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Understanding Financial Well-Being and Capability
– A Revised Model and Comprehensive Analysis

Økonomisk trygghet i Norge 2017

SIFO

Consumption Research Norway

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Sammendrag

Denne rapporten handler om '*financial well-being*' — økonomisk trygghet på norsk. Studien føyer seg inn i en fagtradisjon som omfatter begreper som '*økonomisk integrasjon*', '*financial literacy*' og '*financial capability*', og er en videreføring av disse perspektivene på personlig økonomi i velferdsstaten. Analysene er en oppfølging av en tidligere rapport (Project note 3-2017), og er basert på et revidert spørreskjema og nye data fra 2017.

Analysene som presenteres i denne rapporten viser at økonomisk trygghet består av tre ulike dimensjoner: at man kan 'overholde forpliktelser', at man er 'komfortabel økonomisk' og at man har en rimelig 'økonomisk buffer overfor fremtidige hendelser'. Analysene viser også at økonomisk trygghet påvirkes direkte av tre grupper av variabler: måten man bruker penger på, grad av økonomisk kontroll, og egenskaper ved det sosiale miljøet. I tillegg har vi identifisert viktige indirekte effekter fra fire andre sett av indikatorer: økonomisk oversikt, holdninger til økonomi, økonomisk kunnskap og erfaring, samt personlighetstrekk.

Summary

This report offers a working definition, a revised conceptual model and a comprehensive analysis of 'financial well-being'. It builds on our previous study of the phenomenon (SIFO Project note 3-2017) and new and improved data from Norway 2017.

The analysis presented in this report demonstrates that financial well-being is a meaningful overall concept that can be measured and identified by a set of determinants. Also, it has been shown that financial well-being can usefully be disaggregated into three distinct dimensions: meeting current commitments, being comfortable financially and having resilience for the future.

It is shown that both overall financial well-being and its sub-dimensions are directly affected by three groups of variables: money use behaviours, financial confidence and control, and aspects of people's social environment. In addition, important indirect effects from four other sets of indicators is identified: money management behaviours, financial attitudes, knowledge and experience, and personality traits.

Stikkord

Økonomisk utsatthet, økonomisk trygghet, økonomisk dugelighet, økonomisk atferd

Keywords

Financial well-being, financial capability, financial literacy, behaviours

Acknowledgements

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Norsk sammendrag og konklusjon

Analysene som presenteres i denne rapporten viser at økonomisk trygghet består av tre ulike dimensjoner: at man kan '*overholde forpliktelser*', at man er '*komfortabel økonomisk*' og at man har en rimelig '*økonomisk buffer overfor fremtidige hendelser*'. Analysene viser også at økonomisk trygghet påvirkes direkte av tre grupper av variabler: måten man bruker penger på, grad av økonomisk kontroll, og egenskaper ved det sosiale miljøet. I tillegg har vi identifisert viktige indirekte effekter fra fire andre sett av indikatorer: økonomisk oversikt, holdninger til økonomi, økonomisk kunnskap og erfaring, samt trekk ved personligheten.

På en skala fra null til 100 var gjennomsnittsskåren på det generelle målet for økonomisk trygghet 78 indeks-poeng. Dette indikerer at nordmenn stort sett har det ganske bra økonomisk sammenlignet med flere andre land.[1] Som forventet var skåren høyest (91) på dimensjonen '*overholde forpliktelser*'. Til sammenligning var resultatene for '*komfortabel økonomi*' og '*økonomisk buffer*' lavere: henholdsvis 70 og 75 indekspoeng. Her er det med andre ord rom for forbedring. Våre analyser peker på at beslutningstakere og praktikere kan oppnå de største gevinstene ved å treffe tiltak som endrer måten penger brukes på. De som skårer høyt på økonomisk trygghet utmerker seg ved at de har et bærekraftig forbruk og gode rutiner for sparing, en begrenset bruk av usikret kreditt, samt at de ikke låner for å dekke daglige utgifter. Dessuten er det mye å hente på å øke nivået på den økonomiske selvtilliten i befolkningen. Den relative betydningen av disse faktorene varierer imidlertid mellom de ulike trygghetskomponentene. Følgelig vil implementeringen av konkrete politiske og praktiske tiltak på ethvert tidspunkt avhenge av hvilket aspekt ved den økonomiske tryggheten som ansees som særlig viktig å gjøre noe med.

Å øke nivået på økonomisk trygghet og fremme bærekraftig økonomisk atferd er en kompleks prosess, som potensielt involverer mange aktører. Skoler har åpenbart en viktig rolle å spille, men også organisasjoner som NAV, forbrukerorganisasjonene, banker og andre finansinstitusjoner. Dette har ført til at regjeringer i land som Storbritannia, USA, Canada, New Zealand og Australia, har etablert institusjoner for å koordinere arbeidet på dette området. Disse organene samarbeider typisk med en rekke stakeholders om å utvikle en nasjonal strategi for å øke nivået på økonomisk trygghet og atferd. De gjennomfører bl.a. survey-undersøkelser for å finne fram til prioriterte tiltaksområder og '*best practice*' på området finsiell tjenesteyting, samt å identifisere hull i systemet som må fylles. Slik sett gir surveyen og analysene i denne rapporten et første grunnlag for å utvikle en nasjonal strategi av denne typen i Norge.

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[1] Gjennomsnittsskåren er bl.a. lavere både i Irland og Australia. Rapporten om Irland blir publisert senere i 2018 (CCPC og SIFO), mens den australske blir lansert i april 2018 (ANZ bank). Dessuten er en canadisk survey underveis. Resultatene er forventet i løpet av sommeren 2018.

English Summary and Conclusion

To conclude, the analysis presented in this report demonstrates that financial well-being is a meaningful overall concept that can be measured and identified by a set of determinants. Also, it has been shown that financial well-being can usefully be disaggregated into three distinct components: *meeting current commitments*, *being comfortable financially* and *having resilience for the future*.

We began this report with an overview of the qualitative and quantitative evidence contained in our previous report and formulated a set of hypotheses that we have tested using new (and improved) data collected in 2017. The hypotheses were largely supported by the data. As illustrated by the revised conceptual model, both overall financial well-being and its components are directly affected by three groups of variables: money use behaviours, financial confidence and control, and aspects of people's social environment. In addition, we have identified important indirect effects from four other sets of indicators: money management behaviours, financial attitudes, knowledge and experience, and personality traits.

On a scale from zero to 100, the average score for the overall financial well-being measure was 78. It indicates that, on the whole, Norwegians are doing quite well compared to other countries.[2] As might be expected, the mean score was highest (91) for *meeting current commitments*. In contrast, the scores on *being comfortable financially* and *having resilience for the future* were lower: 70 and 75 respectively. There is, in other words, room for improvement. Our detailed analysis offers clues about how policy-makers and practitioners may achieve this. In general, the greatest gains are associated with focussing on raising levels of capability on the four money use behaviours (*spending restraint, active saving, not borrowing for daily expenses* and *restrained consumer borrowing*) and on increasing levels of *financial confidence*. But the relative importance of these five factors differs across the various measures of financial well-being. And each of them, in turn, has its own unique set of influences. Consequently, the focus of policy and practice, and the nature of any interventions, will depend on which aspect of financial well-being is of particular interest.

Raising levels of financial well-being and promoting capable behaviours is a complex process, potentially involving many actors. Schools clearly have an important part to play, as do organisations such as NAV and consumer organisations. But so, too, do banks and other financial institutions. This has led governments in other countries, such as the United Kingdom, the United States, Canada, New Zealand and Australia to nominate a body to co-ordinate work in this area, which is often either part of the regulatory framework or directly accountable to government. These bodies typically work with a range of stakeholders to develop a national strategy to raise levels of financial capability and well-being. They undertake surveys to identify the priority areas for interventions, identify and promote best practice in terms of service delivery as well as identifying gaps in provision that need to be filled. The well-being survey, therefore, provides the bedrock for developing a national strategy of this kind in Norway.

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[2] Average scores are lower in both Ireland and Australia. The report on Ireland will be published later in 2018 (CCPC in cooperation with SIFO), while the Australian results will be published in April 2018 (ANZ Bank). A Canadian survey is under way. The results are expected during the summer of 2018.

1.   Introduction

In our previous report, we developed a definition and conceptual model of financial well-being and presented the preliminary analysis of data from of a national survey conducted in Norway to test this model (Kempson, Finney, and Poppe 2017). The report included an extensive review of previous research relating to financial literacy (knowledge, experience and skills), financial capability (behaviours) and financial well-being, and identified some important gaps in our understanding. While there were generally accepted definitions of both financial literacy and financial capability, at that time there was no consensus on how to define financial well-being. Similarly, there have been a number of studies measuring both financial literacy and financial capability of populations across the world, although only the latter has been based on extensive empirical work to determine what should be measured and has broad agreement about survey content. The measurement of financial well-being was found to be at a much earlier stage of development, and because it has mainly drawn on the general health literature, it has predominantly focussed on subjective measures. Significantly, these strands of research have tended to be carried out in isolation from one another, with few attempts to look at the linkages between them.

As the first step toward filling these gaps, we undertook a re-analysis of the transcripts from two previous studies that had been carried out by one of the authors for the UK financial services regulator and the World Bank (Atkinson et al. 2006; Kempson, Perotti, and Scott 2013a, 2013b). These were designed to capture the views on what constitutes financial capability of broad cross-sections of the populations of nine high-, middle- and low-income countries. A closer look at the data showed that the analyses that had previously been undertaken conflated financial well-being outcomes with the behaviours that determine those outcomes. So, for example, the measures of financial capability included questions about both whether people had the financial resilience to deal with an unexpected bill equivalent to a month's income (financial well-being) as well as whether and how often they saved for the future (active saving behaviour). We, therefore, reanalysed the transcripts to tease out these two very different concepts.

1.1. Definition of financial well-being

From our literature review and qualitative re-analysis, we formulated the following working definition of financial well-being:

> *The extent to which someone is able to meet all their current commitments and needs comfortably, and has the financial resilience to maintain this in the future.*

This is remarkably similar to the definition developed by the Consumer Financial Protection Board from their empirical qualitative research (CFBP 2015, 2017):

> *… a state of being whereby a person can fully meet current ongoing financial obligations, can feel secure in their financial future and is able to make choices that allow enjoyment of life.*

There is, in other words, a consensus coalescing around these definitions.

Beyond that, we asserted that our definition of financial well-being should be applicable across high- and middle-income countries but that it is less meaningful in the poorest sections of the populations of low-income ones, where people are preoccupied with day-to-day survival.

1.2. The 2016 analysis

Based on the definition, the literature review and qualitative re-analysis we developed an *a priori* model of financial well-being and its possible determinants:

Figure 1-1: Financial well-being: conceptual model 2016
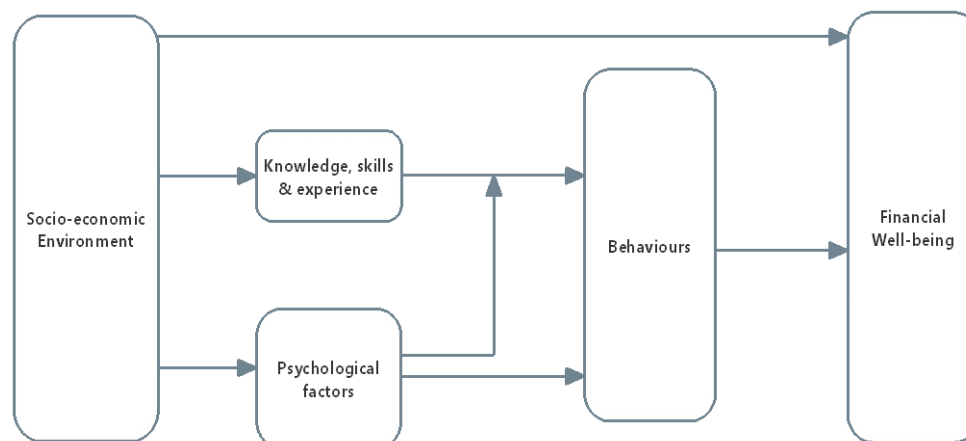
The model was then tested empirically using principal component analysis of survey data collected in Norway in 2016. The principal component analysis showed that we could create an overall measure of financial well-being using the 11 questions that were intended to measure it. The diagnostics further suggested that it could be disaggregated into three components – two relating to current financial well-being — *meeting financial commitments*' and *feeling comfortable* — and one to well-being in the long term — *financial resilience for the future*. In other words, the analysis was broadly consistent with our working definition.

Again using principal components analysis, we identified six components of behaviour,[3] three of knowledge and experience[4]; five personality traits[5] and a composite measure of attitudes towards spending, saving and borrowing. Informed by this, ten regression models were conducted to identify the key drivers of financial well-being and enhance the understanding of the underlying mechanisms responsible for the unequal spread of well-being across the population.

On the whole, the results of this analysis were broadly in line with our conceptual model of financial well-being. Behaviours — in particular, s*pending restraint*, *active saving* and *not borrowing for daily expenses* [6] — along with social and economic factors were important determinants of financial well-being. And psychological factors (both personality traits and attitudes) were important determinants

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[3] Spending restraint; Active saving; Not borrowing for daily expenses; Planning income use (budgeting); Keeping track of money, and Informed product choice.

[4] Knowledge of the financial product marketplace; Understanding of managing money to reduce risk, and Broad experience of money management (financial inclusion and engagement with financial services and day-to-day money management).

[5] Time orientation; Impulsivity; Social status; Self-control, and Locus of control.

[6] Our 2016 questionnaire did not include adequate measures of borrowing behaviour in general, and this might reasonably have been expected to have a direct influence on financial well-being along with our narrower borrowing behaviour. This has been taken into account in the revised questionnaire that was used to collect new data in 2017.

of these three behaviours — again along with social and economic factors. Knowledge and experience were much less important.

But equally, there were some unexpected findings. Most notable of these were the negative impacts of the *planning income use (budgeting)* and *keeping track of money* behaviours on financial well-being and the low levels of variance explained in the regressions analyses. The analysis developed for this report, therefore, sets out to provide a better understanding of these two behaviours. In addition, the preliminary analysis indicated that questions designed to measure borrowing for consumption purposes and informed decision-making should be included in the 2017 questionnaire.

While we expected knowledge and skills to have a smaller effect on behaviours (and no direct effect on financial well-being when behaviours were included in our regression models) the effects were even smaller than we would have expected. However, it should be noted that this was the weakest part of our 2016 questionnaire and may well be the explanation.

Some direct effects of psychological factors on financial well-being were also identified, in addition to their indirect effects through key behaviours. These included *locus of control* that had a significant impact on all three components of well-being and a modest impact of *self-control* on the *meeting commitments* component of financial well-being. These need to be understood and may indicate that there are other important behaviours that were not captured in the 2016 questionnaire. The analysis also indicated that questions designed to measure financial confidence should be included in the 2017 questionnaire.

1.3. The hypotheses and conceptual model 2017

Based on the analysis of the 2016 data and the theoretical implications of the findings, both the questionnaire and the conceptual model was further developed. The questionnaire was improved in three areas. First, more questions were included to capture the informed financial decision-making and restrained consumer borrowing behaviours noted above. Secondly, a larger number of questions were included to cover a wider range of aspects of financial knowledge and experience. Third, the psychological factors category was expanded to include two new categories: personality traits and financial confidence and attitudes.

Based on the evidence in our previous report and outlined above we formulated a set of hypotheses to be tested using the new data:

- ❖ *The main direct effects on financial well-being are from the behaviours and aspects of the socio-economic environment, when other variables in the model are controlled.*

    - o *All other influences on financial well-being are primarily indirect and mediated through the behaviours.*

- ❖ *The behaviours are, in turn, driven by a combination financial knowledge and experience, financial confidence and attitudes, personality traits and characteristics of the socio-economic environment.*

    - o *When other variables are controlled for in the model, the impact of knowledge and experience on the behaviours is weak relative to the other influences*

    - o *The impact of knowledge and experience on behaviours is reduced by attitudes and personality traits.*

❖ *Financial attitudes and confidence are functions of knowledge and experience, personality traits and aspects of the socio-economic environment.*

❖ *Financial knowledge and experience is influenced by aspects of the socio-economic environment.*

Figure 1-2: Conceptual model 2017
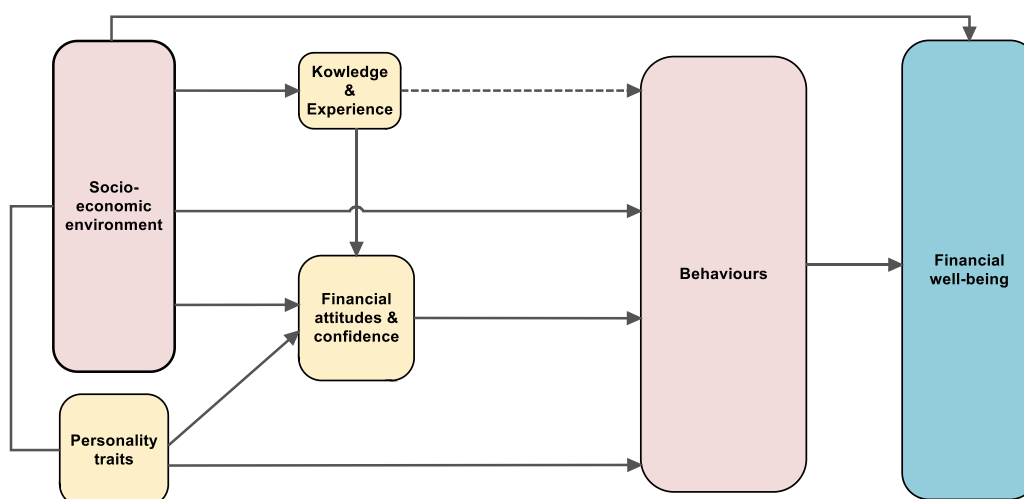
The new conceptual model presented in figure 1-2 above reflects these hypotheses. It presupposes that financial well-being is driven by essentially five categories of independent variables: financial behaviours, financial attitudes and confidence, financial knowledge and experience, personality traits and aspects of the socio-economic environment. Furthermore, it is assumed that the impact of these variables is mainly from left to right in the model — i.e. from two sets of exogenous variables (socio-economic environment and personality traits) through a system of intermediate variables (knowledge and experience, financial attitudes and confidence, and financial behaviours) to financial well-being. The sets of variables expected to affect financial well-being directly are marked in pink.

The aim of this report is two-fold. First, to test whether the conceptual model is supported by the data. The analysis to follow is extensive and explorative, controlling for a large number of variables. The goal is to develop parsimonious empirical models of financial well-being and, if necessary, to adjust the conceptual model in accordance with the new insights obtained by the empirical analysis. Secondly, we aim to draw out from the analysis key learning for policy-makers and practitioners with an interest in raising levels of financial well-being — whether that is assisting people who are in financial difficulty and experiencing payment problems or ensuring that people have financial resilience for the future.

1.4. Data and methods

The fieldwork for the survey was undertaken in March and April 2017, using Gallup's internet panel. A total sample of 2.043 respondents aged 18-80 from across Norway was produced. The number of observations used in the analyses is somewhat lower: 1919. This is partly due to missing information on income, and partly because respondents with more than 15 "*don't know'* and *'prefer not to answer'*

were removed. In addition, some cases were omitted from the sample, involving young people living with their parents who gave information about the household's finances even though they were not responsible for managing them. The final sample was weighted by gender, age, education and place of residence to be representative of the adult population of Norway. (See Appendix 2 for more details).

The questionnaire designed specifically for this study included approximately 90 questions across six sections and was supplemented by standard socio-demographic questions. The questions included were designed to cover all domains in the theoretical model described above, and to do so sufficiently to enable sub-domains (i.e. components within these domains) to be identified and constructed. Crucially, the questions were designed to produce individual measures (or items) for further analysis, which were scaled; that is, providing continuous or interval-level data. (See Appendices 1, 3 and 4).

The method used to analyse the data is OLS regression. In total, 20 regression models are reported and interpreted. In the final chapter, conclusions are drawn by discussing the main results across all these models.

1.5. This report

As noted above, there were some important deficiencies in the 2016 questionnaire and we were fortunate to have been able to revise it and to collect new data from a survey undertaken in 2017. Further analysis has been conducted on this new dataset, including: re-running the principal components analysis at all levels in the conceptual model (reported in Chapter 2) and running regression analyses to identify the key determinants of both the components of well-being (Chapter 3) and also the eight behavioural components: four relating to money use (Chapter 4) and four to money management (Chapter 5). Chapter 5 also explores possible explanations for the negative impacts of the *budgeting* and *keeping track of money* behaviours on the components of financial well-being. Chapters 6 and 7 focus on the psychological and financial knowledge and experience components in our model, giving the average scores and exploring the determinants of financial knowledge, experience, attitudes to money, financial confidence and locus of control. Finally, in Chapter 8, we review how far the evidence supports our hypotheses and refine our conceptual model to take account of our findings. We also draw out some lessons from this research for policy-makers and practitioners.

This report has been written so that it meets the needs of a diverse range of readers. Chapters 2 to 7 each conclude with a summary and discussion of the key findings, to assist readers without a detailed knowledge of statistics. For the technical reader, however, the Appendices 5 and 6 provide the detailed outputs from our analysis. The questionnaire and a description of the survey data are included in Appendices 1 and 2. Appendix 3 provides definitions of the variables used in the analysis, and Appendix 4 gives full details of how the components used in the analysis were derived from the survey questions and were scored.

In reading the results presented in this report, it is important to remember that Norway is a country where incomes are both very high and equal, with a Gini coefficient at 25.7 in 2015.[7] Our findings should be interpreted with this in mind. The questionnaire and analytical approach will, however, be used in a range of countries with higher income inequality than Norway, including the United States (Gini coefficient 39), Australia (33.7), New Zealand (34.9), Canada (31.3) and Ireland (29.8). Further papers reporting comparative analysis are planned.

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[7] Source: http://www.oecd.org/social/inequality.htm

2. Identifying the Key Components of Financial Well-being, Capability and Literacy

As in the preliminary analysis,[8] we began by identifying the key components of each of the levels in the conceptual model (Figure 1-2) from the survey questions using Principal Components Analysis (PCA). The procedure we followed is described in detail in Appendix 4. Following figure 1-2, this analysis was conducted for each level in the conceptual model in turn (financial well-being, behaviours, psychological factors, knowledge and experience). Despite the addition of new questions, the analysis proved to be remarkably stable across the 2016 and 2017 datasets. The components identified in the earlier analysis were once again identified and in the great majority of cases, the structural coefficients were identical or almost identical. The new questions resulted in two new behaviours and two new psychological factors being identified. And they resulted in fine-tuning of the knowledge and experience ones. Subsequent sections of this chapter provide more details of this.

2.1. Well-being components

As before, the PCA indicated that three components based on the 11 measures were optimal. These were:

- Meeting commitments (three measures)
- Being financially comfortable (now including two objective and two subjective measures)
- Resilience for the future (four measures)

Together, they explained 72 per cent of the variance in the replies people gave to the 11 questions. In the 2017 dataset, there was one new measure of financial well-being ('*My finances allow me to do the things I want and enjoy life*') and one was removed ('*How much control of your finances do you feel you have').* In the event, this proved to be a direct substitution as the new question combined with the same questions as the old one had done in the previous analysis. So, while in the preliminary analysis of the 2016 data the second component predominantly comprised subjective measures, using the 2017 data it comprised both objective and subjective measures. In other words, it is the substantive content that appears to be driving the clustering of these measures, not their nature.

Moreover, the structural coefficients were remarkably similar to those in the comparable analysis of the 2016 data (Table 2.1 on the next page). Those for the *meeting financial commitments* component were identical for the two datasets; those for *resilience for the future* differed by less than .01 in each case. Even the measures in the new *financially comfortable* component differed very little indeed.

The analysis also strongly indicated a one-component solution for financial well-being as a whole that included all 11 measures and explained 54 per cent of the total variance in people's responses to the questions considered.

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[8] E. Kempson, A. Finney and C. Poppe (2017): Financial Well-Being: a conceptual model and preliminary analysis. Oslo: Oslo and Akershus University College of Applied Sciences. Project Note no.3-2017

Table 2.1 Financial well-being. Loadings of component Measures. N=1919. Norway 2017

Financial wellbeing

Meeting commitments		Structural coefficient
b3	How often has no money for food and expenses	0.56
b18	Ability to pay bills	0.59
b19	How often payment problems at the final reminder due to lack of money	0.58
Financially comfortable		
b1	How often has money left over at the end of the month	0.48
a2	How good/bad is your current financial situation	0.53
a3	How confident are you about financial situation in next 12 months	0.48
a5x	My finances allow me to do the things I want and enjoy life	0.51
Resilience for the future		
c3	How much could cover of an unexpected expense of one month's income	0.53
c4	How much would need to borrow to cover unexpected expense	0.52
c5	How long could cover fall of income by a third without having to borrow	0.45
c10	Savings in terms of number of months' income	0.50

2.2. Key components of behaviours

The behaviour level of the conceptual model comprised the largest number of available measures, 25 in total, and had a number of important changes made to it in the 2017 survey. Most importantly, the 2017 questionnaire included a number of questions designed to provide improved measures of general consumer borrowing and to capture aspects of informed decision-making. These included:

- Eight new questions about the number of unsecured credit commitments and the total sums of money outstanding; the number of times equity had been withdrawn from the family home to finance consumer purchases and the level of mortgage borrowing
- Two new questions about financial decision-making
- One new question about spending restraint
- One of the four questions on keeping track of money was dropped

Reflecting these changes, an eight-component solution was clearly indicated as the optimal solution. Six of these replicated ones that had been identified in the analysis of the 2016 data too:

- *Spending restraint* (four measures, including one new question)
- *Active saving* (four measures)
- *Not borrowing for daily expenses* (three measures)
- *Planning income use (budgeting)* (three measures)
- *Keeping track of money* (three measures – one measure from 2016 was dropped from thee 2017 questionnaire)
- *Active product choice* (three measures – one measure in the 2016 analysis loaded on the 'informed decision-making component')

Plus two new components:

- *Restrained consumer borrowing* (four measures, all new questions in 2017)
- *Informed decision-making* (three measures – two new questions and one existing one that had previously loaded on the *informed product choice* component)

Table 2.2 Behaviors. Loadings of component Measures. N=1919. Norway 2017

Behaviours		
Spending restraint		Structural coefficient
b8	Lack of money because high consumption	0.55
B9x	Before buys something considers carefully whether really needs it	0.36
b20	Impulsive, buys things cannot afford	0.56
b24	Is more of a saver than a spender	0.47
Active saving		
c1	How often saves money to cover unexpected expenses	0.47
c6	Tries to save money for the future	0.53
c7	Tries to save money regularly	0.49
c8	Makes sure always has money saved	0.51
Not borrowing for day to day expenses		
b10	How often uses credit for food and expenses	0.61
b11	How often borrows money to pay off debts	0.58
b16	How often is overdrawn	0.54
Restrained use of consumer credit		
numcred	Number of consumer credit commitments (unsecured and secured)	.71
tot_ucred	Total amount owed in unsecured credit commitments	.71
Planning use of income		
b5	How often plans how to use the income	0.57
b6	How precisely plans how to use the income	0.57
b7	How often keeps to plan	0.58
Keeping track of money		
b12	Knows how much money spent last week	0.58
b14	How often checks account	0.55
b15	In what ways do you check account	0.60
Informed financial decision-making		
d12	Always gets information when has financial decision to make	0.54
d20x	Tries to stay informed about money matters	0.57
D21x	Spends lot of time considering options before making financial decisions	0.62
Informed product choice		
d4	How often checks that has the best product for needs	0.47
d6_7	Extent of information search before buying products	0.62
d8	How carefully checked terms and conditions of product bought	0.63

Again, the analysis was remarkably stable across the 2016 and 2017 datasets. Where components comprised the same measures in both datasets, the structural coefficients were either identical or within .01.

It should be noted that level of mortgage borrowing did not combine with any of these components and so was omitted from the final components.

As in the preliminary analysis, a single component to reflect respondents' overall behaviour was not supported by the data, reflecting the diversity of these behaviours and individuals' capacity and disposition to engage in them. A second level Principal Components Analysis of these eight components of behaviour, however, suggested that they could be thought of in two broad groups:

- How money is used (*spending restraint, active saving, not borrowing for daily expenses* and *restrained consumer borrowing*).
- How money is managed (*budgeting, keeping track of finances, informed financial decision-making, informed product choice*

We refer to them in this way in subsequent chapters but have not undertaken any further analysis of these two broad groups.

2.3. Key components of knowledge and experience

The 2017 questionnaire included 14 individual measures related to individuals' financial knowledge and experience. This was four more than the 2016 questionnaire and included five new questions designed to improve the data in this level of the conceptual model. In the Principal Components Analysis, these 14 measures produced a clear five-component solution, compared with just three in the 2016 analysis. These were:

- Knowledge of money management
- Knowledge of how to compare financial products
- Experience of money management
- Experience of the financial product marketplace (financial inclusion)
- Understanding of risk

Each component comprised three individual measures, with the exception of *experience of the financial product marketplace* which comprised two (see Table 2.3 below).

Table 2.3 Financial knowledge and experience. Loadings of component measures. N=1919. Norway 2017

Knowledge and experience

		Structural coefficient
Knowledge of money management		
b23	Knowledge of how to plan spending against income	0.47
d10	Knows enough about savings products to choose the right one	0.61
d11	Knows enough about consumer loans and credit cards to choose the right one	0.64
Knowledge of how to compare financial products		
d13	Knowledge of how to use a price comparison website...	0.53
d14	Knowledge of how to compare terms and conditions of insurance products	0.61
d14x	Knowledge of how to compare terms and conditions of credit products	0.60
Experience of money management		
e1x	Experience of planning how money is spent	0.58
e2x	Experience of ensuring bills and credit commitments are paid	0.56
e3x	Experience of financial decision-making	0.59
Experience of financial product marketplace (Financial inclusion)		
d1	Number of products held	0.71
d5	Number of products purchased in last 3 years	0.71
Understanding of managing financial risk		
d15	A high-return investment is also likely to be high risk	0.60
d16	You can reduce risk by saving into more than one account	0.60
d18x	Borrowing over three times income increases risk of mortgage payment problems	0.53

2.4. Key components of psychological factors

As in the 2016 survey, this aspect of the model included both general personality traits, which can influence many aspects of people's lives, and measures which relate specifically to managing money. The 2017 questionnaire added one new personality trait – action orientation/inertia – to the five already included. Like the other traits, the three questions used were taken from an established scale.

In addition, the questionnaire included three new questions designed to measure confidence about managing money, which had been identified as an important omission from the 2016 questionnaire and other research (Finney 2016).

The analysis confirmed the six personality traits (see Table 2.4 on the next page):

- Time orientation
- Impulsivity control
- Social status
- Self-control
- Locus of control
- Action orientation

Most of these were very stable, with identical structural coefficients to the ones in the 2016 analysis. The two that were least stable were *self-control* and *locus of control,* where the coefficients varied by up to 0.4.

A Principal Components Analysis of the seven questions capturing attitudes to money and confidence about money matters identified two clear components: one measuring *attitudes to spending, saving and borrowing*, comprising four measures with almost identical structural coefficients as in 2016, and the other measuring *financial confidence*, which comprised three measures (see Table 2.4 below).

Table 2.4 Psychological factors. Loadings of component measures. N=1919. Norway 2017

Psychological factors		Structural coefficient
Time orientation		
f1	I focus on the long term	0.51
f2	I live more for the present day than for tomorrow	0.64
f3	The future will take care of itself	0.58
Impulsivity		
f4	I often do things without giving them much thought	0.59
f5	I am impulsive	0.61
f6	I says things before I have thought them through	0.53
Social status		
f7	I care about how other people see me	0.61
f8	I am concerned about my status among people I know	0.61
f9	Want other people to respect me	0.50
Self control		
f10	I am good at resisting temptation	0.65
f11	I find it difficult to break undesirable habits	0.50
f12	I am always in control of my actions	0.57
Locus of control		
f13	I can pretty much determine what happens in my life	0.68
f14	My financial situation is largely out of my control	0.45
f15	When I make plans I do everything I can to succeed	0.58
Action orientation/inertia		
f16x	When I have a difficult decision to make I put it off to another day	0.66
f17x	When I have something to do that I don't like, I do it immediately to get it done	0.48
f18x	When I have to choose between a lot of options, I find it difficult to decide	0.57
Attitudes towards spending, saving and borrowing		
b25	Prefers to buy things on credit rather than wait and save up	0.55
B26	Prefers to cut back rather than put everyday spending on a credit card	0.46
c2	Prefers to spend rather than save up for unexpected expenses if income drop	0.50
c9	Finds it more satisfying to spend money than to save it	0.49
Financial confidence		
d22x	About managing money day-to-day	0.56
d23x	About planning for financial future	0.59
d24x	About making financial decisions on financial products and services	0.58

2.5. Social and economic environment

Our survey enabled us to produce a range of socio-demographic and economic variables, including: age, gender, family circumstances, income, income and expenditure changes, economic activity status, educational level, housing tenure, geographical area, availability of family or friends able to help out financially if needed, and whether or not parents had talked to them about managing money or saving when they were a child. In addition, an index of mortgage-borrowing to income ratio was included at this level of the conceptual model as it did not combine with other behaviours and there is considerable concern about current levels of mortgage borrowing in Norway.

2.6. Summary

The changes made to the questionnaire have enhanced the analysis in the ways we had hoped. Moreover, where direct comparisons were possible with the analysis of the 2016 data, the results have been found to be remarkably stable.

We were, again, able to construct a single measure of financial well-being as well as three sub-measures: *meeting current financial commitments*, *being comfortable financially* and *having financial resilience for the future*. Changes in the 2017 questionnaire have resulted in the second component having a balance of objective and subjective measures, confirming that it is their subject content that is driving their clustering not their nature. These sub-measures are broadly in line with our *a priori* definition in Chapter 1. They are also likely to be helpful for policy-makers.

As a result of revisions to the questionnaire, we identified eight underlying behaviours — adding two new measures (*restrained consumer borrowing* and *informed financial decision-making*) to the six identified in the analysis of the 2016 data (*spending restraint, active saving, not borrowing for day-to-day expenses, budgeting, keeping track of money and informed product choice).*

The questionnaire revisions also resulted in some fine tuning of the components of knowledge and experience — identifying five components rather than the three from the 2016 data. Two further psychological factors were also identified: one a general personality trait (*action-orientation*), the other capturing levels of confidence in different aspects of money management.

These measures have been used in the regression analysis reported in the following chapters.

3. Understanding Financial Well-being

In this chapter, we focus on the measures of financial well-being, looking first at the average scores across different segments of the population. We then seek to identify the key predictors of financial well-being at each of the three levels using OLS regression and, in doing so, begin testing our conceptual model of financial well-being.

The analytical interest, and therefore the focus of the text in this chapter, is on the three levels of well-being. Acknowledging that there might be some interest in the overall measure of financial well-being, the results are reported in the tables, even though they are not discussed in the text. In general, much of what is observed for the three sub-components is of course also valid for the overall measure.

3.1.   Average scores for financial well-being

On a scale from zero to 100, the average score for the overall financial well-being measure was 78 (see Appendix 5, Table A5.1). It indicates that, on the whole, Norwegians are doing quite well. As might be expected, the mean score was highest (91) for *meeting current commitments.* In other words, few of the people interviewed said that they were experiencing payment difficulties. In contrast, the score for *being financially comfortable* was considerably lower, at 70, showing that a larger number of people did not have a lot of money left over after paying for essentials. Interestingly, the mean score for *financial resilience for the future* was slightly higher (75) but with a much wider distribution of scores than the other two levels of financial well-being (see Appendix 5, Table A5.1).

Scores for all three levels of well-being differed significantly across age groups, different family types by income level, by work status and by housing tenure. There were, however, no statistically significant differences between men and women or across different areas of Norway (Appendix 5, Table A5.1). In general, groups that had the lowest scores also had the greatest diversity in their scores.

Taking age first, across all three measures of well-being people aged under 40 not only had the lowest mean scores but also the greatest diversity in scores. Mean scores rose steadily across the age groups from the age of 50 upwards and, at the same time, the spread of scores became more concentrated around the average. There was also a clear link with family circumstances. In general, people living with a partner had higher scores than single people and the spread of their scores was lower. In both cases, however, the presence of children lowered the score, particularly if they had a child under the age of 18 living with them. The differences across both age groups and family types were lower for the *meeting current commitment* measure than they were for the other two measures of financial well-being. Putting this together, it means that financial well-being is lowest for young lone parents with young dependent children and highest for older people living as part of a couple who are either childless or their children have left home.

As might be expected, financial well-being was strongly associated with both income and work status. Mean scores on all three measures increased steadily across the income quintile groups and the spread of scores became more concentrated. In terms of work status, the highest mean scores were found among retired people, followed by people in full-time employment. Unemployed people had the lowest scores by far – and the greatest spread of scores.

Table 3.1: Predictors of Financial Well-Being. OLS regressions. Unstandardised coefficients. Norway 2017. N = 1919. Variable definitions [1)]

	Meeting Commitments		Being Financially Comfortable		Resilience for the Future		Overall Well-being	
	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig
Answering about household and personal money	-1.37		-1.53		-0.87		-1.29	
BEHAVIOURS								
Money Use								
Spending restraint (beh1s)	0.27	***	0.05		0.27	***	0.20	***
Active saving (beh2s)	0.32	***	0.15	**	0.53	***	0.34	***
Not borrowing for daily expenses (beh3s)	0.45	***	0.27	***	0.46	***	0.39	***
Restrained consumer borrowing (beh4s)	0.24	***	0.22	***	0.58	***	0.35	***
Interaction: spending restraint*active saving	-0.002	***	0.001		-0.002	*	-0.001	*
Money Management								
Informed decision-making (beh5s)	-0.03		-0.02		-0.02		-0.02	
Active product choice (beh6s)	-0.001		0.001		-0.001		-0.001	
Budgeting (beh7s)	-0.04	**	-0.13	***	-0.11	***	-0.10	***
Keeping track of money (beh8s)	-0.07	***	-0.07	***	-0.09	***	-0.08	***
KNOWLEDGE & EXPERIENCE								
Knowledge of money management (kn1s)	0.04	*	0.05	*	0.06	*	0.05	**
Knowledge of how to choose financial products (kn2s)	-0.01		0.02		0.04		0.02	
Experience of money management (kn3s)	-0.03		-0.09	***	-0.09	*	-0.07	***
Experience of financial-product marketplace (kn4s)	0.02		-0.0005		0.001		0.005	
Understanding of risk (kn5s)	0.01		-0.02		0.04		0.01	
PSYCHOLOGICAL FACTORS								
Personality Traits								
Time orientation (tos)	-0.03		-0.01		0.01		-0.01	
Impulsivity control (imps)	-0.01		-0.07	**	-0.08	**	-0.05	**
Social status (socs)	-0.005		-0.04		0.01		-0.02	
Self-control (selfs)	0.01		0.02		-0.04		-0.004	
Action orientation (aos)	-0.01		0.05	*	0.02		0.02	
Locus of control (locs)	0.09	***	0.19	***	0.09	*	0.13	***
Other Psychological Factors								
Financial confidence (att2s)	0.12	***	0.18	***	0.06	*	0.12	***
Attitudes to spending, saving and borrowing (att1s)	-0.05	*	-0.06	*	-0.005		-0.04	*
SOCIAL & ECONOMIC ENVIRONMENT FACTORS								
Income & Expenditure								
Income	0.000001		0.00001	***	0.000005	***	0.000005	***
Income drop	-5.05	***	-10.28	***	-6.45	***	-7.57	***
Income increase	1.67		4.36	***	0.28		2.40	*
Expenditure drop	-0.60		0.75		0.38		0.20	
Expenditure increase	-2.73	***	-5.29	***	-3.19	*	-3.84	***
Work Status:								
Working full-time	-1.13		-2.40		-1.13		-1.60	
Working part-time	-4.57	**	-6.51	***	-2.99		-4.84	***
Self-employed	-7.33	***	-5.28	*	-5.42	*	-6.04	***
Unemployed	-8.01	***	-14.44	***	-7.14	*	-10.22	***
Disabled	-1.82		-5.60	***	-2.19		-3.46	**
Not working for other reasons than retired	-1.52		-5.52	**	0.08		-2.46	
Other Economic Characteristics								
Mortgage-to-income ratio	-0.0005		0.004		-0.005		-0.0003	
Family or friends who can help financially	0.78		1.11		0.65		0.83	
Region								
Central East (incl. Oslo)	-0.82		-0.25		0.49		-0.29	
Rest of Eastern Region	0.69		1.44		-1.28		0.36	
South & West	-0.44		0.30		0.07		-0.04	

Table 3.1: Predictors of Financial Well-Being. Continued

	Meeting Commitments		Being Financially Comfortable		Resilience for the Future		Overall Well-being	
	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig
Housing Tenure:								
Renters	-0.84		-5.10	***	-8.30	***	-4.60	***
Owners with mortgage	1.06		-2.23	*	-5.58	***	-1.88	**
Personal and family characteristics								
Age:								
u/30	-3.64	**	-6.73	***	-10.10	***	-6.64	***
30-44	-4.31	***	-6.53	***	-11.67	***	-7.39	***
45-59	-2.07	*	-3.20	**	-7.72	***	-4.17	***
Gender	0.17		-0.08		-3.84	***	-1.10	
Couple	1.80	**	2.85	***	0.84		1.87	**
Number of dependent children	-0.76		-1.43	**	-0.85		-1.01	**
Parents discussed money	1.22	*	0.58		2.10	*	1.21	*
Immigrant	0.13		-1.65		-1.57		-0.87	
Educated to university degree or above	0.77		1.37		1.98	*	1.39	*
Constant	-2.37		9.06		-53.22	***	-16.01	**
Adjusted R^2	.49		.56		.55		.66	

[1] *Well-being, behaviours, knowledge and experience, psychological factors*: variables standardised to vary between 0 1nd 100 (see chapter 2). *Income*: income before tax in NOK. *Income drop, income increase:* dummies for substantial changes (1=yes). Omitted category: stable incomes. E*xpenditure drop, expenditure increase*: dummies for substantial changes (1=yes). Omitted category: stable expenditures. *Work Status*: dummies (1=yes), omitted category: retired. *Mortgage-to-income ratio*: mortgage in NOK relative to income before tax in NOK. *Family or friends who can help financially*: dummy (1=yes). *Region*: dummies (1=yes), omitted category: Middle and Northern Norway. *Housing tenure*: dummies (1=yes), omitted category: outright owners. *Age*: dummies (1=yes), omitted category: 60+. *Gender*: dummy (1=female). *Couple*: dummy (1=yes). *Number of dependent children*: number of children under 18. *Parents discussed money*: dummy (1=yes). *Immigrant*: born outside Scandinavia, at least one non-Norwegian parent, dummy (1=yes). *University degree or higher*: dummy (1=yes).

Reflecting the analysis by age and income, there was also a strong link between housing tenure and the mean scores for all three measures of financial wellbeing; outright owners had higher scores than people buying a home with a mortgage, while those renting their home had the lowest scores of all.

3.2. Identifying the predictors of financial well-being

So far, we have considered the average scores of different groups in the population for each of our components of financial well-being. To understand what drives the distribution of financial well-being in the Norwegian population, we ran an OLS regression for each component in turn. This analysis included the measures from all levels of our conceptual model that were identified in the previous chapter:

- The eight components of behaviour,
- The five components of knowledge and experience and
- The eight psychological factors.

In addition, we included socio-demographic and economic factors as well as variables capturing whether or not the individual had family or friends they could turn to for financial assistance if needed and whether or not their parent had spoken to them about managing money or saving when they were a child.

Because financial well-being is a complex social phenomenon, a number of regressions were run. The ones reported in Table 3.1 below include all the variables tested, regardless of their level of statistical significance, to facilitate direct comparison of the size of the effects of individual variables across the different components of financial well-being. The number of stars next to each item indicates the level

of statistical significance with three stars being highly significant (at the 0.001 level) and one star indicating variables that just reach the level of significance (at the 0.05 level). The coefficients indicate the size of the effect that a variable has on each measure of financial well-being. The full regression outputs can be found in Appendix 7 (Table A7.1). All four models performed well, each explaining half or more of the variation in scores.

3.3.   Understanding meeting financial commitments

Our first component of financial well-being measures the extent to which individuals are able to meet their current financial commitments and avoid falling into payment problems and arrears. As Table 3.1 shows, by far the most important predictors of this component of financial well-being lay in the behaviour and socio-economic environment boxes of our conceptual model. Indeed, in two simple models, the one

Facts box: The meeting financial commitments component

Meeting commitments

b3	How often has no money for food and expenses
b18	Ability to pay bills
b19	How often payment problems at the final reminder due to lack of money

containing behaviours alone explained 40 per cent of the variation in replies given by respondents, while the one with environmental factors alone explained about 16 per cent.

The four money use behaviours: *spending restraint*, *active saving*, *not borrowing for daily expenses* and *restrained consumer borrowing* were all highly significant statistically and had very large effects (see Table 3.1). The effect of *not borrowing for daily expenses* was especially large; for each additional 10 points on this score, the one for *meeting financial commitments* was raised by 4.5 points. The effect of *active saving* was also large; each 10-point increase raised the score for *meeting financial commitments* by 3.9 points.

Since spending and saving are likely to be highly correlated, we also included an interaction term of these two variables in our model. This, too, was highly significant (and negative) showing that at higher levels of *spending restraint*, the impact of *active saving* on keeping up with one's commitments is reduced and vice versa. In other words, all other things being equal, people seem to give one of the two behaviours primacy over the other.

Of the money management behaviours, both *budgeting* and *keeping track of money* were statistically significant but had small — and negative — effects (see Table 3.1). It should be noted, though, that neither *informed financial decision-making* nor *active product choice* was statistically significant. Chapter 5 explores some possible explanations for these findings.

Looking next at the socio-economic environment factors, income and expenditure changes, work status and age were all highly significant statistically (see Table 3.1). Although income *per* se was not statistically significant, both a recent, substantial drop in income and an increase in expenses had a negative effect on meeting financial commitments, with an income fall having the bigger effect. Experience of an income fall reduced scores on *meeting financial commitments* by an estimated 5 points. Being unemployed, self-employed or a part-time employee also reduced the likelihood of meeting financial commitments relative to people who were retired. The effect of age on this component of financial well-being was u-shaped with people 30-44 having the lowest scores, all other things being equal. This makes sense since this is a stage in life where one's commitments are most complex and subject to change. It is also consistent with the large body of research into payment problems (Davydoff, Jentsch, and Kempson 2008; Poppe 2016).

Although educational attainment was not statistically significant, it is interesting to note that having parents who discussed money management and saving with you in childhood had a small but positive effect on meeting financial commitments, albeit at a low level of statistical significance. Living as a

couple also had a small positive effect. It is worth noting that when all these factors were taken into account, housing tenure, geographical region, being a first or second-generation immigrant to Norway and the number of children in the household did not have an effect. Given the high level of concern about mortgage borrowing in Norway, it is interesting to note that the mortgage-to-income ratio was a long way from statistical significance. And, unexpectedly, having family or friends who are able to provide financial help also had no effect on being able to meet commitments.

Two of the psychological factors (*locus of control* and *financial confidence*) had a highly statistically significant and moderate effect on meeting financial commitments once behaviours and other factors were taken into account (Table 3.1). A very simple model containing just the personality traits and other psychological factors explained about 20 per cent of the variance in individual responses but, even in the absence of other variables, only *financial confidence*, *locus of control* and *attitudes to spending borrowing and saving* were highly significant statistically, with attitudes having a negative effect.

Locus of control[9] is a measure of the extent to which individuals believe that they are themselves responsible for what happens to them financially, as opposed to feeling that events are outside their control. It is, therefore, interesting to find that it had a direct effect on meeting financial commitments, when the behaviours we measured and other factors were taken into account. This is consistent with previous qualitative research (Finney, Collard, and Kempson 2007).

The effect of *financial confidence*, even when other factors have been taken into account, is also interesting and consistent with analysis of the UK financial capability survey (Finney 2016b). For that reason, we explored the determinants of both *financial confidence* and *locus of control* in a separate regression analysis. This is reported in detail in Chapter 6 and shows that both are influenced to a combination of knowledge, personality traits and economic factors.

Only one of the knowledge factors – *knowledge of money management* – was statistically significant in the model, but even this only just reached statistical significance and the effect was very small compared with the effects of the behaviours discussed above (Table 3.1). Indeed, even when we tested the knowledge and experience variables on their own in a very simple model to predict *meeting financial commitments,* they explained only 7 per cent of the variance in responses given by individuals and, once again, only *knowledge of money management* had an effect of any size.

3.4.   Understanding being financially comfortable

Our second component of financial well-being – being financially comfortable – assessed the extent to which individuals were, and perceived themselves to be, in a comfortable position financially at the present time. It was the only one of our three components that included both subjective and objective measures. This helps to explain the subtle but important differences in its key predictors, compared with the other two well-being components.

Facts box: The being financially comfortable component

Financially comfortable

b1	How often has money left over at the end of the month
a2	How good/bad is your current financial situation
a3	How confident are you about financial situation in next 12 months
a5x	My finances allow me to do the things I want and enjoy life

Once again, behaviours and socio-economic variables appeared to be the main determinants (Table 3.1). But there were some important differences from the model of *meeting financial commitments.* A wider range of environmental factors was statistically significant and the effects of behaviours —

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[9] The questions were drawn from Rutter's index of financial locus of control

especially ones relating to money use — were appreciably lower. Indeed, a simple model with just behaviours included explained 33 per cent of the variance in replies — lower than it had been for *meeting commitments*; one containing only socio-economic factors explained 32 per cent, which was a great deal higher than it had been for *meeting commitments*.

Of the four money use behaviour variables, only the two relating to borrowing were highly significant statistically and they also had the largest, and positive, effect (Table 3.1). A 10-point increase on these scales would increase the score for *being comfortable financially* by 2.7 and 2.2 points respectively. So, people were — and felt that they were — in a financially comfortable situation if they had borrowed very little (or no) money. That said, the influence of *not borrowing for daily expenses* was a good deal lower than it had been for the *meeting financial commitments* component. *Active saving* was slightly less significant statistically, and also had a lower effect — both compared with the two borrowing behaviours and with the effect it had on the *meeting commitments* measure of financial well-being. Even so, people were — and felt they were — more comfortable financially if they were actively saving. *Spending restraint* had no effect at all in this model, and an interaction term between spending and saving was also not significant.

Again*, budgeting* and *keeping track of money* were highly significant statistically, and both had a negative effect (Table 3.1). Indeed, *budgeting* had a much greater effect on being financially comfortable than it did on *meeting financial commitments.* Neither *informed decision-making* or *active product choice* was significant statistically. Possible explanations for these findings are, again, given in Chapter 5.

Turning now to the environmental factors, once again income and expenditure changes were highly significant statistically, but so too was income level (Table 3.1). This was the only one of the financial well-being measures that was influenced (positively) by an increase in income, and the (negative) effects of a substantial fall in income and a substantial rise in expenses were also far greater too. This may well be because this component of financial well-being was the only one to include subjective measures and it may be these that are affected by income and economic shocks.

Unemployment, not working because of long-term illness or disability or having part-time employment were all highly significant statistically and also had a greater effect (negative) on this measure of financial well-being than they did on any of the others. All reduced the level of being financially comfortable, compared with the level among retired people — as did other forms of economic inactivity, but at a lower level of statistical significance. Again, this could be attributable to the inclusion of subjective measures in this component of financial well-being.

Compared with people over the age of 60, those who were aged under 45 were very likely to report lower levels of financial well-being on this measure. The score for being *financially comfortable* was higher for couples than it was among those without a partner. It was lowered the more children there were in the household. And it was also lower if respondents were renting a home or (to a lesser extent) buying it on a mortgage, as opposed to owning it outright.

A key distinguishing feature of the model of *being financially comfortable* was the wider range of psychological factors that were statistically significant compared with the other two components of financial well-being (Table 3.1). Most of these, however, had a smaller effect than the behaviours discussed above and were at lower levels of statistical significance (*impulsivity control, attitudes to spending, saving and borrowing* (both negative) and *action orientation* (positive). *Locus of control* and *financial confidence* again stood out as not only being highly significant statistically but also having large effects — indeed bigger than some of the behaviours. 10-point increases on these scores would

raise the score for *being comfortable financially* by 1.9 and 1.8 points respectively. The effects were also a great deal larger than they were for either *meeting financial commitments* or *resilience for the future*. Once again, this could well be because this is the only one of the three components of financial well-being that includes subjective as well as objective measures.

The level of experience someone had with managing financial matters was very significant but negative, suggesting that when you play a less active role, you tend to have a more positive picture of how comfortable you are financially (Table 3.1). Knowledge relating to money management had a smaller effect at a much lower level of statistical significance. The other three measures (*knowledge of choosing products*, *experience of the financial marketplace* and *understanding of risk*) were not even significant in a simple model that contained only the knowledge and experience variables.

Taken together this analysis suggests that the financially comfortable measure of financial well-being is picking up the level of financial strain people experience – both objectively and subjectively – and, compared with the other measures, it is determined far more by circumstances and personality than it is by behaviours. Or, at least, it is in Norway.

3.5.   Understanding financial resilience for the future

Having *financial resilience for the future* was also primarily determined by behaviours and a limited range of environmental factors. A simple model with just behaviours included explained 46 per cent

of the variance in replies — higher than in comparable models for the other two measures of financial well-being just discussed. One containing only socio-economic factors explained 23 per cent, which was a great deal lower than it had been for *being financial comfortable.*

Facts box: The resilience for the future component		
Resilience for the future		
c3	How much could cover of an unexpected expense of one month's income	
c4	How much would need to borrow to cover unexpected expense	
c5	How long could cover fall of income by a third without having to borrow	
c10	Savings in terms of number of months' income	

All four money use behaviours were highly significant statistically, and *restrained consumer borrowing, active saving* and *not borrowing for daily expenses* all had very large effects (Table 3.1). A 10-point increase in these scores increased the score for financial resilience by 5.8, 5.3 and 4.6 points respectively. Indeed, the effects of the last two were much bigger than in the models of the two current financial well-being components discussed above. *Spending restraint* was also fairly high, with a 10-point increase in scores raising financial resilience by 2.7 points. Once again, we included an interaction term of spending and active saving in our model. This, too, was highly significant and shows that at higher levels of spending restraint, the impact of *active saving* on resilience for the future is reduced and vice versa.

Budgeting and *keeping track of money* again had moderate and negative effects, while neither *informed decision-making* or *informed product choice* was statistically significant. (See Chapter 5 for possible explanations).

All other things being equal, the socio-economic variables that were highly significant statistically in the model of resilience for the future included income (resilience rising with income), a recent drop in income (which reduced resilience) and age. Compared with those aged over 60, younger people (and especially those aged under 45) had much lower levels of financial resilience. In this model, housing tenure was highly significant with both mortgagors and renters having lower levels of financial resilience than people owning their home outright. All these findings are in line with expectations.

This was the only measure of financial well-being where gender was important; women had much lower levels of financial resilience than men. It was also the only measure where work status was not an important determinant. It is also worth noting the small, but just statistically significant effect of having a parent who discussed money management and saving with you as a child, and the similar effect of having a university degree.

The influences of knowledge, experience and psychological factors were minimal — tending to be small and at the lowest level of statistical significance if they had any effect at all. This was the only measure of financial well-being where *locus of control* and *financial confidence* were not important determinants.

3.6.   Summary and discussion

On the whole, the key predictors of financial well-being — and especially the *meeting commitments* and *financial resilience* components – were consistent with our conceptual model in Chapter 1, with behaviours playing a major role, along with key economic variables.

Four behaviours, all relating to how money is used, stood out in this regard: *spending restraint*, *active saving*, *not borrowing for daily expenses* and *restrained consumer borrowing*. The relative size of their effects did, however, differ across the three components of financial well-being. *Not borrowing for daily expenses* had the biggest effect on *meeting financial commitments*, while the biggest effects on *future financial resilience* included *not borrowing for daily expenses* and *restrained consumer borrowing* together with *active saving*. In contrast, although money use behaviours were still important determinants of *being financially comfortable*, the effects of *active saving* and *not borrowing for daily expenses* were considerably lower, and this was the only model where *spending restraint* was not statistically significant at all. This overall all finding seems to make sense. In a country like Norway where incomes are high and relatively equal, it is how people use that income that determines whether they fall behind with their commitments on the one hand or have built financial resilience for the future on the other. It is also consistent with previous research, using quite different questionnaires, that has found links between overall financial wellbeing and spending (Delafrooz and Paim 2013; Finney et al. 2007; Gutter and Copor 2011); borrowing (Delafrooz and Paim 2013; Finney 2016a; Gutter and Copor 2011)) and saving (Finney 2016a; Gutter and Copor 2011). So, policy interventions designed to increase financial well-being would be best focussed on modifying these behaviours.

The four money management behaviours, in contrast, were consistently either not statistically significant or they had much smaller and negative effects than the money use behaviours. Two money management behaviours — *informed decision-making* and *active product choice* — did not reach statistical significance. B*udgeting* and *keeping track of money*, on the other hand, each had a negative influence, but those effects were smaller than that of the money use behaviours. We found similar effects in the analysis of the 2016 data, and it has also been noted in other analysis (Finney 2016a; Gutter and Copor 2011) and in personal communication from the team analysing the US financial well-being survey (Consumer Financial Protection Bureau). As we describe in Chapter 5, further analysis suggests that this effect is possibly because people who are inclined to these behaviours, loosen their control when money is not tight.

Knowledge, experience and psychological factors had hardly any direct effect on any of the measures of financial well-being, with the exception of *locus of control* and *financial confidence* which were highly significant statistically and had moderate effects on *meeting commitments* and *being financially comfortable.* This indicates that people who take responsibility for their own life chances and are confident about financial matters will achieve higher levels of financial well-being than those who do

not, even when their patterns of money use are taken into account. They were, however, not statistically significant in the model of *financial resilience for the future*. Of the five measures of knowledge and experience, only *knowledge of money management* had a direct effect on the measures of financial well-being. But it was small compared to the determinants discussed above and was at the very lowest level of statistical significance.

Although Norway is a high-income country with low income inequality economic factors were still found to be important. Having experienced a recent, substantial drop in income reduced financial well-being on all three measures. Income *per se*, however, was a key determinant of *being financially comfortable* and having *financial resilience* but not of *meeting current commitments.* Experience of a substantial increase in expenditure was also an important determinant of the two measures of current financial well-being, with a negative effect, but had less of an effect on *financial resilience for the future.* Clearly, income and expenditure shocks can damage financial well-being. The wider implication of these findings is that, in countries where incomes are lower and less equal, policy interventions to raise financial well-being will need to address these social policy issues as much as the way that people use their income.

Even controlling for these economic effects, work status was a highly significant determinant of both *meeting current commitments* and *being financially comfortable*. In particular, unemployed people and those in part-time work stood out as having lower levels of financial resilience than people who were retired. Both seem to be capturing the influence that longer-term low income can have on financial well-being. While the effect that self-employment had on *meeting current commitments* may be capturing the influence of fluctuating income.

Age was also important across all three components of financial well-being, with people aged under 45 having the lowest levels of financial well-being even when all other factors were taken into account. This would point to the need to target younger people with policy interventions.

Other findings that are worth noting are the negative effects of having housing costs to meet (renting or buying a home on a mortgage, compared with owning outright) on both being *financially comfortable* and having *financial resilience.* However, the mortgage-to-income ratio was not statistically significant in any of the models. It is the level of unsecured rather than secured borrowing (captured in the behaviours) that is of primary importance in determining financial well-being in Norway.

Taken together, then, these findings are largely in keeping with the conceptual model presented in Chapter 1. They also support the hypothesis that financial well-being is primarily determined by behaviours and social and economic factors. But there are some deviations from the model. Most notable is the fact that only the money use behaviours were direct determinants of financial well-being. The money management behaviours were not. Furthermore, although they were generally lower, the positive direct effects of the personality trait *locus of control* and of *financial confidence* on financial well-being were unexpected. This finding is perhaps more explicable for the *being comfortable financially* measure, including as it does both subjective and objective measures and, indeed, the effects were larger than on the other measures of financial well-being. But it is possible that having a high level of financial well-being adds to financial confidence and to the sense of being in control. The other deviation from the conceptual model of particular note is the moderate but negative effect of *attitudes to spending, saving and borrowing* on the *being comfortable financially* and *financial resilience* measures. Just as noted above for confidence and control, this finding may indicate that people relaxed their attitudes when their financial situation was good. We return to these points in chapter 8.

If these interpretations are correct, the analysis in this chapter would suggest that attempts to promote higher levels of financial well-being in Norway should focus on spending, saving and borrowing behaviours. The following chapter discusses how that might be achieved.

4. Understanding the Money Use Behaviours

Without a doubt, the most striking conclusion from the previous chapter is the strong impact that the four money use behaviours have on all three components of financial well-being. So, we have a fairly clear idea of what policy-makers and practitioners need to focus on to increase levels of financial well-being but not how to bring about the desired changes. In this chapter we, therefore, shift the focus to the four money use behaviours, *spending restraint*, *active saving*, *not borrowing for daily expenses* and *restrained consumer borrowing*, looking at each in turn. In each case, we look first at how the average scores vary across sub-groups in the population. We then report the results of analysis designed to provide an understanding of their key determinants. In particular, we assess the extent to which they are influenced by knowledge, experience, attitudes, psychological traits and socio-economic, environmental factors. By doing so, we can begin to see what sorts of initiatives are required to promote financial well-being.

4.1. Spending restraint

The facts box to the right shows the variables upon which this component is based (see Chapter 2 for more details). The average (mean) score for *spending restraint* was 71 out of a maximum of 100, indicating that the people interviewed exhibited moderately high levels of restraint. The fact that it was so much lower than the average for *restrained consumer borrowing* indicates that a lot of consumer and impulse spending is met out of income or savings.

Facts box: Spending restraint	
Spending restraint	
b8	Lack of money because high consumption
B9x	Before buys something considers carefully whether really needs it
b20	Impulsive, buys things cannot afford
b24	Is more of a saver than a spender

The types of people who were most likely to restrain their spending were couples without dependent children, outright owners and retired people – especially if they were over the age of 70. Those least likely to do so were couples with dependent children (lone parents with children were more restrained), tenants and people aged under 50 (See Appendix 5 Table A5.2). There were no differences by either gender or region and differences across income quintiles were small.

4.1.1. Understanding spending restraint

To understand what predisposes people to spending restraint we, again, ran an OLS regression, that was informed by our conceptual model of financial-well-being. It also tested whether the money management components of behaviour played a role. The final model performed very well, explaining 55 per cent of the variation in scores (see Table 4.1).

This showed that psychological factors were key determinants of spending restraint (Table 4.1). By far the most important factor was *attitudes to spending, saving and borrowing*, all other things being equal. A 10-point increase in the attitudes score raised the score for spending restraint by 4 points. The ability to control *impulsivity* and exercise *self-control* were also highly significant statistically and had large effects, with a 10-point increase in their scores resulting in 2.2 and 1.7 point increases respectively in the score for spending restraint. *Time orientation* had a small effect at a slightly lower level of statistical significance as did *financial confidence.*

Knowledge of money management and *knowledge of how to choose financial products* were both highly significant statistically but had smaller effects than the psychological factors just discussed. However, *knowledge of how to choose financial products* had a negative effect. *Experience of money*

Table 4.1: Predictors of Money Use Behaviours. OLS regressions. Unstandardised coefficients. Norway 2017. N = 1919. Variable definitions [1]

	Spending Restraint		Active Saving		Not Borrowing for Daily Expenses		Restrained Consumer Borr.	
	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig
Answering about household and personal money	-0.82		-2.97		1.40		-0.18	
BEHAVIOURS								
Money Management								
Informed decision-making (beh5s)	0.09	***	0.19	***	0.01		0.02	
Active product choice (beh6s)	0.01		-0.01		-0.01		-0.002	
Budgeting (beh7s)	0.00		0.04	**	-0.03	*	-0.01	
Keeping track of money (beh8s)	-0.06	**	-0.02		-0.06	***	-0.02	*
KNOWLEDGE & EXPERIENCE								
Knowledge of money management (kn1s)	0.12	***	0.04		0.01		0.001	
Knowledge of how to choose financial products (kn2s)	-0.07	***	-0.09	***	0.01		-0.01	
Experience of money management (kn3s)	0.01		0.08	**	0.05	*	0.03	**
Experience of financial-product marketplace (kn4s)	-0.03		0.10	***	0.01		-0.03	***
Understanding of risk (kn5s)	-0.01		-0.04		0.01		0.02	*
PSYCHOLOGICAL FACTORS								
Personality Traits								
Time orientation (tos)	0.05	**	0.22	***	-0.01		0.01	
Impulsivity control (imps)	0.22	***	-0.03		0.07	***	0.004	
Social status (socs)	-0.001		-0.06	**	0.03	*	0.01	
Self-control (selfs)	0.17	***	-0.01		-0.06	**	-0.01	
Action orientation (aos)	-0.03		-0.03		0.01		0.01	
Locus of control (locs)	0.02		0.12	***	0.04		0.02	
Other Psychological Factors								
Financial confidence (att2s)	0.05	**	0.09	***	0.07	***	0.01	
Attitudes to spending, saving and borrowing (att1s)	0.40	***	0.38	***	0.16	***	0.08	***
SOCIAL & ECONOMIC ENVIRONMENT FACTORS								
Income & Expenditure								
Income	0.0000003		0.00001	***	0.000002	*	0.0000003	
Income drop	-1.65		-1.51		-1.47		-0.71	
Income increase	1.31		2.83		1.43		0.68	
Expenditure drop	-0.72		-0.41		0.45		-1.45	*
Expenditure increase	-1.54		-2.51	*	-0.96		-1.38	***
Work Status:								
Working full-time	0.19		3.66	*	0.99		-0.10	
Working part-time	2.29		1.64		0.68		0.58	
Self-employed	1.19		-2.01		-0.70		0.57	
Unemployed	3.48		-3.03		2.53		2.30	*
Disabled	-0.97		-0.66		0.04		0.60	
Not working for other reasons than retired	-0.46		-1.35		2.00		1.60	*
Other Economic Characteristics								
Mortgage-to-income ratio	0.003		-0.001		0.002		0.001	
Family or friends who can help financially	-0.09		-0.24		0.41		0.47	
Region								
Central East (incl. Oslo	1.67	*	0.16		-1.01		0.40	
Rest of Eastern Region	-1.20		-0.88		-0.81		-0.03	
South & West	-0.23		-0.93		-0.74		0.07	
Housing Tenure:								
Renters	-2.37	*	-4.76	***	-0.76		-1.61	***
Owners with mortgage	-2.48	**	-1.82		-0.73		-1.57	***

Table 4.1: Predictors of Money Use Behaviours continued.

	Spending Restraint		Active Saving		Not Borrowing for Daily Expenses		Restrained Consumer Borrowing	
	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig
Personal and family characteristics								
Age:								
u/30	-1.30		1.60		-2.50	*	1.81	**
30-44	-0.45		1.38		-1.23		0.97	
45-59	0.27		-0.45		-2.61	**	-1.12	*
Gender	-2.84	***	0.71		0.95		0.10	
Couple	0.48		0.01		1.27	*	0.54	
Number of dependent children	-0.60		-2.00	***	-1.03	**	-0.40	*
Parents discussed money	-0.16		-0.04		0.45		0.25	
Immigrant	0.65		0.66		-0.30		-0.24	
Educated to university degree or above	0.11		0.98		0.42		0.83	**
Constant	10.08	**	2.82		70.16	***	86.06	***
Adjusted R^2	.55		.38		.18		.16	

[1] *Behaviours, knowledge and experience, psychological factors*: variables standardised to vary between 0 1nd 100 (see chapter 2). *Income*: income before tax in NOK. *Income drop, income increase:* dummies for substantial changes (1=yes). Omitted category: stable incomes. E*xpenditure drop, expenditure increase*: dummies for substantial changes (1=yes). Omitted category: stable expenditures. *Work Status*: dummies (1=yes), omitted category: retired. *Mortgage-to-income ratio*: mortgage in NOK relative to income before tax in NOK. *Family or friends who can help financially*: dummy (1=yes). *Region*: dummies (1=yes), omitted category: Middle and Northern Norway. *Housing tenure*: dummies (1=yes), omitted category: outright owners. *Age*: dummies (1=yes), omitted category: 60+. *Gender*: dummy (1=female). *Couple*: dummy (1=yes). *Number of dependent children*: number of children under 18. *Parents discussed money*: dummy (1=yes). *Immigrant*: born outside Scandinavia, at least one non-Norwegian parent, dummy (1=yes). *University degree or higher*: dummy (1=yes).

management and experience of the financial marketplace, on the other hand, were not statistically significant and nor was an *understanding of risk*.

It is also interesting to note that, in a stepwise regression of *spending restraint*, all five knowledge and experience variables were highly significant and had moderate to high effects when they were the only variables in the model and explained 15 per cent of the variation in replies. The addition of the eight psychological factors not only resulted in a dramatic jump in the proportion of variation explained — to 53 per cent — but also dramatically reduced effects of knowledge and experience; indeed, the two measures of experience (of *money management* and the *financial market*place) were no longer statistically significant and the others had the size of their effect greatly curtailed. In other words, people may have the knowledge that should enable them to restrain spending, but that is often over-ridden by psychological factors such as their *attitudes to spending, saving and borrowing* and their propensity to be *impulsive* and *affected by social status* (see Appendix 7).

Moreover*, Informed decision-making* had a positive effect on spending restraint, as might be expected. *Keeping track of money*, on the other hand, had a small effect that was negative, indicating that the more you are monitoring your money, the less likely you are to exercise spending restraint.

All else being equal, women had lower levels of spending restraint than men, as did, to a lesser extent, renters and mortgagors compared with outright owners. And living in the Central East Region of Norway (including Oslo) was associated with a higher level of spending restraint, relative to living in the Middle and North Region (all other things being equal).

It should, however, be noted that income, changes in income and expenditure, and the mortgage borrowing-to-income ratio did not influence spending restraint when other factors were taken into account. And nor did work status, age, having family and friends to help finically or parents who discussed money with you as a child.

4.2. Active saving

As shown in the facts box, this component is based on four variables. The average score for active saving was 75, indicating that the Norwegian population was moderately good at saving in 2017. The

types of people most inclined to save were those in the highest income quintile (indeed it rose steadily with income) and people in full-time work. There was a sudden jump in scores among people over the age of 50, declining only slightly at older ages. The groups of people who were least likely to save were

Facts box: Active saving	
Active saving	
c1	How often saves money to cover unexpected expenses
c6	Tries to save money for the future
c7	Tries to save money regularly
c8	Makes sure always has money saved

unemployed people, those renting their home and people with incomes in the lowest income quintile. Here, women were more likely to be saving than men but there were no statistically significant differences across different types of family (see Appendix 5 Table A5.2).

4.2.1. Understanding active saving

An OLS regression allowed us to identify the factors that predispose people to active saving. This model performed well, explaining 38 per cent of the variation in scores. It showed that psychological factors were, again, very important determinants (see Table 4.1). The ones with the largest effects were *attitudes to spending, saving and borrowing* and *time orientation*, meaning that people who have longer term horizons were more inclined to save. A 10-point increase in the attitudes score resulted in a 3.8-point increase in the score for *active saving*, while an increase of comparable size in time orientation increased the active saving score by 2.2 points.

In addition, *locus of control* and *financial confidence* had moderate effects. These findings are consistent with other research that has also found a link between saving and locus of control (Cubb-Clarke and Kassenboehmer 2014) and financial confidence (Finney 2016a). The effect of *social status* was smaller and negative, meaning that people were more likely to be active savers if they were concerned about their social status. It is difficult to explain this, but it seems to suggest that saving may be a marker of social status in Norway. That said, its effect was lower than any of the other psychological factors.

Two of the money management behaviours were found to be positive determinants of active saving. Engaging in *informed decision-making*, had a fairly large effect that was highly significant statistically; a 10-point increase in the score resulted in a 1.9-point increase in the one for active saving (Table 4.1). And this time, *budgeting* had a small and positive effect, showing that planning how your money will be used – and sticking to the plan – facilitates active saving.

In contrast to *spending restraint,* experience was far more important. Both *experience of money management* and *experience of the financial marketplace* had moderate and positive effects on active saving. It can be explained in terms of greater engagement if you are saving and hold your savings in financial products. *Knowledge of how to choose financial products,* however, had a negative effect when other factors were taken into account — just as it did for spending restraint — and *knowledge of money management was not significant at all.*

Again, in a stepwise regression of *active saving* all five knowledge and experience variables were highly significant and had moderate to high effects when they were the only variables in the model. The

addition of the eight psychological factors not only resulted in a large increase in the proportion of variance explained — from 12 per cent to 35 per cent — but also reduced the size of the effects of knowledge and experience. So even when people have high levels of knowledge and experience these can be over-ridden by factors such as their *attitudes to spending, saving and borrowing* and their short-term *time orientation* with a propensity to live for today and let tomorrow take care of itself (see Appendix 7).

Unsurprisingly, income level was highly significant statistically and had a positive effect on *active saving*, indicating a 1-point increase in the score per NOK 100.000 rise in yearly income. On the other hand, indicators of potential strain on the household income, such as the number of children in the household and renting a home (as compared with owning it outright) both had negative influences on active saving, as did a substantial expenditure increase. Each additional child in the household, for example, reduced the score for active saving by 2 points.

Although unemployed people had the lowest rates of saving, the fact that neither unemployment nor an income drop were statistically significant in the regression model suggests that it is low incomes *per se* that explains why unemployed people were least likely to be active savers.

Age was not statistically significant when we controlled for other factors. Also, while more women saved than men, gender was not statistically significant in the regression, when other factors were taken into account. Further investigation showed that this is most probably because women have more cautious attitudes to spending, saving and borrowing and this was controlled for in the model.

Finally, in a further refinement of the model in Table 4.1, we tested the effect of adding a variable capturing the number of credit commitments. This variable proved to be highly significant without any notable effect on the other variables reported above. It should, however, be noted that in the mortgage borrowing-to-income ratio had no effect. So, it is consumer borrowing, not mortgages, that restrict people's ability to save in Norway.

4.3. Not borrowing for daily expenses

The *not borrowing for daily expenses* component is based on four variables (see facts box and more details in Chapter 2). On the whole, few people borrowed for daily living expenses and commitments. The average score was 94 and scores were more clustered around this mean than they were for either active saving or spending restraint. As a consequence, the variance in scores between different groups in the population tended to be small even when they were statistically significant (Appendix 5 Table A5.2).

Facts box: *Not borrowing for daily expenses*		
Not borrowing for day to day expenses		
b10	How often uses credit for food and expenses
b11	How often borrows money to pay off debts
b16	How often is overdrawn

4.3.1. Understanding not borrowing for daily expenses

The OLS regression showed that *not borrowing for daily expenses* was driven primarily by psychological factors and by *attitudes to spending, saving and borrowing*, in particular. The effect was, however, lower than it had been for either *spending restraint* or *active saving* and a 10-point increase in the attitudes score increased the corresponding score for *not borrowing for daily expenses* by 1.6 points.

Other variables that were highly significant statistically, but had smaller effects, included *financial confidence* and *impulsivity control* along with *self-control* which had a negative effect. Possible interpretations of this negative effect is that if you have self-control, you may prefer to borrow for daily expenses rather than fall into arrears with bill-payments. The links between borrowing and

impulsivity control have been noted in previous research (Gathergood 2012; Gathergood and Weber 2014).

The *keeping track of money* behaviour was highly significant statistically, while budgeting also had a small effect at the lowest level of statistical significance. Both had negative effects. This could well mean that people were less likely to be monitoring their money or planning they income use if they could meet their daily expenses without borrowing (see Chapter 5).

Just one of the five knowledge and experience variables, *experience of money management*, had an effect but only at the very lowest level of statistical significance and with a small effect. As before a stepwise regression found that psychological factors seemed to reduce the effects of knowledge dramatically.

Income level was positively associated with not borrowing for daily expenses – but the effect was much smaller and at a much lower level of statistical significance than it had been for *active saving*. It is notable that, all other things being equal, neither a fall in income nor work status explained why people borrowed to cover their daily expenses and regular commitments. So, it is not an inevitable consequence of income shock or unemployment – or at least not in Norway where few people live on very low incomes. Nor is it a consequence of high mortgage borrowing as the mortgage-to-income ratio was not statistically significant.

Unlike *spending restraint* and *active saving*, age was a significant determinant of *not borrowing for daily expenses*, with people aged under 30 or between 45 and 59 being more likely to borrow in this way than people aged over 60. Although the 30-44 age-group also had a negative coefficient, it was not statistically significant. Family circumstances also played a small role, with couples being less likely to borrow for daily expenses and the presence of children in the household increasing the likelihood. Both had fairly small effects at lower levels of statistical significance.

In this case, we refined the model in Table 4.1 by the addition of a variable capturing the amount held in savings. This was not only highly significant statistically but had a similar level of influence on *not borrowing for daily expenses* as *attitudes to spending, saving and borrowing*. It also increased the explained variation in scores from 18 to 21 per cent. Even so, this was a lot lower than that found in the models of *spending restraint* and *active saving*, and could be linked to the high average score and low variation in scores.

4.4. Restrained consumer borrowing

As shown in the facts box to the right, this component is made up of two variables (for more details see Chapter 2). It was not possible to re-scale this component from 0-100 in the same way as the others. However, levels of borrowing were quite high: 45 per cent of the respondents owed money on credit commitments including frame loans, with 11% owing money on three or more. Total amount owed in unsecured credit excluding frame loans by these borrowers was NOK 54.595.

> *Facts box: Restrained consumer borrowing*
>
> **Restrained consumer borrowing**
>
> numcred   Number of consumer credit commitments (unsecured and secured)
> tot_ucred   Total amount owed in unsecured credit commitments

4.4.1.   Understanding restrained consumer borrowing

Compared with the OLS regressions for *spending restraint* and *active saving*, the model for this aspect of borrowing also explained far less of the variation in scores (just 16 per cent). Also, in contrast with the other three money use behaviours, the one for restrained consumer borrowing was much less influenced by psychological factors, indeed only *attitudes to spending saving and borrowing* was

statistically significant, and this had a very much smaller effect than it had on the other money use behaviours.

The *keeping track of money* behaviour had a small but highly significant negative effect, meaning that people were less likely to be monitoring their finances if they exercised borrowing restraint – a point that is discussed further in Chapter 5.

People were also less likely to restrain consumer borrowing the more experience they had in the financial marketplace suggesting that some people are heavy users of all kinds of financial product not just consumer credit. *Experience of money management* and *understanding of risk* had very small positive effects that were on the margins of statistical significance. Once again, the effects of knowledge and experience were reduced by *attitudes to spending saving and borrowing* in a stepwise regression.

Neither income nor an income drop was statistically significant but experiencing a substantial expenditure increase had a negative effect – so reducing the level of borrowing restraint. A possible explanation is that some people had incurred a major expense that they had met by using consumer credit.

Having a mortgage or rent to pay (compared with owning a home outright) reduced the level of restraint on consumer borrowing the mortgage. But the mortgage borrowing-to-income ratio was not statistically significant.

Age also had an effect with young people aged under 30 exercising more restraint on consumer borrowing than those aged over 60 and people aged between 45 and 59 exercising less. Being educated to university level had a positive effect on restrained consumer borrowing and having dependent children had a negative effect. But all of these effects were small and at lower levels of statistical significance. Interestingly, having parents who had discussed money with their child was not statistically significant when other factors were taken into account. And nor was having friends and family able to help out financially.

A refined model including the amount held in savings found that it was highly significant statistically, and, unsurprisingly had a rather large effect.

4.5. Summary and discussion

The findings reported in this chapter are also broadly in line with the conceptual model we presented in Chapter 1 Figure 1-1. Across three of the money use behaviours, the main determinants were found to be the psychological factors and knowledge and experience. Environmental factors played less of a role than they had in determining the components of financial well-being. *Restrained consumer borrowing* was the exception to this general rule, and here the key determinants were environmental factors.

A key departure from the conceptual model was the role played by three of the four money management behaviours as determinants of how money was used: *informed decision-making, budgeting* and *keeping track of money* – with the last of these having a negative effect on the two borrowing behaviours.

Although the key determinants differed across the four money use behaviours, *attitudes to spending saving and borrowing* were consistently highly significant and had a larger effect than any of the other knowledge/experience and psychological factors. This is, perhaps, not altogether surprising. Beyond this, the pattern across the four behaviours differed.

Spending restraint was very strongly influenced by *attitudes to saving, spending and borrowing*, and also by *impulsivity control* and *self-control*. Knowledge relating to money management was also important as was *informed decision-making*. *Time orientation* and *financial confidence,* while statistically significant, had slightly smaller effects. So, people were more likely to be spenders if: they lacked self-restraint; they focussed on the present rather than the future; they tended to make financial decisions without weighing up their options; they knew less about money management (including how to plan their money and how to select savings and borrowing products that are appropriate to their needs) and they lacked financial confidence.

Active saving, likewise, was very strongly influenced by *attitudes to saving, spending and borrowing*. *Informed decision-making* and *financial confidence* were also very important and had a much bigger effect than they did on spending restraint. There were other important differences from the determinants of spending restraint. *Time orientation* and income were both very important and exercised a considerable effect on active saving. It seems that people were less likely to save if they focussed on the present and believed that the future would take care of itself and also if they lacked confidence in their financial skills and decision-making and had less experience of using them. Experience of both money management and the financial marketplace had a positive effect; so too did *budgeting*, indicating that people who plan their finances are more likely to be active savers.

Income was also important, as was the number of children in the household and the number of consumer credit commitments held. So, regardless of their attitudes, knowledge and experience people were less inclined to save if they were experiencing financial strain and particularly if they were heavy credit users.

Compared with *spending restraint* and *active saving* the Norwegian population was much better at *not borrowing for daily expenses.* This behaviour was also primarily determined by psychological factors, along with money management behaviours but knowledge and experience played almost no role. Although attitudes were a key determinant, the effect was half that found for the previous two behaviours. The other important determinants were *impulsivity control* and *financial confidence,* both of which exerted positive effects, while *self-control* had a negative effect. Both budgeting and *keeping track of money* had a negative effect, possibly indicating that if you are inclined to avoid borrowing to meet daily expenses you have less need to plan or monitor your finances. Again, income was a determinant as was the number of children in the household. But measures of financial shocks, such as an income drop and unemployment were not. The amount held in savings was very important. So, people were likely to be borrowing to meet their daily living costs such as food bills and other household expenses if they were experiencing financial strain and had no savings to draw on. But it was not determined by economic shocks. At the same time, if they *were* able to meet these expenses without borrowing they tended not to exercise as much self-control or to keep such a close watch on their finances.

Restrained consumer borrowing was much less influenced by both money management behaviours and by psychological factors than any of the other three money use behaviours. Indeed, the only one to act as a determinant of this behaviour was *attitudes to spending saving and borrowing* and this had less than a quarter of the effect that it had on *spending restraint* and *active saving*. *Experience of the financial marketplace* had a negative effect, which might be expected as lack of restraint would mean greater use of credit products. Compared with the other behaviours restrained consumer borrowing was influenced by a much wider range of social and economic factors — but not by income. In particular, experience of a substantial expenditure increase, number of children in the household and unemployment were all associated with lower levels of restraint. So too was renting or buying a home on a mortgage, compared with owning it outright, although the proportion of income spent on

repaying a mortgage had no effect. Being educated to degree level or above was associated with higher levels of restraint. And the amount held in savings had a particularly large and positive effect. Again, the average score on this behaviour was high showing that most people in Norway were not engaged in excessive consumer borrowing. And where people did, it was due to a combination of a favourable attitude to spending and borrowing and a lack savings, along with circumstances that might be expected to increase expenditure.

Across these four behaviours, there are some more general points that are worth highlighting. First is the fact that personality factors and attitudes were not only important for all the money use behaviours, except *restrained consumer borrowing*, but they also tended to reduce or over-ride the effects of knowledge and experience. So, some people may have both the knowledge and experience to manage their finances capably but their attitudes to spending, saving and borrowing and key personality traits such as impulsivity or a short-term time horizon lead to them to engage in incapable behaviours. This means that interventions to promote positive money use behaviours cannot rely on formal education techniques. Instead, the focus should be on shaping attitudes and overcoming behavioural biases emanating from personality traits such as time orientation (*active saving, spending restraint*), impulsivity (*spending restraint, not borrowing for daily expenses*), self-control (*spending restraint*) and locus of control (*active saving).*

Secondly, economic factors - and especially those linked to financial shocks – did not play such a large part in determining the money use behaviours but, this needs to be set in context. The mean scores for the four money use behaviours were all fairly high but show that Norwegians were far better at controlling their borrowing (both for daily expenses and for consumer purchases) than they were at actively saving or restraining their spending. Norwegians have a high average income and low income inequality, and this could explain these findings. There is less need for spending restraint and it is possible to avoid borrowing when there is more than enough money to cover essentials. There may also be less need to save.

5. Understanding the Money Management Behaviours

In contrast to the money use behaviours discussed in the previous chapter, the money management ones were either not determinants of financial well-being at all (*informed decision-making* and *active product choice*) or they had a consistently negative effect (*planning income use* and *keeping track of money*). Some did, however, appear to be important determinants of specific money use behaviours, as we discuss in more detail in the sections below.

Moreover, the four money management behaviours had lower scores and knowledge and experience played a much bigger part in determining these scores than for the money use ones. With the exception of *informed decision-making,* psychological factors were much less important. And there were much clearer gender effects.

That said, there were important differences in the range of factors that determined each of the four money management behaviours.

5.1. Informed decision-making

Informed decision-making was not significant in any of the well-being models although it was one of the important predictors of *spending restraint* and, especially, of *active saving*.

The average score was fairly high at 71, and about the same as the averages for *spending restraint* and *active saving*. There was

Facts box: Informed decision-making
Informed financial decision-making
d12   Always gets information when has financial decision to make
d20x   Tries to stay informed about money matters
D21x   Spends lot of time considering options before making financial decisions

surprisingly little variation in average scores across specific demographic groups in the population although there was a moderate level of variation across the population as a whole (Appendix 5 Table A5.3), which must be explained by factors other than demographic ones.

5.1.1. Understanding informed decision making

An OLS regression was run to identify the range of factors that determine the propensity to engage in informed decision making. Again, this was informed by our conceptual model of financial well-being. The model specified was a good fit, explaining 38 per cent of the variation in scores. It showed that informed decision making was determined by a combination of psychological factors and knowledge and experience, with social and economic environmental factors playing almost no role at all (see Table 5.1).

Both *knowledge of money management* and *knowledge of how to choose products* had fairly large effects on informed decision making, with a 10-point increase in these scores raising the score on informed decision-making by 2.0 and 1.5 points respectively. In contrast, *experience of money management* and *experience of the financial marketplace* had much smaller effects and at a lower level of statistical significance.

Of the psychological factors *locus of control* had the biggest effect, and this was on a par with the two knowledge variables discussed above, with a 10-point score increase resulting in a 1.7-point rise in the *informed decision-making* score. *Self-control* and *time orientation* were also highly significant statistically and had moderate positive effects. *Impulsivity control* had a much smaller positive effect and was only just statistically significant. In contrast, both *social status* and (to a lesser extent) *action-*

Table 5.1: Predictors of Money Management Behaviours. OLS regressions. Unstandardised coefficients. Norway 2017. N = 1919 except Active Product Choice (N=1574). Variable definitions [1]

	Informed Decision-Making		Active Product Choice		Planning Income Use		Keeping Track Of Money	
	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig
Answering about household and personal money	0.35		-2.10		1.98		2.08	
KNOWLEDGE & EXPERIENCE								
Knowledge of money management (kn1s)	0.20	***	0.38	***	0.20	***	0.10	***
Knowledge of how to choose financial products (kn2s)	0.15	***	0.37	***	-0.001		0.04	
Experience of money management (kn3s)	0.07	*	0.13	*	0.03		0.12	***
Experience of financial-product marketplace (kn4s)	0.06	**	-0.05		0.07		0.08	***
Understanding of risk (kn5s)	0.01		0.06		-0.06		-0.02	
PSYCHOLOGICAL FACTORS								
Personality Traits								
Time orientation (tos)	0.10	***	0.07		0.06		0.05	
Impulsivity control (imps)	0.04	*	0.01		0.15	***	0.06	*
Social status (socs)	-0.08	***	0.06		-0.03		-0.03	
Self-control (selfs)	0.11	***	0.05		-0.01		0.04	
Action orientation (aos)	-0.04	*	0.04		0.07	*	0.04	
Locus of control (locs)	0.17	***	-0.07		-0.02		-0.03	
Other Psychological Factors								
Financial confidence (att2s)	0.08	***	0.003		-0.04		0.03	
Attitudes to spending, saving and borrowing (att1s)	0.05	*	-0.03		-0.08	*	-0.03	
SOCIAL & ECONOMIC ENVIRONMENT FACTORS								
Income & Expenditure								
Income	0.0000001		-0.000001		-0.00001	**	-0.000001	
Income drop	0.66		-0.62		0.51		0.17	
Income increase	0.15		1.90		0.05		-1.45	
Expenditure drop	0.65		-6.76		3.52		4.67	*
Expenditure increase	0.44		-0.20		-0.97		1.87	
Work Status:								
Working full-time	-1.59		5.64	*	-2.28		-5.95	***
Working part-time	-0.36		-0.79		0.73		-3.49	
Self-employed	-3.30		-4.11		-5.71		-2.69	
Unemployed	0.62		1.90		6.61		-0.50	
Disabled	1.00		-0.66		5.39		-1.05	
Not working for other reasons than retired	1.19		6.35		2.23		-3.79	
Other Economic Characteristics								
Mortgage-to-income ratio	-0.002		0.01		-0.01		-0.003	
Family or friends who can help financially	-0.80		-1.07		-0.37		-0.58	*
Region								
Central East (incl. Oslo)	-1.52		2.45		-3.08		-1.84	
Rest of Eastern Region	0.64		-0.49		4.82	**	2.55	*
South & West	-0.93		-3.68		0.22		-0.20	
Housing Tenure:								
Renters	0.93		0.31		10.13	***	3.47	*
Owners with mortgage	-0.11		-1.25		8.64	***	1.24	
Personal and family characteristics								
Age:								
u/30	1.41		-1.21		4.88		-0.14	
30-44	1.32		-1.01		6.48	**	-0.27	
45-59	-0.04		-2.23		3.24		-0.08	

Table 5.1 continued: Predictors of Money Management Behaviours. Continued.

	Informed Decision-Making		Active Product Choice		Planning Income Use		Keeping Track Of Money	
	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig
Gender	2.16	***	-7.70	***	6.80	***	0.85	
Couple	0.42		-0.05		2.93	*	-0.55	
Number of dependent children	-0.19		0.10		1.73	*	1.01	
Parents discussed money	1.62	*	2.43		2.12		1.15	
Immigrant	2.19		0.39		5.00	*	0.66	
Educated to university degree or above	0.03		3.17	*	0.08		-0.25	
Constant	5.52		-2.49		17.11	*	35.25	***
Adjusted R²	.38		.23		.10		.09	

[1] *Behaviours, knowledge and experience, psychological factors*: variables standardised to vary between 0 1nd 100 (see chapter 2). *Active product choice*: N=1574 (only those who have bought at least one product over the last five years *Income*: income before tax in NOK. *Income drop, income increase:* dummies for substantial changes (1=yes). Omitted category: stable incomes. E*xpenditure drop, expenditure increase*: dummies for substantial changes (1=yes). Omitted category: stable expenditures. *Work Status*: dummies (1=yes), omitted category: retired. *Mortgage-to-income ratio*: mortgage in NOK relative to income before tax in NOK. *Family or friends who can help financially*: dummy (1=yes). *Region*: dummies (1=yes), omitted category: Middle and Northern Norway. *Housing tenure*: dummies (1=yes), omitted category: outright owners. *Age*: dummies (1=yes), omitted category: 60+. *Gender*: dummy (1=female). *Couple*: dummy (1=yes). *Number of dependent children*: number of children under 18. *Parents discussed money*: dummy (1=yes). *Immigrant*: born outside Scandinavia, at least one non-Norwegian parent, dummy (1=yes). *University degree or higher*: dummy (1=yes).

orientation had negative effects. In other words, people were less likely to engage in informed decision making if they were not concerned about social status and were more action-orientated. Although these findings appear counter-intuitive, it could be that people who are action-oriented act hastily, without ensuring they are well-informed. While making informed decisions could be seen by some people as enhancing their social status.

A stepwise regression showed that adding psychological factors to a model containing the knowledge and experience ones reduced the size of the effects of both *knowledge of money management* and *experience of money management* and resulted in *understanding of risk* becoming statistically insignificant.

In contrast to the money use behaviours, informed decision was almost unaffected by the social and economic environment factors in our models. The exception that stood out was gender, with women being significantly more inclined to make informed decisions than men, all other things being equal. Having parents who discussed money management and saving with you when you were young also had some effect, albeit on the margins of statistical significance. Indeed, informed decision making was the only behaviour that it influenced.

5.2. Active product choice

Active product choice stood out as the only behaviour that was not a determinant of either any of financial well-being or any of the money use behaviours. This is almost certainly a consequence of the design of our financial well-being measures rather than a substantive finding, as we discuss in section 5.5 below. It is, never-the-less, important that consumers shop around and check the features of the products before they buy them to ensure that they meet their needs.

Facts box: Active product choice

Active product choice	
d4	How often checks that has the best product for needs
d6_7	Extent of information search before buying products
d8	How carefully checked terms and conditions of product bought

This being the case, it is of some concern that the active product choice behaviour had the lowest average score of all (52) and that there was a very high level of variation in scores across the population as a whole. In part, this low score can be explained by the fact that 18 per cent of the people interviewed had not actively participated in the purchase of a financial product (or mobile phone

contract) in the past year and were therefore assigned the lowest score on the questions that contribute to this behaviour. But even among those who *had* bought a product the average score was only 61.

Bivariate analysis found that men had significantly higher scores than women and that people whose incomes were in the upper two quintiles had higher scores than those in the lower quintiles (see Appendix 5 Table 5.3). The other groups of people who scored low on this behaviour included people aged over 70, people who were unemployed or disabled or who worked part-time. While people living in the Central East region of Norway had comparatively high scores, along with those in full-time work.

5.2.1. Understanding active product choice

To provide an understanding of the determinants of active product choice, we restricted the regression analysis to people who had actually been involved in the purchase of a product in the past three years and had, therefore, answered the questions about how they made their choice (Table 5.1). The resulting model explained 23 per cent of the variation in scores.

This model identified a very small number of determinants. *Knowledge of money management* and *knowledge of how to choose products* were both were highly significant statistically, and both had a very large effect. A 10-point increase in the scores of these two components increased the score for active product choice by 3.8 and 3.7 points respectively.

Gender was the only other variable that was highly significant, with men being significantly more inclined to make active product choices than women.

Other factors that had smaller effects and were on the margins of statistical significance included *experience of money management*, working full-time (relative to being retired) and having been educated to degree level or above.

This was the only behaviour where none of the psychological factors were determinants.

5.3. Planning income use (budgeting)

Planning income use, or budgeting for short-hand, was one of two behaviours that consistently had a negative correlation with the three financial well-being indicators. In other words, the higher someone's income, the less carefully they planned how their income would be used. The effects were, however, three times larger for the *being financially comfortable* and *financial resilience for the future* components than they were for the *meeting commitments* one. This suggests that some people are

Facts box: Planning income use	
Planning use of income	
b5	How often plans how to use the income
b6	How precisely plans how to use the income
b7	How often keeps to plan

inclined to plan their income use but relax how closely they do so when they not only have a comfortable life financially at the present time but have adequate savings to ensure they can withstand an economic shock. If it were the case that people start to plan when they are facing financial difficulty, we would expect the effect on the *meeting commitments* component to be the highest, not the lowest.

Turning now to the effect of budgeting on the four money management behaviours, the only one where there was a statistically significant effect was on *active saving*. Moreover, this was a positive effect, suggesting that careful budgeting may be undertaken to facilitate saving. The fact that level of savings was also negatively correlated with *active saving* further suggests that people budget when their savings are low, and they want to build them up.

In fact, planning income use had the second lowest average score (54) of all the behaviours and there was considerable variation across the population as a whole (see Appendix 5 Table 5.3). Women had higher scores than men. Respondents aged between 30 and 44 had the highest scores which then fell quite steeply with increasing age. Families with dependent children were more likely budget than those who had none – and especially so if they were lone parents. Scores generally fell as income increased. Retired people and those who were self-employed had particularly low scores, while unemployed and disabled people had high ones. Outright owners were much less likely to plan their income use carefully than either tenants or those buying a home with a mortgage. There were also some regional effects, with people living in the Rest of the East Region being more inclined to budget carefully than the rest of the Norwegian population.

5.3.1. Understanding budgeting

As before we ran an OLS regression analysis to understand the key determinants of budgeting.   This showed that it was influenced by a wider range of socio-demographic factors than the other money management behaviours and was much less influenced by knowledge or experience (Table 5.1).

Indeed, *knowledge of money management* was the only one of the five components of knowledge and experience that was statistically significant, and this had a strong positive effect; a 10-point increase in this knowledge raised the score for budgeting by 2.0 points.

Impulsivity control also had a fairly strong effect, both in absolute terms but also in comparison with its effect on the other money management behaviours. Here, a 10-point increase in the score raised the one for budgeting by 1.5 points. *Action orientation* was also a determinant but with a smaller effect at a much lower level of statistical significance than *impulsivity control*. The only other psychological factor that determined the propensity to plan income use carefully was the measure of *attitudes to spending, saving and borrowing* but here the effect was negative, suggesting that people with strict attitudes to money are less inclined to budget — perhaps because they have less need to do so. The addition of the psychological factors in a stepwise regression did not, however, reduce the effect of knowledge.

Among the social and economic determinants, the key ones were: gender, with women being more careful budgeters than men, all other things being equal; people aged 30-44 (relative to the over 60s); people who rented their homes or who were buying them on a mortgage (relative to outright home owners). In addition, the propensity to budget carefully reduced with rising income — by an estimated 1 point per NOK 100.000 increase in yearly income.

Other factors that also had a positive effect but were less significant statistically included living as a couple (compared to single people), the number of dependent children living in the household and being either a first or second-generation immigrant to Norway[10]. Indeed, this was the only behaviour determined by immigrant status. Likewise, it was one of only two behaviours where geographical region was a determinant when other factors were controlled. People living in the Rest of Eastern Region had higher scores, all other things being equal, than those living in the Middle and North of Norway.

We also tested the effects of the number of credit commitments held (it was not statistically significant) and the level of savings held (it was negative) — indicating that people do not budget when savings levels are high.

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[10] This included people who had themselves been born in a non-Scandinavian country, or who had a parent born outside Norway

Finally, it is interesting to note that neither a substantial fall in income nor a substantial rise in expenditure was statistically significant, again indicating that people do not start to plan more carefully when under financial stress. Moreover, the low proportion of variation explained by this regression model (10 per cent) indicates that there are other factors at play that were not included. Perhaps some people are more organised than others.

5.4. Keeping track of money

Like the planning income use behaviour, the one measuring the propensity to keep track of money had a negative correlation with all three financial well-being components. In this case, however, the size of the effect was similar across all three components. Consequently, it had a larger effect than *budgeting* on the *meeting commitments* component, but smaller effects on both *being financially comfortable* and *having financial resilience for the future.*

Facts box: Keeping track of money	
Keeping track of money	
b12	Knows how much money spent last week
b14	How often checks account
b15	In what ways do you check account

It also correlated negatively with both the *spending restraint* and *not borrowing for daily expenses*, with similar sized effects. This indicates that people were far less likely to keep track of their finances when they were restraining their spending and not borrowing to meet living expenses. This is in contrast, to the *budgeting* behaviour, which was not statistically significant for either. And, unlike *budgeting,* it was not a determinant of *active saving.*

The average score for keeping track of money was also quite a bit higher than that for *planning income use* (66 compared with 54) and had a narrower dispersal of scores (Appendix 5 Table 5.3). Consequently, no sub-groups of the population stood out as having especially high or low scores.

5.4.1. Understanding keeping track of money

An OLS regression analysis showed that keeping track of money was primarily influenced by knowledge and experience. Both *knowledge* and *experience of money management* were highly significant statistically and had fairly large effects, with a 10-point increase in these scores resulting in a 1.0 and 1.2-point increase in the keeping track score. *Experience of the financial marketplace* also had a moderate (see Table 5.1). The effects of knowledge and experience were not diminished by the inclusion of psychological factors in a stepwise regression. Indeed, the only psychological factor that determined keeping track of money was *impulsivity control* and even them at the lowest level of statistical significance.

The only other factor that reached the highest level of statistical significance was working full-time, which had a negative effect (relative to being retired) — possibly suggesting that full-time workers are too busy to monitor their finances closely.

Other factors that correlated positively with keeping track of money, but at the lowest level of statistical significance, included: having experienced an expenditure drop; renting a home (compared with owning it outright) and living in the Rest of Eastern Region (compared with living in the Middle and North of Norway). When the number of credit commitments and amount held in savings were added to the model, only savings were statistically significant and with a negative effect. In other words, people were more inclined to keep track of their finances they less they had saved. Moreover, the inclusion of these two variables caused both an expenditure drop and being a tenant to become statistically insignificant.

Again, the proportion of variance explained by the model was low (9 per cent), indicating that other factors, not included in the model, play an important role.

5.5. Summary and discussion

The four money management behaviours represent an important departure from our conceptual model. They either had a consistently negative correlation with financial well-being (*planning income use* and *keeping track of money*), suggesting a more complex relationship, or they were not determinants at all (*informed decision-making* and *active product choice*).

At the same time, two of the behaviours had a positive effect on one or more of the money use behaviours. *Informed decision-making* was a positive determinant of both *spending restraint* and *active saving*; while *budgeting* was a determinant of just *active saving*. In other words, they had an indirect influence on financial well-being mediated through these behaviours and the model needs to be revised to reflect this.

Beyond this, *informed decision-making* behaved in ways that were largely consistent with our conceptual model. It was primarily determined by a combination of psychological factors and knowledge and experience. Although key personality traits such as locus of control, self-control and time orientation reduced or over-rode the effects of knowledge and experience. So, while increasing knowledge would improve financial decision making, and ultimately both spending restraint and active saving, the effects would be limited unless the influence of these key personality traits were also tackled. Unlike the money use behaviours, informed decision-making was hardly influenced by social or economic factors at all. The two exceptions were gender (with women being more inclined to make informed decisions than men) and having parents who discussed money matters with you in your childhood.

Because *active product choice* was not a predictor of either any of the components of financial well-being or the money management ones, it is tempting to dismiss it as having little or no importance. The reason for these findings is almost certainly a technical one. Namely, that it was not possible within a survey of reasonable length to assess the extent to which people were actually using savings and borrowing products that were appropriate for their circumstances. For example, our measure of resilience for the future would, ideally, have assessed not only whether people had adequate amounts of money put by but also whether or not they were saved or invested in appropriate products. High profile examples of the miss-selling of financial products in the United States and the United Kingdom demonstrate how important it is that consumers of financial products check and understand what they are buying. Looked at in this way, it is of concern that the scores for active product choice were so low and to understand why this should be the case. In fact, we were able to identify very few determinants of active product choice even though the model explained a fair amount of the variance observed. The main ones were *knowledge of money management* and *knowledge of how to choose financial products* both of which had a very large effect indeed. Clearly, education to raise levels of knowledge in these areas would have a beneficial effect on ensuring consumers shop around and check the terms and conditions of financial products before they buy them.

Although *budgeting* and *keeping track of money* are often seen as linked behaviours contributing to careful money management, in practice they seem to be both distinct and rather different activities.

Taken together the analysis of the *budgeting* behaviour reported above suggests that some people were (through nature or nurture) inclined to be organised and to plan how their income will be used. They did so when their income and savings were lower and especially when they were engaged in active saving. But they relaxed their approach to budgeting considerably when they were financially comfortable and had resilience for the future. This is broadly consistent with earlier qualitative research (Collard, Finney, and Crosswaite 2009). There was little evidence to support the hypothesis that people begin budgeting more carefully when their financial circumstances deteriorate, or they

are facing financial difficulties. This is also consistent with the earlier qualitative research (Collard et al. 2009). Although *knowledge of money management* and *impulsivity control* were key determinants, on the whole, knowledge and experience and psychological factors were much less important in determining *budgeting* than social and economic environmental factors, suggesting cultural and societal effects are important determinants of this behaviour. In particular, women and immigrants to seemed to be far more inclined to plan how their income will be used.

In contrast, *keeping track of money* not only had a negative correlation with the components of financial well-being but also correlated negatively with two of the money use behaviours: *spending restraint* and *not borrowing for daily expenses.* And compared with *budgeting* it was influenced more by knowledge and less by either psychological factors or social or economic environmental ones. It seems, then, that this is a behaviour that people some people engage with when they are not exercising restraint on either their spending or the use of credit to meet daily living expenses but that they monitor their finances much less closely at higher levels of financial well-being. This is consistent with previous qualitative research with people in long-term financial difficulty, which concluded that some of the people classified as '*spenders.'*

> *... were actually keeping track of their finances – using telephone banking or the internet for example to check their balance – but they did not seem to translate this information into a budget or plan of action. Indeed, they showed signs that they simply watched their money situation rather than actively managing it (Atkinson, Kempson, and Collard 2008).*

There are also some general points that are worth noting. The first of these is the much greater effect of knowledge and experience than was found for the money use behaviours and in general, the lower effect of psychological factors (including both personality traits and attitudes). Moreover, there was little evidence that personality and attitudes over-rode the effects of knowledge. This makes these behaviours much more amenable to formal education.

Across the four money management behaviours, gender stood out as an important determinant, again in contrast to its effect on the money use behaviours. In particular, women were more likely than men to engage in informed decision-making and in planning how their money would be used. But they were less likely to engage in active choice of products. Age, however, had almost no effect.

Aspects of household finances were also relatively unimportant, including: income, income and expenditure shocks, number of dependent children, having rent or a mortgage to pay (compared with owning a home outright), and mortgage borrowing to income ratio. This suggests that people do not adapt their money management practices to suit their economic circumstances. The exception was *budgeting* which was determined by income level, having housing costs to pay and the number of dependent children. But even here there was no indication that there was a link with income or expenditure shocks or being unemployed. None of the money management behaviours was determined by whether the respondent was answering the survey about both their household and their personal finances or their personal finances only.

The final point to note in this section is that, on the whole, Norwegians had lower scores for the money management behaviours than they did for the money use ones. It could, therefore, be that high incomes and relative income stability were protecting many of them from the consequences of relatively poor money management. In other words, some people were able to save and to avoid using credit unwisely even though they did not budget or monitor their finances.

6. Attitudes, Financial Confidence and Locus of Control

In this chapter, we focus on the measures of *attitudes to spending, saving and borrowing*, *financial confidence* and have also included *locus of control*, since in many ways it behaved more like these two psychological factors than it did the other personality traits. *Locus of control* and *financial confidence* were both highly significant statistically and had moderate effects on the two measures of current financial well-being (*meeting commitments* and *being financially comfortable*). They were all important determinants of one or more of the key money use behaviours and *attitudes to spending saving and borrowing* was by far the most important determinant of all of them. First, we look at the average scores across different segments of the population, after which we proceed to identify the key predictors using OLS regression. The set of independent variables are drawn from the social environment and knowledge and experience boxes for all three components being studied.

6.1. Average scores across different segments of the population

As shown in table A5.4 in appendix 5, the average scores for *attitudes to spending, saving and borrowing* and for *financial confidence* are fairly high: 73 and 71 points respectively. The mean value for *locus of control* was equally high at 71 points (Table A5.6 in Appendix 5). Also, the spread within each of these distributions is considerable, as indicated by the size of the standard deviations.

The two tables in Appendix 5 further reports general bivariate average scores across different segments of the population. Looking at *attitudes* and *financial confidence* first, men typically scored higher than women on both components, as did home-owners — especially outright owners. Age also had a statistically significant effect on both components; the older one gets, the more financial confidence one has and the more capable one's attitudes towards spending, saving and borrowing. As for work status, the retired in particular, but also the self-employed and part-time workers stood out as groups with high scores on both attitudes and confidence. In addition, the bivariate results suggested that income and family type affect financial confidence; the scores were slightly higher in the two lowest income quintiles as well as among couples.

Locus of control seems to have more in common with *financial confidence* than with *attitudes*, as both income, tenure and family types affected the scores on both of these components. In the higher income quintiles, the degree to which people believe that they have control over the outcome of events in their lives was higher. The same was true for couples, home-owners and outright owners in particular.

However, when the effects of these and a number of other socio-economic variables are controlled for in comprehensive multivariate models, they may or may not sustain their independent effects on the scores, for example being retired may no longer have an effect if age is controlled for as, by definition, retired people are also older. Table 6.1 below presents the results of the OLS regression conducted to identify the key predictors if the three components considered in this chapter.

6.2. Attitudes to spending, saving and borrowing

The analysis in chapter 4 showed that attitudes to spending, saving and borrowing affected all four money use behaviours at the highest level of statistical significance. The effects on spending restraint and active saving were particularly large. Furthermore, attitudes to spending, saving and borrowing also had an impact on two of the money management behaviours: informed decision-making and planning income use. The effect on the latter was negative, meaning that conservative attitudes made

people less inclined to plan how to use their income — probably because they restricted their spending

Table 6.1: Predictors of financial confidence and attitudes to spending, saving and borrowing. OLS regressions. Unstandardised coefficients. Norway 2017. N = 1919. Variable definitions [1]

	Attitudes to spending, saving and borrowing		Financial confidence		Locus of control	
	Coeff	Sig	Coeff	Sig	Coeff	Sig
Answering about household and personal money	3.85	*	-1.87		3.09	*
KNOWLEDGE & EXPERIENCE						
Knowledge of money management (kn1s)	0.10	***	0.18	***	0.09	***
Knowledge of how to choose financial products (kn2s)	-0.08	***	0.11	***	0.03	
Experience of money management (kn3s)	0.05		0.13	***	0.09	***
Experience of financial-product marketplace (kn4s)	0.01		0.07	**	0.04	*
Understanding of risk (kn5s)	0.05	*	0.10	***	0.03	
PSYCHOLOGICAL FACTORS						
Personality Traits						
Time orientation (tos)	0.27	***	0.01		0.06	***
Impulsivity control (imps)	0.18	***	0.10	***	-0.03	
Social status (socs)	0.04	*	0.00		-0.05	**
Self-control (selfs)	0.05		0.01		0.24	***
Action orientation (aos)	0.01		0.07	**	0.07	***
Locus of control (locs)	0.05		0.26	***	-	-
SOCIAL & ECONOMIC ENVIRONMENT FACTORS						
Income & Expenditure						
Income	-0.000001		0.000002	*	0.000002	*
Income drop	-0.38		-2.43		-0.94	
Income increase	-0.82		2.56		1.34	
Expenditure drop	-1.16		-0.15		1.30	
Expenditure increase	-2.20	*	-3.57	**	-0.88	
Work Status:						
Working full-time	0.06		-2.88		0.38	
Working part-time	0.70		-2.54		-0.96	
Self-employed	2.51		-5.20	*	-1.13	
Unemployed	3.86		-0.27		-1.71	
Disabled	-0.86		-1.52		-3.37	
Not working for other reasons than retired	0.27		-2.87		0.11	
Other Economic Characteristics						
Mortgage-to-income ratio	-0.01	**	0.0001		-0.0002	
Family or friends who can help financially	0.16		1.65		1.20	
Region						
Central East (incl. Oslo	-1.23		1.25		-0.88	
Rest of Eastern Region	1.17		-0.26		-0.21	
South & West	1.13		-0.92		-1.69	*
Housing Tenure:						
Renters	-4.43	***	-4.71	***	-0.69	
Owners with mortgage	-3.17	***	-2.01		-0.54	
Personal and family characteristics						
Age:						
u/30	4.23	**	0.48		1.59	
30-44	0.81		2.32		-0.35	
45-59	1.04		1.08		-0.68	

Table 6.1: Predictors of financial confidence and attitudes to spending, saving and borrowing. Continued.

	Attitudes to spending and borrowing		Financial confidence		Locus of control	
	Coeff	Sig	Coeff	Sig	Coeff	Sig
Gender	3.48	***	3.18	***	2.23	***
Couple	0.51		-0.60		-1.15	
Number of dependent children	-0.75		-0.75		-0.34	
Parents discussed money	0.61		0.60		0.79	
Immigrant	-1.20		0.47		-0.98	
Educated to university degree or above	-0.37		0.25		-1.58	***
Constant	19.91	***	1.63		30.42	***
Adjusted R^2	.33		.26		.22	

[1] *Knowledge and experience, psychological factors*: variables standardised to vary between 0 1nd 100 (see chapter 2). *Active product choice*: N=1574 (only those who have bought at least one product over the last five years *Income*: income before tax in NOK. *Income drop, income increase:* dummies for substantial changes (1=yes). Omitted category: stable incomes. E*xpenditure drop, expenditure increase*: dummies for substantial changes (1=yes). Omitted category: stable expenditures. *Work Status*: dummies (1=yes), omitted category: retired. *Mortgage-to-income ratio*: mortgage in NOK relative to income before tax in NOK. *Family or friends who can help financially*: dummy (1=yes). *Region*: dummies (1=yes), omitted category: Middle and Northern Norway. *Housing tenure*: dummies (1=yes), omitted category: outright owners. *Age*: dummies (1=yes), omitted category: 60+. *Gender*: dummy (1=female). *Couple*: dummy (1=yes). *Number of dependent children*: number of children under 18. *Parents discussed money*: dummy (1=yes). *Immigrant*: born outside Scandinavia, at least one non-Norwegian parent, dummy (1=yes). *University degree or higher*: dummy (1=yes).

anyway. However, the influence on the money management behaviours was much more modest than on the money use ones, all at the lowest level of statistical significance.

Moreover, even when controlling for many other variables, *attitudes to spending, saving and borrowing* was found to have negative, direct effects on two of the well-being components: meeting commitments and being financially comfortable (table 3.1).

As discussed in chapter 2 and summarised in the facts box to the right, the attitude component is made up of four indicators. Substantively, it measures the extent to which people find it more satisfying to save than to spend, and whether they prefer to save and cut back spending basing everyday consumption on borrowed money. In line with the coding practice for the components, higher scores mean more capable attitudes — in this case

Facts box: attitudes to spending, saving and borrowing

Attitudes towards spending, saving and borrowing

b25	Prefers to buy things on credit rather than wait and save up
B26	Prefers to cut back rather than put everyday spending on a credit card
c2	Prefers to spend rather than save up for unexpected expenses if income drop
c9	Finds it more satisfying to spend money than to save it

holding conservative attitudes to spending, saving and borrowing. The overall average score for this component is 73, which was fairly high (see Table A5.4 in Appendix 5).

6.2.1. Understanding attitudes to spending, saving and borrowing

The analysis in table 6.1 suggests that attitudes to spending, saving and borrowing were mainly driven by knowledge and experience on the one hand and personality traits on the other.

Beginning with the six personality traits, two of these had very large and positive effects on *attitudes to spending, saving and borrowing*: time orientation and impulsivity control. Time orientation was particularly influential; people who were focussed on the long-term tended to hold conservative *attitudes to spending, saving and borrowing*. But also, impulsivity control had a considerable positive effect on attitudes. Compared to these two effects, social status only modestly affected financial attitudes. It was nevertheless highly significant, meaning that those who cared about their social status and the way other people see them typically held more conservative attitudes to money.

Compared with time orientation and impulsivity control, knowledge of money management had a slightly smaller positive effect; high levels of such knowledge tended to lead to more conservative *attitudes to spending, saving and borrowing*. So, too did higher levels of risk understanding, although here the effect was modest and statistically significant at the lowest level.

Knowledge of choosing financial products had the opposite effect; here, higher levels of knowledge were associated with more liberal *attitudes to spending, saving and borrowing*. As opposed to this, higher levels of risk understanding tend to draw people towards more conservative opinions about personal finance. The effect, however, is modest and statistically significant at the lowest level. Finally, it is interesting to notice that neither experience of money management nor of the financial products marketplace were determinants of people's financial attitudes.

In addition, *attitudes to spending, saving and borrowing* were affected by certain socio-economic factors. Women tended to hold more conservative attitudes than did men. Furthermore, renters and people who had experienced a recent increase in expenditures tended to have more liberal attitudes. The same applied to owners with a mortgage, especially those with high levels of mortgage borrowing relative to their household's income. These are, of course, all groups who have already borrowed a lot of money and even generally consider borrowing as a route to welfare.

Unlike the behaviours, there was a difference in attitudes between those who answered about the household and personal money, and those who only answered about personal money only. The former group had, on average, attitude scores that were 4 points higher, hence appearing as holding more conservative views on spending, saving and borrowing.

Finally, it can be noted that the model explains 33% of the variation, which means it has a good fit.

6.3.   Financial confidence

The *financial confidence* component comprises three variables and measures the degree to which people are confident about their abilities in day-to-day money management, long-term planning and making important decisions about how to use financial products and services (see chapter 2 and facts box to the right). Higher scores mean more confidence. The overall average score for this component was 71, which suggests that Norwegians are quite confident about

Facts box: financial confidence	
Financial confidence	
d22x	About managing money day-to-day
d23x	About planning for financial future
d24x	About making financial decisions on financial products and service

their ability to manage money, plan and make financial decisions (see Table A5.4 in Appendix 5).

In chapter 4, the analyses showed that *financial confidence* was a very important determinant of money use and affected three of the four money use behaviours: *active saving*, *not borrowing for daily expenses* and *spending restraint*. The exception was *restrained consumer borrowing*, for which no impact from *financial confidence* was identified. As for the money management behaviours, only one statistically significant effect was found: the higher the confidence, the more capable *informed decision-making* was.

Moreover, taking these and many other factors into account, *financial confidence* was shown to have direct effects on all three well-being components (see chapter 3). The impact was particularly large on *being financially comfortable*, but also substantial for *meeting commitments*. Even though the effect, as well as the level of statistical significance, was smaller for *resilience for the future*, it nevertheless contributes consistently to the overall picture.

6.3.1. Understanding financial confidence

The analysis in table 6.1 shows that *financial confidence* was affected by all five indicators of knowledge and experience. Beginning with knowledge, both *knowledge of money management* and *of how to choose financial products* affected people's confidence about their abilities in relation to financial matters. The same was true for *experience of money management*. These three effects were all positive and considerable in size. The influences of *experience of the financial products marketplace* and *understanding of risk* were slightly more modest, but nevertheless highly significant — both statistically and substantively. Being involved in money matters clearly helps to build people's financial confidence.

Three of the six personality traits also had a positive effect on *financial confidence*: *impulsivity control*, *action orientation* and *locus of control*. *Locus of control* was particularly influential and had a larger effect than any of the knowledge or experience indicators. So, people who believed that they are in control of what happens to them also tended to be financially confident. On explanation relates to the fact that *locus of control* — unlike the other personal traits — is specifically linked to the person's economic situation; in fact, two of the three variables loading on the component referred to financial aspects of people's lives (for details, see Appendix 3). Hence, it is not surprising that people with an "I am in control" outlook on personal finance also tended to have high financial confidence.

Those who had high levels of *impulsivity control* were also likely to have higher levels of financial confidence, even though the effect was less than half of the influence from *locus of control*. As for *action orientation*, people who tended to be "on the ball" and eager to meet challenges and to get things done, had higher levels of financial confidence.

A small number of the socio-economic factors were also drivers of financial confidence. As we found for *attitudes to spending, saving and borrowing*, but perhaps more surprising this time, women tended to have higher financial confidence than did men, when other factors were taken into account. Moreover, this effect was highly significant statistically.

Financial confidence was also positively related to income: the higher the income, the higher the level of confidence. Renters tended to be less confident than outright owners, and self-employed people typically had lower levels of financial confidence than retirees. Lower financial confidence was also found among those who had recently experienced substantial increases in expenditures. These effects were, however, at the lower levels of statistical significance.

The model explains 26% of the variation, which is a little less than for *attitudes to spending, saving and borrowing*. Still, the model has a good fit.

6.4.   Locus of control

We began our analysis by treating *locus of control* in the same way as other personality traits - as an intrinsic part of people's personality. It does, however, differ in two significant ways from the other traits. First, it is the only one where the questions specifically referred to the person's economic situation — indeed they were taken from Rutter's index of financial locus of control. The others related to all aspects of people's lives. Secondly, and in the analysis reported in Chapter 3 in particular, it stood out as behaving somewhat differently than was anticipated and, counter to expectations, had a fairly large, positive and direct effect on financial well-being, along with *financial confidence*. For these reasons we have investigated further where this component ought to be placed in our conceptual model.

The *locus of control* component comprised three indicators that capture the extent to which people believe that they are themselves responsible for what happens to them financially or are at the mercy of forces that are beyond their control (see Facts box). The

Facts box: locus of control	
Locus of control	
f13	I can pretty much determine what happens in my life
f14	My financial situation is largely out of my control
f15	When I make financial plans, I do everything I can to succeed

relatively high overall average score (71 points) suggests that Norwegians, on the whole, take responsibility for their financial well-being.

Locus of control had large effects on both active saving and informed decision-making that were highly significant statistically. Even after taking these into account, it still had direct effect on the two current measures of financial well-being. In other words, like financial confidence, it affected financial well-being both directly and indirectly.

6.4.1. Understanding locus of control

The analysis in table 6.1 shows that the most important determinant of *locus of control* was the personality trait *self-control*. Other personality traits were also important, including *action orientation* and *time orientation*, both of which had moderate positive effects at higher levels of statistical significance. *Social status*, on the other hand, had a smaller and negative effect, suggesting that the more people are concerned about their position relative to their friends and acquaintances the more likely they are to feel they can control what happens in their financial lives. *Knowledge* and *experience of money management* were also important, and both had moderate effects at the highest level of statistical significance.

A small number of socio-economic factors were also important. Again, women were found to have higher scores, all other things being equal, compared with men. And this effect was highly significant statistically. *Locus of control* was also positively correlated with income and the higher the income the higher the score on financial locus of control. Being educated to university level, however, had a negative impact when other factors (such as income) were taken into account.

6.5.   Summary and discussion

Financial confidence, locus of control and *attitudes to spending, saving and borrowing* were all mainly driven by a combination of personality traits and knowledge and experience. That said, knowledge and experience had a greater effect on *financial confidence,* which was affected by all five knowledge and experience indicators, whereas the attitudes component was only impacted by three of them: *understanding of risk*, *knowledge of money management* and *knowledge of how to choose financial products*. And *locus of* control was impacted by just *knowledge* and *experience of money management.* Moreover, the size of the effects was far greater on *financial confidence*.

Knowledge and experience are important because being involved in money matters moulds attitudes and confidence, thereby enabling financial interaction and certain market activities. A good illustration is *knowledge of how to choose financial products*, which affects *attitudes to spending, saving and borrowing* negatively and *financial confidence* positively. In the former case, it means that conservative views are relaxed and replaced by more liberal views on spending, thereby opening for broader use of financial products including loans and credit. In the latter case, this type of knowledge increases one's financial confidence, which in turn may facilitate more capable behaviours.

Turning to personality traits, both *financial confidence* and *attitudes to spending, saving and borrowing* positively were affected by *impulsivity control*; the more people exercised such control, the more conservative their attitudes to money and the higher their financial confidence. The effect was,

however, greater for attitudes than it was for confidence. Both *attitudes to spending, saving and borrowing* and *locus of control* were positively influenced by *time orientation*, with the effect being greater for attitudes than it was for *locus of control*. And *action orientation* had a similar sized positive effect on both *locus of control* and *financial confidence.* These are — more or less — deep-seated personality traits. Still, they are not equally distributed in the population, indicating that such attributes may also in part be formed, enforced or weakened — in rare cases even totally changed — in social contexts.

Socio-economic factors were also important. Women tended to hold more conservative attitudes and to have higher levels of financial confidence and a higher score on l locus of control than did men. Whereas the former is as expected, the latter seems less intuitive. However, we know from numerous studies — including this one — that involvement in personal finance is gendered. In economic life, men and women do different things and get engaged at different levels and to a different extent. Our results suggest that men and women have different attitudes to many financial issues, and that when they act upon those views, women are more confident. Without a doubt, more research is needed to understand these differences, especially because they propagate all the way to financial behaviours and well-being.

Housing tenure was also an important determinant of both attitudes and confidence, although the effects were more pronounced for attitudes than they were for confidence. In the case of attitudes, renters and owners with a mortgage had significantly lower scores, and hence less conservative views on spending, saving and borrowing, than did outright owners. This was particularly true if the level of mortgage borrowing relative to the household's income was high. As for confidence, it was only the renters who had lower scores. But here, income also mattered, with lower levels of financial confidence among lower-income households. One underlying mechanism behind these trends may involve status-specific differences in views on life; in pursuit of welfare goods and services, mortgagors and people living on a tight budget may be more favourable to spending, borrowing and modest saving, and less confident when acting upon those views. Income was also positively related to *locus of control*.

Financial confidence and *attitudes to spending, saving and borrowing* were also negatively impacted by recent, substantial expenditure increases, suggesting that one's financial confidence in part depends on economic stability and that *attitudes to spending, saving and borrowing* tend to be balanced — perhaps even adjusted over time — against changes affecting the household budget. The causal direction may, of course, also be the opposite, implying that people with certain attitudes or levels of financial confidence tend to end up with growing expenditures — and more so than others. The data at hand cannot provide decisive evidence of the one or the other. However, recognising that there is likely to be a two-way causal relationship, the conceptual model at the base of our analyses presuppose that the main direction of influences goes from economic factors to attitudes and confidence, and not vice-versa.

Finally, it is notable that the single largest effect on *financial confidence* was *locus of control.* The follow-up analysis we did further suggested that they share some determinants. Both were influenced positively by *knowledge* and *experience of money management* and *action orientation* as well as by income and gender. But there were also some important differences. *Financial confidence* was determined by all five measures of knowledge and experience, while *locus of control* was only influenced by two*. Conversely, *locus of* control was influenced by a much wider range of personality traits, with *self-control* having a particularly large effect at the highest level of statistical significance. (see table 7.1. and Appendix 6). These results call for a reconsideration of where these two components sit in our conceptual model. We return to this in chapter 8.

7. Financial Knowledge and Experience

In this chapter, we focus on the measures of financial knowledge and experience. Following the same pattern as in the previous chapters, we first look at the average scores across different segments of the population, after which we proceed to identify the key predictors of financial knowledge and experience using OLS regression. These analyses are based on the conceptual model, meaning that the set of independent variables are drawn from the social environment box.

There are five components under this heading: *knowledge of money management*, *knowledge of how to compare financial products*, *experience of money management*, *experience of the financial products marketplace*, and *understanding of risk*. The variables that go into each of the components are listed in the facts boxes in the sub-chapters, and further details are given in chapter 2.

7.1. Average scores across different segments of the population

As shown in table 4 in appendix 5, the means varied considerably across the five components, from 96 (*experience of money management*) to 51 (*experience of financial products marketplace*). Furthermore, Norwegians scored relatively low on the two knowledge components — 59 and 62 points respectively — and relatively high on *understanding of risk* where the mean score is nearly 80 points. However, perhaps except *experience of money management*, the spread within each of these distributions was considerable, as the relatively high standard deviations show.

Table 4 in Appendix 5 further reports general bivariate average scores across different segments of the population. Typically, men scored higher than women, as did high-income respondents and home-owners. Age sometimes lead to higher scores (*knowledge* and *experience of money management, understanding of risk*), sometimes to lower scores (*knowledge of choosing products, experience of the financial marketplace*), depending on the component in question. However, when the effects of these and a number of other socio-economic variables are controlled for in comprehensive multivariate models, they may or may not sustain their independent effects on the scores. Table 7.1 on the next page presents the results of the OLS regression conducted to identify the key predictors of the five components discussed in this chapter.

7.2. Knowledge of money management

As we noted in chapter 4, *knowledge of money management* affected *spending restraint behaviour* at the highest level of statistical significance; if you know how to manage money you are more likely to exercise spending restraint. But it was not a determinant of the other money use behaviours (*active saving, not borrowing for daily expenses* or *restrained consumer borrowing).* In contrast, it had large effects on all four money management behaviours; the more knowledge someone had, the higher their scores on *informed decision-making*, *active product choice*, *budgeting* and *keeping track of money*. The impact was particularly large on *active product choice*.

Moreover, even when controlling for these behaviours and a number of other variables, *knowledge of money management* had direct effects on all three components of financial well-being (see Table 3.1), albeit at the lowest level of statistical significance.

As discussed in chapter 2 and summarised in the facts box, the *knowledge of money management* component is made up of three variables. Substantively, it measures the extent to which Norwegians know how to plan spending against income, and have enough knowledge to choose the right savings

Table 7.1: Predictors of Knowledge and Experience. OLS regressions. Unstandardised coefficients. Norway 2017. N = 1919 except Active Product Choice (N=1574). Variable definitions [1]

| | Knowledge of: | | | | Experience of: | | | | Understanding of | |
| | Money Management | | Comparing fin. products | | Money Management | | Financial prod. marketplace | | Risk | |
	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig
Answering about household and personal money	8.52	***	8.39	***	4.83	***	13.79	***	5.40	***
Income & Expenditure										
Income	0.000003	*	0.000002		-0.000001		0.000004	***	0.000003	**
Income drop	-0.47		1.45		-0.09		2.56	*	1.83	
Income increase	1.66		1.47		2.38		1.90		0.39	
Expenditure drop	3.01		9.14	***	-0.74		-1.08		-0.36	
Expenditure increase	-0.13		0.17		-0.01		2.36	*	-0.70	
Work Status:										
Working full-time	-1.89		-0.07		1.04		0.24		0.20	
Working part-time	-1.70		-1.44		-1.17		-5.31	**	-1.74	
Self-employed	-3.27		1.59		1.47		4.24		3.00	
Unemployed	-2.63		2.53		-5.29	*	-1.83		0.74	
Disabled	-1.42		-0.11		-1.14		-3.36		0.29	
Others not working not retired	-2.20		-0.28		-1.55		-0.96		3.72	
Other Economic Characteristics										
Mortgage-to-income ratio	0.01		0.01	*	0.0003		0.01		-0.003	
Fam/friends can help financial	1.14		3.04	**	1.34	*	2.01	*	0.56	
Region										
Central East (incl. Oslo	-0.95		-0.38		-0.24		-0.02		-0.54	
Rest of Eastern Region	-1.01		0.74		-1.00		-1.67		-0.97	
South & West	-1.69		-0.86		-0.95		-1.51		-0.47	
Housing Tenure:										
Renters	-3.60	*	-0.60		0.17		-2.25		-3.96	**
Owners with mortgage	1.32		0.63		0.72		10.27	***	-2.27	*
Personal and family characteristics										
Age:										
u/30	-0.39		1.03		-4.87	***	10.58	***	-10.77	***
30-44	-2.82		1.54		-3.00	**	7.16	***	-6.99	**
45-59	-0.24		1.49		-0.46		3.09	*	-0.99	
Gender	-4.20	***	-8.74	***	-0.53		-1.05		-6.21	***
Couple	0.40		0.97		-3.09	***	0.99		-1.19	
No. of dependent children	0.10		1.26	*	-0.33		0.87		0.36	
Parents discussed money	4.56	***	1.78	*	2.11	***	1.93	*	2.10	**
Immigrant	1.20		1.10		-1.93		-0.80		2.06	
Univ. degree or above	1.64		4.03	***	-0.42		2.51	**	3.54	***
Constant	50.93	***	50.26	***	95.27	***	22.76	***	75.96	***
Adjusted R²	.06		.10		.05		.25		.10	

[1] *Income*: income before tax in NOK. *Income drop, income increase:* dummies for substantial changes (1=yes). Omitted category: stable incomes. E*xpenditure drop, expenditure increase*: dummies for substantial changes (1=yes). Omitted category: stable expenditures. *Work Status*: dummies (1=yes), omitted category: retired. *Mortgage-to-income ratio*: mortgage in NOK relative to income before tax in NOK. *Family or friends who can help financially*: dummy (1=yes). *Region*: dummies (1=yes), omitted category: Middle and Northern Norway. *Housing tenure*: dummies (1=yes), omitted category: outright owners. *Age*: dummies (1=yes), omitted category: 60+. *Gender*: dummy (1=female). *Couple*: dummy (1=yes). *Number of dependent children*: number of children under 18. *Parents discussed money*: dummy (1=yes). *Immigrant*: born outside Scandinavia, at least one non-Norwegian parent, dummy (1=yes). *University degree or higher*: dummy (1=yes).

products, consumer loans and credit cards. The overall average score on this component was 59 (see Table 4 in Appendix 5). It was higher than the scale's midpoint but must still be considered as relatively low; lower than all of the financial well-being components, all but two of the eight behaviours, and both of the attitudes components. Also, in substantive terms, the

Facts box: *The knowledge of money management component*
Knowledge of money management
b23   Knowledge of how to plan spending against income
d10   Knows enough about savings products to choose the right one
d11   Knows enough about consumer loans and credit cards to choose the right one

overall level of knowledge of money management appeared to be low, given the general dependency on financial products and the largely loan-driven consumption patterns of Norwegian households.

7.2.1. Understanding knowledge of money management

The analysis in table 7.1 shows that the scores varied considerably across different groups in the population. First, people who answered about household and personal money scored on average 8.5 points higher than those who only answered about their personal money, all other things being equal. Similarly, people whose parents discussed money with them when they were children had scores that were, on average, 4.5 points higher than those whose parents had not had these discussions with them. Both effects were at the highest level of statistical significance.

Another strongly significant effect is associated with gender; females typically score 4.2 points lower than men. However, scores were not affected by family circumstances — i.e. whether people lived alone or with a partner, and how many children they had.

Moreover, income and housing tenure mattered, but at the lowest level of statistical significance. Higher-income households tended to have more knowledge of money management than did lower-income families. And compared to outright owners, renters typically scored lower on *knowledge of money management*.

Finally, it should be noticed that the model only explained 6% of the variation. We also adapted the model by including the two experience components as independent variables, since it reasonable to assume that knowledge increases the more experience one has. Both *experience of money management* and *experience of the financial product marketplace* were highly significant and had large effects. They also doubled the proportion of variation explained by the model to 12%. Clearly, more research is needed to understand what drives this type of knowledge. In particular, it would be useful to explore the importance of formal education versus learning from experience. XX

7.3.   Knowledge of how to compare financial products

Knowledge of how to identify suitable financial products has earlier been demonstrated to impact both money use and money management behaviours (see chapter 4 and 5, respectively). As for the former, it affected both *spending restraint* and *active saving*. In both cases, the effects are negative; the *less* people knew about how to compare financial products, the more likely they were to exercise spending restraint and engage in active saving.

As for money management behaviours, *knowledge of how to compare financial products* positively impacted both *informed decision-making* and *active product choice*. The effect was particularly large on the latter of these. The relationship between knowledge and product choice is almost certainly a two-way process whereby each influences the other. Taking these and a range of other variables into account, *knowledge of comparing financial products* was not found to be a direct determinant of any of the financial well-being components.

As discussed in chapter 2 and summarised in the facts box, the comparison component is made up of three variables. It thus reflects the extent to which Norwegians can use price comparison websites and compare terms and conditions of insurance and credit products. The overall

<div style="border:1px solid">

Facts box: Knowledge of comparing financial products

Knowledge of how to compare financial products

d13	Knowledge of how to use a price comparison website...
d14	Knowledge of how to compare terms and conditions of insurance products
d14x	Knowledge of how to compare terms and conditions of credit products

</div>

average score was 62 (see Table 4 in Appendix 5). As already noted for *knowledge of money management*, it must be considered being relatively low, since Norway is a country that is marked by strong reliance on financial products. Low scores on this component may, therefore, lead to unfortunate imbalances in the households' financial situation.

7.3.1. Understanding knowledge of how to compare financial products

As Table 7.1. shows, scores on *knowledge of how to compare financial products* were largely driven by eight determinants. One was the distinction between answering about household and personal money, and personal money only. Controlling for a number of other possible influences, the scores for *knowledge of how to compare financial products* were on average 8.4 points higher for the former group. Those with parents who discussed money with them in early years also scored higher on this kind of knowledge, albeit with a smaller effect (1.8 points) and at a lower level of statistical significance. And once again, we observed a gender difference: with women, on average, scoring nearly 9 points less than men.

In this case, however, there were differences across family types, and families with children — especially many children — scored higher than families without. These are typically households with more pressing demands for a range of financial products including loans to access housing and insurances to secure property as well as the members of the household.

Furthermore, as could be expected, the distribution of knowledge about how to identify suitable financial products was driven by certain economic circumstances. One of them was expenditure drops. A hallmark of the current Norwegian financial market is the consumer banks' extensive marketing of consumer loans to refinance expensive credit card debt (Poppe 2017). Another was the mortgage-to-income ratio: the higher the ratio (and thus the pressure on the household finances), the higher the scores on this area of knowledge. People who had borrowed a lot seemed to know how to compare mortgage products before they decided which one to buy. Prospects of a tight situation and efforts to keep the pressure down may be among the mechanisms at work here. In as much as that is the case, it is reassuring that people who borrow a lot do seem to know how to compare products before they borrow. Thirdly, people with family or friends who could help financially tended to score higher on knowledge about comparing financial products. About half of the informants said they had such a back-up. It could mean that many Norwegians impart information about the financial market alongside direct financial help.

Finally, people with university degrees had more knowledge about how to compare financial products than did others, which is, perhaps not unexpected.

It should be noted that the model only explains 10% of the variation. As before, we adapted the model by including *experience of money management* and *experience of the financial product marketplace* as independent variables. Both were highly significant, had fairly large effects and increased the proportion of variation explained by the model to 15%. Again, it seems important to underline that more research is needed to understand the mechanisms behind the distribution of knowledge about comparing financial products.

7.4.   Experience of money management

In chapter 4, *experience of money management* was shown to impact three of the four money use behaviours: *spending restraint*, *active saving* and *not borrowing for daily expenses*. In chapter 5, it was further demonstrated that it also determines three of the money management behaviours: *keeping track of money*, *informed decision-making* and *active product choice*. Unexpectedly, it was not found to have a statistically significant influence on *planning income use*.

Experience of money management also had direct impact on two of the financial well-being components: *being comfortable financially* and *resilience for the future*. In both cases, the effect is modest and negative: the more experience, the lower the financial well-being

The *experience of money management* component is made up of three variables: experience of planning how money is spent, bill-paying and financial decision-making respectively (see Chapter 2 and the fact box). The average score was indeed high: 96 points on a scale varying between 0 and 100 (see Table 4 in Appendix 5). Also, as expected from such a high mean score, the distribution was extremely skewed towards the higher values; in fact, there were hardly any observations under

Facts box: experience of money management
Experience of money management
e1x   Experience of planning how money is spent
e2x   Experience of ensuring bills and credit commitments are paid
e3x   Experience of financial decision-making

60. Thus, the variation in scores was the smallest of the five components discussed in this chapter. It follows that it was hard to identify the operative mechanisms behind the distribution; only 5% of the variation was explained by the statistical model.

7.4.1. Understanding experience of money management

The regression analysis in table 7.1 sheds some light on the relationship between socio-economic and demographic factors on the one hand, and *experience of money management* on the other. As also observed for the two knowledge components just discussed, those answering about household and personal money, and people with parents who discussed money with them in early years, both tended to score higher on *experience of money management*. Younger persons scored lower than older people, and respondents with partners had lower scores than single people. The latter finding makes sense as there is always some kind of division of labour in larger households. Single people don't have a partner they can delegate to, and thus must take full responsibility for money management.

Furthermore, those who had family or friends who could help financially tend to have slightly higher scores than others. This suggests that people who have family able to help are also encouraged to take responsibility for money matters and so gain more experience. Or, it could also mean that people who have higher levels of experience with money management are more likely to have received help.

Finally, the regression analysis identified unemployment as a determinant; controlling for a wide range of other possible influences, people who were temporarily out of work were on average found to score 5 points less on *experience of money management* than others. It is hard to find good explanations for this, except that unemployment is low in Norway and tends to involve people who are struggling with multiple social and financial challenges that are not captured in the model.

7.5.   Experience of the financial products marketplace

Now turning to *experience of the financial products marketplace*, previous analysis has shown that it was a determinant of two money use behaviours, having a positive effect on *active saving* and a negative impact on *restrained consumer borrowing* (see Chapter 4). It also positively affected two of

the money management behaviours: *informed decision-making* and *keeping track of money* (see Chapter 5). It does not, however, determine *active product choice*.

Taking these and a range of other variables into account, *experience of the financial products marketplace* was not found to be a direct determinant of any of the financial well-being components (see Chapter 3).

This component comprises two variables: the number of types of product held and the number of types of product bought in the last three years (see chapter 2 for details). The average score was the lowest of the five knowledge and experience components considered here: only 51.5 (see Table A5.4 in Appendix 5). This is somewhat of a surprise since financial inclusion in Norway is high and Norwegian households are extensive users of financial products, depending on them

Facts box: Experience of the financial products marketplace
Experience of financial product marketplace (Financial inclusion)
d1   Number of products held
d5   Number of products purchased in last 3 years

for investments as well as consumption. Part of the explanation has to do with the survey questions used to capture this dimension of people's financial life and the extent to which they act in the financial marketplace. Underlying data from the survey show that whereas they on average held 4.5 types of products, only 2.7 of them had been purchased the last three years. Combined, the mean score on the component is bound to be low.

7.5.1. Understanding experience of the financial products marketplace

As Table 7.1 reports, as many as ten drivers of *experience of the financial marketplace* were identified. Those answering about household and personal money score on average 14 points higher than those only answering about personal money. The effect of having parents who discussed money with them when they were young was considerably lower — around 2 points up — but it was nevertheless statistically significant. Moreover, unlike the three knowledge and experience components already discussed, the analysis identified no differences between family types, nor between men and women. Age, on the other hand, was important; younger people had more experience of this kind than did older people. This is as expected; after all, the use of loans, credit, savings products and other financial instruments took off in the late 1990s and early 2000s. And older people have less need for borrowing of all kinds.

Furthermore, education was a driver of this kind of experience: people with university degrees tending to have more experience of the financial products marketplace than others. The same was true for people who had family or friends who could help financially.

As expected, financial circumstances impacted people's experience with the marketplace. Income was among them; the higher the income, the higher the scores. Housing tenure was also important: owners with a mortgage tend to be more experienced than both outright owners and renters. Changes in economic circumstances (including both income drops and expenditure increases) were associated with higher scores. There are many possible explanations for this. For instance, people may explore new market opportunities to combat negative effects of experiencing an income drop and finding themselves in a tighter financial situation. And they may have experienced an expenditure increase because they have taken on new financial obligations.

Yet another determinant was work status. Part-time workers scored on average 5 points lower than did the retired. It is difficult to offer comprehensive explanations for this. However, part-time workers is a composite social category, many of whom are likely to have limited means and struggle with social as well as financial challenges. The retired, on the other hand, is also a composite social category, but

they have, after all, lived a long life and typically accumulated much experience throughout the years. Still, the observed effect is controlled for both age and income and must be understood in that light: as reflecting long-term social factors uncontrolled for by the model.

Finally, the model explains 25% of the variation, which is the highest of the five components discussed in this chapter.

7.6.   Understanding of risk

The analysis in chapter 4 showed that the understanding of risk component only influenced one of the money use behaviours, viz. *restrained consumer borrowing*. The effect was modest, negative and at the lowest level of statistical significance. Moreover, chapter 5 showed that it was not a determinant of any of the money management behaviours. Last, but not least, when these and a range of other variables were taken into account, *understanding of risk* was not found to be a direct determinant of any of the financial well-being components (see chapter 3). Taken together, these findings suggest that an understanding of risk plays very little of a role in the shaping of financial behaviour and well-being patterns in Norway.

The *understanding of risk* component is made up by three variables, all measuring standard knowledge about risks associated with investments, savings strategies and borrowing relative to income (see fact box and further details in chapter 2). The overall average score was 76 points on the 0-100 scale, which is the second highest of the components discussed in this chapter (see Table 4 in Appendix 5). The variation in scores was, however, also substantial.

Facts box: Understanding of financial risk
Understanding of managing financial risk
d15   A high-return investment is also likely to be high risk
d16   You can reduce risk by saving into more than one account
d18x   Borrowing over three times income increases risk of mortgage payment problems

7.6.1. Exploring understanding of risk

The analysis in table 7.1 identified eight determinants of *understanding financial risk*. Beginning with the division between those who, on the one hand, answered about household and personal money, and those who only answered about personal money, the former group scored about 5 points higher than did the latter. Also, those whose parents discussed money with them when they were children tended to have higher scores. Furthermore, both gender and education impacted understanding of risk; women tended to have lower scores -around 6 points – than men; whereas people with university degrees scored 3.5 points higher than those educated to a lower level. In this case age was also a determinant and the older people were, the better was their understanding of financial risk.

Some features of people's financial situation also influenced their understanding of risk. One is income: higher income households tended to have higher scores. Another is tenure; compared with outright owners, both owners with a mortgage and renters tended to have less understanding of financial risks.

Finally, it should be noted that the model only explains 10% of the variation in scores. We again adapted the model by including *experience of money management* and *experience of the financial product marketplace* as independent variables. Both were highly significant, had fairly large effects and increased the proportion of variation explained by the model to 13%. More research is, however, needed to understand the mechanisms behind the distribution of risk scores and the apparently low level of importance it has for financial behaviour and well-being.

7.7.   Summary and discussion

In principle, there are two ways people can become informed and skilled financial actors: by acquiring knowledge through formal instruction (in schools, by parents and from others) and from experience (learning "on the job"). While experience can be expected to be gained over the lifetime through opportunities presenting themselves.   It is also plausible that people are encouraged to take advantage of such opportunities if their level of knowledge is high. In other words, knowledge and experience become self-reinforcing. The first thing to note is that, with the exception of '*experience of the financial marketplace*', the models we specified did not explain a high proportion of the variation in scores for knowledge and experience. In other words, there are important determinants that we have not captured in the models.

That said, it is worth noting that that the regression analyses in table 7.1 identify two features shared by all five knowledge and experience components. First, those who had responsibility for managing both household and personal money had on average significantly higher scores compared to those who managed only their personal money. This was especially true about *experience of the financial products marketplace*, which is not surprising since full-fledged financial actors tend to use a range of such products. Moreover, since we have not observed any such differences in relation to any of the other sets of components, it is worth underlining that it seems to be a unique characteristic of the distribution of knowledge and experience. Obviously, there is a small group of mostly young people who, should they step up to take on broader financial responsibilities, will be disadvantaged by a lack of knowledge and experience and necessarily must find ways around it.

Secondly, there was a more modest, but nevertheless statistically significant and very persistent effect of parents discussing money with their children in young age; people with such parents scored higher on all knowledge and experience components. The effect is of substantial interest since it pinpoints the importance of trans-generational transfer of financial awareness. The knowledge that people take on board, and the experiences they make as financial actors, are not random. Moreover, the financial understanding conveyed by the parents is based on the skills, norms and values rooted in the latter parts of the 1900s. In turn, these insights are applied to and challenged by increasingly liberalised market contexts. Thereby new sets of knowledge and experience emerge to be transmitted to future generations. We shall return to discuss its implications in the concluding chapter.

Moreover, people with families or friends who could help financially had more knowledge of how to choose financial products and more experience of both money management and of operating in the financial product marketplace. It also suggests that family networks help to build knowledge of how to choose products and encourage people to engage in (and develop experience of) financial matters.

Unfortunately, our questionnaire did not include questions relating to financial education at school or university.   But general education *was* important, particularly about operating in the financial marketplace. People educated to degree level had both more *knowledge of how to choose financial products* than those with lower levels of educational attainment, and *more experience of financial products*. They also had a better *understanding of risk*. Education did not, however, have an impact on either *knowledge* or *experience of money management*

As expected, age was statistically significant for several of the indicators. Older people tended to have more *experience of money management* and a better *understanding of risk*, but less experience of operating in the financial products marketplace. Younger households of today must base their welfare on extensive use of loans and other financial instruments, which makes the marketplace for such products an integral part everyday life in ways that are unprecedented by earlier times. The risks involved are less understood among the young, but the awareness of them is likely to grow by age.

The effects of several of the socio-economic variables in Table 7.1 suggest that there is a social status element in the distribution of financial knowledge and experience. For instance, higher-income households tended to have more *knowledge of money management*, more *experience of the financial products market*, and better *understanding of risk*. Added to this, owners with a mortgage were more experienced with the financial products marketplace, and, perhaps reassuringly, the higher their mortgage-to-income ratios, the more they tended to know about how to choose financial products.

In line with most studies on personal finance, the analyses of knowledge and experience also detected gender differences. Women had less *knowledge of money management* and *how to choose financial products*. They also had less *understanding of risk*. There were, however, no gender differences with respect to *experience of money management* or *experience of the financial products market,* which may be an aspect of the high degree of gender equality in Norway.

It is perhaps important to note that the *understanding of risk* component appears to play a fairly minor role in our conceptual model compared with the other components of knowledge and experience. It only had a very modest impact on one of the behaviours (*restrained consumer borrowing*), although it *was* one of the important determinants of *financial c*o*nfidence*. Part of the explanation is probably related to the extraordinary stability of the Norwegian economy, with more than 20 years of consecutive economic upturn. Those at the early and middle stages of their economic careers have never experienced a financial crisis or longer periods of unemployment and economic downturns. Under such circumstances, risk becomes largely irrelevant.

Rounding off this chapter, the average scores on the five knowledge and experience components generally appear to be low compared with the behaviours and well-being scores. This is especially the case for *knowledge of money management* and *knowledge of how to choose financial products*. The exception is *experience of money management*, with a mean of around 96 points. The results generally support the impression that the stability of the Norwegian context and the relative affluence of its inhabitants secure higher levels of financial capability and well-being even for many of those who lack relevant knowledge, experience and understanding of risk.

8. Conclusions and policy implications

We have found that financial well-being is a meaningful overall concept that can be measured and identified its determinants. For policy purposes, however, it can usefully be disaggregated into three distinct components: meeting current commitments, being comfortable financially and having resilience for the future.

In Norway in 2017, levels of financial well-being were generally quite high. The mean score, overall, was 78 on a scale running from 0 to 100. The great majority of the population was meeting their financial commitments and not experiencing payment problems (mean score 91). But that still leaves a small minority of people for whom payment problems were a daily experience. On the other hand, many fewer people were in a financially comfortable position or had sufficient financial resilience for the future. Mean scores for these two components of financial well-being were 70 and 73 respectively, with a much wider range of scores around the mean. This puts a significant minority of people in Norway at risk of experiencing payment problems should they experience a financial shock.

For that reason, this study has sought to understand the key direct and indirect determinants of financial well-being so that policy and interventions can be designed to promote higher levels of well-being in the future and reduce the proportion of the population that is at risk of experiencing financial difficulty.

We began this report with an overview of the qualitative and quantitative evidence contained in our previous report and formulated a set of hypotheses that we have tested using new (and improved) data collected in 2017:

1) The main direct effects on financial well-being are from the behaviours and aspects of the socio-economic environment, when other variables in the model are controlled.

> *1a) All other influences on financial well-being are primarily indirect and mediated through the behaviours.*

2) The behaviours are, in turn, driven by a combination financial knowledge and experience, financial confidence and attitudes, personality traits and characteristics of the socio-economic environment.

> *2a) When other variables are controlled for in the model, the impact of knowledge and experience on the behaviours is weak relative to the other influences*

> *2b) The impact of knowledge and experience on behaviours is reduced by attitudes and personality traits.*

3) Financial attitudes and confidence are functions of knowledge and experience, personality traits and aspects of the socio-economic environment.

4) Financial knowledge and experience is influenced by aspects of the socio-economic environment.

Based on these, we developed a conceptual model that was similarly tested.

Figure 8-1: The conceptual model
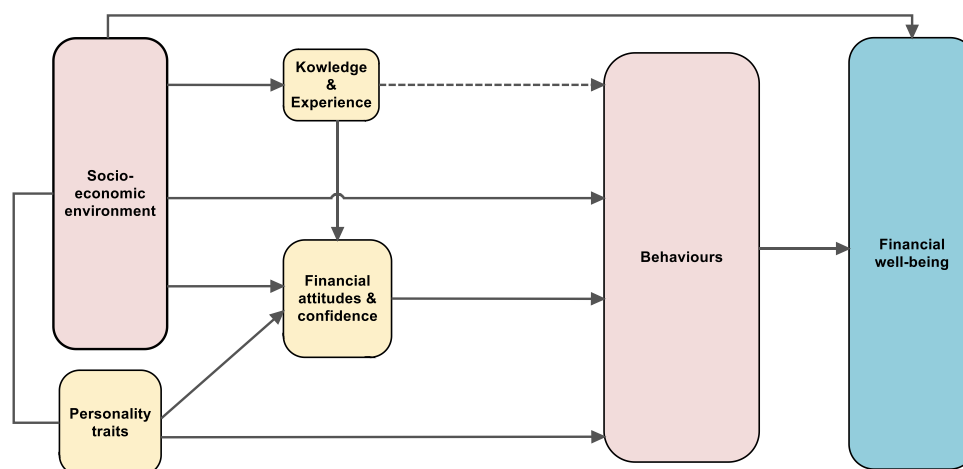
The aim of this report was two-fold. First, to test, through extensive, explorative analysis whether the hypotheses and conceptual model are supported by the data and to develop parsimonious empirical models of financial well-being and, if necessary, to adjust the conceptual model in accordance with the new insights obtained by the empirical analysis. Secondly, we aim to draw out from the analysis key learning for policy-makers and practitioners with an interest in raising levels of financial well-being, whether that is assisting people who are in financial difficulty and experiencing payment problems or ensuring that people have financial resilience for the future.

8.1.   Testing the hypotheses

On the whole, the analysis generally supports the hypotheses, but there were some important deviations, indicating that the conceptual model, above, needs some refinement. Each of the hypotheses is discussed in turn.

Hypotheses 1 and 1a:

> *The main direct effects on financial well-being are from the behaviours and aspects of the socio-economic environment when other variables in the model are controlled.*

> *All other influences on financial well-being are primarily indirect and mediated through the behaviours.*

These hypotheses were borne out to some degree by the analysis reported in Chapter 3, but there were some important deviations from them.

Most importantly, the first hypothesis only holds true for the money use behaviours: *spending restraint, active saving, not borrowing for daily expenses* and *restrained consumer borrowing,* which had very large positive effects even when other factors were controlled for in the models (see Chapter 3). It was not, however, the case for the money management behaviours, which either had no direct effect on our measures of financial well-being at all (*informed decision-making* and *active product choice*) or, where they did, they had a negative effect (*budgeting* and *keeping track of finances*). The model, therefore, needs to be revised to take this into account.

Further analysis was undertaken to understand the negative effect of *budgeting* and *keeping track of finances* and the conclusion reached was that some people are inclined to plan and monitor their finances but relaxing how tightly they do so when their financial well-being is high (Chapter 5). This suggest that it makes more sense to consider these two behaviours as being effects of financial well-being rather than determinants of it. If so, they should be excluded from the model. We return to this point below.

Secondly, *financial confidence* and the personality trait *locus of control* both had moderate and positive direct effects on the two measures of current financial well-being (*meeting financial commitments* and *being comfortable financially*) as well as large indirect ones. This runs counter to hypothesis 1a. The conceptual model needs to be revised to take these direct effects into account. Again, we return to this below.

Other variables that had a much smaller direct effect on financial well-being included *knowledge of money management* and *attitudes to spending, saving and borrowing*. Both were, however, on the margins of statistical significance.

Hypothesis 2:

> *The behaviours are, in turn, driven by a combination financial knowledge and experience, financial confidence and attitudes, personality traits and characteristics of the socio-economic environment.*

In general, this hypothesis was supported by the analyses reported in Chapter 4 and 5. Behaviours were, indeed, driven by a combination of financial knowledge and experience, financial confidence and attitudes, personality traits and characteristics of the socio-economic environment.

However, two of the money management behaviours were found to have unexpected direct effects on some of the money use ones: *informed decision-making* had a positive effect on both *spending restraint* and *active saving*, while *budgeting* had a positive effect on just *active saving* (see Chapter 4). This was not anticipated in hypothesis 2. Hence, a re-think of the position of these behaviours in our conceptual model is required.

Hypotheses 2a and 2b

> *When other variables are controlled for in the model, the impact of knowledge and experience on the behaviours is weak relative to the other influences*
>
> *The impact of knowledge and experience on behaviours is reduced by attitudes and personality traits.*

While the effect of knowledge and experience on the money use behaviours was, indeed, low and was reduced by the addition of attitudes and personality traits to the regression model (see Chapter 4). The same was not true, however, for the money management behaviours, where the effect of knowledge was far greater and was not reduced in this way (see Chapter 5). This is further evidence that the money use and money management behaviours need to be separated in our conceptual model.

Hypothesis 3:

> *Financial attitudes and confidence are functions of knowledge and experience, personality traits and aspects of the socio-economic environment.*

On the whole, the analysis reported in Chapter 6 supports this hypothesis, although the effects of knowledge and experience were far greater on *financial confidence* than they were on *attitudes to spending saving and borrowing.* This suggests that it could be helpful to separate them in our conceptual model.

Hypothesis 4:

> *Financial knowledge and experience is influenced by aspects of the socio-economic environment.*

The analysis presented in Chapter 7 supports this hypothesis. One of the important findings from a policy and practice perspective was the positive effect of having parents who discussed money matters in one's childhood – especially on knowledge and experience of money management. Further analysis also showed that knowledge was influenced by experience in ways that might be anticipated.

8.2.   Redrawing the conceptual model

We have, therefore, revised our broad conceptual model to reflect the findings reported above. To keep our model simple and usable by policy-makers and practitioners we have not included effects that were small and on the margins of statistical significance.

Figure 8-2: The revised conceptual model
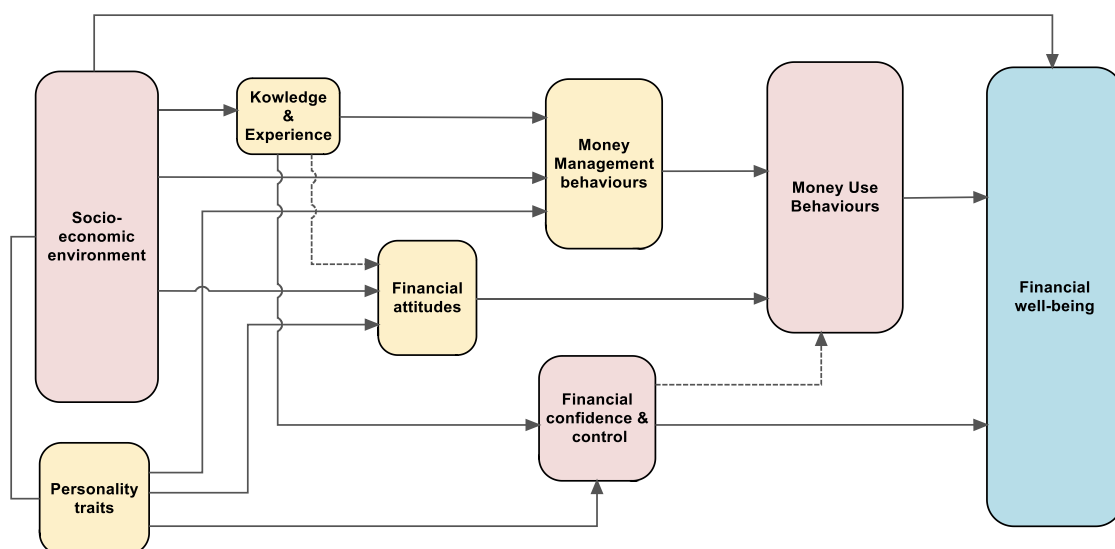
The revised conceptual model provides a general picture of financial well-being and its determinants. The pink boxes illustrate that financial well-being is primarily and directly impacted by three groups of

effect variables: *money use behaviours*, *financial confidence* and *locus of control*, and aspects of the socio-economic environment.

The model also identifies the main indirect influences that operate through these determinants: *money management behaviours*, *financial attitudes*, *knowledge and experience*, and *personality traits*. These groups of variables are marked in yellow. The dotted lines indicate weak associations between two boxes.

While this model is valid for Norway, it may not necessarily apply in other country contexts although we would expect to find similar patterns in other Western countries. Identical surveys are being run or are planned in Australia, New Zealand, Ireland, Canada and the United States. Future comparative analyses can verify the extent to which this expectation is met.

8.3.   Implications of the findings for policy and practise

The analysis reported in previous chapters implies that to raise levels of financial well-being in Norway, both policy and practical interventions with individuals should focus on raising levels of capability on the four money use behaviours (*spending restraint, active saving, not borrowing for daily expenses* and *restrained consumer borrowing*) and on increasing levels of *financial confidence*. The relative importance of these five factors does, however, differ across the various measures of financial well-being. Consequently, the focus of policy and practice will depend on which aspect of financial well-being is of particular interest.

8.3.1.   Promoting financial well-being

About 5 per cent of the people interviewed scored 50 or less on the ***meeting financial commitments*** measure of financial well-being and 1 per cent less than 25. If the primary interest is in working with these people in payment difficulties to get their finances back under control, then interventions would usefully focus on encouragement not to use credit to cover daily living expenses, whether that be to buy food, pay bills, meet credit commitments or to refinance existing credit commitments.

As the analysis reported in Chapter 3 shows, increasing the score on *not borrowing for daily expenses* by 10 points would have the effect of raising the score on meeting financial commitments by as much as 4.5 points. Assisting people to exercise spending restraint would also have a large effect. Every 10-point increase in the *spending restraint* score would result in a 2.7-point increase in their score for *meeting financial commitments.*

Having reduced their dependence on borrowing for daily expenses and increased spending restraint, there are further gains to be achieved by encouraging greater restraint over the use of credit for consumption purposes and engagement in regular saving. Every 10-point increase in the scores on these two behaviours would result in a 2.4 and 3.2 increase in the scores for *meeting financial commitments.* All of these are very large effects, indeed, and would have a dramatic effect on the finances of people in financial difficulty.   A slightly smaller effect could be brought about by raising levels of *financial confidence*, where a 10-point score increase would lead to a 1.2-point increase in *meeting financial commitments*.

Because the numbers of people with real difficulties meeting commitments is so small, the best way of delivering these interventions would be one-to-one advice and coaching as part of the overall assistance delivered by NAV. Engaging in this way would not only enable people to meet their obligations under debt settlement plans but help to prevent a recurrence of the problem in the future (see CFPB 2016 for an evaluation of a success intervention of this kind).

It is clear that although the great majority of Norwegians are not experiencing payment problems, rather fewer are in a financial position that is, and they feel to be, comfortable – with money left over after meeting essentials. The average score for **being comfortable financially** was 77 but around one in five of the population (19 per cent) had scores of 50 or less and 5 per cent scored 25 or below. This means that although only around 5 per cent people were experiencing payment problems at the time they were interviewed, a further 15 per cent reported some degree of financial strain who would be at risk of falling into difficulty especially if their income fell substantially or if they experienced a significant rise in their expenditure.

Although the gains by changing behaviours are not so great as they were for *meeting financial commitments* they are never-the-less large. Increasing the score on *not borrowing for daily expenses* by 10 points would have the effect of raising the score on *being comfortable financially* by 2.7 points. Increases of comparable size for *restrained consumer borrowing* and *active saving* would result in a 2.2 and 1.5-point increase in the *being comfortable financially* score respectively.

Here however, tackling spending restraint would not have such a large effect (0.5 points) and would not, therefore, be a focus of interventions. Raising levels of *financial confidence*, however, could see quite large gains; a 10-point increase in the *financial confidence* score would lead to a 1.8-point increase in *being comfortable financially.* A similar sized increase (1.9 points) could be achieved through a 10-point increase in the *locus of control* scale. But while designing interventions to promote a significant increase in capable behaviours will be a challenge, encouraging people to take greater responsibility for what happens in their lives would be far more difficult.

The third measure of financial well-being is **resilience for the future**, that is having sufficient money saved to cover a major expense or a drop in income for some reason. Here, although the average score was 75, over one in five (21 per cent) of the people interviewed in Norway had a score of 50 or less and 5 per cent a score of 25 or under. These included just about all of the people experiencing financial difficulties currently, whose situations could worsen still further if their income fell or their expenditure increased. In addition, a further 17 per cent of people were not experiencing payment problems but had insufficient money put by and would be at particular risk of payment problems should they experience a financial shock of some kind.

On a positive note, there are some significant gains to be achieved in terms of increasing financial resilience by changing how people use their money. Encouraging people to cut back their consumer borrowing would have a very big effect. A 10-point increase on this measure would result in a 5.8-point increase in their *resilience for the future* score. Increases of a similar size could be achieved by promoting regular saving (5.3 points) and not borrowing for daily living expenses (4.6 points). Although targeting spending restraint would have a smaller effect (2.7 points) the impact is still large and would be a precursor to saving and restrained consumer borrowing for many people. Here, financial confidence is much less important.

As expected there was considerable overlap between the people who lacked financial resilience and those who reported that they were not financially comfortable. It is estimated that around 15 per cent of the Norwegian population have avoided payment problems but are either struggling financially or experience occasional payment problems and have inadequate financial resilience against future financial shocks. And a further 20 per cent struggle or experience the occasional payment difficulty and have limited financial resilience.

Since about a third of the Norwegian population is at risk in these ways, interventions could usefully draw on the techniques of social marketing (marketing campaigns for social purposes) or use

edutainment (story line embedded in popular drama series) to reach them. These would promote the message that one can increase the amount of money you have to enjoy life both now and in the future by small adjustments such as:

- cutting back spending on non-essential;
- not borrowing for daily expenses;
- paying down credit card balances;
- trying to save a small amount regularly, however, little it may be, and
- using savings rather than credit for consumer purchases wherever possible.

(For evaluations of effective interventions see for example (Beshears et al. 2013) (social marketing) and (Berg and Zia 2013) (edutainment)).

Apps and websites that enable people to calculate the savings that can be made by modest changes in spending and modest increases in credit repayments have also been shown to be effective. (See for example (Royal London 2017)).

So, significant increases in financial well-being can be achieved in Norway by promoting capable spending, saving and borrowing behaviours. At the same time, it is clear that social policies relating to income levels and protecting people against the effects of sudden and substantial falls in income and insecure employment are also important to ensure the financial well-being of the Norwegian population, in both the short- and the long-term.

8.3.2. Promoting capable money use behaviours

The analysis summarised above raises the question: how can capabilities on these key money use behaviours and financial confidence be raised? The two behaviours where there is most scope for raising levels of capability are in *spending restraint* and *active saving*.

The average (mean) score for **spending restraint** was 71 and a relatively small proportion of the Norwegian population were exercising low levels of restraint. Just 14 per cent of the people interviewed had scores that were 50 points or below and just 2 per cent had scores of 25 or less, almost certainly making them compulsive spenders and shoppers. *Attitudes to spending, saving and borrowing* were by far the biggest driver of this behaviour and would be the easiest determinant to tackle. As reported in Chapter 4, a 10-point increase in the attitudes score would result in a 4-point increase in the corresponding one for *spending restraint*. Other important factors were *impulsivity control* and *self-control*, where 10 per cent rises in scores would, respectively, lead to 2.2 and 1.7-point increases in *spending restraint.* But these are general personality traits that permeate all aspects of people's lives and are difficult to change. It is far easier to tackle low levels of knowledge, but here the gains are much smaller. Teaching people about money management would have a modest impact, with a 10-point increase leading to a corresponding 1.2-point increase in the *spending restraint* score. Encouraging people to make informed financial decisions would have a modest impact (a 0.9-point increase). Finally, it should be noted that women scored considerably worse than men on *spending restraint.*

Turning now to **active saving**, here the average score was 75 and, on the whole, most Norwegians were inclined (and had the money) to save. That said, 15 per cent of the people interviewed scored 50 or less on this measure and 4 per cent scored 25 or under. Once again *attitudes to spending, saving and borrowing* were by far the biggest driver of this behaviour. A 10-point increase in the attitudes score would lead to a 3.8-point rise on the *active saving* one (see Chapter 4). *Informed decision-making*

was also important (a 1.9-point rise), along with two personality traits: time orientation (looking to the future and not living for today) and locus of control (2.2-point and 1.2-point rises respectively). Although *budgeting* had a positive impact on saving its effect was much smaller (0.4-point rise) and would not be the obvious starting point to encourage increased saving among Norwegians. It should, however, be noted that income also played an important part, when these and other factors were taken into account. In other words, some people were inclined to save but did not have the money to do so. And the number of dependent children in the household also reduced the capability to save.

Although there has been much concern about the levels of borrowing in Norway, the evidence presented in this report shows that, although they may be high, there are not, yet causing significant problems. The mortgage borrowing to income variable was not a significant driver of financial well-being nor did it drive any of the money use behaviours. Such problems seem to stem from consumer borrowing. Certainly, borrowing for daily expenses and not exercising restraint was found to damage financial well-being, but the scores on each of these measures were high.

The mean score for *not borrowing for daily expenses* was 94. Moreover, only 2 per cent of the people interviewed scored 50 or less and just 0.2 per cent scored 25 or below. In other words, this really is a rare practice in the population. And consequently, our modelling found only one factor that had a sizeable influence. This was *attitudes to spending, saving and borrowing* and a 10-point increase in the attitudes score would result in a 1.6-point increase in the score for *not borrowing for daily expenses* (see Chapter 4). Raising someone's level of *financial confidence* and promoting *impulsivity control* would have more modest impacts: 0.7 points in each case. Again, income played a part although this was not a great as it was for *active saving.* The analysis showed (unsurprisingly) that people were more inclined to borrow to meet their daily living expenses if they had low incomes and the more dependent children they had (all other things being equal). More surprising is the fact that a substantial income drop did not predispose them to this behaviour. So, borrowing to meet daily living expenses will not be an easy behaviour to tackle and only affects the financial well-being of a small proportion of the Norwegian population. Never-the-less it is a counter-productive strategy for making ends meet, leading people into a spiral of payment problems.

Finally, *restrained consumer borrowing* where not only was the average score high (95) hardly anybody had low scores: only 0.3 per cent of the people interviewed scored 50 or less, and no-one scored 25 or below. Indeed, only 1 per cent of the population got a score of less than 75. The consequences of this are that it was not possible to find clear determinants of this behaviour. The only one of any with an effect of any size was, once again, *attitudes to spending, saving and borrowing* but here a 10-point increase led to only a 0.8-point increase in the score for *restrained consumer borrowing* (see Chapter 4).

The overall conclusions from this analysis are that they key to promoting capable spending, saving and borrowing behaviours lies in modifying attitudes to money and its use. Because this is such an important determinant we cover what might help to modify attitudes in section 8.4.5 below. At the same time raising levels of financial confidence can be beneficial as can promoting informed decision-making. These are covered in sections 8.3.3 and 8.3.4 respectively.

8.3.3.   Raising levels of financial confidence and locus of control
As we saw in Chapter 6, our measures of *financial confidence* and *locus of control* were closely inter-related. And raising levels of each of them would have both a direct and an indirect effect on financial well-being. And they were influenced by some of the same factors.

Improving financial confidence requires interventions to raise levels of knowledge and to overcome two key personality traits. In order of size effect, the main determinants identified in Chapter 6 are: *knowledge of money management* (1.8 points), *experience of money management* (1.3 points) and (at a roughly equal level of effect of 1 point) *knowledge of how to choose products*, *understanding of risk* and *impulsivity control.*

Locus of control would also be improved by raising levels of *knowledge of money management* and *experience of money management* (0.9 points each) but here the main determinant was *self-control*, where a 10-point increase would raise levels of locus of control by 2.4 points.

The knowledge factors can obviously be taught either one-to-one or in small groups, while the personality traits will be more difficult to deal with and may need to rely on 'nudge' techniques that either harness or overcome the personality traits (see Fiorillo, Potok, and Wright 2014).

8.3.4. Promoting capable money management behaviours

Although internationally, many financial education initiatives focus on aspects of money management, the analysis presented in this report suggests that promoting capable money management behaviours will be a much lower priority for policy and practice than either how money is used or building financial confidence and an internal financial locus of control.

We saw, in Chapter 5, that two money management behaviours (*budgeting* and *keeping track of finances*) had a *negative* correlation with financial well-being and that the analysis concluded that these were effects rather than causes of financial well-being. In other words, some people are inclined to plan and monitor their finances but do so with varying degrees of precision depending on whether they are experiencing financial strain or are quite comfortable financially. Only *budgeting* had any effect on how money was used, and this was limited to a small effect (at the lowest level of statistical significance) on *active saving*. Any interventions to promote capable budgeting would need to focus on the two main determinants: *knowledge of money management*, where a 10-point increase in the score would result in a 2-point increase in the score for budgeting, and *impulsivity control* (a 1.5-point increase). (See Chapter 5). Clearly, raising levels of knowledge will be easier than promoting the control of impulsivity but tackling the one without the other will reduce the overall impact. The evidence suggests that men should be targeted more than women. And the lack of an age effect suggests that the inclination to budget is already being established in early childhood. Indeed, research in the UK has identified that children's approaches to money are already being established as young as the age of four to five (Money Advice Service 2017).

The other two money management behaviours (*informed decision making* and *active product choice*) had no direct effect on any of the measures of financial well-being, although informed *decision making* did have positive indirect effects on both *spending restraint* and *active saving*. This makes it a clear candidate for financial capability interventions. As the analysis in Chapter 5 shows, there is a much wider range of determinants where a 10-point increase would lead to a substantial increase in the score for *informed decision-making*. These include: *knowledge of money management* (a 2-point increase), *financial locus of control* (1.7 points), *knowledge of how to choose financial products* (1.5 points), *self-control (1.1 points)* and *time orientation* (1 point). Again, the focus would be on men. There was also evidence that people were more inclined to make informed decisions if their parents had discussed money with them as children. Once again it is clear that increasing interventions to raise knowledge levels would be beneficial but that the effect would be magnified if the effects of the three personality traits were also taken into account.

The situation with *active product choice* is somewhat different. Although it had neither a direct nor an indirect effect on any of our measures of financial well-being, this is almost certainly because our measures failed to capture whether people were using savings, investment or credit products that were appropriate to their needs. This was beyond the scope of such a short survey. However, it is clear that the purchase of inappropriate products can seriously damage both current and future financial well-being — although this most likely in countries where there is a significant sub-prime credit market. Never-the-less the low scores on *active product choice* in Norway indicate the need for vigilant consumer protection legislation. The fact that is largely determined by *knowledge of money management* and *knowledge of how to choose financial products* also suggests that interventions and online tools to help people to make appropriate choices would be beneficial. A 10-point increase in scores on these two aspects of knowledge would lead to a 3.8 and 3.7 improvement in the score for *active product choice*. Here women need to be targeted more than men.

8.3.5. Modifying attitudes

Because attitudes are very important determinants of the money use behaviours (especially *spending restraint* and *active saving*) it also is helpful to understand how these might be modified. Here personality traits have the largest effect — in particular *time orientation* (where a 10-point increase would lead to a 2.7-point rise in the attitudes score) and, with a slightly smaller effect, *impulsivity control* (a 1.8-point rise). (See Chapter 6). But *knowledge of money management* is also important even though it has a smaller effect (1-point increase) than either time orientation or impulsivity control. This means that attitudes will be potentially quite difficult to shift and require interventions that encourage people to curb their impulsivity and consider the future more and place less emphasis on having a good life today. Because men tend to have less capable attitudes to money these interventions would focus more on them than on women.

8.3.6. Improving levels of knowledge

Both *knowledge of money management*, and (to a lesser extent) *knowledge of how to select financial products,* have been identified as important determinants in the sections above. Clearly there are several ways that this knowledge can be acquired: through formal education, through informal learning or through experience and "learning as you go" and on our measures of knowledge and experience. On the whole, the analysis in Chapter 7 supports this.

A point that is worth noting in particular is the role of parents discussing money matters with their children. This has a small direct effect on two of our measures of financial well-being: *keeping up with commitments* and *financial resilience*. Although it has no direct effect on the money use behaviours, it does, have an effect on informed decision-influence making (and through this has an indirect effect on both spending restraint and active saving) and also a strong effect on *knowledge of money management.* This reinforces the finding of the UK Money Advice Service research with children and young people (Money Advice Service 2017), and points not only to the importance of encouraging parents to discuss money with their children but also of formal education as soon as children start to attend school.

8.4.   Future research

Our analysis indicates two areas for future research. First, while the conceptual model underlying the analyses is valid for Norway, it may not necessarily apply in other country contexts although we would expect to find similar patterns in other Western countries. Only future comparative analyses can verify the extent to which this expectation is met. Indeed, cross-country analyses is probably the best way forward to gain a broader and deeper understanding of financial well-being as a social phenomenon. As we write, identical surveys are being run or are planned in Australia, New Zealand, Ireland, Canada

and the United States. As even more countries follow, the research community should seize the opportunity, share data and design projects to conduct studies of this kind.

Second, there is a need to better understand the pathways to higher levels of financial well-being: how the various factors are linked together and what mechanisms are responsible for establishing those links. This calls for a different methodological approach, partly qualitative studies and partly path analysis (SEM) rather than a series of stand-alone regressions. Based on the revised conceptual model, a number of detailed analyses should be conducted, focussing on the aspects of financial well-being that are most urgent from a policy-making point of view.

8.5.   Conclusion

To conclude, the analysis presented in this report demonstrates that financial well-being is a meaningful overall concept that can be measured and identified by a set of determinants. Also, it has been shown that financial well-being can usefully be disaggregated into three distinct components: *meeting current commitments*, *being comfortable financially* and *having resilience for the future*.

We began this report with an overview of the qualitative and quantitative evidence contained in our previous report and formulated a set of hypotheses that we have tested using new (and improved) data collected in 2017. The hypotheses were largely supported by the data. As illustrated by the revised conceptual model, both overall financial well-being and its components are directly affected by three groups of variables: money use behaviours, financial confidence and control, and aspects of people's social environment. In addition, we have identified important indirect effects from four other sets of indicators: money management behaviours, financial attitudes, knowledge and experience, and personality traits.

On a scale from zero to 100, the average score for the overall financial well-being measure was 78. It indicates that, on the whole, Norwegians are doing quite well. As might be expected, the mean score was highest (91) for *meeting current commitments*. In contrast, the scores on *being comfortable financially* and *having resilience for the future* were lower: 70 and 75 respectively. There is, in other words, room for improvement. Our detailed analysis offers clues about how policy-makers and practitioners may achieve this. In general, the greatest gains are associated with focussing on raising levels of capability on the four money use behaviours (*spending restraint, active saving, not borrowing for daily expenses* and *restrained consumer borrowing*) and on increasing levels of *financial confidence*. But the relative importance of these five factors differs across the various measures of financial well-being. And each of them, in turn, has its own unique set of influences. Consequently, the focus of policy and practice, and the nature of any interventions, will depend on which aspect of financial well-being is of particular interest.

Raising levels of financial well-being and promoting capable behaviours is a complex process, potentially involving many actors. Schools clearly have an important part to play, as do organisations such as NAV and consumer organisations. But so, too, do banks and other financial institutions. It has led governments in other countries, such as the United Kingdom, the United States, Canada, New Zealand and Australia to nominate a body to co-ordinate work in this area, which is often either part of the regulatory framework or directly accountable to government.[11] These bodies typically work with a range of stakeholders to develop a national strategy to raise levels of financial capability and well-being. They undertake surveys to identify the priority areas for interventions, identify and

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[11] For further details see the OECD/INFE Policy Handbook National Strategies for Financial Education http://www.oecd.org/g20/topics/employment-and-social-policy/National-Strategies-Financial-Education-Policy-Handbook.pdf

promote best practice regarding service delivery as well as identifying gaps in provision that need to be filled. The well-being survey, therefore, provides the bedrock for developing a national strategy of this kind in Norway.

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Appendix 1: The Questionnaire

The questionnaire consists of around 100 questions in five sections, plus background variables.

Section A: Opening Module

The role IP has in making the household's financial decisions. General indicators of the household's financial situation.

Section B: Day-to-day Money Management

Indicators of money management routines and behaviours including planning, borrowing and spending. Bank accounts. Financial buffers. Keeping commitments. Arrears and overdrafts.

Section C: Planning for the future

Indicators of financial resilience for the future including saving and ability to handle unexpected expenses. Income, income change, mortgages, consumer loans and credit card debts. Retirement.

Section D: Product Purchase

Products held and products that one has actively made decisions about and purchased. Knowledge about financial products and risk. Assessments about one's ability to manage, plan and make financial decisions.

Section E: Role in managing money

Indicators on the role that IP plays in the day-to-day management of the household's finances. Financial education at home and at school.

Section F: Motivations

Psychological factors and personality traits.

Core background variables

Gender

age (continuous),

whether IP lives with a partner/as a couple,

whether there are children aged under 18 in household and if yes: how many and the age of the youngest child.

Housing tenure (outright owner, mortgagor, tenant, lives with parents, other),

IP's country of birth, parents' county/countries of birth.

Economic activity status (full-time employee, part-time employee, self-employed, unemployed and looking for work, not working through long-term sickness or disability, fully retired, partially retired, not working for other reason).

Geographical region

Education (degree level or above, vocational qualifications (post school), neither degree nor vocational qualifications).

Appendix 2: About the Survey

Administered by Kantar TNS Gallup Norway, SIFOs financial well-being survey 2017 was fielded between 08.03.2017 and 07.04.2017. The sample was based on the TNS internet panel, which is a pre-recruited selection of people over the age of 15. Participants are randomly recruited through other telephone (fixed and mobile) and postal surveys and constitute an active panel. The panel is certified according to ISO 26362.

The size of the panel indicates that it is possible to draw representative samples from this to different surveys. Since the panellists' background characteristics are already mapped, it is possible to address the survey directly to the target population. The population in this survey was pre-stratified by age, gender, place of residence and education level. Respondents were drawn randomly within each stratum.

The survey was conducted over the Internet. As most Norwegians have got online access, web panels are increasingly being used for interview surveys. Web-based design provides great flexibility in the formulation of the questionnaire, allowing complex question batteries and filter structures (as was needed in this survey). The questionnaire was sent as an invitation to participate, along with a link to its address on the Internet.

The desired sample was 2.000 respondents, representative of the target population (Norwegian adults 18-80 years of age). The survey was sent to 4.356 respondents (Table A2.1). Over-sampling is in principle not an issue: although it would allow faster implementation, people who are easily accessible could be overrepresented in the selection. Invitations to participate are sent sequentially according to actual response.

Table A2.1: Response. Number of participants

Status	Number of participants
Invitations	4.356
No contact	2.226
Contact	2.130
Drop-out:	
Incomplete forms	85
Refused to participate	0
Technical problems	02
Number of interviews	**2043**

Overall, the survey was opened by 2,130 respondents (49%). The proportion is somewhat lower than in "standard" panel surveys, which can be due to the length of the interview. Among the 2.130 panellists, 85 did not return a full response. Nobody opened the form without filling it out. The fieldwork was completed with 2,043 respondents, which is 47% of all invitations. The number of interviews constitute 96% of those who received the survey.

The sample largely follows the population: it is slightly overrepresented in age groups 45-59 years and correspondingly underrepresented among the younger. Women are slightly overrepresented, while the place of residence distribution follows the population. This is also largely the case for the sample distribution of achieved education levels. The final sample is weighted according to population distribution. Weighting is performed with Rim (Random Iterative Method) weighting.

Appendix 3: Component tables

Financial wellbeing

Meeting commitments		Structural coefficient
b3	How often has no money for food and expenses	0.56
b18	Ability to pay bills	0.59
b19	How often payment problems at the final reminder due to lack of money	0.58
Financially comfortable		
b1	How often has money left over at the end of the month	0.48
a2	How good/bad is your current financial situation	0.53
a3	How confident are you about financial situation in next 12 months	0.48
a5x	My finances allow me to do the things I want and enjoy life	0.51
Resilience for the future		
c3	How much could cover of an unexpected expense of one month's income	0.53
c4	How much would need to borrow to cover unexpected expense	0.52
c5	How long could cover fall of income by a third without having to borrow	0.45
c10	Savings in terms of number of months' income	0.50

Overall financial wellbeing		Structural coefficient
b1	Money left over	0.31
b3	No money for food and expenses	0.31
b18	Ability to pay bills	0.31
b19	How often payment problems at the final reminder due to lack of money	0.28
c3	How much of an unexpected expense equivalent to one month's income	0.33
c4	How much would need to borrow to cover unexpected expense	0.32
c5	How long could cover fall of income by a third without having to borrow	0.30
c10	Savings in terms of number of month's income	0.28
a2	How is your current financial situation	0.32
a3	How confident are you about financial situation in next 12 months	0.29
a4	How much control of finances do you feel you have	0.27

Behaviours

Spending restraint		Structural coefficient
b8	Lack of money because high consumption	0.55
B9x	Before buys something considers carefully whether really needs it	0.36
b20	Impulsive, buys things one cannot afford	0.56
b24	Is more of a saver than a spender	0.47
Active saving		
c1	How often saves money to cover unexpected expenses	0.47
c6	Tries to save money for the future	0.53
c7	Tries to save money regularly	0.49
c8	Makes sure always has money saved	0.51
Not borrowing for day to day expenses		
b10	How often uses credit for food and expenses	0.61
b11	How often borrows money to pay off debts	0.58
b16	How often is overdrawn	0.54
Restrained consumer borrowing		
numcred	Number of consumer credit commitments (unsecured and secured)	.71
tot_ucred	Total amount owed in unsecured credit commitments	.71
Planning use of income		
b5	How often plans how to use the income	0.57
b6	How precisely plans how to use the income	0.57
b7	How often keeps to plan	0.58
Keeping track of money		
b12	Knows how much money spent last week	0.58
b14	How often checks account	0.55
b15	In what ways do you check account	0.60
Informed financial decision-making		
d12	Always gets information when has financial decision to make	0.54
d20x	Tries to stay informed about money matters	0.57
D21x	Spends lot of time considering options before making financial decisions	0.62
Active product choice		
d4	How often checks that has the best product for needs	0.47
d6_7	Extent of information search before buying products	0.62
d8	How carefully checked terms and conditions of product bought	0.63

Knowledge and experience

Knowledge of money management		Structural coefficient
b23	Knowledge of how to plan spending against income	0.47
d10	Knows enough about savings products to choose the right one	0.61
d11	Knows enough about consumer loans and credit cards to choose the right one	0.64
Knowledge of how to compare financial products		
d13	Knowledge of how to use a price comparison website...	0.53
d14	Knowledge of how to compare terms and conditions of insurance products	0.61
d14x	Knowledge of how to compare terms and conditions of credit products	0.60
Experience of money management		
e1x	Experience of planning how money is spent	0.58
e2x	Experience of ensuring bills and credit commitments are paid	0.56
e3x	Experience of financial decision-making	0.59
Experience of financial product marketplace (Financial inclusion)		
d1	Number of products held	0.71

d5	Number of products purchased in last 3 years	0.71

Understanding of managing financial risk

d15	A high-return investment is also likely to be high risk	0.60
d16	You can reduce risk by saving into more than one account	0.60
d18x	Borrowing over three times income increases risk of mortgage payment problems	0.53

Psychological factors

Time orientation		Structural coefficient
f1	I focus on the long term	0.51
f2	I live more for the present day than for tomorrow	0.64
f3	The future will take care of itself	0.58
Impulsivity		
f4	I often do things without giving them much thought	0.59
f5	I am impulsive	0.61
f6	I says things before I have thought them through	0.53
Social status		
f7	I care about how other people see me	0.61
f8	I am concerned about my status among people I know	0.61
f9	Want other people to respect me	0.50
Self control		
f10	I am good at resisting temptation	0.65
f11	I find it difficult to break undesirable habits	0.50
f12	I am always in control of my actions	0.57
Locus of control		
f13	I can pretty much determine what happens in my life	0.68
f14	My financial situation is largely out of my control	0.45
f15	When I make financial plans, I do everything I can to succeed	0.58
Action orientation/inertia		
f16x	When I have a difficult decision to make I put it off to another day	0.66
f17x	When I have something to do that I don't like, I do it immediately to get it done	0.48
f18x	When I have to choose between a lot of options, I find it difficult to decide	0.57
Attitudes towards spending, saving and borrowing		
b25	Prefers to buy things on credit rather than wait and save up	0.55
B26	Prefers to cut back rather than put everyday spending on a credit card	0.46
c2	Prefers to spend rather than save up for unexpected expenses if income drop	0.50
c9	Finds it more satisfying to spend money than to save it	0.49
Financial confidence		
d22x	About managing money day-to-day	0.56
d23x	About planning for financial future	0.59
d24x	About making financial decisions on financial products and services	0.58

Appendix 4: Deriving and scaling the components

Our approach to deriving components of financial well-being and capability from the survey questions involved two distinct but related stages:

- Variable derivation and initial allocation against the conceptual model.
- Identification and construction of the underlying components within the different levels of the model.

After an initial review of the data, only valid cases were included in the final data set. Valid cases were defined as those who responded using meaningful responses to at least 15 questions from the questionnaire and for whom a measure of total income could be derived. In addition, some cases were omitted from the sample, involving young people living with their parents who gave information about the household's finances even though they were not responsible for managing them. In total, 122 cases were excluded. Components were derived for only the remaining 1,919 valid cases.

VARIABLE DERIVATION AND ALLOCATION

Variable derivation involves the cleaning of each survey variable relevant to the financial well-being model to make them suitable for use in analysis to identify and construct components in the next stage. Crucial to this, every variable considered for the analysis must include all valid cases in the sample. The great majority of survey questions were, by design, asked of all respondents. Therefore, for these variables, all respondents were represented in the data, whether by a meaningful pre-coded response or a 'don't know' response. In other instances, we used a sequence of questions with filtering within the questionnaire to create a survey variable.

It is also crucial to the analysis that the response categories of all the variables used are scaled or at least ordered. Most survey variables were already designed in this way, but some needed to be derived or re-constructed to take this into account. Additionally, we recoded valid missing responses (such as 'don't know' and 'prefer not to answer') to the most relevant meaningful response category. Typically, this was a middle value within the scale, or the most common ('modal') value. This was intended to be parsimonious.

We also re-ordered the response categories wherever necessary to ensure that a low score corresponded to low well-being or capability and a high score to high well-being or capability. In some cases, this involved the wholesale reversal of the order of the response categories. This was done to facilitate the interpretation of the components.

Finally, the resulting analysis variables were allocated provisionally to the relevant level and element of the conceptual model, for example, a behaviour or knowledge and experience. For the small number of variables that were of potential relevance to more than one level of the framework, they were provisionally allocated to both.

IDENTIFICATION AND CONSTRUCTION OF COMPONENTS

We used Principal Components Analysis (PCA) to both identify and construct financial well-being and financial capability components based on the survey variables. PCA is one of several analytical techniques which explore the patterns occurring naturally within the data. It looks across respondents' answers to identify commonality in their answers to the different survey variables, and reduces variables to underlying components. PCA is one such technique which is suitable for

exploratory analysis, where there are no prior assumptions about which particular variables relate well to each other. It is also the most robust of these techniques.

We applied PCA to the variables cleaned and derived in the previous stage. All analysis was undertaken *within* each level of the conceptual model in turn. As such, we assumed *a priori* (based on the conceptual model) that these variables related to a particular level but not what the particular components might be within that level. We undertook several suites of PCAs: one suite per level.

IDENTIFYING COMPONENTS

Identifying the components was an iterative process for each level of the model. First, all variables identified within a level were entered into an initial PCA. We used the results of the initial PCA (which did not specify how many components to return) against diagnostic criteria to identify the optimal solution.[12] We then re-ran the PCA requesting the number of solutions indicated by the optimal solution and interpreted the resulting provisional components based on the 'loading' of the variables on each returned component. Loading is a measure of the correlation of the observed variable with the underlying component and is given by the structural coefficient. Interpretability of the resulting components was important, as was ensuring that components were indicated by more than one variable and ideally by more than two.

When we were satisfied that we had interpretable and meaningful solutions, we identified and extracted the higher-loading variables for each component in turn.[13] We tested the reliability and sampling adequacy of the data for each subset of variables.[14] We also re-ran a one-component PCA for each subset of variables to check that the results remained intuitive.

The exception to this iterative approach was for the six psychological traits, such as time orientation. For these, the survey variables (three for each) were informed directly by existing, validated psychological scales. As such, these were explored in their defined sets and each set was found to reflect the same construct, also demonstrating strong reliability and sampling adequacy.

CONSTRUCTING COMPONENTS

With the components now defined, we constructed and rescaled them so that they took on a potential score ranging from a true minimum of 0 to a true maximum of 100. For ease of interpretation, an absolute scale like this is desirable. It also allows for comparisons in average scores between components.

However, PCA (and its related techniques) describe component scores on relative scales (respondents relative to each other, indicated by standard deviations from a mean of zero). To address this, for each component, we force-coded a 'fake' case to score the minimum score on each variable contributing to each component in turn, and another to score the maximum. The PCA was re-run to include these two minimum / maximum cases, and we re-scaled the resulting scores

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[12] Diagnostic criteria included: explained variance, eigenvalues, scree plot and Monte Carlo parallel run.

[13] We used a threshold of 0.30 as our guide for considering a variable to be important to a component.

[14] Using the Cronbach's alpha and Kaiser-Meyer-Olbin (KMO) statistics respectively.

between 0 and 100,[15] calculated based on the relative scores for these two cases. The two fake cases were then removed for all subsequent analysis

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[15] Which takes the respondent's score, subtracts the minimum possible from this, and divides this by the difference between the maximum and minimum possible scores, and then multiplies the result by 100.

Appendix 5: Bivariate Analysis

Table A5.1 Components of Well-Being. Norway 2017. N=1919

	WB1s		WB2s		WB3s		OWBs	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Overall	90.85	16.45	69.62	20.90	73.34	26.14	77.77	18.78
Gender [1]								
Male	90.41	17.38	69.63	21.42	74.59	26.41	77.97	19.31
Female	91.27	15.61	69.25	20.48	72.47	25.82	77.53	18.28
Age [2]								
u/30	87.52	18.58	62.05	20.70	66.20	26.25	71.72	19.11
31-40	87.12	19.05	64.21	21.23	65.60	28.27	72.15	20.10
41-50	87.68	18.51	66.85	21.33	68.08	25.55	74.17	19.04
51-60	92.60	14.75	72.40	20.74	75.47	25.70	80.03	18.50
61-70	95.64	11.07	76.02	18.45	84.24	20.67	84.95	14.45
70+	97.14	9.52	79.63	15.89	87.96	18.63	87.96	12.61
Income [3]								
Quint 1	85.06	21.41	56.97	23.20	63.83	31.53	68.12	22.62
Quint 2	88.17	18.59	63.49	21.36	68.86	27.88	73.19	19.92
Quint 3	92.34	14.27	71.43	19.06	76.60	23.73	79.93	16.81
Quint 4	92.79	13.27	73.97	16.98	75.72	22.69	80.75	15.23
Quint 5	96.09	10.29	82.01	13.55	83.08	18.72	87.25	11.43
Fam. Type [4]								
Couples	94.94	11.90	76.12	18.00	80.52	21.93	83.71	14.96
Couples w/child<18	87.87	18.45	66.16	19.50	67.39	26.19	73.76	18.62
Couples w/child 18+	93.06	13.32	74.16	18.83	77.46	21.90	81.47	15.91
Single	89.19	18.67	65.79	21.78	70.87	29.36	74.89	20.65
Lone parent w/child<18	80.64	19.85	54.08	23.78	60.65	30.20	64.84	22.45
Lone parent w/child 18+	84.94	23.00	60.01	29.05	62.77	33.87	69.06	26.76
Other	86.12	18.75	59.73	22.17	65.92	26.43	70.42	19.86
Housing tenure [5]								
Renters	83.97	21.81	57.72	22.33	61.14	29.98	67.24	21.98
Owners w/ mortgage	91.78	14.80	70.64	19.15	73.22	24.08	78.50	16.86
Outright owners	95.78	11.45	79.17	18.61	88.92	18.76	87.54	14.18
Work status [6]								
Employed fulltime	91.79	15.34	71.91	19.25	73.61	24.80	79.06	17.28
Employed part-time	87.11	19.08	64.25	21.64	68.92	26.42	73.22	19.58
Self-employed	83.95	24.01	65.68	23.58	67-78	29.47	72.27	23.78
Retired	96.87	9.02	79.10	15.91	86.06	19.86	87.06	12.77
Unemployed	78.36	23.57	45.85	23.94	54.45	33.93	58.96	24.74
Disabled	87.07	19.00	61.13	23.62	66.81	31.88	71.18	22.54
Other	87.57	17.85	59.21	19.50	67.38	24.26	71.07	17.61
Region [7]								
Central East	90.91	17.27	71.02	20.95	73.11	26.92	78.20	19.26
Rest of East	91.16	15.20	69.00	20.58	72.05	25.96	77.25	18.29
South & West	90.01	17.25	68.56	21.42	74.01	26.33	77.31	19.28
Middle & North	91.72	16.05	69.50	20.62	75.43	24.91	78.67	18.07

[1] NS throughout [2] p<.001 throughout [3] p<.001 throughout [4] p<.001 throughout [5] p<.001 throughout [6] p<.001 throughout [7] NS throughout

Table A5.2 Components of Money Use Behaviours. Spending Restraint (beh1s), Active Saving (beh2s), Not Borrowing for Daily Expenses (beh3s), Restrained Consumer Borrowing (beh4s). Norway 2017. N=1919

	Beh1s		Beh2s		Beh3s		Beh4s	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Overall	71.46	18.23	74.57	21.94	93.46	11.81	94.78	9.05
Gender [1]								
Male	72.22	17.90	72.35	22.40	92.81	12.68	94.50	9.76
Female	70.54	18.76	76.32	21.33	94.11	10.71	95.55	7.84
Age [2]								
u/30	67.41	21.30	72.49	22.60	91.87	11.42	97.47	5.43
31-40	66.52	20.34	73.66	22.94	92.57	12.68	95.08	7.39
41-50	68.21	19.05	71.31	24.38	91.55	13.89	92.05	11.42
51-60	74.61	15.35	77.14	21.23	93.85	12.35	93.54	9.69
61-70	76.22	13.85	76.34	19.63	96.42	7.70	95.96	7.25
70+	78.09	14.15	75.07	18.86	95.20	10.20	96.62	10.47
Income [3]								
Quint 1	68.79	20.17	67.24	25.39	91.62	13.05	95.57	9.02
Quint 2	71.17	19.29	72.66	22.34	92.17	13.76	94.68	10.99
Quint 3	73.38	17.02	74.26	20.10	93.90	11.09	95.29	7.72
Quint 4	70.86	17.56	76.90	21.22	94.59	9.45	95.06	7.36
Quint 5	72.52	17.19	80.67	18.07	95.17	10.07	94.61	8.28
Fam. Type [4]								
Couples	74.92	16.26	77.59	19.97	95.28	9.39	96.02	7.06
Couples w/child<18	67.08	19.46	71.87	22.59	91.98	12.25	93.42	9.15
Couples w/child 18+	73.56	15.50	77.15	20.88	94.03	11.48	92.42	12.98
Single	69.73	19.69	72.24	22.74	92.33	13.73	94.91	9.81
Lone parent w/child<18	70.45	17.46	71.85	22.44	91.14	14.51	93.18	9.48
Lone parent w/child 18+	70.31	18.98	75.08	25.73	88.47	20.93	92.53	13.55
Other	68.20	20.16	69.39	24.43	92.53	11.01	97.20	6.40
Housing tenure [5]								
Renters	66.03	20.60	66.10	25.88	90.97	14.15	95.59	8.77
Owners w/ mortgage	71.09	17.86	76.05	20.16	93.45	11.34	93.78	9.54
Outright owners	78.53	14.44	78.33	20.15	96.36	9.05	98.39	4.91
Work status [6]								
Employed fulltime	69.95	19.21	76.64	21.23	93.27	12.25	93.93	9.17
Employed part-time	72.36	17.66	74.02	22.62	93.02	11.51	95.45	7.39
Self-employed	72.99	16.34	68.92	22.99	92.04	12.18	94.80	9.71
Retired	77.64	13.54	75.29	19.28	95.74	9.37	96.14	9.40
Unemployed	70.56	19.37	64.32	28.65	92.95	13.40	96.64	5.60
Disabled	68.42	19.25	69.13	24.03	91.64	14.90	94.02	10.58
Other	68.14	19.35	70.24	23.11	92.71	8.93	98.54	3.87
Region [7]								
Central East	70.88	18.77	74.56	21.45	92.42	13.09	95.31	8.73
Rest of East	71.89	17.35	74.34	21.87	93.52	12.11	95.03	8.32
South & West	71.07	18.68	73.66	22.59	93.57	10.98	94.80	9.59
Middle & North	71.84	18.65	75.17	21.67	94.56	10.48	95.04	8.51

[1] NS throughout, except Beh2s: p<.05 [2] p<.01 (Beh1s), p<.001 (Beh2s, Beh3s), NS (Beh4s) [3] p<.05 (Beh1s), NS (Beh2s, Beh3s), p<.001 (Beh4s) [4] p<.001 (Beh1s, Beh3s, Beh4s) NS (beh2s) [5] p<.001 throughout [6] p<.01 (Beh1s), p<.001 (Beh2s, Beh3s), NS (Beh4s) [7] NS throughout

Table A5.3 Components of Money Management Behaviours. Norway 2017. N=1919

	Beh5s		Beh6s		Beh7s		Beh8s	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Overall	70.43	16.55	52.18	33.64	54.41	26.82	66.00	17.03
Gender [1]								
Male	70.19	17.15	59.17	32.42	51.24	28.14	66.09	17.11
Female	70.95	16.14	45.20	33.25	57.55	25.06	66.21	16.55
Age [2]								
u/30	71.14	17.86	51.86	31.98	57.28	23.52	65.19	14.41
31-40	70.75	17.41	54.19	33.76	59.22	25.12	66.07	16.44
41-50	68.98	17.75	53.96	35.11	56.80	25.64	65.35	18.06
51-60	70.18	16.16	53.55	32.11	51.20	28.21	64.93	17.63
61-70	71.49	15.13	50.73	34.53	52.30	28.61	67.92	17.20
70+	70.98	14.40	46.22	34.04	46.06	28.78	68.65	16.97
Income [3]								
Quint 1	69.27	18.21	49.94	34.18	55.28	27.92	67.24	16.88
Quint 2	70.78	16.53	49.62	32.98	56.90	27.01	67.67	16.33
Quint 3	68.96	16.15	45.56	33.95	53.82	26.38	65.75	15.09
Quint 4	71.34	16.06	57.22	32.46	53.62	26.22	66.40	16.71
Quint 5	72.52	16.17	59.59	32.40	51.85	26.46	63.40	18.86
Fam. Type [4]								
Couples	71.41	15.81	52.38	33.58	53.31	26.90	66.45	16.48
Couples w/child<18	70.55	16.29	56.85	32.81	58.92	23.68	66.29	16.27
Couples w/child 18+	71.10	16.56	52.61	35.19	50.12	29.35	63.28	17.89
Single	69.28	17.67	49.81	34.12	52.58	28.75	66.67	18.62
Lone parent w/child<18	68.76	16.52	54.86	32.91	60.05	24.13	68.50	17.70
Lone parent w/child 18+	69.73	18.72	51.08	34.52	65.52	22.63	65.55	19.55
Other	70.43	18.01	47.12	31.71	53.99	25.71	65.04	13.03
Housing tenure [5]								
Renters	68.37	18.17	48.14	33.94	56.98	24.54	66.30	15.51
Owners w/ mortgage	71.14	16.23	54.22	33.13	56.33	25.82	66.22	16.58
Outright owners	71.28	15.98	50.39	34.06	45.14	30.42	65.74	18.99
Work status [6]								
Employed fulltime	70.39	17.07	56.97	32.67	53.60	26.41	64.38	17.13
Employed part-time	69.91	16.04	41.45	34.85	57.84	25.46	66.03	17.26
Self-employed	68.52	18.31	53.42	32.16	48.30	30.91	67.73	17.82
Retired	71.63	14.55	48.90	34.02	49.21	29.13	69.54	16.14
Unemployed	69.16	21.86	47.52	33.70	64.66	25.82	69.04	17.20
Disabled	69.90	16.56	46.27	33.87	60.06	26.97	68.68	16.37
Other	71.81	16.81	51.60	32.05	58.62	21.64	65.29	14.76
Region [7]								
Central East	70.12	16.69	56.21	33.81	54.36	25.70	65.79	16.06
Rest of East	71.81	16.07	50.56	33.81	57.73	26.31	68.34	16.29
South & West	69.32	16.92	49.22	33.09	52.41	27.00	64.85	17.34
Middle & North	71.53	16.86	54.43	33.14	52.98	28.36	65.66	17.44

[1] p<.05 (Beh5s), p<.001 (Beh6s, Beh7s), NS (Beh8s) [2] NS (Beh5s), p<.001 (Beh6s, Beh8s), p<.01 (Beh7s) [3] NS (Beh5s, Beh7s, Beh8s), p<.01 (Beh6s) [4] NS (Beh5s, Beh6s), p<.001 (Beh7s, Beh8s) [5] p<.01 (Beh5s), p<.001 (Beh6s, Beh7s, Beh8s) [6] p<.001 (Beh5s, Beh6s, Beh8s), p<.01 (Beh7s) [7] NS (Beh5s, Beh6s, Beh8s), p<.05 (Beh7s)

Table A5.4 Components of Other Psychological Factors. Norway 2017. N=1919

	Attitudes to spending, saving & borrowing (att1s)		Financial Confidence (att2s)	
	Mean	SD	Mean	SD
Overall	73.39	17.56	71.23	19.35
Gender [1]				
Male	71.49	18.00	70.74	20.28
Female	75.17	17.00	71.56	18.55
Age [2]				
u/30	71.74	17.63	67.74	21.21
31-40	68.98	18.62	71.47	19.60
41-50	69.70	17.80	70.27	20.30
51-60	76.04	16.43	72.40	18.03
61-70	77.70	16.13	72.52	19.11
70+	77.17	16.76	73.64	16.46
Income [3]				
Quint 1	72.05	18.43	68.13	19.78
Quint 2	73.60	17.44	69.54	20.29
Quint 3	73.80	17.49	69.10	19.09
Quint 4	73.56	16.66	73.37	18.57
Quint 5	73.49	18.07	76.01	18.17
Fam. Type [4]				
Couples	75.97	17.02	72.74	19.37
Couples w/child<18	69.80	17.89	70.98	18.22
Couples w/child 18+	74.21	16.61	71.70	18.99
Single	71.99	18.18	70.44	20.47
Lone parent w/child<18	71.54	17.46	67.37	21.28
Lone parent w/child 18+	78.40	15.62	68.09	21.95
Other	71.75	17.49	67.89	18.54
Housing tenure [5]				
Renters	68.78	18.37	64.82	20.73
Owners w/ mortgage	73.07	17.41	72.53	18.58
Outright owners	79.42	15.49	74.06	19.09
Work status [6]				
Employed fulltime	71.76	18.10	72.04	19.72
Employed part-time	74.26	16.48	69.19	19.65
Self-employed	74.44	16.90	69.13	20.17
Retired	77.72	16.60	74.07	17.53
Unemployed	73.16	15.43	68.30	23.60
Disabled	72.02	17.35	68.93	18.56
Other	72.82	17.83	66.59	19.44
Region [7]				
Central East	71.83	18.70	72.55	17.65
Rest of East	74.59	16.66	71.10	19.98
South & West	73.56	17.74	69.73	20.43
Middle & North	73.05	17.11	71.83	19.04

[1] p<.01 (Att1s), p<.001 (Att2s) [2] p<.001 (Att1s), p<.01 (Att2s) [3] NS (Att1s), p<.01 (Att2s) [4] NS (Att1s), p<.01 (Att2s) [5] p<.001 throughout [6] p<.05 (Att1s), p<.001 (Att2s) [7] NS throughout

Table A5.5 Components of Financial Knowledge and Experience. Norway 2017. N=1919

	Knowledge of:				Experience of:				Understanding of:	
	Money management		Choosing financial products		Money management		Financial products marketplace		Risk	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Overall	59.21	17.61	62.13	19.31	95.98	12.44	51.50	18.79	75.91	17.76
Gender [1]										
Male	61.07	17.93	66.43	17.66	96.25	12.45	52.31	19.50	78.80	17.95
Female	57.34	17.09	57.82	19.93	95.70	12.43	50.68	18.02	73.00	17.09
Age [2]										
u/30	57.09	17.15	61.48	19.71	94.02	15.90	52.40	19.76	68.17	18.84
31-40	57.71	18.61	65.61	18.95	95.07	12.88	57.80	20.23	72.59	18.84
41-50	59.88	18.06	64.07	19.36	95.92	12.81	55.16	19.25	77.96	17.30
51-60	60.85	17.14	62.69	18.87	97.17	10.00	51.52	16.73	79.86	15.14
61-70	59.69	16.73	59.24	19.98	97.06	8.68	45.33	15.96	79.37	16.00
70+	60.71	17.95	57.91	17.24	97.12	13.11	43.22	15.69	79.04	16.64
Income [3]										
Quint 1	56.39	18.23	59.76	19.77	97.20	12.80	46.62	17.83	74.73	17.47
Quint 2	58.61	17.80	61.46	19.52	97.56	9.00	48.91	19.01	73.91	18.30
Quint 3	56.97	16.16	57.47	19.65	93.36	15.37	46.39	17.21	73.00	18.08
Quint 4	60.33	17.53	65.38	17.57	95.84	11.75	57.13	18.30	78.17	17.53
Quint 5	63.94	17.39	66.98	18.35	95.82	12.45	59.15	17.60	80.33	16.13
Fam. Type [4]										
Couples	60.40	17.03	61.67	19.27	95.22	13.36	50.50	18.45	76.51	18.34
Couples w/child<18	60.02	17.90	66.81	18.33	94.76	13.07	60.25	17.01	76.70	17.18
Couples w/child 18+	61.35	16.46	62.13	19.36	95.37	12.82	52.44	18.01	78.44	18.41
Single	57.42	18.21	59.70	19.19	98.75	6.46	48.35	18.29	75.74	16.47
Lone parent w/child<18	59.43	16.89	63.36	23.57	96.96	11.84	51.83	20.50	72.97	17.69
Lone parent w/child 18+	56.90	20.23	55.73	17.37	100	0	49.98	18.97	77.20	15.36
Other	55.75	17.93	61.12	19.17	94.58	16.79	45.29	19.14	71.18	18.49
Housing tenure [5]										
Renters	54.18	17.64	60.69	19.67	94.95	14.99	43.68	18.32	70.91	17.77
Owners w/ mortgage	60.82	17.36	63.38	19.37	96.21	11.57	57.17	17.80	76.48	18.11
Outright owners	59.87	17.33	59.79	18.39	96.42	11.82	42.27	15.21	79.85	15.16
Work status [6]										
Employed fulltime	60.25	17.74	64.55	19.52	96.75	10.70	56.60	18.62	76.36	17.98
Employed part-time	57.75	16.93	58.83	18.01	94.34	14.81	47.14	17.89	71.68	17.98
Self-employed	59.16	18.28	66.43	17.78	97.69	7.68	57.06	18.26	80.76	14.11
Retired	60.59	17.08	59.15	18.63	96.88	11.53	44.17	16.09	79.30	16.57
Unemployed	55.08	17.97	64.57	22.55	90.04	23.09	49.07	19.43	72.05	17.86
Disabled	57.92	16.80	59.38	19.60	95.81	12.14	45.62	17.01	75.61	17.03
Other	55.16	18.30	59.32	18.28	93.34	15.62	48.11	18.87	71.42	18.38
Region [7]										
Central East	58.81	18.25	63.31	19.13	95.76	12.83	52.61	18.93	75.35	17.52
Rest of East	59.05	17.38	62.12	19.50	95.89	12.22	49.56	17.48	75.43	17.60
South & West	58.81	17.83	61.23	19.39	95.70	13.08	51.61	19.34	76.23	18.08
Middle & North	60.68	16.66	62.16	19.12	96.88	10.99	52.66	19.32	76.80	17.77

[1] p<.001 (Kn1s, Kn2s, Kn5s), p<.05 (Kn3s), p<.01 (Kn4s) [2] p<.001 throughout, except Kn3s (NS) [3] p<.001 (Kn1s, Kn4s), p<.01 (Kn2s, Kn3s, Kn5s) [4] NS (Kn1s), p<.001 (Kn2s, Kn4s), p<.05 (Kn3s, Kn5s) [5] p<.001 throughout, except Kn4s (NS) [6] NS (Kn1s, Kn5s), p<.001 (Kn2s, Kn3s, Kn4s) [7] NS throughout

Table A5.6 Components of Personal Traits: Time orientation (TOs), Impulsivity (IMPs), Social Status (SOCs), Self-control (SELFs), Locus of Control (LOCs), Action Orientation (AO). Norway 2017. N=1919

	TOs		IMPs		SOCs		SELFs		LOCs		AOs	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Overall	69.90	19.24	66.08	19.86	51.59	19.33	57.50	15.21	70.64	13.14	50.20	18.08
Gender [1]												
Male	68.32	20.34	67.05	20.58	52.60	19.85	59.17	14.93	70.43	13.49	51.17	17.69
Female	70.95	18.43	65.02	19.47	50.02	18.95	56.23	15.54	71.06	13.11	48.98	18.55
Age [2]												
u/30	64.31	20.17	60.05	19.89	41.30	18.37	54.31	16.41	71.16	15.11	43.64	19.28
31-40	66.01	20.29	60.15	21.93	45.83	20.08	53.51	15.70	70.41	13.62	47.16	18.13
41-50	66.41	19.74	63.68	20.78	52.25	19.18	54.77	15.11	69.40	13.88	50.02	17.10
51-60	72.58	17.99	69.08	17.80	56.39	17.69	59.96	13.70	70.24	11.58	53.27	17.72
61-70	75.54	17.56	72.48	17.52	56.71	17.23	61.58	13.86	71.60	12.88	54.01	16.88
70+	75.37	16.73	74.39	16.34	58.91	17.47	65.18	12.93	72.29	11.69	54.27	16.54
Income [3]												
Quint 1	66.54	19.68	63.94	20.76	50.77	20.97	55.83	16.92	68.80	15.57	45.88	18.74
Quint 2	67.69	20.78	65.80	20.76	51.00	19.08	57.54	15.02	70.13	13.80	48.19	18.52
Quint 3	70.90	18.14	68.06	19.01	53.90	19.54	58.80	14.40	70.39	12.88	50.68	16.91
Quint 4	70.81	19.73	66.02	18.55	51.89	19.57	57.29	15.12	71.34	11.64	51.94	17.76
Quint 5	72.45	18.04	66.16	20.91	48.86	17.82	58.89	15.02	73.15	11.92	53.89	17.80
Fam. Type [4]												
Couples	72.89	18.74	69.34	18.70	53.37	19.25	60.50	14.54	71.84	12.58	52.78	17.75
Couples w/child<18	68.15	19.20	62.61	19.79	48.33	18.29	54.95	14.92	70.22	12.45	50.53	17.47
Couples w/child 18+	71.23	19.04	66.60	22.29	55.53	20.43	58.80	15.62	68.85	12.92	52.68	17.67
Single	67.08	20.24	63.72	21.09	51.65	18.99	56.48	15.90	70.84	14.25	48.34	18.62
Lone parent w/child<18	71.48	15.49	68.45	17.20	49.81	19.54	55.38	14.21	68.82	14.99	48.20	18.05
Lone parent w/child 18+	69.85	19.58	68.86	18.48	54.51	17.93	58.78	15.26	71.63	15.95	43.00	13.38
Other	63.71	19.85	63.25	20.61	45.03	20.82	54.24	15.81	68.96	14.45	42.11	18.05
Housing tenure [5]												
Renters	62.52	21.44	60.66	22.04	48.34	20.25	54.80	16.53	68.85	14.44	44.97	19.76
Owners w/ mortgage	70.32	18.51	66.52	19.47	51.13	19.10	57.81	15.18	71.16	12.86	51.70	17.54
Outright owners	75.70	17.46	70.68	18.04	55.35	18.96	60.68	13.56	71.59	13.15	50.75	17.07
Work status [6]												
Employed fulltime	68.66	19.64	63.98	20.25	49.56	18.90	56.58	15.08	71.57	12.84	50.84	17.38
Employed part-time	69.90	19.18	65.10	19.83	51.84	20.80	57.13	14.61	69.59	13.15	49.22	17.83
Self-employed	66.07	20.69	65.70	19.65	59.01	20.22	62.47	14.33	70.54	15.56	49.70	18.70
Retired	75.11	17.73	73.77	16.48	58.02	17.89	63.90	13.12	72.11	12.09	53.91	16.20
Unemployed	61.86	21.14	67.02	22.19	48.54	21.18	50.77	20.71	66.02	17.25	47.24	21.61
Disabled	68.76	18.82	65.29	21.03	53.21	18.19	55.46	16.36	66.39	14.59	50.33	18.08
Other	68.08	19.62	63.27	20.78	43.70	19.44	54.54	15.09	70.40	13.72	40.60	21.24
Region [7]												
Central East	69.25	19.38	64.66	19.46	50.70	18.72	57.44	14.71	70.83	13.96	50.94	18.00
Rest of East	70.34	19.02	68.43	19.88	51.44	20.19	58.79	15.87	71.30	13.10	50.09	18.18
South & West	69.29	19.38	65.25	20.11	51.32	19.27	57.06	15.18	69.65	13.19	49.64	18.60
Middle & North	69.71	20.33	65.70	20.75	51.94	19.66	57.50	15.44	71.71	12.79	49.65	17.55

[1] Chisq: p<.001 (SOCs, AOs), NS (TOs, IMPs, SELFs, LOCs) [2] t-test: p<.001 throughout, except NS (LOCs) [3] t-test: p<.001 (TOs, LOCs, AOS), p<.05 (SELFs), NS (IMPs, SOCs) [4] Chisq: p<.001 (LOCs), p<.01 (SELFs), NS (TOs, IMPs, SOCs, AOs), [5] Chisq: p<.001: (all except SOCs), p<.05: (SOCs) [6] Chisq: p<.001 throughout [7] Chisq: NS throughout.

Table A5.7 Grouping variables. Norway 2017. N=1919.

```
. fre gender

gender

                          Freq.     Percent      Valid       Cum.

Valid    1 Male            916       47.73       47.73       47.73
         2 Female         1003       52.27       52.27      100.00
         Total            1919      100.00      100.00
```

```
. fre income_2_quint

income_2_quint —— Household Income Quintiles

                          Freq.     Percent      Valid       Cum.

Valid    0 Quint 1         332       17.30       17.30       17.30
         1 Quint 2         435       22.67       22.67       39.97
         2 Quint 3         384       20.01       20.01       59.98
         3 Quint 4         374       19.49       19.49       79.47
         4 Quint 5         394       20.53       20.53      100.00
         Total            1919      100.00      100.00
```

Appendix 6: Extended regressions for Chapter 7

Understanding of money management

Source	SS	df	MS			
				Number of obs	=	1,919
				F(30, 1888)	=	9.77
Model	79934.051	30	2664.46837	Prob > F	=	0.0000
Residual	514879.733	1,888	272.711723	R-squared	=	0.1344
				Adj R-squared	=	0.1206
Total	594813.784	1,918	310.121889	Root MSE	=	16.514

kn1s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
kn3s	.2254791	.0320317	7.04	0.000	.1626579	.2883003
kn4s	.1627412	.0238428	6.83	0.000	.1159803	.2095021
a1_new	5.189355	2.155998	2.41	0.016	.9609653	9.417744
income_2	2.18e-06	1.12e-06	1.94	0.052	-1.83e-08	4.38e-06
inc_drop	-.8648503	1.245983	-0.69	0.488	-3.308498	1.578797
inc_inc	.8095369	1.407698	0.58	0.565	-1.951271	3.570345
exp_drop	3.351418	1.96391	1.71	0.088	-.5002446	7.20308
exp_inc	-.5109803	1.149949	-0.44	0.657	-2.766285	1.744325
wrkfulltime	-2.162624	1.575333	-1.37	0.170	-5.252201	.9269535
wrkparttime	-.5723034	1.838688	-0.31	0.756	-4.178378	3.033771
wrkselfemp	-4.285567	2.555824	-1.68	0.094	-9.298104	.7269697
wrkunempl	-1.144414	2.841836	-0.40	0.687	-6.717883	4.429054
wrkdisabled	-.6153993	1.812948	-0.34	0.734	-4.170991	2.940193
wrkother	-1.694291	2.093556	-0.81	0.418	-5.800217	2.411636
d_ratio_2_m~p	.0063914	.0038953	1.64	0.101	-.0012482	.014031
e5	.5093387	.8818386	0.58	0.564	-1.220142	2.238819
oslo_area	-.890314	1.088846	-0.82	0.414	-3.025782	1.245154
east	-.5076914	1.163117	-0.44	0.663	-2.788821	1.773438
south_west	-1.232575	1.12408	-1.10	0.273	-3.437145	.9719958
renter	-3.273264	1.395117	-2.35	0.019	-6.009398	-.5371309
owner_m	-.5131727	1.120797	-0.46	0.647	-2.711303	1.684958
age_u30	-1.010754	1.803956	-0.56	0.575	-4.548711	2.527203
age_30_44	-3.312829	1.57236	-2.11	0.035	-6.396574	-.2290836
age_45_59	-.6426615	1.405832	-0.46	0.648	-3.399809	2.114486
gender0	-3.913946	.7831341	-5.00	0.000	-5.449845	-2.378047
couple	.9335792	.9444722	0.99	0.323	-.9187398	2.785898
numchild	.033765	.5408017	0.06	0.950	-1.026867	1.094397
e6	3.76566	.7874849	4.78	0.000	2.221228	5.310092
immigrant3	1.769258	1.436592	1.23	0.218	-1.048217	4.586732
eduuniv	1.326688	.8482731	1.56	0.118	-.336963	2.990339
_cons	25.74208	3.970564	6.48	0.000	17.95492	33.52923

Knowledge of how to choose financial products

Source	SS	df	MS			
Model	113228.092	30	3774.26973			
Residual	601935.378	1,888	318.821705			
Total	715163.47	1,918	372.86938			

	Number of obs	=	1,919
	F(30, 1888)	=	11.84
	Prob > F	=	0.0000
	R-squared	=	0.1583
	Adj R-squared	=	0.1450
	Root MSE	=	17.856

kn2s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
kn3s	.141129	.0346339	4.07	0.000	.0732042	.2090538
kn4s	.199658	.0257797	7.74	0.000	.1490983	.2502178
a1_new	4.954004	2.331151	2.13	0.034	.3821009	9.525907
income_2	9.80e-07	1.21e-06	0.81	0.419	-1.40e-06	3.36e-06
inc_drop	.9519002	1.347206	0.71	0.480	-1.690269	3.594069
inc_inc	.75662	1.52206	0.50	0.619	-2.228476	3.741716
exp_drop	9.463626	2.123458	4.46	0.000	5.299055	13.6282
exp_inc	-.2970063	1.243371	-0.24	0.811	-2.735532	2.141519
wrkfulltime	-.2659806	1.703313	-0.16	0.876	-3.606554	3.074593
wrkparttime	-.2085194	1.988063	-0.10	0.916	-4.107551	3.690512
wrkselfemp	.5404427	2.763459	0.20	0.845	-4.879312	5.960197
wrkunempl	3.637905	3.072706	1.18	0.237	-2.388351	9.664161
wrkdisabled	.7178363	1.960232	0.37	0.714	-3.126612	4.562284
wrkother	.1283876	2.263636	0.06	0.955	-4.311103	4.567879
d_ratio_2_m~p	.0070003	.0042118	1.66	0.097	-.00126	.0152605
e5	2.454333	.953479	2.57	0.010	.5843496	4.324316
oslo_area	-.3460708	1.177304	-0.29	0.769	-2.655024	1.962882
east	1.219438	1.257608	0.97	0.332	-1.24701	3.685886
south_west	-.4266251	1.2154	-0.35	0.726	-2.810294	1.957044
renter	-.1687567	1.508456	-0.11	0.911	-3.127173	2.78966
owner_m	-1.518971	1.21185	-1.25	0.210	-3.895677	.8577355
age_u30	-.3928833	1.950509	-0.20	0.840	-4.218263	3.432497
age_30_44	.5340807	1.700098	0.31	0.753	-2.800187	3.868349
age_45_59	.9359403	1.520041	0.62	0.538	-2.045197	3.917078
gender0	-8.453566	.8467558	-9.98	0.000	-10.11424	-6.792891
couple	1.212495	1.021201	1.19	0.235	-.7903063	3.215296
numchild	1.130345	.5847363	1.93	0.053	-.0164528	2.277142
e6	1.092505	.85146	1.28	0.200	-.5773969	2.762406
immigrant3	1.533817	1.5533	0.99	0.324	-1.512549	4.580183
eduuniv	3.593455	.9171866	3.92	0.000	1.794649	5.392261
_cons	32.27518	4.293132	7.52	0.000	23.8554	40.69497

Understanding of risk

Source	SS	df	MS		Number of obs	=	1,919
					F(30, 1888)	=	10.43
Model	85935.4944	30	2864.51648		Prob > F	=	0.0000
Residual	518753.202	1,888	274.763349		R-squared	=	0.1421
					Adj R-squared	=	0.1285
Total	604688.697	1,918	315.270436		Root MSE	=	16.576

kn5s	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
kn3s	.1124541	.032152	3.50	0.000	.049397	.1755112
kn4s	.1447444	.0239323	6.05	0.000	.0978079	.1916808
a1_new	2.857146	2.164093	1.32	0.187	-1.387119	7.101411
income_2	2.60e-06	1.12e-06	2.31	0.021	3.93e-07	4.80e-06
inc_drop	1.467942	1.250661	1.17	0.241	-.9848802	3.920764
inc_inc	-.148976	1.412984	-0.11	0.916	-2.920149	2.622198
exp_drop	-.1238054	1.971283	-0.06	0.950	-3.989928	3.742318
exp_inc	-1.04121	1.154267	-0.90	0.367	-3.304983	1.222562
wrkfulltime	.0461363	1.581248	0.03	0.977	-3.05504	3.147313
wrkparttime	-.8431142	1.845592	-0.46	0.648	-4.462728	2.7765
wrkselfemp	2.220015	2.56542	0.87	0.387	-2.811342	7.251371
wrkunempl	1.596037	2.852505	0.56	0.576	-3.998357	7.190431
wrkdisabled	.8988628	1.819755	0.49	0.621	-2.670079	4.467804
wrkother	4.033127	2.101416	1.92	0.055	-.0882151	8.154469
d_ratio_2_m~p	-.0040034	.00391	-1.02	0.306	-.0116717	.0036649
e5	.1200744	.8851494	0.14	0.892	-1.615899	1.856048
oslo_area	-.5139704	1.092934	-0.47	0.638	-2.657456	1.629515
east	-.6114116	1.167484	-0.52	0.601	-2.901105	1.678282
south_west	-.1434949	1.128301	-0.13	0.899	-2.356342	2.069352
renter	-3.653169	1.400355	-2.61	0.009	-6.399575	-.9067628
owner_m	-3.833702	1.125005	-3.41	0.001	-6.040086	-1.627319
age_u30	-11.7542	1.810729	-6.49	0.000	-15.30544	-8.202955
age_30_44	-7.68499	1.578263	-4.87	0.000	-10.78031	-4.589667
age_45_59	-1.384642	1.41111	-0.98	0.327	-4.152141	1.382857
gender0	-5.995118	.7860744	-7.63	0.000	-7.536784	-4.453452
couple	-.9888065	.9480182	-1.04	0.297	-2.84808	.870467
numchild	.2741362	.5428321	0.51	0.614	-.7904777	1.33875
e6	1.584013	.7904415	2.00	0.045	.0337827	3.134244
immigrant3	2.395061	1.441986	1.66	0.097	-.4329918	5.223114
eduuniv	3.221666	.8514579	3.78	0.000	1.551768	4.891563
_cons	61.94796	3.985471	15.54	0.000	54.13157	69.76435

Appendix 7: Stepwise regressions on Spending restraint (beh1)

Weighted results

Spending restraint:

Source	SS	df	MS			
				Number of obs	=	1,919
				F(5, 1913)	=	69.94
Model	99767.3175	5	19953.4635	Prob > F	=	0.0000
Residual	545771.486	1,913	285.296125	R-squared	=	0.1545
				Adj R-squared	=	0.1523
Total	645538.804	1,918	336.568719	Root MSE	=	16.891

beh1s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
kn1s	.3834196	.0254332	15.08	0.000	.3335399	.4332993
kn2s	-.1006117	.0231438	-4.35	0.000	-.1460014	-.0552219
kn3s	.1173604	.0321819	3.65	0.000	.0542451	.1804757
kn4s	-.0847381	.0217224	-3.90	0.000	-.1273401	-.042136
kn5s	.1473768	.0224314	6.57	0.000	.1033842	.1913694
_cons	36.84378	3.33048	11.06	0.000	30.31203	43.37554

Source	SS	df	MS			
				Number of obs	=	1,919
				F(13, 1905)	=	170.18
Model	346865.811	13	26681.9855	Prob > F	=	0.0000
Residual	298672.993	1,905	156.783723	R-squared	=	0.5373
				Adj R-squared	=	0.5342
Total	645538.804	1,918	336.568719	Root MSE	=	12.521

beh1s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
kn1s	.1383161	.0203823	6.79	0.000	.0983422	.1782901
kn2s	-.0443687	.0175064	-2.53	0.011	-.0787024	-.010035
kn3s	.0151681	.0242312	0.63	0.531	-.0323542	.0626905
kn4s	-.0458167	.016429	-2.79	0.005	-.0780374	-.0135961
kn5s	.0150298	.0170975	0.88	0.379	-.018502	.0485617
tos	.055544	.0195886	2.84	0.005	.0171266	.0939614
imps	.2221161	.0190728	11.65	0.000	.1847104	.2595218
socs	.006511	.0156616	0.42	0.678	-.0242046	.0372266
selfs	.1847367	.0229397	8.05	0.000	.1397471	.2297263
locs	.033853	.0246385	1.37	0.170	-.0144683	.0821743
aos	-.0285562	.0174411	-1.64	0.102	-.062762	.0056495
att1s	.3993254	.019591	20.38	0.000	.3609033	.4377476
att2s	.064143	.0170266	3.77	0.000	.0307501	.0975358
_cons	1.375605	2.820022	0.49	0.626	-4.155051	6.906262

Active saving:

```
      Source │       SS           df       MS            Number of obs   =      1,919
─────────────┼────────────────────────────────           F(5, 1913)      =      52.71
       Model │  111929.21          5   22385.8419         Prob > F        =     0.0000
    Residual │  812417.654      1,913   424.682517         R-squared       =     0.1211
─────────────┼────────────────────────────────           Adj R-squared   =     0.1188
       Total │  924346.864      1,918   481.932672         Root MSE        =     20.608
```

```
       beh2s │      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
─────────────┼────────────────────────────────────────────────────────────────
        kn1s │    .3236571   .0310302    10.43   0.000     .2628004    .3845137
        kn2s │   -.1308024   .0282371    -4.63   0.000    -.1861811   -.0754238
        kn3s │    .1964501   .0392641     5.00   0.000     .1194451    .2734551
        kn4s │    .1706691   .0265028     6.44   0.000     .1186916    .2226465
        kn5s │    .0747598   .0273679     2.73   0.006     .0210858    .1284338
       _cons │   29.97558   4.063414     7.38   0.000      22.0064    37.94477
```

```
      Source │       SS           df       MS            Number of obs   =      1,919
─────────────┼────────────────────────────────           F(13, 1905)     =      79.48
       Model │  325055.761        13   25004.2893         Prob > F        =     0.0000
    Residual │  599291.103      1,905   314.588506         R-squared       =     0.3517
─────────────┼────────────────────────────────           Adj R-squared   =     0.3472
       Total │  924346.864      1,918   481.932672         Root MSE        =     17.737
```

```
       beh2s │      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
─────────────┼────────────────────────────────────────────────────────────────
        kn1s │    .0893391   .0288718     3.09   0.002     .0327154    .1459628
        kn2s │   -.0850699   .0247981    -3.43   0.001    -.1337041   -.0364357
        kn3s │    .0757189   .0343238     2.21   0.028     .0084028    .1430351
        kn4s │     .14277    .0232719     6.13   0.000      .097129     .188411
        kn5s │   -.0373389   .0242189    -1.54   0.123    -.0848372    .0101595
         tos │    .2570635   .0277475     9.26   0.000     .2026447    .3114822
        imps │   -.0312681   .0270169    -1.16   0.247    -.0842538    .0217176
        socs │   -.0905303   .0221848    -4.08   0.000    -.1340394   -.0470213
       selfs │   -.0030644   .0324944    -0.09   0.925    -.0667928    .0606639
        locs │    .1718571   .0349008     4.92   0.000     .1034094    .2403049
         aos │   -.0174469   .0247056    -0.71   0.480    -.0658999     .031006
       attls │     .391427    .027751    14.10   0.000     .3370015    .4458525
       att2s │    .1318138   .0241185     5.47   0.000     .0845124    .1791152
       _cons │    2.162676   3.994602     0.54   0.588    -5.671577     9.99693
```

Appendix 8: Regression Models

Financial Well-Being (weighted results)

Source	SS	df	MS		
Model	263140.201	50	5262.80403		
Residual	260269.924	1,868	139.330795		
Total	523410.126	1,918	272.893705		

Number of obs	=	1,919		
F(50, 1868)	=	37.77		
Prob > F	=	0.0000		
R-squared	=	0.5027		
Adj R-squared	=	0.4894		
Root MSE	=	11.804		

wb1s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-1.36583	1.553287	-0.88	0.379	-4.412191	1.68053
beh1s	.2674728	.0492414	5.43	0.000	.1708987	.3640468
beh2s	.3247482	.0440264	7.38	0.000	.2384022	.4110942
beh3s	.451795	.0277683	16.27	0.000	.3973348	.5062552
beh4s	.2393375	.0508752	4.70	0.000	.1395593	.3391158
beh1s_beh2s	-.0024853	.0006157	-4.04	0.000	-.0036929	-.0012777
beh5s	-.0282737	.0217606	-1.30	0.194	-.0709513	.0144039
beh6s	-.0013191	.0098553	-0.13	0.894	-.0206475	.0180094
beh7s	-.0357527	.011484	-3.11	0.002	-.0582755	-.0132299
beh8s	-.066927	.0182325	-3.67	0.000	-.1026852	-.0311687
kn1s	.0412014	.0201729	2.04	0.041	.0016377	.0807651
kn2s	-.0079021	.0178656	-0.44	0.658	-.0429407	.0271366
kn3s	-.0321365	.0237834	-1.35	0.177	-.0787814	.0145084
kn4s	.0166398	.0183813	0.91	0.365	-.0194102	.0526899
kn5s	.0137925	.0169581	0.81	0.416	-.0194664	.0470513
tos	-.031123	.019613	-1.59	0.113	-.0695886	.0073426
imps	-.0086867	.0191243	-0.45	0.650	-.046194	.0288206
socs	-.0047884	.0156297	-0.31	0.759	-.0354419	.0258651
selfs	.0083835	.0226104	0.37	0.711	-.0359608	.0527279
aos	-.0063193	.016939	-0.37	0.709	-.0395406	.0269021
locs	.0915284	.0240747	3.80	0.000	.0443122	.1387446
att2s	.117384	.0166294	7.06	0.000	.0847698	.1499982
att1s	-.0471843	.0216698	-2.18	0.030	-.089684	-.0046847
income_2	1.24e-06	8.15e-07	1.52	0.128	-3.59e-07	2.84e-06
inc_drop	-5.054454	.8961677	-5.64	0.000	-6.81205	-3.296859
inc_inc	1.674536	1.014021	1.65	0.099	-.3141967	3.663268
exp_drop	-.596264	1.423399	-0.42	0.675	-3.387883	2.195355
exp_inc	-2.726611	.8347952	-3.27	0.001	-4.36384	-1.089381
wrkfulltime	-1.132908	1.13832	-1.00	0.320	-3.36542	1.099604
wrkparttime	-4.567881	1.320489	-3.46	0.001	-7.15767	-1.978092
wrkselfemp	-7.330163	1.840467	-3.98	0.000	-10.93975	-3.720576
wrkunempl	-8.005096	2.049681	-3.91	0.000	-12.025	-3.98519
wrkdisabled	-1.820673	1.305462	-1.39	0.163	-4.380991	.739645
wrkother	-1.523774	1.513902	-1.01	0.314	-4.492891	1.445344
d_ratio_2_mortgage_pop	-.0004774	.0027979	-0.17	0.865	-.0059649	.00501
e5	.7809594	.6350634	1.23	0.219	-.464549	2.026468
oslo_area	-.8235887	.7854243	-1.05	0.295	-2.36399	.7168127
east	.6876708	.8379086	0.82	0.412	-.9556647	2.331006
south_west	-.4394102	.8065004	-0.54	0.586	-2.021147	1.142326
renter	-.844335	1.024193	-0.82	0.410	-2.853018	1.164348
owner_m	1.062815	.824817	1.29	0.198	-.5548444	2.680475
age_u30	-3.641091	1.347949	-2.70	0.007	-6.284737	-.9974463
age_30_44	-4.310045	1.162282	-3.71	0.000	-6.589553	-2.030538
age_45_59	-2.074688	1.015377	-2.04	0.041	-4.066081	-.0832945
gender0	.1726616	.61375	0.28	0.778	-1.031046	1.376369
couple	1.799368	.6806883	2.64	0.008	.4643784	3.134357
numchild	-.760806	.3910452	-1.95	0.052	-1.527738	.0061255
e6	1.219625	.5751615	2.12	0.034	.0915983	2.347652
immigrant3	.1288695	1.03298	0.12	0.901	-1.897048	2.154787
eduuniv	.7740241	.6149755	1.26	0.208	-.4320872	1.980135
_cons	-2.370581	5.964594	-0.40	0.691	-14.06855	9.327387

```
      Source |       SS           df       MS      Number of obs   =     1,919
-------------+----------------------------------   F(50, 1868)     =     49.76
       Model |  480825.249         50   9616.50498  Prob > F        =    0.0000
    Residual |  361002.685      1,868   193.256255  R-squared       =    0.5712
-------------+----------------------------------   Adj R-squared   =    0.5597
       Total |  841827.934      1,918   438.909246  Root MSE        =    13.902
```

wb2s	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
a1_new	-1.531175	1.829342	-0.84	0.403	-5.118945	2.056595
beh1s	.0521115	.0579928	0.90	0.369	-.061626	.1658489
beh2s	.1496059	.0518509	2.89	0.004	.0479142	.2512977
beh3s	.2708161	.0327034	8.28	0.000	.2066771	.3349551
beh4s	.2249691	.0599169	3.75	0.000	.107458	.3424803
beh1s_beh2s	.0006639	.0007252	0.92	0.360	-.0007583	.0020861
beh5s	-.0179139	.0256279	-0.70	0.485	-.0681763	.0323485
beh6s	.0010761	.0116068	0.09	0.926	-.0216875	.0238397
beh7s	-.1316215	.013525	-9.73	0.000	-.1581472	-.1050959
beh8s	-.0727782	.0214729	-3.39	0.001	-.1148916	-.0306648
kn1s	.0478671	.023758	2.01	0.044	.001272	.0944622
kn2s	.0246676	.0210408	1.17	0.241	-.0165983	.0659335
kn3s	-.0927016	.0280103	-3.31	0.001	-.1476364	-.0377668
kn4s	-.000457	.0216481	-0.02	0.983	-.042914	.042
kn5s	-.024117	.019972	-1.21	0.227	-.0632867	.0150528
tos	-.0139061	.0230986	-0.60	0.547	-.0592079	.0313958
imps	-.0710313	.0225232	-3.15	0.002	-.1152045	-.0268581
socs	-.0443671	.0184075	-2.41	0.016	-.0804684	-.0082658
selfs	.0236193	.0266288	0.89	0.375	-.028606	.0758447
aos	.0508424	.0199494	2.55	0.011	.0117169	.0899679
locs	.1934008	.0283534	6.82	0.000	.1377932	.2490085
att2s	.1793185	.0195848	9.16	0.000	.140908	.2177289
att1s	-.0600869	.0255211	-2.35	0.019	-.1101397	-.0100341
income_2	7.74e-06	9.60e-07	8.06	0.000	5.86e-06	9.63e-06
inc_drop	-10.28288	1.055438	-9.74	0.000	-12.35284	-8.212922
inc_inc	4.359346	1.194236	3.65	0.000	2.01717	6.701522
exp_drop	.7496373	1.676369	0.45	0.655	-2.538117	4.037391
exp_inc	-5.292943	.9831576	-5.38	0.000	-7.221146	-3.364741
wrkfulltime	-2.400947	1.340626	-1.79	0.073	-5.030228	.228335
wrkparttime	-6.511518	1.55517	-4.19	0.000	-9.561572	-3.461463
wrkselfemp	-5.28009	2.167561	-2.44	0.015	-9.531185	-1.028995
wrkunempl	-14.44091	2.413957	-5.98	0.000	-19.17525	-9.706577
wrkdisabled	-5.600342	1.537473	-3.64	0.000	-8.615688	-2.584996
wrkother	-5.519093	1.782958	-3.10	0.002	-9.015891	-2.022294
d_ratio_2_mortgage_pop	.004297	.0032952	1.30	0.192	-.0021657	.0107596
e5	1.111643	.7479289	1.49	0.137	-.3552214	2.578507
oslo_area	-.2488513	.9250124	-0.27	0.788	-2.063018	1.565315
east	1.443857	.9868244	1.46	0.144	-.4915371	3.379251
south_west	.2952254	.9498342	0.31	0.756	-1.567622	2.158073
renter	-5.103526	1.206216	-4.23	0.000	-7.469198	-2.737853
owner_m	-2.225406	.9714062	-2.29	0.022	-4.130561	-.3202504
age_u30	-6.734316	1.587511	-4.24	0.000	-9.847798	-3.620834
age_30_44	-6.531935	1.368846	-4.77	0.000	-9.216564	-3.847306
age_45_59	-3.197042	1.195833	-2.67	0.008	-5.542352	-.8517327
gender0	-.0815102	.7228276	-0.11	0.910	-1.499145	1.336124
couple	2.845912	.8016624	3.55	0.000	1.273664	4.418161
numchild	-1.427579	.460543	-3.10	0.002	-2.330812	-.5243464
e6	.5807619	.677381	0.86	0.391	-.7477412	1.909265
immigrant3	-1.649219	1.216565	-1.36	0.175	-4.035188	.7367508
eduuniv	1.371218	.7242709	1.89	0.058	-.0492475	2.791683
_cons	9.064837	7.02464	1.29	0.197	-4.712131	22.84181

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Source	SS	df	MS		
Model	730570.275	50	14611.4055		
Residual	579292.766	1,868	310.1139		
Total	1309863.04	1,918	682.931721		

Number of obs = 1,919
F(50, 1868) = 47.12
Prob > F = 0.0000
R-squared = 0.5577
Adj R-squared = 0.5459
Root MSE = 17.61

wb3s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-.872365	2.317335	-0.38	0.707	-5.417203	3.672473
beh1s	.2741201	.0734629	3.73	0.000	.1300421	.418198
beh2s	.5329165	.0656825	8.11	0.000	.4040976	.6617354
beh3s	.458495	.0414273	11.07	0.000	.3772464	.5397437
beh4s	.5794913	.0759003	7.63	0.000	.430633	.7283496
beh1s_beh2s	-.0020684	.0009186	-2.25	0.024	-.00387	-.0002668
beh5s	-.0239126	.0324644	-0.74	0.461	-.0875829	.0397577
beh6s	-.0012882	.014703	-0.09	0.930	-.0301242	.0275478
beh7s	-.1071043	.0171329	-6.25	0.000	-.1407059	-.0735027
beh8s	-.0888933	.027201	-3.27	0.001	-.1422408	-.0355459
kn1s	.0634095	.0300957	2.11	0.035	.0043847	.1224342
kn2s	.0393552	.0266536	1.48	0.140	-.0129187	.0916291
kn3s	-.0850945	.0354823	-2.40	0.017	-.1546836	-.0155053
kn4s	.0012418	.0274229	0.05	0.964	-.0525409	.0550246
kn5s	.0425401	.0252997	1.68	0.093	-.0070785	.0921586
tos	.0073385	.0292604	0.25	0.802	-.050048	.064725
imps	-.0753772	.0285314	-2.64	0.008	-.131334	-.0194204
socs	.0086285	.0233178	0.37	0.711	-.0371032	.0543602
selfs	-.0418429	.0337323	-1.24	0.215	-.1079998	.024314
aos	.0166645	.0252711	0.66	0.510	-.0328981	.0662271
locs	.0879633	.0359169	2.45	0.014	.0175219	.1584047
att2s	.0595053	.0248093	2.40	0.017	.0108485	.1081621
att1s	-.0049277	.032329	-0.15	0.879	-.0683325	.0584772
income_2	4.62e-06	1.22e-06	3.79	0.000	2.23e-06	7.00e-06
inc_drop	-6.452384	1.336984	-4.83	0.000	-9.074525	-3.830244
inc_inc	.2796036	1.512808	0.18	0.853	-2.687368	3.246575
exp_drop	.3786786	2.123555	0.18	0.858	-3.786112	4.543469
exp_inc	-3.187384	1.245423	-2.56	0.011	-5.629951	-.7448161
wrkfulltime	-1.133443	1.698249	-0.67	0.505	-4.464108	2.197222
wrkparttime	-2.990357	1.970025	-1.52	0.129	-6.854039	.8733256
wrkselfemp	-5.423256	2.745776	-1.98	0.048	-10.80837	-.0381452
wrkunempl	-7.141748	3.0579	-2.34	0.020	-13.13901	-1.144488
wrkdisabled	-2.189035	1.947607	-1.12	0.261	-6.00875	1.630679
wrkother	.0752988	2.258577	0.03	0.973	-4.354301	4.504898
d_ratio_2_mortgage_pop	-.0045641	.0041742	-1.09	0.274	-.0127507	.0036226
e5	.6468447	.9474453	0.68	0.495	-1.211318	2.505007
oslo_area	.4854256	1.171767	0.41	0.679	-1.812685	2.783536
east	-1.282718	1.250068	-1.03	0.305	-3.734395	1.168959
south_west	.0687456	1.203211	0.06	0.954	-2.291033	2.428524
renter	-8.296132	1.527984	-5.43	0.000	-11.29287	-5.299396
owner_m	-5.584292	1.230537	-4.54	0.000	-7.997664	-3.17092
age_u30	-10.09672	2.010993	-5.02	0.000	-14.04075	-6.152695
age_30_44	-11.66925	1.733998	-6.73	0.000	-15.07003	-8.268474
age_45_59	-7.719217	1.514832	-5.10	0.000	-10.69016	-4.748276
gender0	-3.835491	.915648	-4.19	0.000	-5.631292	-2.03969
couple	.8407253	1.015513	0.83	0.408	-1.150933	2.832384
numchild	-.8502896	.5833968	-1.46	0.145	-1.994468	.2938885
e6	2.097646	.8580781	2.44	0.015	.4147538	3.780539
immigrant3	-1.565735	1.541094	-1.02	0.310	-4.588182	1.456713
eduuniv	1.976371	.9174763	2.15	0.031	.1769846	3.775757
_cons	-53.21737	8.898523	-5.98	0.000	-70.66946	-35.76528

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Source	SS	df	MS
Model	452184.003	50	9043.68007
Residual	225530.521	1,868	120.733684
Total	677714.525	1,918	353.344382

Number of obs	= 1,919
F(50, 1868)	= 74.91
Prob > F	= 0.0000
R-squared	= 0.6672
Adj R-squared	= 0.6583
Root MSE	= 10.988

owbs	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-1.293588	1.445914	-0.89	0.371	-4.129365	1.542188
beh1s	.2038275	.0458376	4.45	0.000	.1139292	.2937257
beh2s	.3398159	.040983	8.29	0.000	.2594386	.4201931
beh3s	.3871368	.0258488	14.98	0.000	.3364412	.4378323
beh4s	.3531375	.0473584	7.46	0.000	.2602566	.4460185
beh1s_beh2s	-.0013325	.0005732	-2.32	0.020	-.0024566	-.0002084
beh5s	-.0212425	.0202564	-1.05	0.294	-.0609699	.018485
beh6s	-.0013968	.009174	-0.15	0.879	-.0193892	.0165956
beh7s	-.0956899	.0106902	-8.95	0.000	-.1166558	-.074724
beh8s	-.0797356	.0169722	-4.70	0.000	-.1130221	-.0464492
kn1s	.0516589	.0187784	2.75	0.006	.0148301	.0884877
kn2s	.0178732	.0166306	1.07	0.283	-.0147434	.0504898
kn3s	-.0732075	.0221394	-3.31	0.001	-.116628	-.029787
kn4s	.0049752	.0171107	0.29	0.771	-.0285829	.0385332
kn5s	.0102413	.0157859	0.65	0.517	-.0207185	.0412011
tos	-.0135185	.0182572	-0.74	0.459	-.0493251	.0222881
imps	-.0496926	.0178023	-2.79	0.005	-.0846071	-.014778
socs	-.0178541	.0145493	-1.23	0.220	-.0463886	.0106804
selfs	-.0036578	.0210474	-0.17	0.862	-.0449368	.0376211
aos	.0217362	.015768	1.38	0.168	-.0091886	.0526611
locs	.1300331	.0224105	5.80	0.000	.0860808	.1739854
att2s	.1198387	.0154799	7.74	0.000	.089479	.1501983
att1s	-.0401647	.0201719	-1.99	0.047	-.0797265	-.0006029
income_2	4.79e-06	7.59e-07	6.31	0.000	3.30e-06	6.28e-06
inc_drop	-7.570164	.8342188	-9.07	0.000	-9.206263	-5.934066
inc_inc	2.395077	.9439249	2.54	0.011	.5438188	4.246335
exp_drop	.204362	1.325004	0.15	0.877	-2.394282	2.803006
exp_inc	-3.837031	.7770887	-4.94	0.000	-5.361085	-2.312978
wrkfulltime	-1.603071	1.059632	-1.51	0.130	-3.681257	.4751161
wrkparttime	-4.843257	1.229208	-3.94	0.000	-7.254022	-2.432491
wrkselfemp	-6.041782	1.713242	-3.53	0.000	-9.401852	-2.681713
wrkunempl	-10.21772	1.907994	-5.36	0.000	-13.95974	-6.475692
wrkdisabled	-3.455796	1.21522	-2.84	0.005	-5.839128	-1.072464
wrkother	-2.464078	1.409251	-1.75	0.081	-5.227951	.2997946
d_ratio_2_mortgage_pop	-.0003061	.0026045	-0.12	0.906	-.0054142	.004802
e5	.83038	.5911637	1.40	0.160	-.3290308	1.989791
oslo_area	-.2932157	.7311307	-0.40	0.688	-1.727135	1.140703
east	.3607162	.7799869	0.46	0.644	-1.169021	1.890454
south_west	-.0431238	.7507499	-0.06	0.954	-1.51552	1.429273
renter	-4.595234	.9533943	-4.82	0.000	-6.465064	-2.725404
owner_m	-1.881036	.7678003	-2.45	0.014	-3.386873	-.3751995
age_u30	-6.64475	1.25477	-5.30	0.000	-9.105649	-4.183851
age_30_44	-7.389945	1.081937	-6.83	0.000	-9.511878	-5.268012
age_45_59	-4.173186	.9451877	-4.42	0.000	-6.026921	-2.319451
gender0	-1.098318	.5713236	-1.92	0.055	-2.218818	.0221814
couple	1.873286	.6336347	2.96	0.003	.6305796	3.115992
numchild	-1.005578	.3640137	-2.76	0.006	-1.719494	-.291662
e6	1.210647	.5354026	2.26	0.024	.1605972	2.260697
immigrant3	-.8676146	.9615741	-0.90	0.367	-2.753487	1.018258
eduuniv	1.38722	.5724644	2.42	0.015	.2644829	2.509957
_cons	-16.01435	5.552282	-2.88	0.004	-26.90368	-5.125025

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Behaviours (weighted results)

Source	SS	df	MS
Model	359988.996	45	7999.75546
Residual	285549.808	1,873	152.45585
Total	645538.804	1,918	336.568719

Number of obs	= 1,919
F(45, 1873)	= 52.47
Prob > F	= 0.0000
R-squared	= 0.5577
Adj R-squared	= 0.5470
Root MSE	= 12.347

beh1s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-.8206676	1.622347	-0.51	0.613	-4.002466	2.361131
beh5s	.0922586	.0224847	4.10	0.000	.048161	.1363563
beh6s	.0076869	.0103001	0.75	0.456	-.0125139	.0278878
beh7s	.0017832	.0119571	0.15	0.881	-.0216675	.0252339
beh8s	-.0569682	.0189656	-3.00	0.003	-.0941642	-.0197723
kn1s	.1178654	.0209134	5.64	0.000	.0768494	.1588815
kn2s	-.0663794	.018565	-3.58	0.000	-.1027897	-.0299692
kn3s	.0145405	.0248008	0.59	0.558	-.0340997	.0631807
kn4s	-.033031	.0190252	-1.74	0.083	-.0703437	.0042818
kn5s	-.0082356	.017672	-0.47	0.641	-.0428946	.0264234
tos	.0504477	.0200887	2.51	0.012	.0110491	.0898462
imps	.2186468	.019247	11.36	0.000	.180899	.2563945
socs	-.0011959	.0162865	-0.07	0.941	-.0331375	.0307457
selfs	.1668847	.0232311	7.18	0.000	.1213232	.2124462
aos	-.0290138	.0176925	-1.64	0.101	-.0637129	.0056852
locs	.023246	.025055	0.93	0.354	-.0258926	.0723847
att2s	.0538018	.0172269	3.12	0.002	.020016	.0875877
att1s	.3964549	.0198207	20.00	0.000	.3575819	.4353279
income_2	3.16e-07	8.48e-07	0.37	0.710	-1.35e-06	1.98e-06
inc_drop	-1.649109	.9352713	-1.76	0.078	-3.483393	.1851743
inc_inc	1.311043	1.058239	1.24	0.216	-.7644082	3.386494
exp_drop	-.7194933	1.484543	-0.48	0.628	-3.631025	2.192038
exp_inc	-1.53816	.8691363	-1.77	0.077	-3.242738	.166417
wrkfulltime	.1867273	1.188617	0.16	0.875	-2.144426	2.517881
wrkparttime	2.288098	1.379894	1.66	0.097	-.4181937	4.99439
wrkselfemp	1.185651	1.922623	0.62	0.538	-2.585058	4.956361
wrkunempl	3.476957	2.138047	1.63	0.104	-.7162475	7.670162
wrkdisabled	-.973634	1.364828	-0.71	0.476	-3.650377	1.703109
wrkother	-.4604172	1.580459	-0.29	0.771	-3.560063	2.639228
d_ratio_2_mortgage_pop	.00264	.0029256	0.90	0.367	-.0030978	.0083778
e5	-.0912066	.6637491	-0.14	0.891	-1.392972	1.210559
oslo_area	1.674304	.8191323	2.04	0.041	.0677957	3.280812
east	-1.196081	.874789	-1.37	0.172	-2.911745	.5195822
south_west	-.2252586	.8431936	-0.27	0.789	-1.878956	1.428439
renter	-2.368387	1.065142	-2.22	0.026	-4.457378	-.2793967
owner_m	-2.475797	.8564405	-2.89	0.004	-4.155475	-.7961194
age_u30	-1.303716	1.401628	-0.93	0.352	-4.052632	1.445201
age_30_44	-.4480621	1.212979	-0.37	0.712	-2.826995	1.930871
age_45_59	.2726702	1.058771	0.26	0.797	-1.803824	2.349164
gender0	-2.837652	.6373118	-4.45	0.000	-4.087568	-1.587737
couple	.4832807	.7109689	0.68	0.497	-.9110938	1.877655
numchild	-.600568	.4063146	-1.48	0.140	-1.397445	.1963089
e6	-.1615673	.6008568	-0.27	0.788	-1.339987	1.016852
immigrant3	.64559	1.080281	0.60	0.550	-1.47309	2.76427
eduuniv	.1143333	.6418594	0.18	0.859	-1.144502	1.373168
_cons	10.07957	3.61682	2.79	0.005	2.986153	17.17299

Source	SS	df	MS
Model	368929.103	45	8198.4245
Residual	555417.761	1,873	296.539114
Total	924346.864	1,918	481.932672

Number of obs = 1,919
F(45, 1873)   =   27.65
Prob > F   = 0.0000
R-squared   = 0.3991
Adj R-squared = 0.3847
Root MSE   =   17.22

beh2s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-2.973261	2.262626	-1.31	0.189	-7.410795	1.464272
beh5s	.1872974	.0313585	5.97	0.000	.1257961	.2487987
beh6s	-.0108333	.0143651	-0.75	0.451	-.0390067	.01734
beh7s	.0445252	.0166762	2.67	0.008	.0118193	.077231
beh8s	-.0209233	.0264506	-0.79	0.429	-.0727991	.0309525
kn1s	.0413097	.0291672	1.42	0.157	-.0158939	.0985132
kn2s	-.0917293	.0258919	-3.54	0.000	-.1425093	-.0409493
kn3s	.0821724	.0345888	2.38	0.018	.0143358	.150009
kn4s	.1013778	.0265337	3.82	0.000	.0493392	.1534165
kn5s	-.037986	.0246465	-1.54	0.123	-.0863236	.0103515
tos	.22089	.0280169	7.88	0.000	.1659423	.2758377
imps	-.0267919	.026843	-1.00	0.318	-.0794372	.0258535
socs	-.0601279	.0227141	-2.65	0.008	-.1046756	-.0155802
selfs	-.0086815	.0323995	-0.27	0.789	-.0722244	.0548614
aos	-.0332319	.0246751	-1.35	0.178	-.0816254	.0151616
locs	.119105	.0349433	3.41	0.001	.0505732	.1876368
att2s	.0913878	.0240257	3.80	0.000	.044268	.1385077
att1s	.3800407	.0276432	13.75	0.000	.3258259	.4342554
income_2	5.08e-06	1.18e-06	4.30	0.000	2.77e-06	7.40e-06
inc_drop	-1.507689	1.304387	-1.16	0.248	-4.065894	1.050516
inc_inc	2.829621	1.475885	1.92	0.055	-.0649317	5.724174
exp_drop	-.4074136	2.070435	-0.20	0.844	-4.468015	3.653188
exp_inc	-2.506408	1.212151	-2.07	0.039	-4.883718	-.129099
wrkfulltime	3.658418	1.657719	2.21	0.027	.4072469	6.909588
wrkparttime	1.644987	1.924486	0.85	0.393	-2.129375	5.419348
wrkselfemp	-2.012201	2.68141	-0.75	0.453	-7.271066	3.246664
wrkunempl	-3.027307	2.981853	-1.02	0.310	-8.875409	2.820796
wrkdisabled	-.6578662	1.903473	-0.35	0.730	-4.391018	3.075286
wrkother	-1.349778	2.204206	-0.61	0.540	-5.672735	2.97318
d_ratio_2_mortgage_pop	-.001042	.0040802	-0.26	0.798	-.0090443	.0069603
e5	-.2443063	.9257057	-0.26	0.792	-2.059829	1.571217
oslo_area	.1589872	1.142413	0.14	0.889	-2.081548	2.399523
east	-.8820702	1.220035	-0.72	0.470	-3.274841	1.510701
south_west	-.9336112	1.17597	-0.79	0.427	-3.23996	1.372738
renter	-4.755535	1.485513	-3.20	0.001	-7.66897	-1.842099
owner_m	-1.818213	1.194445	-1.52	0.128	-4.160796	.5243702
age_u30	1.596132	1.954797	0.82	0.414	-2.237677	5.429942
age_30_44	1.379522	1.691696	0.82	0.415	-1.938285	4.697329
age_45_59	-.4499366	1.476627	-0.30	0.761	-3.345944	2.446071
gender0	.7129796	.8888345	0.80	0.423	-1.03023	2.45619
couple	.0085528	.9915612	0.01	0.993	-1.936128	1.953234
numchild	-1.999684	.5666714	-3.53	0.000	-3.111058	-.8883103
e6	-.0449753	.8379921	-0.05	0.957	-1.688472	1.598521
immigrant3	.6596636	1.506626	0.44	0.662	-2.295179	3.614507
eduuniv	.9844573	.8951769	1.10	0.272	-.7711917	2.740106
_cons	2.821236	5.044241	0.56	0.576	-7.071686	12.71416

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      Source |       SS           df       MS        Number of obs   =     1,919
-------------+----------------------------------    F(45, 1873)     =     10.45
       Model | 53122.2101          45  1180.49356    Prob > F        =    0.0000
    Residual | 211671.384       1,873  113.011951    R-squared       =    0.2006
-------------+----------------------------------    Adj R-squared   =    0.1814
       Total | 264793.594       1,918   138.05714    Root MSE        =    10.631
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beh3s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-1.394926	1.396799	-1.00	0.318	-4.134373	1.34452
beh5s	.0128038	.0193587	0.66	0.508	-.0251632	.0507707
beh6s	-.0116239	.0088681	-1.31	0.190	-.0290163	.0057685
beh7s	-.0262453	.0102948	-2.55	0.011	-.0464358	-.0060549
beh8s	-.0583667	.0163289	-3.57	0.000	-.0903914	-.0263419
kn1s	.0136581	.0180059	0.76	0.448	-.0216556	.0489719
kn2s	.0055365	.015984	0.35	0.729	-.0258118	.0368847
kn3s	.0463838	.0213529	2.17	0.030	.0045059	.0882618
kn4s	.0085016	.0163802	0.52	0.604	-.0236237	.0406269
kn5s	.0131748	.0152152	0.87	0.387	-.0166657	.0430153
tos	-.0089411	.0172958	-0.52	0.605	-.0428623	.02498
imps	.0674382	.0165711	4.07	0.000	.0349383	.099938
socs	.0314609	.0140222	2.24	0.025	.00396	.0589618
selfs	-.0550563	.0200014	-2.75	0.006	-.0942836	-.015829
aos	.0061539	.0152328	0.40	0.686	-.0237211	.0360289
locs	.0417961	.0215717	1.94	0.053	-.000511	.0841033
att2s	.0681349	.0148319	4.59	0.000	.0390461	.0972237
att1s	.1617839	.0170651	9.48	0.000	.1283152	.1952525
income_2	1.69e-06	7.30e-07	2.31	0.021	2.54e-07	3.12e-06
inc_drop	-1.47312	.8052445	-1.83	0.067	-3.05239	.1061512
inc_inc	1.429683	.9111164	1.57	0.117	-.3572274	3.216593
exp_drop	.4484775	1.278153	0.35	0.726	-2.058276	2.955231
exp_inc	-.9554195	.748304	-1.28	0.202	-2.423017	.5121777
wrkfulltime	.9917444	1.023369	0.97	0.333	-1.015318	2.998807
wrkparttime	.679988	1.188053	0.57	0.567	-1.650059	3.010035
wrkselfemp	-.7047217	1.655329	-0.43	0.670	-3.951205	2.541762
wrkunempl	2.532087	1.840803	1.38	0.169	-1.078154	6.142328
wrkdisabled	.041469	1.175082	0.04	0.972	-2.263138	2.346076
wrkother	2.001064	1.360734	1.47	0.142	-.6676507	4.669779
d_ratio_2_mortgage_pop	.0016598	.0025189	0.66	0.510	-.0032803	.0065999
e5	.4056289	.5714709	0.71	0.478	-.7151577	1.526416
oslo_area	-1.013359	.7052518	-1.44	0.151	-2.396521	.3698029
east	-.8098548	.7531708	-1.08	0.282	-2.286997	.6672874
south_west	-.7395771	.7259679	-1.02	0.308	-2.163368	.6842139
renter	-.7574003	.9170601	-0.83	0.409	-2.555967	1.041167
owner_m	-.7264705	.7373732	-0.99	0.325	-2.17263	.7196889
age_u30	-2.496159	1.206766	-2.07	0.039	-4.862906	-.1294128
age_30_44	-1.231518	1.044344	-1.18	0.238	-3.279718	.8166822
age_45_59	-2.611831	.9115742	-2.87	0.004	-4.399639	-.8240231
gender0	.9455436	.548709	1.72	0.085	-.1306017	2.021689
couple	1.266545	.6121259	2.07	0.039	.0660241	2.467065
numchild	-1.031173	.3498264	-2.95	0.003	-1.717263	-.3450822
e6	.4526197	.5173222	0.87	0.382	-.5619689	1.467208
immigrant3	-.3004658	.9300939	-0.32	0.747	-2.124595	1.523663
eduuniv	.421848	.5526244	0.76	0.445	-.6619763	1.505672
_cons	70.16161	3.113988	22.53	0.000	64.05436	76.26886

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Source	SS	df	MS
Model	13822.5619	45	307.168042
Residual	62863.182	1,873	33.5628307
Total	76685.7438	1,918	39.9821396

Number of obs	= 1,919
F(45, 1873)	= 9.15
Prob > F	= 0.0000
R-squared	= 0.1802
Adj R-squared	= 0.1606
Root MSE	= 5.7933

beh4s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-.1843251	.7612041	-0.24	0.809	-1.677222	1.308572
beh5s	.0177472	.0105498	1.68	0.093	-.0029433	.0384378
beh6s	-.0019368	.0048328	-0.40	0.689	-.011415	.0075414
beh7s	-.0075692	.0056103	-1.35	0.177	-.0185722	.0034339
beh8s	-.0222131	.0088986	-2.50	0.013	-.0396654	-.0047607
kn1s	.0014225	.0098126	0.14	0.885	-.0178222	.0206672
kn2s	-.0118829	.0087107	-1.36	0.173	-.0289666	.0052007
kn3s	.0285295	.0116365	2.45	0.014	.0057076	.0513514
kn4s	-.030232	.0089266	-3.39	0.001	-.0477391	-.0127249
kn5s	.0165009	.0082917	1.99	0.047	.000239	.0327629
tos	.0146917	.0094256	1.56	0.119	-.003794	.0331775
imps	.0037667	.0090307	0.42	0.677	-.0139445	.0214779
socs	.0095067	.0076416	1.24	0.214	-.0054802	.0244937
selfs	-.0135388	.0109	-1.24	0.214	-.0349162	.0078387
aos	.0062048	.0083013	0.75	0.455	-.0100759	.0224856
locs	.0215288	.0117558	1.83	0.067	-.001527	.0445846
att2s	.0128281	.0080828	1.59	0.113	-.0030242	.0286805
att1s	.0823767	.0092999	8.86	0.000	.0641375	.1006159
income_2	2.73e-07	3.98e-07	0.69	0.493	-5.07e-07	1.05e-06
inc_drop	-.7097305	.4388285	-1.62	0.106	-1.570375	.1509138
inc_inc	.6776636	.4965248	1.36	0.172	-.2961364	1.651464
exp_drop	-1.452428	.6965461	-2.09	0.037	-2.818516	-.0863395
exp_inc	-1.383909	.4077981	-3.39	0.001	-2.183695	-.5841228
wrkfulltime	-.0990322	.5576982	-0.18	0.859	-1.192807	.994743
wrkparttime	.5828165	.6474452	0.90	0.368	-.6869733	1.852606
wrkselfemp	.5710219	.9020934	0.63	0.527	-1.198192	2.340236
wrkunempl	2.297285	1.00317	2.29	0.022	.3298372	4.264734
wrkdisabled	.6028558	.6403761	0.94	0.347	-.6530699	1.858782
wrkother	1.604323	.74155	2.16	0.031	.149972	3.058674
d_ratio_2_mortgage_pop	.0005272	.0013727	0.38	0.701	-.002165	.0032194
e5	.468741	.3114306	1.51	0.132	-.1420464	1.079528
oslo_area	.3971488	.3843362	1.03	0.302	-.3566234	1.150921
east	-.0317951	.4104503	-0.08	0.938	-.836783	.7731929
south_west	.0710962	.3956257	0.18	0.857	-.7048173	.8470098
renter	-1.608104	.4997639	-3.22	0.001	-2.588256	-.627951
owner_m	-1.56988	.4018412	-3.91	0.000	-2.357984	-.7817764
age_u30	1.811271	.6576427	2.75	0.006	.5214813	3.10106
age_30_44	.9688393	.5691289	1.70	0.089	-.147354	2.085033
age_45_59	-1.121526	.4967743	-2.26	0.024	-2.095815	-.1472363
gender0	.0970391	.2990262	0.32	0.746	-.4894204	.6834986
couple	.5352404	.333586	1.60	0.109	-.118999	1.18948
numchild	-.3954058	.1906425	-2.07	0.038	-.7692997	-.0215118
e6	.2520722	.2819215	0.89	0.371	-.3008411	.8049855
immigrant3	-.2370248	.5068668	-0.47	0.640	-1.231108	.7570583
eduuniv	.8273573	.3011599	2.75	0.006	.236713	1.418002
_cons	86.05527	1.697009	50.71	0.000	82.72704	89.3835

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      Source |       SS           df       MS        Number of obs   =      1,919
-------------+----------------------------------     F(41, 1877)     =      29.11
       Model |  206780.826         41   5043.43479   Prob > F        =     0.0000
    Residual |  325232.543      1,877   173.272532   R-squared       =     0.3887
-------------+----------------------------------     Adj R-squared   =     0.3753
       Total |  532013.369      1,918   277.379233   Root MSE        =     13.163
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beh5s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	.347297	1.729058	0.20	0.841	-3.04378	3.738374
kn1s	.1963981	.0216152	9.09	0.000	.1540057	.2387904
kn2s	.1543484	.0191863	8.04	0.000	.1167196	.1919772
kn3s	.0661657	.0262795	2.52	0.012	.0146255	.1177059
kn4s	.0613407	.0197031	3.11	0.002	.0226985	.0999829
kn5s	.007622	.0188131	0.41	0.685	-.0292749	.0445188
tos	.0998649	.0212845	4.69	0.000	.0581211	.1416086
imps	.040334	.0204158	1.98	0.048	.000294	.0803739
socs	-.0838809	.0172492	-4.86	0.000	-.1177106	-.0500512
selfs	.1111203	.02462	4.51	0.000	.0628348	.1594057
aos	-.0412478	.0187887	-2.20	0.028	-.0780967	-.0043989
locs	.1742482	.0263373	6.62	0.000	.1225948	.2259017
att2s	.0813026	.0182445	4.46	0.000	.0455209	.1170843
att1s	.0523984	.0210532	2.49	0.013	.0111084	.0936885
income_2	1.09e-07	9.01e-07	0.12	0.904	-1.66e-06	1.88e-06
inc_drop	.6636871	.9968626	0.67	0.506	-1.291388	2.618763
inc_inc	.1517503	1.127155	0.13	0.893	-2.058859	2.362359
exp_drop	.650596	1.577369	0.41	0.680	-2.442984	3.744176
exp_inc	.4447275	.925257	0.48	0.631	-1.369913	2.259368
wrkfulltime	-1.585457	1.260271	-1.26	0.209	-4.057137	.8862229
wrkparttime	-.359105	1.469253	-0.24	0.807	-3.240647	2.522437
wrkselfemp	-3.301492	2.047376	-1.61	0.107	-7.316864	.7138795
wrkunempl	.6163218	2.277104	0.27	0.787	-3.8496	5.082243
wrkdisabled	.9965499	1.452787	0.69	0.493	-1.852698	3.845798
wrkother	1.190106	1.679614	0.71	0.479	-2.104002	4.484213
d_ratio_2_mortgage_pop	-.0015068	.0031174	-0.48	0.629	-.0076207	.0046071
e5	-.7980231	.7070701	-1.13	0.259	-2.184749	.5887031
oslo_area	-1.520201	.8706544	-1.75	0.081	-3.227754	.1873512
east	.6358697	.9301095	0.68	0.494	-1.188288	2.460027
south_west	-.9300386	.8979956	-1.04	0.300	-2.691213	.831136
renter	.9325338	1.128458	0.83	0.409	-1.28063	3.145697
owner_m	-.1066665	.9048019	-0.12	0.906	-1.88119	1.667857
age_u30	1.407187	1.492307	0.94	0.346	-1.519568	4.333943
age_30_44	1.317031	1.289736	1.02	0.307	-1.212435	3.846498
age_45_59	-.0351904	1.127846	-0.03	0.975	-2.247154	2.176774
gender0	2.164193	.6646323	3.26	0.001	.8606975	3.467689
couple	.41568	.7567673	0.55	0.583	-1.068514	1.899874
numchild	-.1908295	.4323681	-0.44	0.659	-1.038802	.6571433
e6	1.61796	.6390796	2.53	0.011	.3645789	2.871341
immigrant3	2.192762	1.149326	1.91	0.057	-.0613291	4.446853
eduuniv	.028304	.6831301	0.04	0.967	-1.31147	1.368078
_cons	5.521131	3.773615	1.46	0.144	-1.879791	12.92205

Source	SS	df	MS				
Model	347936.424	41	8486.25425				
Residual	1043026.2	1,532	680.8265				
Total	1390962.62	1,573	884.273759				

Number of obs = 1,574
F(41, 1532) = 12.46
Prob > F = 0.0000
R-squared = 0.2501
Adj R-squared = 0.2301
Root MSE = 26.093

beh6s	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
a1_new	-2.09841	4.234599	-0.50	0.620	-10.40463	6.207814
kn1s	.3775953	.0475233	7.95	0.000	.2843777	.4708128
kn2s	.3660418	.0427399	8.56	0.000	.2822069	.4498768
kn3s	.1342138	.0649154	2.07	0.039	.0068813	.2615462
kn4s	-.0501508	.0466703	-1.07	0.283	-.1416952	.0413937
kn5s	.0563248	.0417918	1.35	0.178	-.0256503	.1382999
tos	.065378	.0468895	1.39	0.163	-.0265963	.1573524
imps	.0102964	.044271	0.23	0.816	-.0765417	.0971345
socs	.0648715	.0380996	1.70	0.089	-.0098613	.1396043
selfs	.0498595	.0532438	0.94	0.349	-.054579	.154298
aos	.036742	.0408628	0.90	0.369	-.043411	.1168949
locs	-.0651836	.0577982	-1.13	0.260	-.1785555	.0481884
att2s	.0034038	.0395286	0.09	0.931	-.0741322	.0809397
att1s	-.0255003	.045427	-0.56	0.575	-.114606	.0636055
income_2	-6.29e-07	1.86e-06	-0.34	0.736	-4.28e-06	3.03e-06
inc_drop	-.6212167	2.137282	-0.29	0.771	-4.813525	3.571091
inc_inc	1.899823	2.365723	0.80	0.422	-2.740575	6.540222
exp_drop	-6.757257	3.519447	-1.92	0.055	-13.6607	.1461868
exp_inc	-.2025456	1.944445	-0.10	0.917	-4.016602	3.611511
wrkfulltime	5.637233	2.840511	1.98	0.047	.065532	11.20893
wrkparttime	-.7948133	3.374773	-0.24	0.814	-7.414477	5.82485
wrkselfemp	-4.114416	4.347913	-0.95	0.344	-12.64291	4.414075
wrkunempl	1.90096	4.973998	0.38	0.702	-7.855605	11.65753
wrkdisabled	-.6568468	3.290787	-0.20	0.842	-7.11177	5.798076
wrkother	6.35167	3.780501	1.68	0.093	-1.063835	13.76718
d_ratio_2_mortgage_pop	.0055331	.006194	0.89	0.372	-.0066165	.0176828
e5	-1.071945	1.560672	-0.69	0.492	-4.133225	1.989334
oslo_area	2.453529	1.908988	1.29	0.199	-1.290976	6.198035
east	-.4860657	2.034169	-0.24	0.811	-4.476117	3.503985
south_west	-3.681063	1.95533	-1.88	0.060	-7.51647	.1543442
renter	.3106403	2.534352	0.12	0.902	-4.660527	5.281807
owner_m	-1.248218	2.034536	-0.61	0.540	-5.238988	2.742552
age_u30	-1.214656	3.280545	-0.37	0.711	-7.64949	5.220178
age_30_44	-1.012484	2.842982	-0.36	0.722	-6.589032	4.564064
age_45_59	-2.226227	2.506045	-0.89	0.374	-7.141869	2.689415
gender0	-7.696335	1.454913	-5.29	0.000	-10.55017	-4.842503
couple	-.0455194	1.675207	-0.03	0.978	-3.331461	3.240422
numchild	.0991216	.9482938	0.10	0.917	-1.76097	1.959213
e6	2.42604	1.416675	1.71	0.087	-.352788	5.204867
immigrant3	.3876646	2.512198	0.15	0.877	-4.540046	5.315375
eduuniv	3.165839	1.473397	2.15	0.032	.275751	6.055927
_cons	-2.487245	8.832656	-0.28	0.778	-19.81262	14.83813

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      Source |       SS           df       MS      Number of obs   =     1,919
-------------+----------------------------------   F(41, 1877)     =      6.25
       Model |  165861.846         41  4045.41087   Prob > F        =    0.0000
    Residual |  1214471.54      1,877  647.027989   R-squared       =    0.1202
-------------+----------------------------------   Adj R-squared   =    0.1009
       Total |  1380333.38      1,918  719.673296   Root MSE        =    25.437
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beh7s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	1.979223	3.341228	0.59	0.554	-4.57369	8.532135
kn1s	.2014878	.0417692	4.82	0.000	.1195688	.2834068
kn2s	-.0014756	.0370756	-0.04	0.968	-.0741893	.0712382
kn3s	.0349869	.0507826	0.69	0.491	-.0646093	.1345831
kn4s	.0661735	.0380742	1.74	0.082	-.0084987	.1408456
kn5s	-.060847	.0363544	-1.67	0.094	-.1321464	.0104523
tos	.0640328	.0411301	1.56	0.120	-.0166328	.1446983
imps	.1491038	.0394514	3.78	0.000	.0717306	.2264769
socs	-.0261003	.0333324	-0.78	0.434	-.0914727	.0392721
selfs	-.0069093	.0475756	-0.15	0.885	-.100216	.0863973
aos	.0737106	.0363072	2.03	0.042	.0025039	.1449174
locs	-.0241347	.0508941	-0.47	0.635	-.1239496	.0756803
att2s	-.0362391	.0352557	-1.03	0.304	-.1053836	.0329054
att1s	-.0849611	.0406831	-2.09	0.037	-.1647499	-.0051723
income_2	-5.31e-06	1.74e-06	-3.05	0.002	-8.73e-06	-1.90e-06
inc_drop	.5136891	1.926336	0.27	0.790	-3.264296	4.291674
inc_inc	.0506496	2.178113	0.02	0.981	-4.221128	4.322427
exp_drop	3.516729	3.048104	1.15	0.249	-2.461301	9.494759
exp_inc	-.9677578	1.787965	-0.54	0.588	-4.474366	2.538851
wrkfulltime	-2.281052	2.435346	-0.94	0.349	-7.057322	2.495218
wrkparttime	.728954	2.839183	0.26	0.797	-4.839333	6.297241
wrkselfemp	-5.706033	3.956346	-1.44	0.149	-13.46533	2.053266
wrkunempl	6.608897	4.400272	1.50	0.133	-2.021043	15.23884
wrkdisabled	5.393868	2.807363	1.92	0.055	-.1120142	10.89975
wrkother	2.230268	3.245684	0.69	0.492	-4.135259	8.595796
d_ratio_2_mortgage_pop	-.0053439	.006024	-0.89	0.375	-.0171583	.0064705
e5	-.3684569	1.366341	-0.27	0.787	-3.048164	2.311251
oslo_area	-3.080559	1.682451	-1.83	0.067	-6.38023	.2191128
east	4.824768	1.797342	2.68	0.007	1.299769	8.349767
south_west	.2229191	1.735285	0.13	0.898	-3.180372	3.62621
renter	10.13257	2.18063	4.65	0.000	5.85586	14.40929
owner_m	8.639299	1.748438	4.94	0.000	5.210213	12.06839
age_u30	4.877286	2.883732	1.69	0.091	-.7783719	10.53294
age_30_44	6.478304	2.492283	2.60	0.009	1.590367	11.36624
age_45_59	3.236531	2.179448	1.49	0.138	-1.037865	7.510927
gender0	6.797101	1.284334	5.29	0.000	4.278228	9.315974
couple	2.926027	1.462376	2.00	0.046	.0579735	5.794081
numchild	1.726948	.8355075	2.07	0.039	.088327	3.365569
e6	2.120745	1.234956	1.72	0.086	-.3012865	4.542777
immigrant3	5.004315	2.220956	2.25	0.024	.6485128	9.360117
eduuniv	.0773282	1.32008	0.06	0.953	-2.51165	2.666306
_cons	17.11042	7.292128	2.35	0.019	2.808886	31.41195

Source	SS	df	MS		Number of obs	=	1,919
					F(41, 1877)	=	5.61
Model	59289.0048	41	1446.07329		Prob > F	=	0.0000
Residual	483586.212	1,877	257.637833		R-squared	=	0.1092
					Adj R-squared	=	0.0898
Total	542875.217	1,918	283.042345		Root MSE	=	16.051

beh8s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	2.083804	2.108383	0.99	0.323	-2.051216	6.218824
kn1s	.0965412	.0263572	3.66	0.000	.0448487	.1482337
kn2s	.0370199	.0233955	1.58	0.114	-.0088639	.0829038
kn3s	.1204352	.0320448	3.76	0.000	.057588	.1832824
kn4s	.0768355	.0240256	3.20	0.001	.0297158	.1239551
kn5s	-.0161952	.0229404	-0.71	0.480	-.0611865	.0287962
tos	.0467533	.0259539	1.80	0.072	-.0041484	.0976549
imps	.0635333	.0248946	2.55	0.011	.0147093	.1123573
socs	-.0267587	.0210334	-1.27	0.203	-.06801	.0144926
selfs	.0367095	.0300212	1.22	0.222	-.0221689	.0955879
aos	.0423658	.0229106	1.85	0.065	-.0025671	.0872987
locs	-.0298488	.0321152	-0.93	0.353	-.092834	.0331365
att2s	.0296442	.0222471	1.33	0.183	-.0139874	.0732758
att1s	-.0316118	.0256718	-1.23	0.218	-.0819602	.0187366
income_2	-1.16e-06	1.10e-06	-1.05	0.293	-3.31e-06	1.00e-06
inc_drop	.1719601	1.215557	0.14	0.888	-2.212025	2.555945
inc_inc	-1.453005	1.374433	-1.06	0.291	-4.148583	1.242573
exp_drop	4.667095	1.923416	2.43	0.015	.8948373	8.439353
exp_inc	1.869908	1.128242	1.66	0.098	-.3428329	4.082649
wrkfulltime	-5.948456	1.536753	-3.87	0.000	-8.962379	-2.934532
wrkparttime	-3.486543	1.791582	-1.95	0.052	-7.000245	.0271586
wrkselfemp	-2.694757	2.496534	-1.08	0.281	-7.591031	2.201517
wrkunempl	-.4980328	2.776661	-0.18	0.858	-5.9437	4.947634
wrkdisabled	-1.047057	1.771503	-0.59	0.555	-4.52138	2.427266
wrkother	-3.789957	2.048092	-1.85	0.064	-7.806734	.22682
d_ratio_2_mortgage_pop	-.0026683	.0038013	-0.70	0.483	-.0101234	.0047869
e5	-.5811489	.862189	-0.67	0.500	-2.272099	1.109801
oslo_area	-1.841877	1.061661	-1.73	0.083	-3.924036	.2402828
east	2.552913	1.134159	2.25	0.025	.3285677	4.777259
south_west	-.2044628	1.095	-0.19	0.852	-2.352008	1.943083
renter	3.469222	1.376022	2.52	0.012	.7705291	6.167915
owner_m	1.241881	1.1033	1.13	0.260	-.9219422	3.405703
age_u30	-.142058	1.819693	-0.08	0.938	-3.710892	3.426776
age_30_44	-.2740121	1.572681	-0.17	0.862	-3.358399	2.810375
age_45_59	-.0825161	1.375276	-0.06	0.952	-2.779746	2.614714
gender0	.847008	.810441	1.05	0.296	-.7424521	2.436468
couple	-.5473092	.9227888	-0.59	0.553	-2.357109	1.262491
numchild	1.005123	.5272221	1.91	0.057	-.0288802	2.039126
e6	1.145163	.7792825	1.47	0.142	-.3831883	2.673514
immigrant3	.660878	1.401468	0.47	0.637	-2.087721	3.409477
eduuniv	-.2515876	.8329969	-0.30	0.763	-1.885285	1.38211
_cons	35.25429	4.60148	7.66	0.000	26.22974	44.27885

Extended models for Active Saving (Beh2s), Not Borrowing for Daily Expenses (beh3s) and Restrained Consumer Borrowing (beh4s) (weighted results)

Source	SS	df	MS			
				Number of obs	=	1,919
				F(46, 1872)	=	28.35
Model	379522.27	46	8250.48413	Prob > F	=	0.0000
Residual	544824.594	1,872	291.038779	R-squared	=	0.4106
				Adj R-squared	=	0.3961
Total	924346.864	1,918	481.932672	Root MSE	=	17.06

beh2s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-2.828182	2.241673	-1.26	0.207	-7.224623	1.568259
beh5s	.1831822	.0310738	5.90	0.000	.1222393	.2441252
beh6s	-.0112103	.0142314	-0.79	0.431	-.0391214	.0167008
beh7s	.0496656	.0165428	3.00	0.003	.0172214	.0821098
beh8s	-.0176563	.0262098	-0.67	0.501	-.0690597	.0337471
kn1s	.0364425	.0289066	1.26	0.208	-.0202501	.0931352
kn2s	-.0839594	.0256829	-3.27	0.001	-.1343296	-.0335892
kn3s	.0642062	.0343956	1.87	0.062	-.0032517	.131664
kn4s	.1131612	.0263589	4.29	0.000	.0614653	.1648571
kn5s	-.0420422	.0244261	-1.72	0.085	-.0899475	.0058631
tos	.2159657	.0277679	7.78	0.000	.1615064	.2704249
imps	-.0291719	.0265958	-1.10	0.273	-.0813325	.0229887
socs	-.0611285	.0225031	-2.72	0.007	-.1052624	-.0169947
selfs	-.0028829	.032112	-0.09	0.928	-.0658619	.0600962
aos	-.036003	.0244495	-1.47	0.141	-.0839541	.011948
locs	.1101849	.0346492	3.18	0.001	.0422297	.1781401
att2s	.0913195	.0238018	3.84	0.000	.0446387	.1380004
att1s	.3414321	.0281234	12.14	0.000	.2862755	.3965887
income_2	5.14e-06	1.17e-06	4.39	0.000	2.85e-06	7.44e-06
inc_drop	-1.10083	1.293992	-0.85	0.395	-3.638648	1.436989
inc_inc	2.652244	1.462429	1.81	0.070	-.2159195	5.520407
exp_drop	-.1445424	2.051606	-0.07	0.944	-4.168218	3.879133
exp_inc	-2.102538	1.202721	-1.75	0.081	-4.461354	.256278
wrkfulltime	3.798989	1.642438	2.31	0.021	.577786	7.020191
wrkparttime	1.354584	1.907162	0.71	0.478	-2.385802	5.094971
wrkselfemp	-2.547671	2.657908	-0.96	0.338	-7.760445	2.665103
wrkunempl	-4.06208	2.959044	-1.37	0.170	-9.865452	1.741291
wrkdisabled	-.7461401	1.885794	-0.40	0.692	-4.44462	2.95234
wrkother	-1.949444	2.185929	-0.89	0.373	-6.236558	2.337669
d_ratio_2_mortgage_pop	-.0012335	.0040423	-0.31	0.760	-.0091615	.0066945
e5	-.5855848	.9188233	-0.64	0.524	-2.38761	1.216441
oslo_area	-.1075824	1.13263	-0.09	0.924	-2.328933	2.113768
east	-.8816679	1.208667	-0.73	0.466	-3.252145	1.488809
south_west	-1.030727	1.165124	-0.88	0.376	-3.315805	1.254351
renter	-3.96512	1.477492	-2.68	0.007	-6.862825	-1.067415
owner_m	-.4224039	1.205721	-0.35	0.726	-2.787103	1.942295
age_u30	.8914519	1.940102	0.46	0.646	-2.913539	4.696443
age_30_44	.9872181	1.677194	0.59	0.556	-2.302149	4.276585
age_45_59	-.0434855	1.464419	-0.03	0.976	-2.915551	2.82858
gender0	.7444855	.8805681	0.85	0.398	-.9825129	2.471484
couple	-.0794228	.9824305	-0.08	0.936	-2.006197	1.847351
numchild	-1.776944	.5626041	-3.16	0.002	-2.880341	-.673547
e6	-.0217033	.830193	-0.03	0.979	-1.649904	1.606498
immigrant3	.6987552	1.492602	0.47	0.640	-2.228584	3.626095
eduuniv	.7093545	.8880075	0.80	0.424	-1.032234	2.450943
numcred	-1.940314	.3216138	-6.03	0.000	-2.571074	-1.309555
_cons	8.652768	5.089864	1.70	0.089	-1.329636	18.63517

Source	SS	df	MS		
Model	61562.6355	46	1338.31816		
Residual	203230.958	1,872	108.563546		
Total	264793.594	1,918	138.05714		

Number of obs = 1,919
F(46, 1872) = 12.33
Prob > F = 0.0000
R-squared = 0.2325
Adj R-squared = 0.2136
Root MSE = 10.419

beh3s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-1.159343	1.369293	-0.85	0.397	-3.844845	1.526159
beh5s	.0070889	.018985	0.37	0.709	-.030145	.0443228
beh6s	-.012763	.0086928	-1.47	0.142	-.0298116	.0042855
beh7s	-.0154952	.0101635	-1.52	0.128	-.0354282	.0044379
beh8s	-.0490755	.016039	-3.06	0.002	-.0805317	-.0176194
kn1s	.0042511	.0176802	0.24	0.810	-.0304238	.0389261
kn2s	.0067127	.0156668	0.43	0.668	-.0240136	.0374389
kn3s	.0471374	.0209286	2.25	0.024	.0060916	.0881832
kn4s	.0050274	.0160594	0.31	0.754	-.0264688	.0365236
kn5s	.0101578	.0149166	0.68	0.496	-.0190972	.0394128
tos	-.0212447	.0170094	-1.25	0.212	-.054604	.0121145
imps	.0716206	.0162487	4.41	0.000	.0397532	.103488
socs	.0291774	.0137459	2.12	0.034	.0022184	.0561364
selfs	-.0510483	.019609	-2.60	0.009	-.0895061	-.0125904
aos	.0079398	.0149314	0.53	0.595	-.0213441	.0372236
locs	.0344553	.0211593	1.63	0.104	-.0070429	.0759536
att2s	.0593802	.0145709	4.08	0.000	.0308032	.0879571
att1s	.1356015	.0169874	7.98	0.000	.1022852	.1689178
income_2	1.06e-06	7.19e-07	1.47	0.141	-3.50e-07	2.47e-06
inc_drop	-1.044535	.7907326	-1.32	0.187	-2.595345	.506275
inc_inc	1.620431	.8932666	1.81	0.070	-.1314715	3.372334
exp_drop	.5290766	1.252778	0.42	0.673	-1.927912	2.986065
exp_inc	-.5255139	.7350475	-0.71	0.475	-1.967113	.9160847
wrkfulltime	1.244373	1.003435	1.24	0.215	-.7235949	3.212341
wrkparttime	.9475202	1.164832	0.81	0.416	-1.336985	3.232025
wrkselfemp	-.0881626	1.62393	-0.05	0.957	-3.273065	3.09674
wrkunempl	2.881911	1.804647	1.60	0.110	-.6574192	6.421242
wrkdisabled	.267273	1.152007	0.23	0.817	-1.99208	2.526626
wrkother	2.00054	1.333685	1.50	0.134	-.6151248	4.616205
d_ratio_2_mortgage_pop	.0014963	.0024689	0.61	0.545	-.0033458	.0063383
e5	.4784913	.5601717	0.85	0.393	-.6201355	1.577118
oslo_area	-1.217266	.691619	-1.76	0.079	-2.573691	.1391597
east	-.6366581	.73846	-0.86	0.389	-2.08495	.8116333
south_west	-.8307948	.7116118	-1.17	0.243	-2.226431	.5648411
renter	.54134	.9108187	0.59	0.552	-1.244987	2.327667
owner_m	.5907153	.7379926	0.80	0.424	-.8566594	2.03809
age_u30	-1.552976	1.187604	-1.31	0.191	-3.882143	.7761902
age_30_44	-.1232402	1.031272	-0.12	0.905	-2.145804	1.899324
age_45_59	-1.519464	.9020016	-1.68	0.092	-3.288498	.2495706
gender0	1.253661	.5389355	2.33	0.020	.1966834	2.310638
couple	1.253746	.5999594	2.09	0.037	.0770868	2.430406
numchild	-.7738455	.344112	-2.25	0.025	-1.448729	-.0989619
e6	.1720136	.5080363	0.34	0.735	-.8243633	1.168391
immigrant3	-.2400011	.9116306	-0.26	0.792	-2.02792	1.547918
eduuniv	.195441	.5422472	0.36	0.719	-.8680316	1.258914
c10	1.772144	.2009828	8.82	0.000	1.37797	2.166318
_cons	66.19895	3.084997	21.46	0.000	60.14855	72.24934

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      Source |       SS           df       MS      Number of obs   =     1,919
-------------+----------------------------------   F(46, 1872)     =       11.05
       Model |  16380.2148         46  356.091627   Prob > F        =      0.0000
    Residual |   60305.529      1,872   32.214492   R-squared       =      0.2136
-------------+----------------------------------   Adj R-squared   =      0.1943
       Total |  76685.7438      1,918  39.9821396   Root MSE        =      5.6758
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beh4s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	-.0546421	.7458992	-0.07	0.942	-1.517524	1.408239
beh5s	.0146013	.0103417	1.41	0.158	-.0056812	.0348839
beh6s	-.0025639	.0047352	-0.54	0.588	-.0118508	.006723
beh7s	-.0016515	.0055364	-0.30	0.766	-.0125097	.0092067
beh8s	-.0170985	.0087369	-1.96	0.050	-.0342337	.0000367
kn1s	-.0037558	.009631	-0.39	0.697	-.0226444	.0151328
kn2s	-.0112355	.0085342	-1.32	0.188	-.0279731	.0055021
kn3s	.0289443	.0114005	2.54	0.011	.0065853	.0513033
kn4s	-.0321445	.0087481	-3.67	0.000	-.0493015	-.0149875
kn5s	.0148402	.0081256	1.83	0.068	-.001096	.0307763
tos	.0079189	.0092656	0.85	0.393	-.010253	.0260908
imps	.006069	.0088512	0.69	0.493	-.0112902	.0234283
socs	.0082497	.0074879	1.10	0.271	-.0064357	.0229352
selfs	-.0113324	.0106817	-1.06	0.289	-.0322817	.0096168
aos	.0071879	.0081336	0.88	0.377	-.0087639	.0231398
locs	.0174879	.0115262	1.52	0.129	-.0051176	.0400933
att2s	.0080089	.0079373	1.01	0.313	-.0075579	.0235757
att1s	.0679639	.0092536	7.34	0.000	.0498154	.0861124
income_2	-7.15e-08	3.92e-07	-0.18	0.855	-8.40e-07	6.97e-07
inc_drop	-.4738049	.4307381	-1.10	0.271	-1.318582	.3709724
inc_inc	.7826664	.4865917	1.61	0.108	-.1716529	1.736986
exp_drop	-1.40806	.6824295	-2.06	0.039	-2.746462	-.0696571
exp_inc	-1.147256	.4004046	-2.87	0.004	-1.932543	-.36197
wrkfulltime	.040034	.5466039	0.07	0.942	-1.031983	1.112051
wrkparttime	.7300866	.6345221	1.15	0.250	-.5143585	1.974532
wrkselfemp	.9104231	.8846079	1.03	0.304	-.8244983	2.645345
wrkunempl	2.489855	.9830504	2.53	0.011	.5618654	4.417845
wrkdisabled	.7271555	.6275362	1.16	0.247	-.5035887	1.9579
wrkother	1.604035	.7265019	2.21	0.027	.1791959	3.028874
d_ratio_2_mortgage_pop	.0004372	.0013449	0.33	0.745	-.0022005	.0030748
e5	.50885	.305144	1.67	0.096	-.0896082	1.107308
oslo_area	.284903	.3767476	0.76	0.450	-.4539866	1.023793
east	.0635456	.4022635	0.16	0.874	-.7253864	.8524776
south_west	.020883	.3876384	0.05	0.957	-.7393658	.7811319
renter	-.8931779	.496153	-1.80	0.072	-1.866249	.0798932
owner_m	-.8448004	.4020089	-2.10	0.036	-1.633233	-.0563677
age_u30	2.330471	.6469269	3.60	0.000	1.061697	3.599244
age_30_44	1.57892	.5617678	2.81	0.005	.4771628	2.680677
age_45_59	-.5202034	.49135	-1.06	0.290	-1.483855	.443448
gender0	.2666503	.2935759	0.91	0.364	-.3091201	.8424208
couple	.5281952	.3268176	1.62	0.106	-.1127699	1.16916
numchild	-.2537533	.1874492	-1.35	0.176	-.6213846	.113878
e6	.0976052	.2767441	0.35	0.724	-.4451541	.6403646
immigrant3	-.2037405	.4965952	-0.41	0.682	-1.177679	.770198
eduuniv	.7027256	.2953799	2.38	0.017	.123417	1.282034
c10	.9755235	.109482	8.91	0.000	.760804	1.190243
_cons	83.87392	1.680499	49.91	0.000	80.57807	87.16977

Knowledge and experience (weighted results)

Source	SS	df	MS			
Model	42149.736	27	1561.10133			
Residual	552664.048	1,891	292.260205			
Total	594813.784	1,918	310.121889			

Number of obs = 1,919
F(27, 1891) = 5.34
Prob > F = 0.0000
R-squared = 0.0709
Adj R-squared = 0.0576
Root MSE = 17.096

kn1s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
income_2	2.70e-06	1.15e-06	2.34	0.019	4.38e-07	4.96e-06
inc_drop	-.5003802	1.288261	-0.39	0.698	-3.026943	2.026182
inc_inc	1.6146	1.454883	1.11	0.267	-1.238745	4.467944
exp_drop	2.958412	2.032785	1.46	0.146	-1.028325	6.94515
exp_inc	-.0391217	1.188791	-0.03	0.974	-2.370601	2.292358
wrkfulltime	-1.723607	1.629901	-1.06	0.290	-4.920199	1.472986
wrkparttime	-1.822511	1.898847	-0.96	0.337	-5.546567	1.901545
wrkselfemp	-2.983302	2.642735	-1.13	0.259	-8.166284	2.199681
wrkunempl	-3.155928	2.933832	-1.08	0.282	-8.909815	2.597959
wrkdisabled	-1.259738	1.87451	-0.67	0.502	-4.936062	2.416587
wrkother	-2.859571	2.159943	-1.32	0.186	-7.095693	1.376551
d_ratio_2_mortgage_pop	.0077204	.0040284	1.92	0.055	-.0001803	.015621
e5	1.123393	.9109778	1.23	0.218	-.6632344	2.91002
oslo_area	-.9867373	1.127122	-0.88	0.381	-3.197272	1.223797
east	-1.137942	1.202674	-0.95	0.344	-3.496649	1.220765
south_west	-1.808764	1.162479	-1.56	0.120	-4.08864	.4711116
renter	-3.95299	1.440268	-2.74	0.006	-6.777671	-1.128309
owner_m	1.318021	1.133161	1.16	0.245	-.9043561	3.540398
age_u30	-.9656738	1.831032	-0.53	0.598	-4.556728	2.625381
age_30_44	-2.668745	1.612189	-1.66	0.098	-5.830601	.4931109
age_45_59	-.3092207	1.45299	-0.21	0.831	-3.158854	2.540412
gender0	-3.990123	.8083412	-4.94	0.000	-5.575457	-2.404788
couple	.5702556	.9704732	0.59	0.557	-1.333055	2.473566
numchild	-.0417432	.5580277	-0.07	0.940	-1.136158	1.052672
e6	4.535685	.8116718	5.59	0.000	2.943819	6.127552
immigrant3	1.495762	1.483922	1.01	0.314	-1.414535	4.406059
eduuniv	1.742262	.8752332	1.99	0.047	.0257377	3.458786
_cons	59.0915	1.703174	34.69	0.000	55.7512	62.43179

Source	SS	df	MS
Model	78843.0026	27	2920.11121
Residual	636320.468	1,891	336.499454
Total	715163.47	1,918	372.86938

Number of obs	= 1,919
$F(27, 1891)$	= 8.68
Prob > F	= 0.0000
R-squared	= 0.1102
Adj R-squared	= 0.0975
Root MSE	= 18.344

kn2s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
income_2	1.77e-06	1.24e-06	1.43	0.152	-6.52e-07	4.20e-06
inc_drop	1.418803	1.382328	1.03	0.305	-1.292246	4.129853
inc_inc	1.431575	1.561117	0.92	0.359	-1.630117	4.493267
exp_drop	9.094386	2.181217	4.17	0.000	4.816542	13.37223
exp_inc	.2615364	1.275595	0.21	0.838	-2.240185	2.763258
wrkfulltime	.0916369	1.748914	0.05	0.958	-3.338367	3.521641
wrkparttime	-1.553963	2.037499	-0.76	0.446	-5.549945	2.442019
wrkselfemp	1.870996	2.835704	0.66	0.509	-3.690442	7.432434
wrkunempl	2.012912	3.148057	0.64	0.523	-4.161118	8.186941
wrkdisabled	.0429057	2.011384	0.02	0.983	-3.90186	3.987671
wrkother	-.9310472	2.317659	-0.40	0.688	-5.476486	3.614391
d_ratio_2_mortgage_pop	.0085755	.0043226	1.98	0.047	.000098	.0170531
e5	3.029985	.9774964	3.10	0.002	1.1129	4.947069
oslo_area	-.4222641	1.209424	-0.35	0.727	-2.794209	1.949681
east	.613912	1.290492	0.48	0.634	-1.917025	3.144849
south_west	-.9765028	1.247362	-0.78	0.434	-3.422852	1.469847
renter	-.940334	1.545434	-0.61	0.543	-3.97127	2.090602
owner_m	.6308333	1.215903	0.52	0.604	-1.753819	3.015486
age_u30	.4625393	1.964731	0.24	0.814	-3.39073	4.315808
age_30_44	1.693467	1.729909	0.98	0.328	-1.699264	5.086198
age_45_59	1.423658	1.559086	0.91	0.361	-1.634051	4.481368
gender0	-8.527237	.8673653	-9.83	0.000	-10.22833	-6.826144
couple	1.14376	1.041336	1.10	0.272	-.8985282	3.186048
numchild	1.117299	.5987742	1.87	0.062	-.0570287	2.291627
e6	1.755688	.8709391	2.02	0.044	.0475852	3.46379
immigrant3	1.389222	1.592277	0.87	0.383	-1.733581	4.512026
eduuniv	4.135702	.9391416	4.40	0.000	2.293839	5.977565
_cons	58.30139	1.827537	31.90	0.000	54.71719	61.8856

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Source	SS	df	MS	Number of obs	=	1,919
				F(27, 1891)	=	4.13
Model	16525.682	27	612.062297	Prob > F	=	0.0000
Residual	280143.177	1,891	148.145519	R-squared	=	0.0557
				Adj R-squared	=	0.0422
Total	296668.859	1,918	154.676152	Root MSE	=	12.172

kn3s	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
income_2	-1.31e-06	8.21e-07	-1.59	0.111	-2.92e-06	3.01e-07
inc_drop	-.1071974	.9171984	-0.12	0.907	-1.906025	1.69163
inc_inc	2.359822	1.035828	2.28	0.023	.3283372	4.391307
exp_drop	-.7724967	1.447274	-0.53	0.594	-3.610919	2.065926
exp_inc	.0394611	.8463791	0.05	0.963	-1.620474	1.699396
wrkfulltime	1.131938	1.160434	0.98	0.329	-1.143928	3.407804
wrkparttime	-1.242917	1.351915	-0.92	0.358	-3.89432	1.408485
wrkselfemp	1.626652	1.881538	0.86	0.387	-2.063457	5.316761
wrkunempl	-5.582421	2.088789	-2.67	0.008	-9.678995	-1.485847
wrkdisabled	-1.045791	1.334588	-0.78	0.433	-3.66321	1.571628
wrkother	-1.925364	1.537807	-1.25	0.211	-4.941339	1.090612
d_ratio_2_mortgage_pop	.0003535	.0028681	0.12	0.902	-.0052715	.0059784
e5	1.329993	.6485855	2.05	0.040	.0579744	2.602011
oslo_area	-.2627739	.8024732	-0.33	0.743	-1.8366	1.311052
east	-1.075415	.8562632	-1.26	0.209	-2.754735	.6039053
south_west	-1.01758	.8276456	-1.23	0.219	-2.640775	.6056143
renter	-.0309688	1.025422	-0.03	0.976	-2.042046	1.980109
owner_m	.7154493	.8067724	0.89	0.375	-.8668083	2.297707
age_u30	-5.197242	1.303633	-3.99	0.000	-7.753952	-2.640533
age_30_44	-2.915286	1.147824	-2.54	0.011	-5.166421	-.6641513
age_45_59	-.5006013	1.03448	-0.48	0.629	-2.529444	1.528241
gender0	-.4076408	.5755117	-0.71	0.479	-1.536345	.7210637
couple	-2.992294	.6909442	-4.33	0.000	-4.347387	-1.637201
numchild	-.4137081	.3972969	-1.04	0.298	-1.192894	.3654783
e6	2.102979	.577883	3.64	0.000	.9696237	3.236334
immigrant3	-1.76767	1.056503	-1.67	0.094	-3.839703	.3043636
eduuniv	-.3655217	.6231365	-0.59	0.558	-1.587629	.8565856
_cons	99.89	1.212602	82.38	0.000	97.51182	102.2682

Source	SS	df	MS
Model	162516.861	27	6019.143
Residual	514532.548	1,891	272.095477
Total	677049.409	1,918	352.997606

Number of obs	= 1,919
F(27, 1891)	= 22.12
Prob > F	= 0.0000
R-squared	= 0.2400
Adj R-squared	= 0.2292
Root MSE	= 16.495

kn4s	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
income_2	4.54e-06	1.11e-06	4.08	0.000	2.36e-06	6.72e-06
inc_drop	2.506161	1.243025	2.02	0.044	.0683168	4.944004
inc_inc	1.83584	1.403796	1.31	0.191	-.9173109	4.588991
exp_drop	-1.158504	1.961405	-0.59	0.555	-5.005249	2.688242
exp_inc	2.505985	1.147047	2.18	0.029	.2563734	4.755596
wrkfulltime	.506008	1.572668	0.32	0.748	-2.578338	3.590354
wrkparttime	-5.509684	1.83217	-3.01	0.003	-9.102972	-1.916396
wrkselfemp	4.693767	2.549937	1.84	0.066	-.3072181	9.694753
wrkunempl	-2.67507	2.830812	-0.94	0.345	-8.226913	2.876773
wrkdisabled	-3.100232	1.808687	-1.71	0.087	-6.647464	.4470009
wrkother	-2.025359	2.084098	-0.97	0.331	-6.112732	2.062014
d_ratio_2_mortgage_pop	.0075119	.003887	1.93	0.053	-.0001113	.0151351
e5	1.987261	.8789894	2.26	0.024	.2633705	3.711152
oslo_area	-.0817402	1.087544	-0.08	0.940	-2.214653	2.051173
east	-1.886636	1.160443	-1.63	0.104	-4.162519	.3892461
south_west	-1.698673	1.121659	-1.51	0.130	-3.898492	.5011462
renter	-2.82125	1.389694	-2.03	0.042	-5.546744	-.0957557
owner_m	10.26448	1.093371	9.39	0.000	8.120144	12.40882
age_u30	9.642659	1.766736	5.46	0.000	6.177702	13.10762
age_30_44	7.413956	1.555578	4.77	0.000	4.363127	10.46478
age_45_59	2.986461	1.40197	2.13	0.033	.2368914	5.736031
gender0	-.7035369	.7799568	-0.90	0.367	-2.233203	.8261293
couple	1.271184	.9363956	1.36	0.175	-.5652934	3.107661
numchild	.6404957	.5384329	1.19	0.234	-.4154893	1.696481
e6	1.895409	.7831704	2.42	0.016	.3594397	3.431378
immigrant3	-.3279983	1.431815	-0.23	0.819	-3.136102	2.480105
eduuniv	2.673429	.8444999	3.17	0.002	1.01718	4.329679
_cons	35.9732	1.643368	21.89	0.000	32.7502	39.19621

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Source	SS	df	MS
Model	67492.4487	27	2499.72032
Residual	537196.248	1,891	284.080512
Total	604688.697	1,918	315.270436

Number of obs	=	1,919
F(27, 1891)	=	8.80
Prob > F	=	0.0000
R-squared	=	0.1116
Adj R-squared	=	0.0989
Root MSE	=	16.855

kn5s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
income_2	3.15e-06	1.14e-06	2.77	0.006	9.21e-07	5.38e-06
inc_drop	1.808061	1.270105	1.42	0.155	-.6828946	4.299016
inc_inc	.3679213	1.434379	0.26	0.798	-2.445211	3.181053
exp_drop	-.3950381	2.004137	-0.20	0.844	-4.32559	3.535514
exp_inc	-.6436901	1.172037	-0.55	0.583	-2.942312	1.654932
wrkfulltime	.3025199	1.60693	0.19	0.851	-2.849022	3.454062
wrkparttime	-1.82074	1.872087	-0.97	0.331	-5.492313	1.850832
wrkselfemp	3.176825	2.60549	1.22	0.223	-1.933113	8.286763
wrkunempl	.4062887	2.892485	0.14	0.888	-5.266508	6.079086
wrkdisabled	.3853744	1.848092	0.21	0.835	-3.239139	4.009888
wrkother	3.302372	2.129503	1.55	0.121	-.8740491	7.478794
d_ratio_2_mortgage_pop	-.0028616	.0039716	-0.72	0.471	-.0106509	.0049277
e5	.5521947	.8981393	0.61	0.539	-1.209253	2.313643
oslo_area	-.5684945	1.111238	-0.51	0.609	-2.747875	1.610886
east	-1.049876	1.185724	-0.89	0.376	-3.375342	1.275589
south_west	-.5425062	1.146096	-0.47	0.636	-2.790251	1.705239
renter	-4.18262	1.41997	-2.95	0.003	-6.967492	-1.397748
owner_m	-2.26784	1.117191	-2.03	0.043	-4.458897	-.0767829
age_u30	-11.1369	1.805226	-6.17	0.000	-14.67734	-7.596454
age_30_44	-6.887467	1.589468	-4.33	0.000	-10.00476	-3.770172
age_45_59	-1.030524	1.432513	-0.72	0.472	-3.839996	1.778949
gender0	-6.071089	.7969491	-7.62	0.000	-7.634081	-4.508097
couple	-1.083769	.9567962	-1.13	0.257	-2.960256	.7927184
numchild	.2727178	.5501633	0.50	0.620	-.8062732	1.351709
e6	2.087907	.8002328	2.61	0.009	.5184749	3.657339
immigrant3	2.247057	1.463009	1.54	0.125	-.6222246	5.116339
eduuniv	3.602164	.8628984	4.17	0.000	1.909831	5.294497
_cons	81.12539	1.67917	48.31	0.000	77.83217	84.41861

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Attitudes, Financial Confidence and Locus of Control

Source	SS	df	MS
Model	202435.183	39	5190.64573
Residual	391929.244	1,879	208.583951
Total	594364.427	1,918	309.887605

Number of obs	=	1,919
F(39, 1879)	=	24.89
Prob > F	=	0.0000
R-squared	=	0.3406
Adj R-squared	=	0.3269
Root MSE	=	14.442

att1s	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
a1_new	3.84609	1.894539	2.03	0.042	.1304683	7.561712
kn1s	.1023215	.0233514	4.38	0.000	.0565241	.1481189
kn2s	-.0767391	.0208557	-3.68	0.000	-.1176418	-.0358363
kn3s	.0542006	.0286855	1.89	0.059	-.0020582	.1104593
kn4s	.0051291	.0215658	0.24	0.812	-.0371663	.0474245
kn5s	.0470659	.0205221	2.29	0.022	.0068174	.0873144
tos	.2713356	.0224982	12.06	0.000	.2272115	.3154596
imps	.1825604	.0219215	8.33	0.000	.1395674	.2255534
socs	.0441566	.0188978	2.34	0.020	.0070938	.0812195
selfs	.0476298	.0269893	1.76	0.078	-.0053025	.100562
aos	.0060345	.0205658	0.29	0.769	-.0342998	.0463687
locs	.0456007	.0284313	1.60	0.109	-.0101595	.101361
income_2	-1.04e-06	9.88e-07	-1.05	0.292	-2.98e-06	8.95e-07
inc_drop	-.3813589	1.092633	-0.35	0.727	-2.52426	1.761542
inc_inc	-.8182259	1.23544	-0.66	0.508	-3.241204	1.604752
exp_drop	-1.160794	1.73044	-0.67	0.502	-4.554581	2.232992
exp_inc	-2.204994	1.011552	-2.18	0.029	-4.188878	-.2211095
wrkfulltime	.0569524	1.381535	0.04	0.967	-2.652552	2.766457
wrkparttime	.6985004	1.611116	0.43	0.665	-2.461265	3.858265
wrkselfemp	2.507691	2.243027	1.12	0.264	-1.891396	6.906777
wrkunempl	3.860323	2.496772	1.55	0.122	-1.036415	8.75706
wrkdisabled	-.855888	1.593567	-0.54	0.591	-3.981235	2.269459
wrkother	.2671585	1.841914	0.15	0.885	-3.345254	3.879571
d_ratio_2_mortgage_pop	-.0100389	.0034124	-2.94	0.003	-.0167314	-.0033464
e5	.1610249	.775074	0.21	0.835	-1.359071	1.681121
oslo_area	-1.22872	.9544714	-1.29	0.198	-3.100655	.6432155
east	1.165587	1.020117	1.14	0.253	-.8350937	3.166268
south_west	1.126005	.9847159	1.14	0.253	-.805247	3.057256
renter	-4.430562	1.230669	-3.60	0.000	-6.844183	-2.016941
owner_m	-3.170998	.9893531	-3.21	0.001	-5.111345	-1.230652
age_u30	4.232197	1.634401	2.59	0.010	1.026766	7.437628
age_30_44	.8057121	1.414208	0.57	0.569	-1.967872	3.579296
age_45_59	1.044348	1.23704	0.84	0.399	-1.381769	3.470465
gender0	3.478443	.7223276	4.82	0.000	2.061795	4.895092
couple	.5055237	.8301275	0.61	0.543	-1.122545	2.133593
numchild	-.7529553	.4738549	-1.59	0.112	-1.682293	.1763819
e6	.6132705	.7009494	0.87	0.382	-.7614507	1.987992
immigrant3	-1.19881	1.260662	-0.95	0.342	-3.671254	1.273635
eduuniv	-.3704861	.7494449	-0.49	0.621	-1.840318	1.099346
_cons	19.91423	4.114736	4.84	0.000	11.8443	27.98417

Source	SS	df	MS	Number of obs	=	1,919
				F(39, 1879)	=	18.73
Model	202841.075	39	5201.05321	Prob > F	=	0.0000
Residual	521887.072	1,879	277.747244	R-squared	=	0.2799
				Adj R-squared	=	0.2649
Total	724728.147	1,918	377.856177	Root MSE	=	16.666

att2s	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
a1_new	-1.866072	2.186191	-0.85	0.393	-6.153689	2.421545
kn1s	.1759183	.0269462	6.53	0.000	.1230707	.2287659
kn2s	.1076721	.0240663	4.47	0.000	.0604727	.1548715
kn3s	.134726	.0331014	4.07	0.000	.0698066	.1996454
kn4s	.0748754	.0248857	3.01	0.003	.0260689	.1236818
kn5s	.0991906	.0236813	4.19	0.000	.0527461	.1456351
tos	.0134711	.0259616	0.52	0.604	-.0374456	.0643877
imps	.1035097	.0252961	4.09	0.000	.0538982	.1531212
socs	-.0015023	.021807	-0.07	0.945	-.0442707	.0412661
selfs	.0126344	.0311442	0.41	0.685	-.0484464	.0737152
aos	.0707066	.0237318	2.98	0.003	.0241631	.11725
locs	.2552597	.0328081	7.78	0.000	.1909155	.3196038
income_2	2.45e-06	1.14e-06	2.15	0.032	2.12e-07	4.68e-06
inc_drop	-2.431724	1.260836	-1.93	0.054	-4.90451	.0410615
inc_inc	2.559185	1.425627	1.80	0.073	-.2367949	5.355164
exp_drop	-.1457755	1.99683	-0.07	0.942	-4.062012	3.770461
exp_inc	-3.568248	1.167274	-3.06	0.002	-5.857537	-1.278958
wrkfulltime	-2.875317	1.594213	-1.80	0.071	-6.001932	.2512968
wrkparttime	-2.543372	1.859137	-1.37	0.171	-6.189562	1.102817
wrkselfemp	-5.204135	2.588326	-2.01	0.045	-10.28043	-.1278393
wrkunempl	-.2740095	2.881133	-0.10	0.924	-5.924567	5.376548
wrkdisabled	-1.518926	1.838886	-0.83	0.409	-5.125399	2.087547
wrkother	-2.868732	2.125464	-1.35	0.177	-7.037251	1.299787
d_ratio_2_mortgage_pop	.0000971	.0039377	0.02	0.980	-.0076256	.0078199
e5	1.650938	.8943914	1.85	0.065	-.1031668	3.405043
oslo_area	1.251563	1.101406	1.14	0.256	-.9085438	3.411671
east	-.2602831	1.177157	-0.22	0.825	-2.568955	2.048389
south_west	-.92375	1.136306	-0.81	0.416	-3.152305	1.304805
renter	-4.708762	1.420122	-3.32	0.001	-7.493943	-1.92358
owner_m	-2.008677	1.141657	-1.76	0.079	-4.247727	.230372
age_u30	.4784309	1.886006	0.25	0.800	-3.220455	4.177317
age_30_44	2.323648	1.631916	1.42	0.155	-.8769111	5.524206
age_45_59	1.081864	1.427474	0.76	0.449	-1.717737	3.881465
gender0	3.184352	.833525	3.82	0.000	1.54962	4.819084
couple	-.6017056	.95792	-0.63	0.530	-2.480404	1.276993
numchild	-.7489236	.5468017	-1.37	0.171	-1.821326	.3234788
e6	.5952485	.8088558	0.74	0.462	-.9911016	2.181599
immigrant3	.4661328	1.454732	0.32	0.749	-2.386928	3.319193
eduuniv	.2456969	.8648168	0.28	0.776	-1.450406	1.941799
_cons	1.62856	4.748171	0.34	0.732	-7.683684	10.9408

```
. reg locs kn1s kn2s kn3s kn4s kn5s tos imps socs selfs aos  a1_new income_2 inc
> _drop inc_inc exp_drop exp_inc wrkfulltime wrkparttime wrkselfemp wrkunempl wr
> kdisabled wrkother d_ratio_2_mortgage_pop e5 oslo_area east south_west renter
> owner_m age_u30 age_30_44 age_45_59 gender0 couple numchild e6 immigrant3 eduu
> niv [aweight=vekt_f1]
(sum of wgt is   1.9190e+03)
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Source	SS	df	MS
Model	81116.7348	38	2134.65092
Residual	258040.224	1,880	137.255438
Total	339156.959	1,918	176.828446

Number of obs	= 1,919
$F(38, 1880)$	= 15.55
Prob > F	= 0.0000
R-squared	= 0.2392
Adj R-squared	= 0.2238
Root MSE	= 11.716

locs	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
kn1s	.0875499	.0188346	4.65	0.000	.0506111	.1244888
kn2s	.0291421	.0169046	1.72	0.085	-.0040117	.0622959
kn3s	.0902667	.0231762	3.89	0.000	.044813	.1357204
kn4s	.0440806	.0174644	2.52	0.012	.0098289	.0783324
kn5s	.0266935	.016636	1.60	0.109	-.0059335	.0593204
tos	.0615847	.018195	3.38	0.001	.0259001	.0972693
imps	-.0346876	.0177646	-1.95	0.051	-.0695279	.0001527
socs	-.0476972	.0152902	-3.12	0.002	-.0776849	-.0177096
selfs	.2403467	.0211802	11.35	0.000	.1988075	.2818859
aos	.071798	.0166005	4.33	0.000	.0392408	.1043553
a1_new	3.094399	1.535179	2.02	0.044	.0835645	6.105234
income_2	1.88e-06	8.00e-07	2.35	0.019	3.09e-07	3.45e-06
inc_drop	-.9376036	.8860724	-1.06	0.290	-2.675392	.8001851
inc_inc	1.342537	1.001702	1.34	0.180	-.6220278	3.307102
exp_drop	1.296077	1.403403	0.92	0.356	-1.456314	4.048469
exp_inc	-.8768892	.8203152	-1.07	0.285	-2.485713	.7319348
wrkfulltime	.3795996	1.120658	0.34	0.735	-1.818264	2.577463
wrkparttime	-.9616727	1.306738	-0.74	0.462	-3.524483	1.601137
wrkselfemp	-1.134585	1.81934	-0.62	0.533	-4.702724	2.433554
wrkunempl	-1.714895	2.024978	-0.85	0.397	-5.686337	2.256547
wrkdisabled	-3.373112	1.290348	-2.61	0.009	-5.903776	-.8424475
wrkother	.1092382	1.494146	0.07	0.942	-2.821121	3.039598
d_ratio_2_m~p	-.000241	.0027681	-0.09	0.931	-.0056699	.0051879
e5	1.203406	.6281219	1.92	0.056	-.0284829	2.435296
oslo_area	-.8797614	.7739949	-1.14	0.256	-2.397741	.638218
east	-.2050024	.8274983	-0.25	0.804	-1.827914	1.417909
south_west	-1.6882	.7978454	-2.12	0.034	-3.252956	-.1234443
renter	-.6935888	.998182	-0.69	0.487	-2.65125	1.264072
owner_m	-.5399057	.80246	-0.67	0.501	-2.113712	1.0339
age_u30	1.587896	1.325309	1.20	0.231	-1.011335	4.187127
age_30_44	-.3530688	1.147168	-0.31	0.758	-2.602924	1.896787
age_45_59	-.6762918	1.003357	-0.67	0.500	-2.644103	1.29152
gender0	2.22973	.5836863	3.82	0.000	1.084989	3.374471
couple	-1.15241	.6728691	-1.71	0.087	-2.472059	.1672388
numchild	-.3370284	.3843093	-0.88	0.381	-1.090746	.4166893
e6	.7873919	.5683154	1.39	0.166	-.3272034	1.901987
immigrant3	-.9781717	1.022392	-0.96	0.339	-2.983313	1.02697
eduuniv	-1.578646	.6068534	-2.60	0.009	-2.768823	-.388469
_cons	30.4238	3.263261	9.32	0.000	24.02381	36.82379

Overall Financial Well-Being. Parsimonious model. Revised conceptual model

Source	SS	df	MS
Model	425164.678	26	16352.4876
Residual	252549.847	1,892	133.483006
Total	677714.525	1,918	353.344382

Number of obs =	1,919
F(26, 1892) =	122.51
Prob > F =	0.0000
R-squared =	0.6274
Adj R-squared =	0.6222
Root MSE =	11.553

owbs	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
al_new	-2.004931	1.492116	-1.34	0.179	-4.931297	.9214356
beh1s	.1392991	.0455858	3.06	0.002	.0498955	.2287028
beh2s	.2981087	.0420434	7.09	0.000	.2156524	.380565
beh3s	.4116508	.026592	15.48	0.000	.359498	.4638035
beh4s	.3644148	.048958	7.44	0.000	.2683974	.4604322
smaspl	-.0012054	.0005933	-2.03	0.042	-.002369	-.0000418
att2s	.1169228	.015276	7.65	0.000	.0869632	.1468823
locs	.1334696	.0218856	6.10	0.000	.0905471	.1763921
income_2	6.14e-06	7.77e-07	7.90	0.000	4.61e-06	7.66e-06
inc_drop	-8.024733	.8520581	-9.42	0.000	-9.695805	-6.35366
exp_inc	-3.576062	.7969878	-4.49	0.000	-5.139129	-2.012994
wrkfulltime	-.5761595	1.09932	-0.52	0.600	-2.732165	1.579846
wrkparttime	-4.311176	1.279646	-3.37	0.001	-6.820841	-1.80151
wrkselfemp	-5.208304	1.78015	-2.93	0.003	-8.699568	-1.71704
wrkunempl	-10.4249	1.980305	-5.26	0.000	-14.30871	-6.541088
wrkdisabled	-3.806482	1.263676	-3.01	0.003	-6.284826	-1.328138
wrkother	-2.305174	1.457844	-1.58	0.114	-5.164325	.5539757
renter	-6.018411	.9837395	-6.12	0.000	-7.947739	-4.089082
owner_m	-3.072676	.7736853	-3.97	0.000	-4.590042	-1.55531
age_u30	-5.084386	1.200116	-4.24	0.000	-7.438075	-2.730697
age_30_44	-6.428025	1.063961	-6.04	0.000	-8.514684	-4.341366
age_45_59	-4.025107	.9806077	-4.10	0.000	-5.948293	-2.101921
gender	-1.994034	.5537849	-3.60	0.000	-3.080127	-.9079404
couple	1.746402	.6551747	2.67	0.008	.461461	3.031343
numchild	-1.337785	.3781436	-3.54	0.000	-2.079408	-.5961629
eduuniv	1.675872	.5840953	2.87	0.004	.5303335	2.821411
_cons	-30.06703	5.388771	-5.58	0.000	-40.63559	-19.49847

Consumption Research Norway SIFO at Oslo and
Akershus University College of Applied Sciences (HiOA)
has a special responsibility to contribute to the knowledge
base for consumer policy in Norway and will develop new
knowledge about consumption, consumer policy and con-
sumer position and role in society.

Key research topics are:

- consumers in the market and consumer choice
- household resource allocations
- consumer economy - debt development and poverty
- technological development and consumers' every
  day life
- digital daily life and coping
- environmental effects of different types of consumption
- food and eating habits
- textiles - value chains - consequences for everyday life
  and environment
- consumption significance for social inclusion
- consumer policy

SIFO
Consumption Research Norway

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