E. (2016) "The Damage of Debt The impact of money worries on children's mental health and well-being". Published by the Children's Society.

[119] Dearing, E., Kreider, H., Simpkins, S., & Weiss, H. B. (2006) "Family involvement in school and low-income children's literacy: Longitudinal associations between and within families" Journal of Educational Psychology, 98(4), 653-664.; Flouri, E. (2006) "Parental interest in children's education, children's self-esteem and locus of control, and later educational attainment: twenty-six year follow-up of the 1970 British Birth Cohort" Br J Educ Psychol, 76(Pt 1), 41-55. Hill, N. E., & Taylor, L. C. (2004) "Parental School Involvement and Children's Academic Achievement. Pragmatics and Issues" Current Directions in Psychological Science, 13(4), 161-164.

Table 5.11: Definition of parental disengagement

Definition	Study
A multi-dimensional construct that refers to the engagement of significant caregivers into the education of their children at home, such as helping their child with homework, and at school, such as communicating with their child's teacher and supporting their child in school.	Hoglund, Jones, Brown, and Aber (2014)
Parent involvement "foster[s] the psychological resources necessary for children's optimal academic functioning"	Monti, Pomerantz, and Roisman (2014)
"Any interactions between a parent and child that may contribute to the child's development or to direct parent participation with a child's school in the interests of the child"	Dumont, Trautwein, Nagy, and Nagengast (2014)
"For this [Campbell Collaboration] review, parent involvement is defined as the active engagement of a parent with their child outside of the school day in an activity which centers on enhancing academic performance."	Nye (2006)
Parents' involvement in children's schooling is parents' commitment of resources to the academic arena of children's lives.	Grolnick and Slowiaczek (1994)
"Researchers have often characterized involvement in two sub-types, home-based and school-based ... Home-based involvement is generally defined in the literature as interactions taking place between the child and parent outside of school. These parental behaviors generally focus on the individual child's learning-related behaviors, attitudes, or strategies, and include parental activities such as helping with homework, reviewing for a test, and monitoring the child's progress … school-based involvement activities generally include activities typically undertaken by parents at school which are generally focused on the individual child, such as attending a parent-teacher conference, observing the child in class, and watching the child's performance in a school club or activity".	Green, Walker, Hoover-Dempsey, and Sandler (2007)
Parent involvement is defined as families and communities who take an active role in creating a caring educational environment. It involves six categories of involvement: parenting, communicating, volunteering, learning at home, decision making, collaborating with the community	Epstein et al. (1997)

Source: Replicated from Fox and Olsen (2014) "Education Capital: Our Evidence Base. Defining Parental Engagement" Report prepared for the ACT Government by the Australian Research Alliance for Children and Youth.

To combine the different dimensions of parental engagement, the Australian Research Alliance for Children and Youth (ARACY) has developed a model of parental engagement with two broad core constructs, defined below.

"Parental engagement involves partnerships between families and schools to promote children's learning and wellbeing. It involves:

1. Family-led learning focused on high aspirations for children, shared reading, a positive environment for homework, parent-child conversation, a cognitively stimulating home environment and support for social and emotional wellbeing; and

2. Family-school partnerships that encourage positive parent-teacher relationships, communication about children's progress, and engagement in the school community, while equipping parents to effectively support and encourage their children's learning and wellbeing.

Parental engagement recognises the important role that both parents and teachers play in children's learning and development. It is most effective when it is focused on

developing positive attitudes towards learning and education for children, building their motivation and confidence as learners, and fostering their enjoyment of learning." [120]

Research has provided evidence that parent-teacher relationships, and opportunities for regular communication, are the most important aspects of family-school partnership. Family conversation is one form of parental engagement and research suggests that it can have a strong influence on a child's cognitive skills and the value they put on leaning as well as the enjoyment of learning. However, the evidence on the impact of involvement in homework is ambiguous. There are studies showing negative impacts on children's motivation and academic achievements, while others report positive impacts. The types of parental engagement in homework that appear to lead to improved outcomes for children are:[121]

- ensuring children have an appropriate space for homework;
- having rules around homework that are consistent with the expectations of the school;
- positive interactions between parents and children around homework; and
- supporting children's development as independent learners.

In a 2010 report, the Prince's Trust estimated that youth unemployment (within the 20-24 age bracket) cost from £22 to £133 million per week in terms of productivity lost.[122] Each 16 to 18 year-old who spends some time as a NEET will cost an average of £56,000 over the course of their life up to retirement age in public finance costs (e.g. cost to services and lost tax revenue), or, alternatively calculated, £104,000 in opportunity costs (e.g. loss of income to the economy and individuals).[123]

Clifford et al. (2014) argued that financial difficulties could lead to a family's children being taken into care. There are both direct and indirect costs associated with children spending time in a care home. The direct costs include the cost of the care home for the time spent there per child. The indirect costs are the social costs to the taxpayers because of the long-term implications that being put in a care home has on children (e.g. due to being convicted, homeless, etc.)

5.5.2 Insights from primary research

The primary research sought data on the change in parental engagement levels before and after facing financial difficulties. We also asked the respondents whether they thought their financial difficulties were the causal factor of their problems and used this as a control in our regression analysis.

The distribution of the number of children in the advised and unadvised group is highly similar, although it is slightly higher for the advised. Despite this small difference, it holds statistical significance. The group differences are presented in Table 5.12. The number of children in the household is controlled for in our robustness checks using the PSM model described in Appendix 7.2.

Table 5.12: Number of children in household

Children	The advised	The unadvised	Difference
Average number of children	1.9	1.7	-0.2***

Source: Europe Economics analysis on YouGov survey. Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***.

[120] Fox and Olsen (2014) "Education Capital: Our Evidence Base. Defining Parental Engagement". Report prepared for the ACT Government by the Australian Research Alliance for Children and Youth.

[121] Ibid.

[122] The Prince's Trust (2010) "The Cost of Exclusion: Counting the cost of youth disadvantage in the UK".

[123] Public Health England (2014) "Local action on health inequalities: Reducing the number of young people not in employment, education or training (NEET)".

More specifically, we asked the following questions on the respondents' engagement level before and after their financial difficulties:

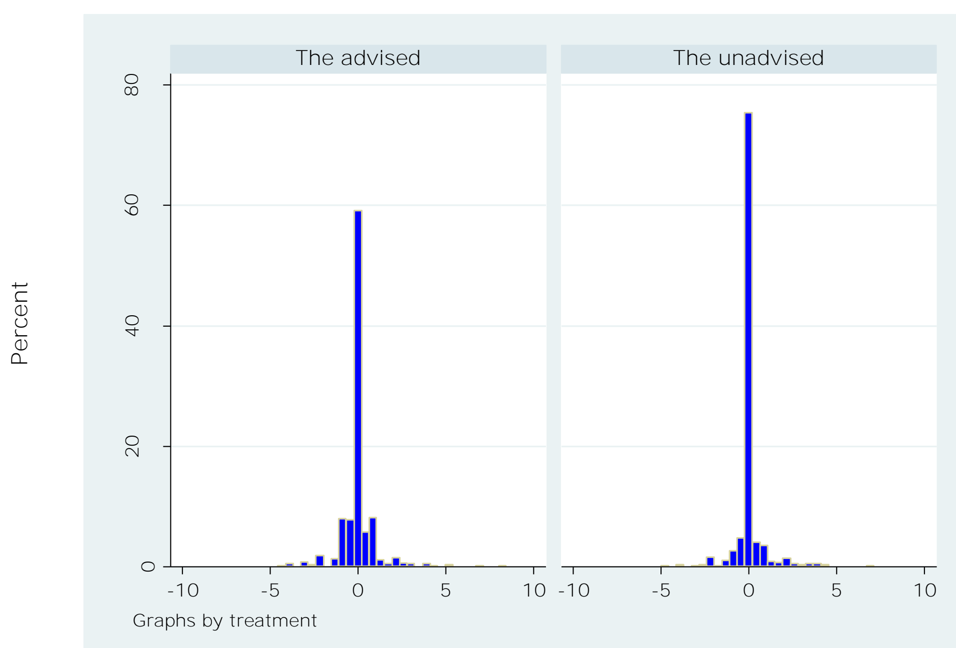
- How frequently, if at all, would you say that you meet with teachers at your child's/children's school?
- How frequently, if at all, would you say that you talk with your child/children about any problems they have?
- How frequently, if at all, would you say that you help your child/children with their homework?

Using these questions we constructed a parental engagement index. The change was estimated as the current interaction frequency minus the previous one (i.e. before financial difficulties), with higher values indicating higher engagement being observed currently. The average across the three variables was used to construct a 'parental engagement index' showing the average change, where a positive number constitutes an improvement in terms of parental engagement levels. The index ranges between -10 and 10, where 10 (-10) is the maximum (minimum) improvement the parents could have made. That would be, changing from 'Never' talking to your child before your financial difficulties to talking to them 'Several times a day' after receiving debt advice. [124]

The advised and the unadvised groups

Figure 5.2 depicts the distribution of the 'parental engagement index' across the advised and the non-advised. The vast majority of the non-advised and the advised individuals had not exhibited a change in their level of engagement. There is a clear difference between the groups in terms of the share that had not experienced a change — this group constitutes around 75 per cent of the non-advised group as opposed to nearly 60 per cent of the advised.

Figure 5.2 Changes in parental engagement index



Source: Europe Economics analysis of YouGov survey data. The total sample size is 1,145 observations, whereof 585 are advised and 560 are unadvised individuals.

The regression analysis evaluated whether there was a higher probability of observing improvements (or deterioration) in the 'parental engagement index' if one has received debt advice as opposed to those not having received advice. We also analysed the probability of experiencing either a positive or negative change

[124] If an individual only answered two out of three questions, the index was constructed on these two responses solely to keep as many observations as possible in the analysis.

in each of the questions asked above, separately. The analysis showed that only a negative change in the 'parental engagement index' was statistically significant, and that this was more likely in the advised rather than the unadvised group (see Table 5.13). The results remained unchanged when we used the PSM approach.

We consider these results to be consistent with the observation made previously that the advised group are more likely to suffer from unstable family relationships.

Comparisons between advice seekers

We also examined differences within the advised group. This could identify significant impacts that particular types of advice might have and could help us distinguish between, e.g. paid versus free or, high versus low advisor involvement. The results from this analysis are presented in Table 5.13.

In the analysis between advised who paid for their advice and those who consulted free advice organisations, the results showed that the latter group were less likely to have a negative change in their engagement level index. This held true across all index components analysed separately. Again, this supports the notion that paid advice is sought as a "last resort" solution which might be motivated by significant life events.

The only significant effect we can identify from the within sample analysis of the advised population is that those who sought advice more than two years ago are less likely to have seen a worsening of their disengagement index score compared to those who sought advice less than six months ago. However this effect is again based on a rather small sample size. None of the other probit models showed any significant results in the analysis *within* the advised sample.

Table 5.13: Regression output for parental engagement (over-indebted population, debt advice seekers)

Dependent variable	Treatment variable	Observations		Coefficient sign		Significance	
		Baseline	Control	Baseline	Control	Baseline	Control
Comparison between the advised and the unadvised							
Improvement Index	advised	1145	770	+	n.a.	**	n.a.
Worse Index	advised	1145	770	+	n.a.	***	n.a.
Comparison between advise seekers							
Improvement Index	still advised	569	430	n.a.	n.a.	n.a.	n.a.
Worse Index	still advised	569	430	n.a.	n.a.	n.a.	n.a.
Improvement Index	free advice	585	434	n.a.	n.a.	n.a.	n.a.
Worse Index	free advice	585	434	n.a.	n.a.	n.a.	n.a.
Improvement Index	6 months ago	348	259	n.a.	n.a.	n.a.	n.a.
Worse Index	6 months ago	352	262	n.a.	n.a.	n.a.	n.a.
Improvement Index	1 year ago	316	230	n.a.	n.a.	n.a.	n.a.
Worse Index	1 year ago	318	180	n.a.	n.a.	n.a.	n.a.
Improvement Index	2 years ago	180	95	n.a.	n.a.	n.a.	n.a.
Worse Index	2 years ago	180	130	-	n.a.	*	n.a.
Improvement Index	involvement	318	249	n.a.	n.a.	n.a.	n.a.
Worse Index	involvement	318	235	n.a.	n.a.	n.a.	n.a.

Note: Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***. Insignificant results are represented as n.a. in the table.

5.5.3 Conclusions

Parental disengagement can have serious implications for the future welfare, well-being and success of children. But we find that the evidence linking such disengagement to indebtedness is limited. The primary research suggests that advised parents are more likely to experience a negative change in the 'parental engagement index' once their financial difficulties began. The fact that the advised are more likely to have become disengaged from their children *could* also be due to their higher level of debt compared to the unadvised.

A further causal link to *advice*, and its ability to resolve such issues, is even more elusive. Relationships, once damaged, can be extremely difficult to repair — more so indeed even than one's financial situation. Our conclusion is that the beneficial impact of debt advice on restoring such relationships, or even simply reducing their deterioration, remains unproven.

One further contribution of this study lies in highlighting the dynamics of advice seeking, i.e. the primary research indicates that the over-indebted do not seek help until their situation has worsened.

Further research would need to investigate the effect of parental disengagement on children. For instance, it would be important to examine the link between the duration of a child experiencing disengagement and the subsequent long-term effects. If a child has already experienced disengagement for a long time — are such effects reversible? Equally, the evolution of parental engagement (or disengagement) subsequent to advice-seeking would be suitable for future study, e.g. is any change apparent immediately after debt resolution, or is there a delay? Are any such effects permanent or only temporary? The ideal control group would again follow the methodology of our study, but with a greater focus on family constellations and relationships in order to generate larger sample sizes, and hence more robust results. This would likely require a longitudinal methodology as one would wish to follow the advised before and after advice — where both resolving your financial difficulties and recovering your relationship are most likely rather slow processes.

5.6 Reduced risk of losing home

5.6.1 Insights from secondary research

Clifford et al. (2014) argue that people in debt are more vulnerable to losing their home (due to rent or mortgage arrears) as they do not have the reserves to respond to changes in situations such as being dismissed from work or reductions in their income.

It is widely recognised that new homes in England are under-supplied as supply has struggled to keep up with demand.[125] The affordability of housing in England has declined significantly as property prices have grown at a much faster rate than incomes, particularly in London and the South East. Regardless of the discrepancy

[125] Europe Economics (2014) "How to Increase Competition, Diversity and Resilience in the Housebuilding Market."

between supply and demand, there has been a steady decline in the number of affordable homes built since 2010. Shelter's analysis indicates that, between 2004 and 2012, there was a cumulative shortfall in England of 1.15 million homes.[126] Given estimates that there is an annual deficit of 100–150,000 homes,[127] this suggests the cumulative deficit could now have now grown to 1.55–1.75 million homes. For certain housing tenures affordability is even worse. On average:[128]

- Owners spend 20 per cent of their gross household income on their housing costs.
- The corresponding figure for tenants in the private rented sector is 40 per cent.
- For those in the social rented sector, 30 per cent of their gross income is spent on their housing costs.

Insufficient affordable housing is one of the structural causes of homelessness and also prevents people from moving out of homelessness. According to Homeless Link, 10 per cent of the people in England have had an experience of being homeless and many of them require support and help.[129] The cause of homelessness and the required support varies greatly across people. The services that these individuals are eligible for also depend on circumstances. Some of the individuals are not eligible for statutory support and need to rely on charitable services in the homelessness sector to provide them with accommodation and support to address the issues that led to, or sustain, their homelessness.[130]

People who use homelessness services have the following characteristics:[131]

- 72 per cent of people are men;
- 45 per cent are young people aged between 16 and 24;
- more than 23 per cent have a history of offending; and
- 16 per cent are people who have recently slept rough.

A large share of these people, 33 per cent, have serious and complex needs.[132] Indeed, looking across the whole population of accommodation seekers:

- 32 per cent of clients in accommodation services have mental health problems (with the majority of these also having a drug or alcohol problem);
- 31 per cent have drug problems;
- 23 per cent have alcohol problems;
- 12 per cent have physical health problems; and
- 6 per cent have a learning disability.

Collard et al. (2012) acknowledge that rent arrears are a primary concern for housing associations and local authority housing providers. They investigated the potential impact of financial skills on landlords and conclude that, although there are fewer people in rent arrears after receiving advice, this effect was not statistically significant when compared to the unadvised.[133]

Advice can increase the knowledge base of the advised, and result in the latter coping better with their financial difficulties. The Scottish Legal Aid Board, inter alia, provides grants to fund programmes providing advice aimed at tackling homelessness and housing debt around Scotland. These programmes have enhanced the knowledge of options amongst those in receipt of advice and budgeting skills were enhanced.[134] However,

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[126] Shelter (2013) "Getting Serious About the Housing Shortage".
[127] Europe Economics (2014) "How to Increase Competition, Diversity and Resilience in the Housebuilding Market".
[128] Homeless Link (2016) "Support for single homeless people in England: Annual Review 2016".
[129] This estimate draws on an omnibus survey conducted by Populus on behalf of Homeless Link in 2013.
[130] Homeless Link (2016).
[131] Ibid.
[132] Ibid.
[133] Collard et al. (2012).
[134] Scottish Legal Aid Board (2017) "Monitoring and evaluation report of the Economic Downturn programme and the Making Advice Work programmes".

whilst those receiving advice do appear to have received some benefit, it is not clear whether this advice has actually translated through into measurable impacts in the rate of homelessness triggered by debt problems in Scotland.

In addition, stakeholders noted that late stage debt advice could be highly beneficial. This might be timed around the date set for a court hearing. Aside from the potential for avoiding housing issues, court time could also be saved, which would also be a source of benefit.

5.6.2 Insights from primary research

The primary research sought data on the incidence of various housing problems. The respondents were also asked whether they believed that their financial difficulties were the causal factor of these issues. In particular, we examined the link between indebtedness and the likelihood of the following events:

- becoming homeless;
- having your property repossessed;
- moving to another accommodation; and
- using homeless prevention services to stay in home.

Table 5.14 shows the current housing tenure of both the advised and the non-advised. The distribution between the groups is superficially similar, with the largest difference present between the proportion of the advised and unadvised that own their property outright. This is statistically significant, as are the differences between people who part-own their property, rent from a housing association, or live with a family or friend without paying rent. The rest of the distributions are minimally different or the same. Since there are statistically significant differences in tenure type we controlled for these in our regression analysis.

Table 5.14 Current house tenure

Tenure type	The advised	The unadvised	Difference
Own outright	7%	12%	5%***
Own with a mortgage	33%	34%	1%
Part-own	3%	1%	-1%**
Private rent	27%	26%	-1%
Rent local authority	11%	10%	-1%
Housing association	14%	11%	-3%**
Rent from family	3%	3%	0%
Live with family no rent	1%	2%	1%*

Source: Europe Economics analysis of YouGov survey data. Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***.

The advised and the unadvised groups

The regression analysis evaluated the probability of facing different housing problems when belonging to the advised group as opposed to the non-advised. The results show that the advised as a group are significantly more likely to have faced the following problems (see Table 5.15):

- being homeless;
- having your property repossessed;
- moving to another accommodation; and
- using homeless prevention to stay in home.

The results indicate that in all cases the advised group was in worse shape than the non-advised, which brings up again concerns of reverse causality (i.e. in this case that housing issues could be causing or at least

coincident with seeking advice to resolve financial difficulties). The results remained unchanged when we used the PSM approach as a robustness check.

Comparisons between advice seekers

We also examined the differences *within* the advised group. This could identify significant impacts that particular types of advice might have had and could help distinguish between, say paid-for versus free-to-client advice, or high versus low advisor involvement. The results from this analysis are presented in Table 5.15.

Those who had sought free advice are less likely to face any of the relevant problems identified. Again, we know that in the advised sub-sample free advice can be a possible precursor to seeking paid-for advice (i.e. hardly anyone sought paid advice first). This is consistent with the hypothesis that paid advice is sought as a "last resort" solution, which, in turn, might be motivated by significant life events.

Those who were still in the process of consulting a debt advisor when the survey was conducted were more likely to have experienced the following issues as compared to those who had already received advice:

- using homeless prevention to stay in their home; and
- having had their property repossessed.

These results could support the argument that the onset of housing problems might be a driver of seeking help from a debt advisor. If so, any measurable positive benefits from debt advice with respect to housing would be experienced on a different, longer timescale. However, we could not find any significant effects of seeking advice a year ago or two years ago as opposed to six months ago.

Individuals with high advisor involvement were less likely to have had their home repossessed and less likely to have moved to a cheaper home than those with low advisor involvement. This suggests that at least a sub-group of the advised could have benefitted directly from the increased involvement of the advisers. Whilst this is very interesting, it is not clear from the data available to us whether this sub-group were facing more or less severe housing problems than the rest of the advised.

The question posed in the survey created some limitations to our analysis, as it did not allow us to pin-point whether the housing problems happened before or after the individual sought advice. Since the question was phrased to identify the housing problems as an effect of being over-indebted we cannot establish whether facing such events drives individuals to seek advice or if the distraction of seeking debt advice is somehow the cause of these issues. However, the former explanation strikes us as much more plausible. The primary research does reveal that there is a significant difference between the groups; however the driver for that difference is unclear. The advised group have a significantly higher level of debt and a significantly larger proportion of people addicted to alcohol and/or drugs which are both associated with homelessness. Unfortunately, the sample size does not allow us to control for all confounding factors as the group that have been facing some form of homelessness only consists of 160 observations.

Table 5.15: Regression output for housing problems (over-indebted population, debt advice seekers)

Dependent variable	Treatment variable	Observations		Coefficient sign		Significance	
		Baseline	Control	Baseline	Control	Baseline	Control
Comparison between the advised and the unadvised							
Homeless	advised	3799	2305	+	+	***	***
Repossession	advised	3799	2305	+	+	***	*
Cheaper home	advised	3799	2305	+	+	***	***
Prevention Stay	advised	3799	2305	+	+	***	***
Comparison between advice seekers							
Homeless	free advice	1581	1121	-	n.a.	*	n.a.
Repossession	free advice	1581	1097	-	-	***	***
Cheaper home	free advice	1581	1121	-	-	***	***
Prevention Stay	free advice	1581	1097	-	n.a.	*	n.a.
Homeless	still advised	1707	1186	n.a.	n.a.	n.a.	n.a.
Repossession	still advised	1707	1163	+	n.a.	*	n.a.
Cheaper home	still advised	1707	1186	n.a.	n.a.	n.a.	n.a.
Prevention Stay	still advised	1707	1163	+	+	**	*
Homeless	6 months	938	661	n.a.	n.a.	n.a.	n.a.
Repossession	6 months	938	645	n.a.	n.a.	n.a.	n.a.
Cheaper home	6 months	938	661	n.a.	n.a.	n.a.	n.a.
Prevention Stay	6 months	938	645	n.a.	n.a.	n.a.	n.a.
Homeless	1 year	1021	686	n.a.	n.a.	n.a.	n.a.
Repossession	1 year	1021	675	n.a.	n.a.	n.a.	n.a.
Cheaper home	1 year	1021	686	n.a.	n.a.	n.a.	n.a.
Prevention Stay	1 year	1021	675	n.a.	n.a.	n.a.	n.a.
Homeless	2 year	583	412	n.a.	n.a.	n.a.	n.a.
Repossession	2 year	583	401	n.a.	n.a.	n.a.	n.a.
Cheaper home	2 year	583	412	n.a.	n.a.	n.a.	n.a.
Prevention Stay	2 year	583	401	n.a.	n.a.	n.a.	n.a.
Homeless	involvement	894	659	n.a.	n.a.	n.a.	n.a.
Repossession	involvement	894	646	-	-	*	*
Cheaper home	involvement	894	659	-	n.a.	***	n.a.
Prevention Stay	involvement	894	646	n.a.	n.a.	n.a.	n.a.

Note: Statistical significance at the 5% level is represented by *, at the 1% level by ** while significance at the 0.1% level is represented by ***. Insignificant results are represented as n.a. in the table.

5.6.3 Conclusions

People with unmanageable debt are more vulnerable to losing their home either directly (e.g. through repossession) or indirectly (lacking the reserves to respond to changes in situations such as being dismissed from work or reductions in their income). However, reverse causality and confounding factors could also be at work here, e.g. the onset of housing problems may prompt advice-seeking.

In terms of advice making a difference, robust evidence is in short supply. The evidence in support of this proposition is drawn from studies based on a handful of interviews. For example, whilst Collard et al. (2012) show that fewer people are in rent arrears after receiving advice, this effect is not statistically significant when compared to the unadvised. That said, stakeholders noted that late stage debt advice could be highly beneficial. This might be timed around the date set for a court hearing. Aside from the potential for avoiding housing issues, court time could also be saved.

The primary research does not contribute significantly to the evidence base, although intriguingly it does show that those individuals with high advisor involvement were less likely to have had their home repossessed and less likely to have moved to a cheaper home compared to those with low advisor involvement. This suggests that at least a sub-group of the advised could be benefitting from the increased involvement of the advisers — it is consistent with the idea that the onset of housing problems could trigger seeking advice and that — likely because it is done too late — only very intensive engagement by the adviser is *likely* to make a difference. Whilst this is very interesting, it is not clear from the data available to us whether this sub-group was facing more or less severe housing problems than the rest of the advised, or even the unadvised. We are not therefore able to estimate a robust quantitative effect.

There are a number of ways in which further research could investigate the contribution of debt advice (and hence resolving financial difficulties) on the incidence of homelessness. For example, the research could explore further the role of homelessness in triggering debt advice being sought, for example whether it acts as a trigger for advice seeking, or acts as a distraction from seeking advice. As with potential future research into the interaction between debt advice and relationships, study of the evolution of the incidence of homelessness subsequent to advice-seeking would be very interesting, e.g. is any change in incidence post-advice permanent or only temporary? Again, further investigation would be merited around the influence of say debt-to-income levels where small sample sizes have limited the conclusions we have been able to draw. In order to truly capture before and after *advice* effects impacts one would need to follow a consistent group of individuals in real-time, including both advice-seekers and non-seekers. Future research structured like this would be of great interest, and the Money Advice Service has an ongoing longitudinal research project, which could usefully include this as a focus. This might also identify more clearly whether individuals face lagging effects of debt advice and also the time horizon over which any such effects are experienced.

5.7 Impact on the elderly (care home entry)

5.7.1 Insights from secondary research

Our work has identified no evidence that a direct causal link exists between debt and admission into care home, or state-funded social care. In contrast, Clifford et al. (2014) suggest that there is an indirect causal link between debt and admission into care homes through mental and physical health.

> "Debt can mean that those who were previously self-sufficient, but are suffering from poor health, may have to seek state support earlier, due to deterioration in their health. One University of Sheffield study[135] found that for all ages, a factor the researchers termed 'repayment structure' (the percentage of debt borrowed in high interest categories) has an impact on health that is independent of the actual levels of debt. For the elderly, with poor physical health and co-morbidities, this can mean a loss of independence and an early move into residential care. The cost of this is significant to the state."[136]

Clifford et al. (2014) only considered residential care in their analysis; we believe there are reasons to expand the potential impact area to include domiciliary care too. First, though, an important distinction needs to be made regarding the following potential consequences of being indebted:

- Is debt relevant to the payment for the care?
- Does debt contribute towards needing care?

In attempting to answer the first question it is worth noting that residential care is not typically provided for free in the UK (under 10 per cent — 9.2 per cent in 2013/14 — of people aged 65 and over receive support with social care, i.e. state-funded care).[137] Social care is only provided to elderly who pass a 'needs assessment' which includes a financial assessment. A person's financial situation is one criterion for being eligible for state-funded care but that other 'needs' are necessary in order to receive the funding.[138] Local authorities operate a system of public funding that provides state-funded services to those with assets below a threshold level, currently £23,250 in England.[139] Being indebted does not necessarily mean that you do not have assets, unless assets have been claimed as a result of debt.

The second question relates to the needs that arise from being indebted, and whether these pass qualifying criteria of the 'needs' assessment. The national criteria to decide who is eligible for care and support include three main requirements:[140]

- the person has needs related with any kind of disability or illness;
- these needs prevent the person from achieving normal daily routines[141]; and
- this results in a significant impact on the person's wellbeing.

This implies that debt needs to cause a health condition or disability which causes the individual to fail two or more of the listed 'outcomes' above. That is, the individual needs help to do the activities, or that the activities cause pain, distress or anxiety to the individual when he or she attempts to do it without help, or

[135] Leston, P. Mosely, P. (2008) "Debt and Health" Department of Economics, University of Sheffield, April 2008.
[136] Clifford et al. (2014).
[137] Age UK (2017) "Briefing: Health and Care of Older People in England 2017".
[138] Ibid.
[139] https://www.moneyadviceservice.org.uk/en/articles/means-tests-for-help-with-care-costs-how-they-work.
[140] Age UK (2015) "Social care assessment, eligibility and care planning" Factsheet 41.
[141] Normal routines include for example: maintaining personal hygiene and nutrition, being able to make use of your home safely and developing and maintaining family or other personal relationships etc.

the activities are dangerous for the individual or others, or it takes the individual significantly longer time than it should.[142]

There is a possibility that being indebted could cause such a disability or illness which would limit them to achieve two or more activities, e.g. a severe depression. In a survey conducted in 2014, respondents were asked to select one of a range of statements describing anxiety and depression on the day of the survey. On a five scale ranging from 'I am not anxious or depressed' to 'I am extremely anxious or depressed' where:[143]

- 9 per cent of 65 to 74 years olds;
- 10 per cent of 75 to 84 year olds; and
- 17 per cent of those aged 85+ were moderately, severely or extremely anxious.

However, the percentage of these people who are depressed as a result of financial difficulties is unknown. The causal link of this impact area is based on health deterioration, both mental and physical, poor self-care and the lack of finances to live independently. The link through mental and physical health deterioration is already accounted for, as costs associated to mental and physical health have been addressed separately.

"So the likelihood of someone being eligible for state-funded residential care purely because of debt problems seems remote, unless there is some other care need. I am assuming someone in debt is highly unlikely to be a 'self-funder'." Age UK

5.7.2 Conclusions

We have identified no evidence that a direct causal link between debt and admission into care home, or state-funded social care exists. An important distinction needs to be made regarding the potential consequences of being indebted:

- Is being over-indebted relevant to the payment for the care?
- Does being over-indebted contribute towards needing care?

Social care is only provided to elderly who pass a 'needs assessment' which includes a financial assessment. A person's financial situation is one criterion for being eligible for state-funded care but that other 'needs' are necessary in order to receive the funding. We do not currently have tangible evidence to counter the view of a relevant stakeholder that the likelihood of the posited effect "seems remote".

We cannot therefore isolate any impacts from debt advice on early admission into care home for elderly Future research targeting the relevant dimensions of this topic (i.e. its relevance to paying for care and its contribution towards needing to receive care) would be necessary to substantiate any effect.

5.8 Impact on desperation crime

5.8.1 Insights from secondary research

The underlying mechanism in this impact area covers individuals that may have no other option but to steal to eat or clothe themselves and their families at times of desperation. By extension, some slightly heightened likelihood of committing offences such as fraud, tax evasion and illegal trading are also plausible consequences

[142] Age UK (2015) Factsheet 41.
[143] Age UK (2016) "Briefing: Health and Care of Older People in England in 2016".

of a person being in financial distress. Certainly, there appears to be a positive link between low household income levels and over-indebtedness. According to a study by the Money Advice Service and CACI (2017), 23 per cent of households with incomes of less than £10,000 are over-indebted.[144] However, we stress that only a small proportion of the over-indebted — or indeed the very poor — are committing desperation-driven petty crime (or any other form of crime).[145]

Several scholars have suggested that financial debt and criminal behaviour are related. Merton (as far back as 1938) and Agnew (1985) sought to explain criminal behaviour from the perspective of strain, i.e. discrepancies between needs and desires on the one hand and opportunities and expectations to reach these on the other hand.[146] A possible counter-argument is that indebtedness and petty crime might be common symptoms of a common cause, namely poor risk judgment.[147] However, the quantitative and causal evidence on the effect debt has on crime rates is limited. Indebtedness and petty crime could have other common symptoms of a common cause or common causes. For example, researchers have evaluated the relationship between crime and unemployment, socioeconomic status and childhood experiences.

There are many empirical studies suggesting the existence of a link between poverty and crime, but one cannot readily assume debt as one of the main sources of poverty.[148] A few recent studies empirically show the importance of personal indebtedness in explaining the observed pattern of theft crimes. For instance, McIntyre (2013) presents a significant relationship between indebtedness, using data available at the neighbourhood level for London on county court judgments (CCJs), and theft crimes granted against residents in that neighbourhood. However, McIntyre (2013) and McIntyre and Lacombe (2012) do not provide any estimates that we are able to exploit for our purposes.

Low socioeconomic status in childhood is a well-known predictor of subsequent criminal and substance misuse behaviours but the causal mechanisms are questioned. Sariaslan et al. (2014) conducted a study to evaluate the relationship between crime and family income, where 15 year-olds in Sweden were tracked for an average of 3.5 years. The authors found that children of parents in the lowest income quintile were seven times more likely to be convicted of violent crimes and twice as likely to be convicted of drug offences, as those whose family incomes were in the top fifth. However, there were no associations between childhood family income and subsequent violent criminality once they had adjusted for unobserved familial risk factors.[149]

Webster and Kingston (2014) also recognise that the early childhood experiences can predict later offending behaviour in teenagers which can also persist into young adulthood and beyond. Furthermore, childhood and teenage crime has been shown to be closely related to long-term low parental income, school exclusion, poor parenting and parental alcoholism which is connected to growing up in poor areas. The authors conclude

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[145] McIntyre, S. (2013) "Personal indebtedness, community characteristics and theft crimes"; and McIntyre, S. G., & Lacombe, D. J. (2012) "Personal indebtedness, spatial effects and crime" Economics Letters, 117(2), 455-459.

[146] Merton (1938) "Social structure and anomie" American Sociological Review, Vol. 3, pp 672-682; and Agnew (1985) "A revised theory of delinquency" Social Forces, Vol. 64, pp 151-167.

[147] Hoeve et al. (2014) "A systematic review of financial debt in adolescents and young adults: prevalence, correlates and associations with crime" PLoS ONE, Vol. 9(8), e104909.

[148] Sociales, P. (2001) "Crime as a social cost of poverty and inequality: a review focusing on developing countries" Facets of Globalization, 171; and Webster and Kingston (2014) "Anti-poverty strategies for the UK. Poverty and crime review" Centre for Applied Social research, for a review of the literature about how and why poverty and crime influence one another.

[149] Sariaslan, A., Larsson, H., D'Onofrio, B., Långström, N., & Lichtenstein, P. (2014) "Childhood family income, adolescent violent criminality and substance misuse: quasi-experimental total population study" The British Journal of Psychiatry, 205(4), 286-290.

that living in poor neighbourhoods does increase the likelihood of people being victims and/or perpetrators of crime.[150]

Researchers have also attempted to explain crime through macro-economic factors such as facing a weaker economy, income shocks and unemployment. For example, Han (2009) conducted three empirical studies detecting the determinants of crime in England and Wales. The author looked for relationships between property crimes and unemployment as well as law enforcement instruments. The research concludes that socio-economic factors, such as unemployment and income level, have an effect on property crimes. Their net effects on property crime rates depend on the type of crime as well as the time period being examined.[151] Although, debt could cause unemployment which has an effect on crime, there is not enough information for us to provide a quantitative estimate on the impact of debt advice on crime rates.

One important concern is the potential reverse causality between debt and crime. Hoeve et al. (2014) find that debt is associated with crime. However, the paths from criminal behaviour to debt and financial problems were stronger than those going the other way.[152] Crime is a notably difficult area to estimate empirically as there is significant potential for omitted variable bias.

The incidence of crime attributable to financial difficulties is a particularly sensitive area and is probably of relatively low frequency — both factors made it unsuitable for the primary research conducted as part of this study.

The secondary research has failed to identify readily available information sufficient for a reliable estimate on the impact of debt advice on crime rates. The link is arguably there but there is too much noise in order to isolate the effect of receiving advice and/or being indebted on criminal behaviour.

There is some evidence that debt advice can help people who are in prison. The Prison and Probation project, funded by the Money Advice Service, found positive impacts for individuals who are in prison and has helped them improve their debt situation.[153] These inmates have not necessarily committed desperation crime. Even so, improving the debt situation of such imprisoned individuals could help in promoting a transition to a non-criminal future once released, i.e. by reducing the chances of committing desperation crime when they are out in the future.

5.8.2 Conclusions

Several studies confirm a link between poverty and petty crime but the evidence in the literature establishing a direct link between indebtedness and petty crime is extremely weak. The link between debt advice, in particular, and a reduction in petty crime is practically non-existent. We know that only a fraction of those with unmanageable debt seek advice. Desperation crime could equally act as an alternative coping strategy.

The evidence base does not support an unambiguous identification of an impact, let alone quantification or monetisation of any such effects. Crime is a highly sensitive area

[150] Webster and Kingston (2014) "Anti-poverty strategies for the UK. Poverty and crime review" Centre for Applied Social research.

[151] Han, L. (2009) "Economic Analyses of Crime in England and Wales" Doctoral dissertation, The University of Birmingham.

[152] See also: Zara and Farrington (2010) "A longitudinal analysis of early risk factors for adult-onset offending: what predicts a delayed criminal career?" Criminal behaviour and Mental Health, Vol. 20, pp 257-273; Siennick (2009) "Three essays on criminal's indebtedness"; and Blom et al. (2011) "Problem met geld en delinquent gedrag van adolescenten" Factsheet 2011-1, Den Haag: WOCD.

[153] Optimisa Research (2012) "360 degree evaluation of Money Advice Service Funded face-to-face advice". This is a qualitative/quantitative research report on prison and probation, prepared for the Money Advice Service. Unpublished, but available upon request from the Money Advice Service.

to explore, and to identify a link with advice would further require access to highly confidential records, i.e. the names of the advised to enable links to be made to crime reports.

Further research to establish reliable and quantifiable evidence that being indebted causes an increase in crime rates committed by a person — isolated from any other individual characteristics that may be a determinant of criminal behaviour — would be a valuable expansion in the evidence base. If debt is found to be an important driver of committing petty crime then it would be sensible to test whether debt advice, by reducing financial difficulties, can have a positive effect on reducing crime. However, establishing such causal inferences is likely a challenging task.

5.9 Recovery in credit access

Another potential area of impact relates to the implications of obtaining debt advice with respect to the consumer's credit rating. The credit rating can impact significantly on the choice of credit products available to a consumer and/ or the price of any credit obtained. This could be material in its pecuniary impact.

On the other hand, the impact may not be straight-forwardly beneficial to consumers. For example, acting upon advice may result in a shock to an individual's credit rating (e.g. entering into a DRO will immediately adversely impact your rating), but could also mean that the recovery in rating post-advice is all the quicker compared to someone over-indebted but not seeking advice. This ambiguity also suggests that this impact may be difficult to model robustly.

5.9.1 Insights from secondary research

Creditors use different credit score criteria by weighting various information and risk in their own preferred way. A score generated by a lender will use the information to decide on whether the individual is an acceptable risk. There are many aspects included in a credit score such as:

- person details;
- employment status;
- credit file;
- income;
- bank details; and
- living conditions such as mortgaged or rented accommodation.

Credit reference agencies will register any deviations from original credit agreements which will affect the credit score when applying for new credit. Over-indebted people (and hence most advice seekers) will most likely already have a bad credit score when implementing a debt solution as a result of past inability to fully repay their debts, or at least an inability to pay on time. That implies that starting a debt solution (in particular those that offer creditors reduced payments) will continue to adversely affect the credit score for some period of time.

There is a clear distinction between the formal and informal debt solutions in terms of an individual's credit score. The formal solutions including bankruptcies and insolvencies, IVAs and County Court Judgments are public records and can decrease one's credit score for six years or longer. Other more informal solutions are not public records and will therefore not have an impact on the credit score per se, as the information is not available to the credit reference agencies.[154]

[154] See https://www.payplan.com/advice/credit-score-and-debt/credit-score-debts/.

Cost of having a bad credit score

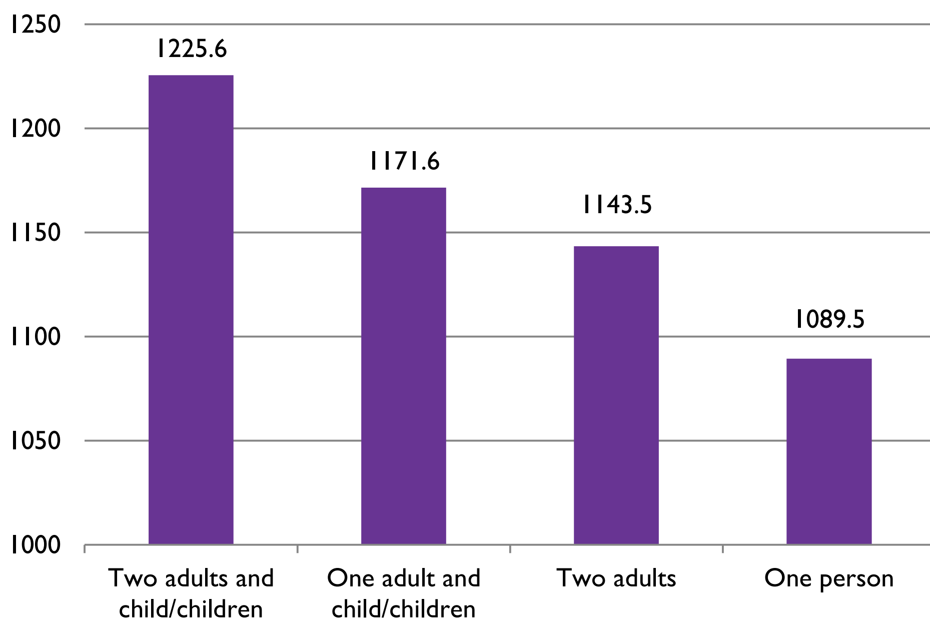
The cost of having a bad credit score is not only the result of being constrained access to credit; but also the result of higher cost of obtaining a selection of goods and services, such as:

- average mobile phone cost;
- average energy costs;
- cost of purchasing a car on finance;
- credit card costs;
- white goods purchased on finance; and
- fixed line broadband costs.

Aqua (2014) investigated the annual cost of having a poor credit score for middle income households across the UK covering the above mentioned goods and services.

The study showed that households with a bad credit score could be facing an additional cost between £1,089 and £1,225 per year compared to a household with a good score. The additional cost also varied depending on the type of household that had a bad credit score. The greatest burden was felt by the larger households e.g. with two adults and children. The cost amounts up to almost an additional £100 per month (see Figure 5.3).[155]

Figure 5.3: Additional cost by household type (£ per year)



Source: Recreated chart from Aqua (2014) "The cost of a poor credit rating".

These estimates depend on the goods assumed to be purchased by each household. For example, for white goods Aqua assumed that an individual with poor credit score would purchases goods at 35% APR over a 36 month period, as opposed to the good credit score individual who purchases goods at 0% APR over a 12 month period.

[155] Aqua (2014) "The cost of a poor credit rating".

5.9.2 Quantitative and qualitative impacts

The credit score is based on a number of different variables, many of which are independent of whether someone has sought advice or not. For example being on the electoral payroll or being financially associated with someone who has been made bankrupt, will impact your score.

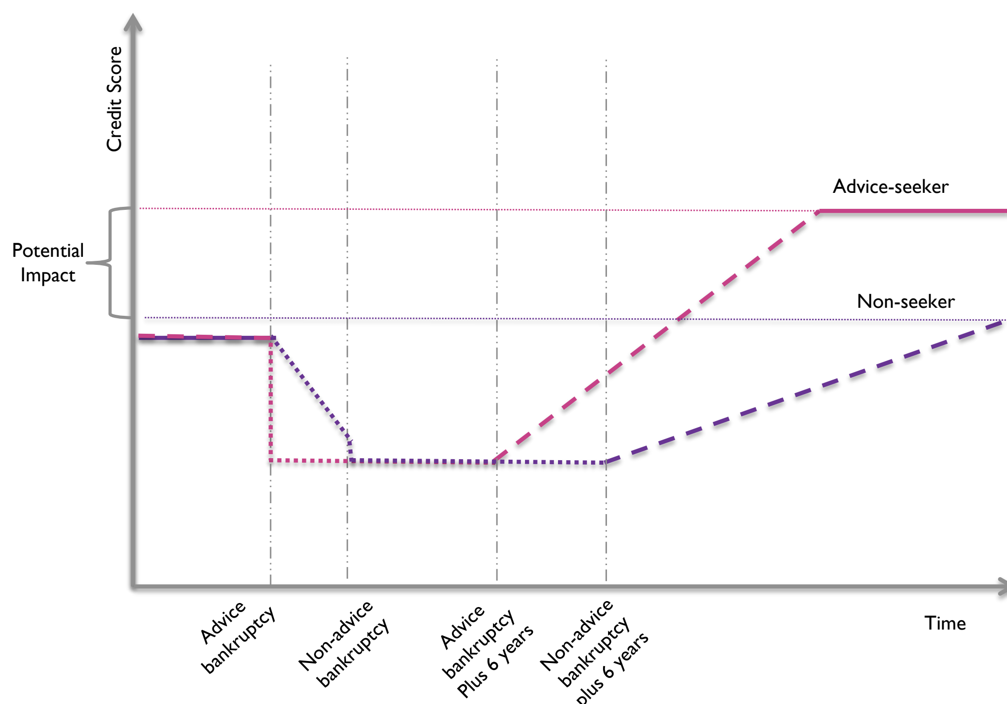
Suppose we have two individuals who are identical in every aspect, except the fact that one of them sought debt advice for his or her arrears and the other did not. That is, they both have the same credit score at the point in time when the first person sought advice: what difference(s) between these individuals will have an impact on their credit score?

There are several possibilities to consider:

- A debt advisor can provide advice on how to recover the credit score which an individual not seeking advice may not know, i.e. the advice-seeker will face a quicker recovery from the bad score.
- The advice-seeker may enter into a debt solution that:
  - is not possible for the non-seeker to enter into;
  - the non-seeker will also enter into; and
  - that the non-seeker will enter into later after a period of bad credit score.

To illustrate one of these possibilities and the potential effects that debt advice could have on the cost of a deteriorating credit score, let us assume that the advice seeker is advised to declare bankruptcy and does so immediately. There would be a drop in the advice seeker's credit score that would persist for six years. However, if the advice seeker had been receiving advice that would help them to be able to manage their finances more efficiently there could be a steeper increase in the credit scores once the process of bankruptcy is over. The non-seeker (who is in the same financial situation as the advice seeker) might be able to roll over credit for a few more years, continuing to decrease his credit score. Inevitably, the non-seeker would declare bankruptcy (given no change in behaviour) and go through the same process as the advice seeker without help from an advisor. If the non-seeker faces a slower rehabilitation after the process of bankruptcy is over, there is a potential positive impact of seeking debt advice, in terms of less cost for the individuals and a quicker recovery (see Figure 5.4).

Figure 5.4: Potential impact of debt advice on credit score



Source: Europe Economics.

There is a possible impact of debt advice on credit score and the cost an individual faces as a result of a bad credit score. There is limited evidence on the impact of debt advice on credit score; but there has been attempted to investigate the impact of receiving credit counselling on an individual's credit score. For example, Elliehausen et al. (2003) found that counselling has a positive effect on the credit score over time and the effect is greatest for the clients who have lower scores in the beginning of counselling.[156] However, this impact area is difficult to model as there are multiple variables that affect the credit score and there are not sufficient data in order to control for all of them.

5.9.3 Conclusions

Consumers' credit ratings can have a significant impact on the choice of credit products available to a consumer.

The impact of debt advice in this area may not be immediately beneficial to consumers and might even result in initial negative shocks (compared to not receiving debt advice), as entering a DMP or a formal insolvency process will be noted. On the other hand, taking these steps could later translate into quicker and/ or more effective post-advice recovery compared to not receiving advice. This ambiguity makes it particularly difficult to model the impact area robustly.

This area is hard to explore through primary research as the credit scores provided by credit reference agencies would be key to any such analysis, but are largely unknown by the consumers. An ideally configured empirical research project would examine the

[156] Elliehausen, G., Lundquist, E. C. and Staten, M. E. (2003) "The impact of credit counselling on subsequent borrower behaviour", Journal of Consumer Affairs, Vol. XLI No I.

relationship between debts (including pricing) and credit score over time and depending on different courses of action. This would require matching such credit scores (typically a non-public resource, although this is changing) and panel data on a cohort of the indebted. This would be a non-trivial task that would require resources becoming publically available. Credit reference agencies record, for example, whether someone enters a DMP but may not retain that flag in their databases. Other types of debt advice are not recorded.

5.10 Impact on creditor recovery

5.10.1 Insights from secondary research

Household debt is at high levels relative to income. At the end of Q2 2016 household debt was over 133 per cent of household disposable income,[157] and on a rising trend for the first time since the credit crunch. Wells et al. (2010) focus on unsecured outstanding debt as it has been argued to be the main problem among over-indebted individuals by several debt advice organisations. Indeed, as of Q2 2016, non-mortgage debt represented about 31 per cent of disposable household income, with unsecured consumer credit growing rapidly. This means that unsecured debts now average above £13,000 per household.[158] The researchers note the scarce information available for quantification of such impacts:

"…it was clear that there would be considerable limitations to testing the theory, not only because full data sets to support or challenge the underlying assumptions would not be available but also because of the absence of any data to support a counterfactual: what would have happened if independent debt advice had not been available?"

"…If little is published on outcomes from debt advice (from a creditor perspective), even less data are available on the percentage recovered through different solutions."[159]

Clifford et al. (2014) mentions that individuals under financial stress have reported having to default on borrowing, housing costs, and utility bills in order to ensure that their income covers their living costs. A natural starting point in understanding the impact of debt advice on creditors is to first consider the types of cost incurred by creditors from debtors defaulting:[160]

- Internal and external collection costs from chasing arrears; and
- Reduced recovery on the debtors' account.

A creditor can take various actions to recover their arrears such as:[161]

- chase the debtor by phone or letters;
- send doorstep collectors;
- add interest and charges to the debtors account in line with the original agreement;
- take money from connected accounts;
- issue a default notice;

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[157] Bank of England (2016) "Financial Stability Report: Household Debt".
[158] Trades Union Congress (2017), see: https://www.tuc.org.uk/economic-issues/labour-market/economic-analysis/fair-pay-fortnight-2015/unsecured-debt-hits-new-peak.
[159] Wells, J. et al. (2010).
[160] Clifford et al. (2014).
[161] See http://moneyaware.co.uk/2011/08/you%E2%80%99re-in-debt-but-what-can-your-creditors-actually-do/.

- pass the debt on to an internal or external debt collection agency;
- apply for a County Court Judgement (CCJ); and
- issue a statutory demand i.e. enforcing bankruptcy.

These different approaches to chasing arrears likely result in differences in the administrative costs that creditors face, but comprehensive data on such costs are not publicly available. A debt collector can be involved to recover the outstanding monies. In this case the creditor will receive the recovered net of fees, since the debt collector charges the creditor for their services.[162] For example, a debt collector might charge 15 per cent of the amount recovered for UK debts (if the recovery is unsuccessful, a fee may not be charged).[163] Smith and Patel (2008) estimated that approximately 8 per cent of debt was written off for the clients they evaluated. These were all closed cases based on a one-year reference period. On average, this is equivalent to more than £1,000 per closed case.[164]

There are a few past attempts at estimating the benefits to creditors of debt advice. Wells et al. (2010) explaining these benefits as follows:

- If the provision of independent debt advice leads to customers repaying more of their original debt, interest and charges than would otherwise happen, creditors should face reduced write-offs.
- Some outcomes for creditors and debtors can give rise to higher costs than others. In particular, solutions that involve resorting to the courts appear to give rise to higher costs (some of which will be borne by the creditor) than solutions that lead to customer-led insolvency solutions.

The impact of debt advice on creditor recovery can be calculated with reference to the additional recovery rates of different debt solutions and the cost of pursuing a debtor. That is, the gain is what the creditor receives from indebted people when they receive debt advice compared to what they otherwise would have been able to recover from the loans. This is the approach of Clifford et al. (2014).[165]

Wells et al. modelled the impact by estimating the total outstanding debt amongst two populations: the advised and the unadvised. Wells et al. assume, for example, that the average additional recovery rate of the advised population is five per cent (albeit with scenarios run where the additional recovery ranges between one and seven per cent.[166]

We have used data from the YouGov survey and other data sources (where available) to complement, and where possible, to update these modelling approaches. For example, we have used data from the Insolvency Service to estimate the number of IVAs created in 2016. New data were not always available. As there is currently limited publically available information on these 'additional recovery' rates, we have used the same estimates as Clifford et al. (2014). The recovery rate for those on DMP was based on data provided to Clifford et al. by Arrow Global (a debt purchaser) that compared rates of recovery with and without debt advice. The additional recovery on IVAs reported in Clifford et al. relied on data from StepChange's completed cases.

5.10.2 Quantitative and qualitative impacts

Creditor recovery was one of the impact areas that were excluded from the primary research, as it was judged that consumers would be unlikely to have the information needed to provide a reliable answer. Even so, the primary research provides estimates of parameters such as the proportion of respondents with a

[162] See http://www.atradiuscollections.com/uk/insight/our-success-rates.html.
[163] This is based upon a review of the charges published on the websites of debt collectors.
[164] Smith, M. and Patel, A. (2008) "Money Advice Outreach evaluation: cost and effectiveness of the outreach pilots", Research Findings 22, Legal Services Research Centre, London: Legal Services Commission.
[165] Wells, J. et al. (2010).
[166] Ibid.

mortgage, the average mortgage value and outstanding debt on different debt solutions and the value of mortgage arrears.

Our objective in modelling the impact of debt advice on creditors was to describe the annual benefit, i.e. consistent with our other estimates in this study. We have considered the number of new DMPs and insolvency solutions in a year and the present value of the benefit expected over the expected duration of each plan or insolvency solution. Our estimate is based on DMP, IVAs and Trust Deeds as these are the solutions that allow for robust estimation (the full list of debt solutions available in Table 2.2). Therefore, given that other debt solutions exist,[167] our estimate is an underestimate of the impacts of debt advice on creditor recovery.

Our model incorporates the following assumptions and data in order to estimate the impact of debt advice on creditor recovery:

- The average initial unsecured debt in a DMP was taken as £21–£24,000. This was based around estimates of all DMPs entered into at various free-to-client debt advisers. This range is somewhat above that derived from the survey (£18,100–£20,200), but we prefer it as it is drawn from a considerably larger population of DMPs.
- The average outstanding unsecured debt on an IVAs and Trust Deeds was taken initially from the primary research. Since the survey's sample included individuals that had entered into an IVA between early 2014 and early 2016, an adjustment was made to reflect some degree of paying down of the balance. The resultant range was £18,500–£19,000 per indebted individual.
- The average mortgage arrears for people on a DMP and for people in a relevant insolvency solution was drawn from the primary research. Again, adjustments were made to reflect the fact that the data collected in the survey would have already reflected some paying down of outstanding balances.
- Our assumptions on recovery rates (net of any fees, where relevant) and the cost of pursuing a debtor are drawn from Clifford et al. (2014) and Wells et al. (2010):[168]
    - DMPs result in a 5-10 per cent additional recovery rate compared to the unadvised population.
    - IVAs or Trust Deed result in a 5–8 per cent additional recovery rate compared to the unadvised population.
    - An additional two–five per cent in recovery is achieved on mortgage arrears (where relevant) relative to the unadvised population.
    - The avoided cost of pursuing a debtor was set to 4.5–5.5 per cent of the outstanding debt.
- The number of IVAs and Trust Deeds started in one year in the UK was calculated from the Insolvency Service's Insolvency Statistics for 2016.
- We understand that the number of DMPs outstanding is about 460,000. We estimate that the current duration of a typical DMP is 3.75–5.5 years (DMPs can of course be both shorter and also considerably longer than this in length). This implies that 84–123,000 DMPs may be being entered into in a twelve month period.
- The benefits due to increased repayments of loans per person were calculated in accordance to the following equation for each group of indebted people:

$$\text{Impact per person} = PV\left[\text{outstanding debt (recovery rate + cost of pursuing a debtor)}\right]$$

- Last, we take the adjusted per person benefit and multiply it by the estimated number of individuals taking debt advice in DMPs, IVAs or Trust Deeds.

Table 5.16 below presents the resulting model, and the estimated impacts.

[167] For example, insolvency solutions include: DRO and Bankruptcy, as well as IVA and Trust Deeds.

[168] Clifford et al. (2014), page 76, are generally the source of the upper bounds. Wells et al. found a five per cent differential in recovery rates.

Table 5.16: Impact of debt advice on creditor recovery

	Low	High
DMPs		
Average unsecured debt on DMP [a]	£21,000	£24,000
Average mortgage arrears on DMP [b]	£1,450	£1,650
Additional recovery on DMP unsecured debt [c]	5%	10%
Additional recovery on DMP mortgage arrears [c]	2%	5%
Duration of DMP [b]	3.75 years	5.5 years
Cost of pursuing a debtor [c]	4.5%	5.5%
Discount rate [d]	3%	3%
PV of impacts per DMP	£2,017	£3,665
New DMPs per annum	83,600	122,700
Total impact per annum, DMPs	**£168.7m**	**£449.6m**
IVAs and Trust Deeds		
Average unsecured debt on IVA/TD [b]	£18,500	£19,050
Average mortgage arrears on IVA/TD [b]	£1,500	£1,550
Additional recovery on IVA/TD unsecured debt [c]	5%	8%
Additional recovery on IVA/TD mortgage arrears [c]	2%	5%
Duration of IVA/TD [b]	4.5 years	5 years
Cost of pursuing a debtor [c]	4.5%	5.5%
Discount rate [d]	3%	3%
PV of impacts per IVA/TD	£1,761	£2,608
New IVAs/TDs per annum	56,300	56,300
Total impact per annum, IVAs and Trust Deeds	**£99.1m**	**£146.7m**

Sources: a = Europe Economics analysis drawing on stakeholder estimates, b = EE analysis of YouGov SROI survey data, a, c = Clifford et al. (2014) and Wells et al. (2010), and d = HM Treasury Green Book.

5.10.3 Conclusions

Debt advice has a direct, beneficial impact on creditors through improving the recovery of debt and lowering the cost of pursuing a debtor. The total benefits associated with receiving debt advice are estimated at £268–£596 million per annum.

This is a very substantial gain, larger than the other quantifiable gains combined. It is worth stressing, therefore, first, that the model has been built upon limited data and incorporates a number of assumptions, which have been highlighted.

Second, the benefits arising for creditors are not pure social benefits as is the case with other impact areas. In fact, much of the creditor's benefit arises from a debtor making additional payments, i.e. these are transfer payments. These should be treated differently

to, say, benefits arising from advised individuals experiencing mental health improvements. The exception to this is the share of benefits that arises due to decreased recovery costs as this does not take place through an implicit transfer payment from the debtors to the creditors. These latter benefits amount to over £135–237 million per annum. There can also be indirect social benefits arising from the improved creditor recovery. These can materialise through a more structurally sound credit provision system. Debtors may also find that their ability to access credit might be improved. This type of impact, however, has already been explored separately in Section 5.9.

Wells et al. (2010) suggest that creditors recover just over £1.2 billion more from borrowers when debt advice is given. The different scenarios modelled ranged from £173 million to £2.1 billion depending on the input assumptions made. These estimates apply to all debt advice, extending beyond DMPs and IVAs/Trust Deeds.

Further research could improve our understanding by providing more robust data on both recovery rates among the two groups and the cost of pursuing a debtor across different debt solutions.

5.11 Reduced risk of further debt cycles

Debt recycling is where individuals who have already been through one debt cycle, relapse and enter an additional cycle. In that scenario, an individual is expected to face the same set of costs that they would have encountered previously. In some cases, repeated experiences of the same problem might improve an individual's effectiveness in dealing with the issue but equally some impacts could be more pronounced.

Debt advice could play a positive role here. Those receiving advice can have on individuals avoiding the experience of 'debt recycling': this determination would need to be based on a comparison with those who did not seek advice.

5.11.1 Insights from secondary research

Our review of the secondary materials reveals that individuals exhibiting specific behaviours are subject to a higher risk of over-borrowing, which can lead to increased interest rate payments and an increased likelihood of unmanageable debt.

Low financial capability may be an important contributing factor towards ending up in unmanageable debt, e.g. individuals do not understand that meeting minimum payments or missing payments does not only prolong the repayment of debt but also increases the aggregate interest payments. Such low capability can lead to a 'debt trap' that services existing debt but prevents paying down any principle debt.[169] Optimisa (2014) undertook research on consumer credit for low-income consumers and found that in combination with missing or minimum payments, low visibility of total borrowings leads to 'fragmented borrowing', i.e. people with numerous and often small credit commitments. These individuals do not seem to have a full appreciation of their debt levels which leads them to over-borrowing and unmanageable debt.[170] The Centre for Social Justice estimated that approximately 15 per cent of low-income credit card holders are making minimum payments for more than three years.[171]

[169] Financial Conduct Authority (2014) "Consumer credit and consumers in vulnerable circumstances".
[170] Optimisa (2014) "Consumer Credit Research: Low Income Consumers".
[171] Centre for Social Justice (2013) "Maxed Out".

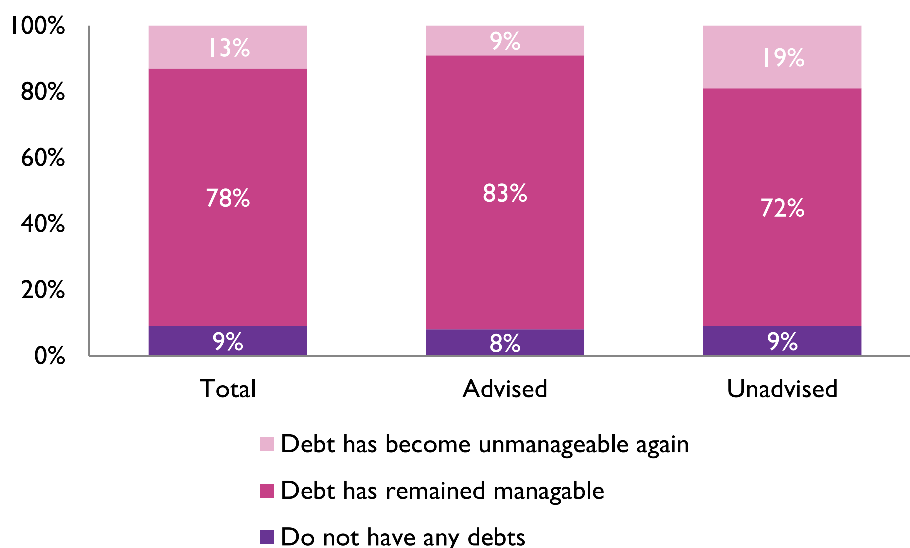
Once people end up in a 'debt spiral' this magnifies the problems and is likely to lead to financial and non-financial damage. The Financial Conduct Authority's research shows that low-income individuals are more likely to end up in such spirals as they lack the resources to cope with income shocks and increasing debt.[172] People in debt traps tend to deal with such problems by first cutting out essentials and juggling between creditors/bills, ignoring contact from creditors and ignoring payments, until eventually getting help and advice or taking action to consolidate debts.[173]

The effectiveness of advice

The effectiveness of debt advice in helping individuals manage their debts was researched by YouGov in 2012, using a sample of about 3,800 respondents who had previously been in debt since 2006. More than half of the sample had experienced unmanageable debt at some point in time; 42 per cent of those who had experienced unmanageable debt moved into manageable debt between 2006 and the time of the survey. This study showed that those in unmanageable debt and receiving advice were more likely to transition to manageable debt levels compared to the unadvised.[174] The unadvised take approximately three months longer on average to make their debts manageable (18 compared to 15 months).

Figure 5.5 shows both how debt can remain embedded and also how debt can quickly become unmanageable again. The probability of one's debt becoming unmanageable again is significantly higher for the unadvised sample in comparison to the advised, 19 per cent as opposed to nine per cent (although the advised — as in the more recent survey conducted by YouGov — displayed more severe debt levels).

Figure 5.5: Cyclical nature of debt



Source: YouGov report for the Money Advice Service, "The Effectiveness of debt advice in the UK", May 2012.

5.11.2 Insights from the primary research

The primary research is not very helpful here. It lacks a time series dimension so that we cannot see how advice impacts upon the 'recycling' of debt episodes. This time dimension would ideally extend beyond twelve months — debt advice might only be *deferring* debt recycling rather than preventing it. Whilst we can see that various indebted individuals have received advice prior to the two year window that is the focus of the

[172] Financial Conduct Authority (2014) "Consumer credit and consumers in vulnerable circumstances".
[173] Optimisa (2014).
[174] YouGov (2012) took into account other variables such as the scale of the debt, type of debt and the reasons for being in unmanageable debt.

primary research, this does not allow any robust inferences to be drawn: we would need to know the outcomes of the complete cohort of those receiving advice at that time. However, while the primary research cannot be helpful in a direct way, we have made use of some of its results in our attempt to quantify the impacts in this area.

5.11.3 Quantitative and qualitative impacts

Advice will have a positive impact here if it helps advice seekers to either avoid, or at least defer, a subsequent debt episode. Insofar as debt advice is successful in this respect, this generates a consequent benefit. Ideally, this would be estimated based on the expected costs of over-indebtedness that debt advice might help avoid, or defer, in the future. We have adopted, on a conservative basis, our estimates of the impact of debt advice. Three main inputs are needed in order to get a quantitative estimate of the impact of debt advice on debt recycling:

- An estimate of the duration of a debt cycle.
- An estimate of the reduced likelihood of debt recycling due to receiving debt advice.
- Quantitative estimates of the benefits of debt advice (as per the previous section).

For the duration of a debt cycle stakeholders indicated a best estimate of four to five years, against the four year assumption used by Clifford et al. (2014).

For the estimate of the reduced likelihood we use a mix of sources. We used the YouGov data presented in section 5.11.1 as indicative of the reduced likelihood that an advice seeker has to fall back into unmanageable debt compared to an unadvised individual, i.e. about 10 per cent. This estimate looks only at a one year time period.

This limitation motivated the use of primary data from the survey aimed at decomposing the reduced likelihood estimate into more meaningful estimates that reflect the expected timing of a recurring debt episode. We drew on the views expressed on how successful the actions taken in response to their financial difficulties were in resolving their issues; respondents' views on this issue have been presented earlier in Figure 4.5. The following assumptions were made:

- Immediate entry (i.e. in the next year) to the next debt cycle: this was determined by taking the increased share of unadvised respondents who answered "completely unsuccessful" as compared to their advised counterparts. There were one per cent fewer respondents in this category for the advised compared to the unadvised.
- Slightly deferred entry to the next debt cycle: this was determined by taking the increased share of unadvised respondents who answered "somewhat unsuccessful" as compared to their advised counterparts. There were about four per cent fewer respondents in this category for the advised compared to the unadvised.
- Deferred entry to the next debt cycles: the percentage of advice seekers that belongs to this category was taken as the difference between our previous estimates for 'immediate' and 'slightly deferred' entry and the ten per cent figure obtained from the YouGov research. The corresponding estimate was five per cent.

For the benefits of debt advice we relied on the estimated quantified impacts for this study, i.e. health impacts, productivity impacts and creditor recovery impacts. Creditor recovery impacts were separated into the social impacts and creditor-specific impacts — i.e. the ones arising from a transfer payment from debtors. Only the former entered into this first calculation. Depending on the timing of one's entry to the debt cycle we calculated the present values of the estimated impacts using a discount rate of 3.5 per cent.[175] More

[175] This discount rate is that recommended by HM Treasury's Green Book, see https://data.gov.uk/sib_knowledge_box/discount-rates-and-net-present-value.

specifically, each deferral scenario is associated with the following timings, depending on the assumed duration of the debt cycle:

- Immediate recurrence of unmanageable debt, discounted at one year from present under both scenarios.
- Slightly deferred entry is at two years for a four-year cycle and at 2.5 years for a five-year cycle.
- Deferred entry is at the end of the four-year and five-year cycles respectively.

The total impact was calculated for four scenarios, reflecting of the sensitivity of our estimates for the different impact areas and the uncertainty regarding the duration of the debt cycle (i.e. four versus five years). The results are presented in Table 5.17.

Table 5.17: Estimated social impact of debt advice on debt recycling

Impact scenario	Four-year debt cycle (in million £)	Five-year debt cycle (in million £)
High social impact[176]	47.4	46.3
Low social impact[177]	25.1	24.5

Source: Europe Economics analysis.

These can be attributed £13-26 million to consumers (health and productivity benefits) and £12–22 million for creditors (reduced cost of creditor recovery). In addition, the transfer payments between creditors and debtors will also be non-trivial, albeit not a social benefit. Using an equivalent methodology, we estimate this as £12–£32 million.

5.11.4 Conclusions

The primary research is only partly helpful here. It lacks a time series dimension so that we cannot see how advice impacts upon the 'recycling' of debt episodes. This should ideally extend beyond twelve months — debt advice might only be *deferring* debt recycling rather than preventing it. However, the primary research did provide useful information on the success rate of debt advice which was used to infer the expected timing of a recurring debt.

For the quantified benefits of debt advice we relied on the impacts estimated for this study, i.e. health impacts, employment impacts and creditor recovery impacts. The total impact was calculated for six scenarios, reflecting our range of estimates for the health and creditor recovery impacts (high, medium and low) and the uncertainty regarding the duration of the debt cycle (i.e. four versus five years). We find that the social impact of deferring the entry of a second debt cycle ranges between £25m and £48m.

Future research could improve the current understanding of the risk of ending up in unmanageable debt after having resolved it as well as the duration of a debt cycle by generating a richer data set. This would also allow one to estimate this impact more robustly across different debt solutions. A question for future research to answer would

[176] That is the top of the range from the health impacts (i.e. £145 million, including QALY effects), productivity impacts (i.e. £137 million) and the social element within the creditor recovery estimate (i.e. £237 million). In total this is £519 million, which has entered our deferral effect calculation.

[177] That is the lower end of the range from the health impacts (i.e. £74 million), productivity impacts (i.e. £67 million) and the social element within the creditor recovery estimate (i.e. £135 million). In total this is £276 million, which has again entered into our deferral effect calculation.

be the impact characteristics such as gambling, risk preferences or other coping strategies have on the likelihood of entering a second debt cycle.

5.12 The impact of credit cycles

5.12.1 Insights from secondary research and our research

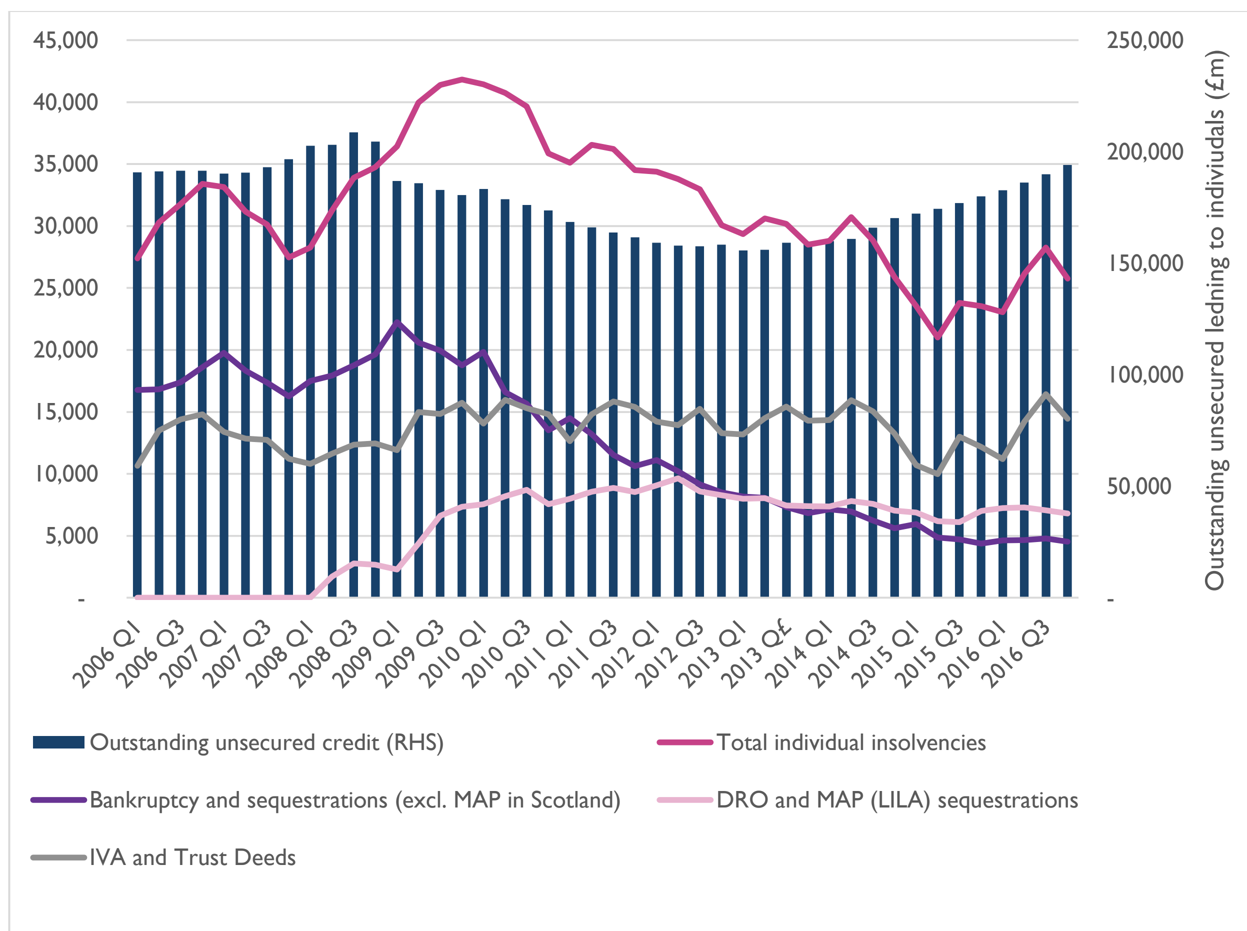
Outstanding unsecured consumer credit peaked around Q3 2008 before significant deleveraging that did stop until 2012-13. This means consumer credit levels rose before the credit crunch and even continued to rise as the economy began to worsen. The subsequent deleveraging is typical of the aftermath of financial crises, as both credit conditions tighten (i.e. it is less readily available) and households seek to pay down outstanding debts (at least, to the extent they are able). This is shown in Figure 5.6 below.

Bank of England data on the consumer credit and other unsecured personal lending written-off by UK lenders peaked in 2010 (both in absolute terms and relative to the level of outstanding debt in those areas). Such write-offs have reduced significantly subsequently, reflecting both successful deleveraging by households and the recovery in the economy.

The situation with secured lending has followed a slightly different trajectory. Mortgage arrears and properties in possession rose from 2007–08 (i.e. pre credit crunch) through to Q2 2009 before starting to reduce again. The beginning of this process largely precedes the recovery in the economy in many ways and is likely much more reflective of many households being able to manage their debts better (with mortgage debt being treated as a budgeting priority relative to unsecured borrowings).[178]

[178] This is apparent from the MLAR data published jointly by the Financial Conduct Authority and the Bank of England.

Figure 5.6: Consumer credit cycle and insolvency proceedings in the UK, 2006–2016



Notes: The data presented are not seasonally adjusted. This is because the quarterly insolvency data from Scotland and Northern Ireland are available only in a non-seasonally adjusted form. The consumer credit data exclude student loans, being the Bank of England's series LPQBI2P.
Sources: Bank of England, Insolvency Service.

Debt becoming burdensome or unmanageable does not follow a simple relation to either outstanding credit levels or to even to aggregate levels of problem debt (i.e. debts written off, or in arrears). The drivers of debt becoming unmanageable are changes in circumstances or income (due to losing a job or the end of a relationship). These have been the most cited reasons for individuals seeking help with their debts.[179] The Centre for Social Justice has calculated that a one per cent increase in the unemployment leads to an additional 60,000 debt advice seekers per quarter.[180] Even so, the number of IVAs, for example, only began to decline in 2014, several years after write-offs peaked and also a considerable lag after the UK employment rate began to rise — and in fact, *rose* again through to Q3 2016.

There are a number of possible factors that can help explain this apparent disconnect. Creditor action may act as a trigger to the seeking of advice (i.e. it could impact on the demand for advice, increasing the proportion of advised amongst the indebted population), and economic recovery may motivate creditors to consider particular actions (e.g. initiating insolvency) as the potential for the recovery of debts increases. For example once housing prices began to recover and strengthen this could have prompted increased creditor-initiated actions. This means that creditor recovery should increase in the early stages of economic recovery relative to the bottom of any down-turn.

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[179] The Debt Resolution Foundation found in 2013 that the main reason identified for seeking help was a loss in income (32.5 per cent), followed by a change in circumstances (28.5 per cent). 2013 Client Survey Provider KPIs, Debt Resolution Forum, 2013.

[180] Centre for Social Justice (2013)"Maxed Out".

Similarly, low rates may have had a cushioning effect on borrowers in the most recent recession. The economic cycle is typically thought to have a close relation with monetary policy and the level of interest rates. As and when the economic recovery is sufficiently strong, interest rates should rise. This should have a negative effect on indebtedness. An interest rate rise is likely to have the greatest proportionate impact on mortgage holders (as current rates are very low, even a one per cent rise could have a strong relative impact) and on those borrowers who are most marginal (e.g. those with debt obligations greatest relative to incomings).

The debtors themselves also take action when the business cycle affects them (e.g. through losing or gaining a job). Household consumption can be seen to fall more when facing a negative income shock than it rises when dealing with a positive shock. This asymmetry is characterised as being largely explained by household characteristics, with more credit-constrained households changing consumption to a greater extent.[181] This could have implications for both the rate of creditor recovery and the build-up of consumer debt at different stages in the business cycle.

We have identified above likely links between creditor recovery and the cycle. But this does not necessarily mean that the additional creditor recovery achievable in an advised setting *relative* to an unadvised one also increases. Creditor recovery may simply become easier, but it may be that in an average unadvised case this comes at the cost of worsened perceptions of control over one's financial situation.

There is clear and robust evidence linking indebtedness and also debt advice to changes in mental health states. However we have not found evidence to indicate that, once indebted, there are further impacts on mental health that can be associated with the economic cycle.

The economic cycle has a role in employment levels and productivity. The UK's employment rate only stabilised in mid-2010, and has been on an upward path since Q3 2011. If the employment market has improved, then the likelihood of any gain should also improve. If we take as our starting point that debt advice — by alleviating stress and allowing for improved mental health states — can have a positive role here, then improving employment conditions would then likely increase the benefit attributable to advice. Whilst employment conditions would also be improving for the unadvised, it seems reasonable to expect disproportionate gains for those obtaining advice.

5.12.2 Conclusions

We have identified above ways in which the economic cycle could impact upon the need for advice and hence the proportion of advised amongst the indebted population. The evidence for the cycle affecting the nature or scale of benefit expected to be attributable to any instance of advice is much weaker, although at least plausible in the case of employment effects.

There are ways in which further research could help here. This would mean, as with many of the impacts, conducting research with a proper time series component. This need not be simply tracking a consumer group over time. For example, research by the Federal Reserve Bank of Boston had access to a large cross-section of credit card accounts for a fifteen year period.[182] Having access to such panel data would contribute towards examining short-term changes in the credit and debt levels that individuals

[181] Bunn, P., Le Roux, J., Reinold, K. and Surico, P. (2017) "The consumption response to positive and negative income changes" Bank of England Staff Working Paper 645.

[182] Fulford, S. L. and Schuh, S. (2015) "Consumer Revolving Credit and Debt over the Life Cycle and Business Cycle" Consumer Payments Research Centre, October 2015. This study found that credit card utilization was very over an individual's life, i.e. use of revolving credit was fundamentally driven by its availability.

accumulate and how the evolution of credit changes over the business cycle. In order to model the relationship between credit availability and the build-up of debt access to a panel would again help by controlling better for individual unobservable characteristics.

5.13 Links to financial capability

Financial capability may interact with the provision of debt advice in various ways. This could be relevant at all stages of the consumer journey, e.g. affecting the likelihood of experiencing financial difficulties, the severity of the experience, the timing of advice being sought, responsiveness to advice, and so on. As such, it can be seen as embedded already within the above analysis. In this section we discuss the potential nature of this interaction further.

Capability is not simply financial literacy. It is about the ability to take meaning from the information available and to take consequential action. Even highly financially capable individuals can become over-burdened by debt. However, capability plays a role in both the build-up of excessively high debt and how individuals subsequently manage the ensuing financial difficulties. It is also worth highlighting that some debt advisers have explicitly adopted increasing financial capability into their approach. Christians Against Poverty is a good example of this. Involvement with the indebted individuals is high, with the intention of improving general money management skills. Its own-advice research suggests that budgeting and other skills have grown and been maintained post-advice.[183]

The reasons why people experience problems with debt are complex as it is often not a single issue that leads to debt problems but rather a variety of factors:[184]

- Kober (2005) points to negative income shocks such as job loss, divorce or illness/disability that may result in a sudden decrease in income and/or to increased expenditure.[185] Kempson (2002) highlights job loss as the most significant factor contributing to debt problems.[186] These types of "shock" represent a link to other aspects of financial capability (i.e. the changing likelihood of access to adequate precautionary savings and the preparation for particular life events).
- Day, Collard and Hay (2008) suggest that increased indebtedness may be non-exclusively related to poor money management and lack of financial knowledge.[187]

In light of the above, some researchers have focused on the tendency of people to make "financial mistakes" — i.e. display consistently low capability — that may ultimately lead those individuals to being confronted with significant difficulties in fulfilling their debt obligations. In a cross-section of prime borrowers, Agarwal et al. (2009) found that middle-aged adults made fewer such mistakes than younger and older adults.[188] This U-shaped pattern of mistakes was at a low (in this study) at age 53. The authors' hypothesis was that relatively young borrowers have low levels of experience and a high degree of analytic function, while older borrowers have high levels of experience but relatively lower levels of analytic function, which would explain the U-shape of financial mistakes curve.

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[183] Christians Against Poverty (2016) "The Freedom Report: The importance of debt advice in building financial capability and resilience to stay free of problem debt".

[184] Social Market Research (2010) "Research on Helping Customers to Avoid/Manage Debt".

[185] Kober, C. (2005) "In the Balance: Disabled people's experiences of debt" Leonard Cheshire.

[186] Kempson, E. (2002) "Over indebtedness in Britain: A report to the Department of Trade and Industry" Personal Finance Research Centre.

[187] Day, L., Collard, S. and Hay, C. (2008) "Money advice outreach evaluation: Qualitative outcomes for clients" Legal Services Research Centre.

[188] Agarwal, S., Driscoll, J., Gabaix, X. and Laibson, D. (2009) "The age of reason: Financial decisions over the life cycle and implications for regulation" Brookings Papers on Economic Activity, p.51–101.

The ability of individuals to deal with financial difficulties is also closely related with their ability to manage money well on a daily basis. Efficient money management should address more effectively financial difficulties, should they arise, or prohibit them from arising. For instance, the limited exposure of financially capable individuals to "recency" bias and their more efficient use of "mental accounts" should heighten their ability to allocate resources, thus lowering their indebtedness. Similarly, greater financial capability should enhance the ability of people to make informed decisions about financial products and financial services. To be able to make informed decisions about financial products individuals must have a sound financial knowledge and reasoning which are heightened under increased financially capability.[189]

When people are over-indebted, some will take actions, such as cutting back on spending and drawing up a budget plan. However, such responses are not universal.[190] More rapid and effective management of such financial difficulties (e.g. more actively managing consumption expenditure downwards) would be signs of greater capability.

The linkage between taking debt advice and financial capability can be considered in a number of ways:

- First, it could signal a degree of capability — i.e. it shows recognition that the situation is difficult, and that additional help (even if paid for) could be valuable.
- Second, it could compensate for weaknesses in the individual's knowledge or nature, particularly if the input from the debt adviser is more intensive (e.g. if the adviser contacts and negotiates with creditors).
- Third, there is the question of timing. We can see from the survey that those seeking advice are frequently facing more severe difficulties than those who do not, but it still may be that more financially capable individuals seek advice earlier than those who are less capable.[191] Past research has indicated that, inter alia, people with very low general literacy and numeracy are slow to take advice,[192] but whether there are subtler linkages between financial capability and seeking debt advice is not yet clear.

On the other hand, accepting that even financially capable individuals could become over-indebted, it could be that the stresses associated with that condition could be sufficient to suppress that capability.

Individuals can acquire financial capability skills through life experience. This suggests that individuals who have already experienced a debt advice process could subsequently display improved credit and budget management skills. This would mean that these individuals should be less likely — all else being equal — to re-experience an episode of being over-indebted. Although reasonable, it is not clear from the evidence available to us whether this is indeed the case. The survey, for example, does not shed particular light on this as it covers only those who are heavily indebted, i.e. it misses out on those individuals with past exposure to debt advice who have not entered a further debt cycle.

5.14 Conclusions on future research

In this study we have assessed the existing literature around the impact of debt advice, analysed new primary research and have striven to add to what is known. This has enabled us to develop a comprehensive analysis of the economic benefits due to debt advice, and to monetise estimates for many of these impacts where the evidence has been sufficiently robust, for example impacts around mental health and productivity. We have also developed thinking around links between advice and the credit cycle and an eventual recovery in credit access. Even so, there remain various gaps in the evidence base currently available.

[189] Johnson, E., Hershey, J., Meszaros, J. and Kunreuther, H. (1993) "Framing, probability distortions, and insurance decisions" Journal of Risk and Uncertainty, Vol. 7, No 1, p.35-51.

[190] Wells et al. (2010).

[191] Optimisa (2013) note that for 52 per cent of those seeking debt advice the trigger is correspondence or a call from a creditor. On the other hand, 29 per cent only seek advice when confronted by a bailiff, a court notice or possible eviction.

[192] Disney, R., Bridges, S. and Gathergood, J. (2008) "Drivers of Over-Indebtedness".

There are some areas where the information speaking directly to the impact of debt advice (as opposed to the impact of debt) is very limited, or even non-existent. One of these areas is the potential link between taking debt advice and an individual's financial capability. Capability is not simply financial literacy: it is about the ability to take meaning from the information available and to take consequential action. As such, there remains some ambiguity as to the best way of measuring it. Perhaps partly in consequence the evidence here is less substantive than that linking such capability and becoming over-indebted or entering a period of financial difficulty. Notwithstanding the potential difficulties, we believe one area for new research would be to assess how different degrees of financial capability interact with debt advice. For example, a measure of financial capability could be constructed using carefully selected survey data. This was the approach adopted in our recent study on the potential economic impacts of increasing financial capability, where we graded responses to fifteen survey questions to create a Financial Decision-making Index for over 3000 consumers.[193] This measure could then be used to help assess whether increased capability (or capability above a given threshold) is associated with debt advice being sought earlier, or to an individual taking more effective or more rapid action (e.g. in terms of cutting any discretionary expenditure) than those who are less capable. Such research could examine how different individuals respond to debt advice at the time it is sought (e.g. do more capable individuals respond more fully to the advice received).

A second, related, topic is investigating whether, and to what extent, individuals who have already experienced a debt advice process subsequently display improved credit and budget management skills. This would be a practical example whereby individuals acquire financial skills through life experience. As noted above, this should reduce the likelihood of re-experiencing unsustainable debt levels. This would require investigation of a cohort of individuals with past exposure to debt advice, i.e. both those who have and have not subsequently entered a further debt cycle.

Third, it would be interesting to evaluate further how the advised and the unadvised differ in terms of attitudes to risk and, more specifically, how these might be associated with both the level of indebtedness and impact debt advice has in resolving financial difficulties. Efforts to assess attitudes to risk may be incorporated into future research. As described above (at 4.1) the advised in our sample were more likely to be frequent gamblers than the unadvised. Of course, one aspect of gambling in particular that would complicate its use as a proxy for an individual's risk attitude is that gambling can directly lead to financial difficulties (e.g. through gambling with one's pay cheque).

Future research might also explore the link between physical health conditions and receiving debt advice, particularly in areas where our survey only generated few observations (in particular, heart disease and OCD). Such research might benefit from medical expertise in order to establish stronger causal links to underlie the developed hypotheses.

Our analysis also revealed potentially interesting future research avenues in terms of housing impacts. We identified individuals with high advisor involvement as being less likely to have their homes repossessed and less likely to move to a cheaper home compared to those with low advisor involvement. While this suggests that at least a sub-group of the advised could be benefitting from the increased involvement of the advisers, it is not clear from the data available to us, however, whether this sub-group were facing more or less severe housing problems than the rest of the advised. There are a number of ways in which further research could contribute here. For example, research could explore the role of homelessness in triggering debt advice being sought, for example whether it acts as a trigger for advice seeking, or instead acts as a distraction from seeking advice. As with potential future research into the interaction between debt advice and relationships, study of the evolution of the incidence of homelessness subsequent to advice-seeking would be very

[193] Europe Economics was commissioned by the Money Advice Service to examine the impact of improving financial capability in the UK. This study — "The Economic Impact of Improved Financial Capability" was published in 2016. This can be accessed at: https://www.moneyadviceservice.org.uk/en/corporate/research.

interesting. Equally, further investigation would be merited around the influence of say debt-to-income levels where small sample sizes have limited the conclusions we have been able to draw.

Another area where evidence is currently lacking is recovery in access to credit. This area is hard to explore without access to the credit scores provided by credit reference agencies — and it is unclear whether the latter would be willing or able to share these data in a form where it could be established that debt advice had occurred. An ideally configured empirical research project would examine the relationship between debts (including pricing) and credit score over time and depending on different courses of action.

We think two possible workarounds are available here. First, suitable reference data could be collected on study participants at regular intervals to create a bespoke credit score for each individual, mirroring those produced by the professional agencies, which could then be monitored. However, this might introduce an element of measurement error if the new score's methodology or its interpretation were not robust, and also extracting the necessary itself information may be challenging. Second, a recent market innovation is the availability of free credit scores (e.g. noddle). Such a resource could be used to access and record a sample's scores at regular intervals. However, both approaches are likely only feasible for a future-orientated study (i.e. one starting today) rather than a retrospective one.

The other theme we see in potential new research concerns "new" ways at looking at topics for which there is already some evidence. In particular we believe that additional longitudinal research could reveal additional insights into the impact of debt advice in the UK. (The Money Advice Service is currently conducting a scoping study exploring the potential of conducting longitudinal research that could identify the long-term impacts of debt advice.)

We have identified in the conclusions sub-sections related to the relevant impact areas described already in this chapter how such research could add value. At the expense of some repetition, we briefly recap some of those impact areas where this would be of particular value below:

- In the impact area of mental and physical health, monitoring over a longer time horizon (some symptoms might need more time to develop) could help establish a stronger causal link, ideally supported by medical expertise, between being indebted, access to debt advice and health.
- In terms of (self-) employment, small business and productivity impacts, such research would again enable clearer before and after advice effects on the over-indebted to be identified. Where business closure was involved, increased understanding of the role of advice and the ways in which mixing personal and company debts could complicate resolution would be valuable. The identification in this study of likely lagging effects related to debt advice suggests any such research should be over a long-term horizon.
- An important area where such longitudinal research could contribute is exploring the contribution of different factors, including resolving financial difficulties, towards recovering relationships with family and on children (and the consequent costs of such parental disengagement) that were on the verge of breakdown or disengagement due to the onset of financial difficulties. A longitudinal methodology would likely be of particular value here as both resolving your financial difficulties and recovering your relationship are most likely rather slow processes. For example, the research could explore further the role of relationship breakdown in triggering debt advice being sought, for example whether debt advice is sought post-separation or not. Similarly, investigation around the impact on the development of new relationships (e.g. finding a new partner after a relationship breakdown), and also on the impact on non-familial relationships (e.g. maintaining friendships), could enrich the understanding of debt advice. Again, further investigation would be merited around the influence of other factors, such as debt-to-income levels and advisor involvement, where small sample sizes have limited the conclusions we have been able to draw. Similarly, research could examine the link between the duration of a child experiencing disengagement due to parental indebtedness and the subsequent long-term effects. If a child has already experienced disengagement for a long time — are such effects reversible? The preventative dimension of debt advice could also be explored. Receiving debt advice might help particular individuals avoid

excessively disruptive financial difficulties altogether and, in doing so, help them maintain their relationships better.

- Longitudinal research could also shed light on the evolution of the incidence of homelessness subsequent to advice-seeking, e.g. is any change in incidence post-advice permanent or only temporary?
- A final impact area where longitudinal data could be of particular value would be in describing links to the credit cycle. A true time series component with access to panel data would contribute towards examining changes in the credit and debt levels that individuals accumulate and how debt and the evolution of credit over the business cycle, by controlling better for individual unobservable characteristics.

Appendices

Europe Economics

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7 Statistical Models

7.1 Statistical models

In this section we describe the statistical model we used to analyse the effects of debt advice. We used a probit model as many of our dependent variables are binary. A probit (probability unit) model is a regression where the dependent variable is binary, i.e. it can only take two values, zero or one. We have estimated probit models for each of the impact areas explored in the primary research, testing a variety of different specifications. The hypothesis tested in our probit models is that the treatment (debt advice) will influence the probability of an event (impact outcome variables), the baseline model is specified as follows:

$$\boldsymbol{y} = \alpha + \beta\boldsymbol{\tau} + \varepsilon_i$$

The interpretation of the results from a probit model involves obtaining the marginal effects arising from a change in the explanatory variables (i.e. receiving debt advice) on the estimated probability of experiencing a particular outcome (e.g. feeling a lot better in terms of a mental health condition). For example, one of the models we run would be the following:

$$\text{Pr('feeling a lot better')} = \alpha + \beta\text{Advised} + \varepsilon_i$$

The model measures the probability of feeling a lot better in terms of one's mental health condition if they are in the group of people that sought advice in the last two years compared to the group that have not sought advice in the last two years. The regression coefficient, β, indicates if there is a statistically significant difference between the groups i.e. a possible impact of having received advice on mental health status. However, this coefficient requires further analysis in order to obtain the marginal effects on the explanatory variable (being advised), which indicate the magnitude of the differences; for illustrative purposes suppose the marginal effects are 8 per cent. The marginal effects can be interpreted as follows: an individual having received advice is 8 per cent more likely, compared to an individual not having received advice, to feel a lot better in terms of their mental health condition.

7.1.1 Treatment

In the model defined above we have used $\boldsymbol{\tau}$ to define the different treatment effects (such as being advised) that have been analysed; these are the following:

- treatment group (over-indebted individuals who have received debt advice in the last two years) compared to the control group (over-indebted individuals who have not received debt advice in the last two years); and
- a within treatment group analysis looking at differences between those:
  - still in advice compared to who are not currently consulting an advisor;
  - receiving free debt advice compared to paying for the advice;
  - reporting a high level of involvement of advisor in the different actions taken compared to those who undertook the actions by themselves; and
  - who received advice:
    - six months to a year ago compared to the individuals who sought advice in the last six months;
    - one to two years ago compared to the individuals who sought advice in the last six months; and
    - two or more years ago compared to the individuals who sought advice in the last six months.

7.1.2 Outcome variables

Most of the outcome variables are binary, taking the value of one if the individual had experienced a particular outcome, e.g. homelessness or redundancy, and zero otherwise. In some cases, category variables such as perceived improvements in one's health status[194] were used to create several outcome variables that were each examined separately. For example, we modelled the probability of someone in the advised group currently feeling a lot better, with reference to a mental health condition, since his financial difficulties started, compared to the unadvised group. That is, the outcome variable would take the value of one if the individual was feeling:

- 'a lot better' and 0 otherwise;
- 'a little better' and 0 otherwise;
- 'a little worse' and 0 otherwise; and
- 'a lot worse' and 0 otherwise.

We then ran the same model for all possible answers, i.e. feeling a little better/worse, feeling a lot worse or feeling neither better nor worse. The same process was undertaken for the variation of relationship problems that the respondents had experienced since their financial difficulties.

The impact on children was modelled using multiple questions from the survey regarding the frequency of parental interaction with their children, their teachers and helping children with their homework — before and after their financial difficulties. These variables were categorical and each option the respondent faced was given a number ranging between 1 and 10 (depending on the number of options the respondent had) with the most preferred option given the highest number, for example 10 = "Several times a day", 9 = "Once a day", 8 = "Several times a week" and so forth.

The change was estimated as the current interaction frequency minus that before financial difficulties. The average across the three variables was used to construct a 'parental engagement index' showing the average change, where a positive number constitutes an improvement in terms of parental engagement levels. The dependent variable we used in the probit model took the value of 1 if there had been an improvement in the index and 0 otherwise.

7.1.3 Control variables

Our examination of the models started from simple bivariate relationships, to which explanatory variables were gradually added in order to explore different interactions.

We controlled for the level of outstanding debt as a share of income and various demographic variables including age, gender and employment status.

7.2 Robustness checks

We implemented Propensity Score Matching (PSM) to improve the comparability between the advised and the non-advised. In order to ensure that we are appropriately capturing any statistical effects of receiving advice through making comparisons to a group that has not received advice, we would want to make these two groups to be highly comparable in all material matters, except the presence or absence of advice.

[194] Possible answers to this type of question were: 'A lot better', 'A little better', 'Neither', 'A little worse', and 'A lot worse'.

If the advised and non-advised are fundamentally different groups then any effect seen in a comparison of the two could be biased. This could mean that any observed monetary impact of debt advice may be due to the pre-treatment characteristics of the advised individuals, rather than to provision of debt advice per se.

The advantage of the PSM methodology allows for an unbiased causal inference and addresses such concerns.[195] It also provides an alternative methodological set-up that we can compare our other analysis to.

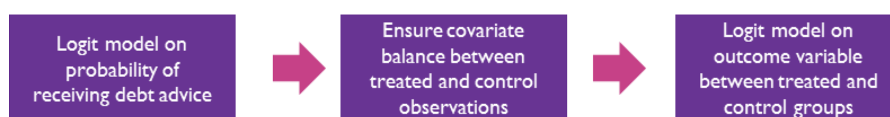
PSM matches treated to untreated (or control) observations based on a single propensity score that is estimated using observable pre-treatment characteristics. More specifically, we can model the probability of receiving debt advice via a logit model and estimate each treated and control observation's propensity score (i.e. probability) to receive the treatment (debt advice). Subsequently, we match treated deals to their closest, in terms of this propensity score, control counterfactuals and observe the difference in the relevant impact outcome variables (e.g. mental health, parental disengagement, employment and relationship breakdowns).

There is a variety of factors that could be used in order to model the probability of receiving debt advice. Consistent with the Money Advice Trust report, such determinants may include among others:[196] age; gender; marital status; education; employment; having children; and home ownership.

We used the above factors as predictors of receiving debt advice. In addition we included survey information for differences in attitude and responsibility for financial decisions in the household, as well as the region where individuals live in the UK. Due to the nature of the PSM method,[197] the matching process was undertaken separately for each impact area as the predictors of debt advice need to be exogenous to the outcome variable; e.g. when estimating outcomes in the relationship breakdown area, marital status was not included as a predictor. For robustness, we ran several matching processes and different model specifications.[198,199]

After the matching process we defined our new control group, consisting of the non-advised individuals with the closest propensity score of being advised, and used this group as our counterfactual in a logit regression model, following the same methodology as described above. This is the last step implemented in our overall approach to applying the PSM method, illustrated in the figure below.

Figure 5.7: PSM approach



Source: Europe Economics.

[195] See for example Dehejia, R. H. and Wahba, S. (2002) "Propensity score-matching methods for non-experimental casual studies" Review of Economics and Statistics, Vol. 84, p.151-161.

[196] Money Advice Trust "The Scale of Potential Need for Debt Advice", see: http://www.moneyadvicetrust.org/SiteCollectionDocuments/Research%20and%20reports/demand_and_capacity.pdf.

[197] The process relies on the Conditional Independence Assumption i.e. that given the set of observable covariates which are not affected by treatment, potential outcomes are independent of treatment assignment.

[198] We employed a variety of matching algorithms including nearest neighbour matching (i.e. a treated observation is matched to its closest in terms of counterfactual propensity score) and radius matching (i.e. a treated observation is matched to more than one counterfactuals) with and without replacement (i.e. the same control observation may or may not be used as a counterfactual multiple times). Moreover, as PSM is based on matching relative to each observation's propensity score to exhibit the treatment, and not on each separate covariate's effect on the probability of its occurrence, we test for covariate balance between 'treated' and 'control' observations once matching is complete, as a robustness check. Existing studies suggest that a two sample t-test among the distribution of covariates between the treated and control groups constitutes a sufficient diagnostic to determine covariate balance and, thus, whether matching is accurate or not.

[199] See e.g. Rosenbaum P. R. and Rubin D. B. (1985) "Constructing a control group using multivariate matched sampling methods that incorporate the propensity score" The American Statistician, Vol. 39, p.33–38.