Financial Well-being in the Workplace

A Cox, H Hooker, C Markwick, P Reilly

REPORT 464

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INSTITUTE FOR EMPLOYMENT STUDIES
Mantell Building
University of Sussex Campus
Brighton BN1 9RF
UK

Tel. +44 (0) 1273 686751
Fax +44 (0) 1273 690430

www.employment-studies.co.uk

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Executive Summary

Background

The Institute for Employment Studies was commissioned by the charitable foundation of a multinational organisation to undertake an investigation of the state of financial well-being and links between financial well-being and employee performance at work. This consisted of an online survey of employees conducted in two organisations in the summer of 2008, during the onset but not the peak of the global financial crisis. 1,439 responses were received as a result of 5,289 emails sent to employees of 'Private Co.', a private company in the service sector with a number of sites across England, giving a 27.2 per cent response rate. 470 responses were received as a result of 4000 emails sent to employees of 'Public Co.', a public sector organisation with 3 sites in Southern England, giving a response rate of 11.8 per cent.

Definition

Financial well-being refers to subjective perceptions and objective indicators of individuals' personal financial status. Objective indicators of financial circumstances include measures such as income, debt, savings and aspects of financial capability such as knowledge of financial products and services, planning ahead and staying on budget. Subjective perceptions include individuals' satisfaction with their current and future financial situation.

Findings

Predictors of financial well-being

Financial well-being is predicted by a mixture of demographic characteristics and personal financial behaviours

Factors predicting financial well-being among survey respondents were consistent with those in the literature.

People with poor financial well-being are likely to be: younger, single people with health problems or a disability, living in rented accommodation and on lower incomes. This group are more likely to face financial distress and have difficulty in paying bills.

Those with better financial well-being are older, own their homes, married or living with a partner, without health problems and on higher incomes.

Notably, financial behaviours as well as demographic characteristics were also influential in predicting financial well-being among respondents to the survey: those who budgeted, had lower levels of savings and higher debts were likely to have lower financial well-being than the rest of the respondents.

Apart from associations between higher income levels and better financial well-being, there is no available evidence in the literature which identifies particular occupational groups as being most vulnerable to poor financial well-being.

Financial circumstances

Mortgage borrowings varied between Private Co. and Public Co

Over two-thirds of respondents had mortgages with estimated average amounts outstanding of £91,324 in Private Co. and £106,481 in Public Co. Public Co. had a higher proportion of respondents earning over £25,000 and is based entirely in Southern England which may account for higher estimated average mortgages.

Survey respondents' income levels are just above UK averages

The average annual personal income in both organisations was just over £25,000. This is just slightly higher than the most recent UK figure of national average income which is £24,769 (Annual Survey of Hours and Earnings, 2007).

Average personal loan and store card debts are over £8,000 per individual

The estimated average individual debts owed in personal loan, store cards and hire purchase agreements taken out in the past two years was over £8,000 per survey respondent. This figure is somewhat lower than the levels reported by

charities that assist citizens with debt problems but the survey data contained in this report excludes debts incurred longer than two years ago.

Average credit card debt is around £3,000 per individual survey respondent

The estimated average debt on credit cards was £3,117 for an employee in Private Co. and £3,002 for Public Co. These results are very similar to the Department for Business, Enterprise and Regulatory Reform's (BERR) analysis of individual UK debt (2007) which showed that the average amount on credit cards per household was £3,220. However, BERR's survey refers to household rather than individual debt, so it is possible that the data we report underestimates the extent of household debt.

Credit or store cards debts for employees who did not pay their balance off in full every month represented over 10 per cent of yearly income in both firms.

Financial behaviours

Budgeting but not always sticking to budgets

Over two-thirds of the respondents in each organisation reported that they budgeted their spending and, of those budgeting, nearly half in each organisation said they stuck to their budget.

A majority are savers but saving amounts are small

Over fifty per cent of respondents in each organisation reported being regular savers in addition to any pension contributions they made. A majority of savers stated that they put aside under £100 a month, but this needs to be put in the context of evidence from national surveys which show that only around 30 per cent of households saved regularly.

Current and future financial worries

Substantial minorities of employees have current financial concerns …

Over 30 per cent of respondents stated that they did not feel in control of their finances. Around a quarter of survey respondents were worried about debt, around one in five reported being kept awake at night by financial worries and over ten per cent felt their health was suffering as a result of financial concerns.

... and were also worried about the future

A substantial majority of respondents had concerns about their future financial well-being. Only around a third of people felt positive about their financial future and less than one-third of respondents thought they would have sufficient savings for their retirement.

The relationship between financial well-being and individual performance at work

A minority feel financial problems affect their work

Just under 10 per cent of employees felt that their financial well-being had a damaging effect on their work performance.

Financial well-being and productivity at work

Those who report better financial well-being are 1.54 times more likely to say their productivity has increased over the past year.

Views on financial advice and education

Substantial minorities seek information and advice about finance

Over 40 per cent of respondents had made use of some source of financial advice/information in the past twelve months, with the most popular sources being independent financial advisors and banks/building societies. Unsurprisingly perhaps, these were also the most popular sources of advice and information which employees would consider using in the future among the entire sample.

Participation in and responses to financial education

Fewer than 15 per cent of respondents had made use of financial education programmes run by their employers, but those who had participated reported finding the contents useful.

People from groups identified in both previous literature and the current survey as more likely to suffer from poor financial well-being were significantly less likely to participate in financial education workshops. These included employees with a long-term health problem or disability, and those who reported having life events involving changes to their personal circumstances, including redundancy or reducing working hours. This suggests that accessibility may be a barrier to participation and further customisation and targeting of financial education may be required. There were no differences found in take-up of financial education according to debt or income levels.

Financial competence education needs include both financial products and basic processes

The topics for potential financial education which attracted most interest from respondents were pension planning and budgeting. The first arguably reflects the complexities of the products involved, while the second illustrates a self-reported competence gap in basic financial processes.

Conclusions

More research is required to assess how customisation of delivery methods for financial education could optimise its impact for different demographic groups. More robust evaluations of the impact of financial education and cost-benefit analysis of participation in financial education for employers are required.

1 Introduction

Personal financial well-being and its effects on employee behaviour in the workplace is a new topic of study in the UK. There has been longstanding concern about the impact of rising debt levels on UK citizens and a number of analyses of the causes and consequences of debt, many of which are discussed within the literature review in Chapter 2. But there is a dearth of UK research to investigate any links between financial health and individual productivity and performance in the workplace. However, these connections have been explored in much more detail in studies conducted in the United States, where employee financial well-being has been investigated since the early 1990s.

The Institute for Employment Studies (IES) was commissioned by the charitable foundation of a multinational organisation to undertake an investigation of the state of financial well-being and links between financial well-being and employee performance at work. This consisted of an online survey of employees conducted in two organisations in the summer of 2008, when the global financial crisis was simmering but had not yet reached its peak. The objectives of the project were to:

- review the literature on financial well-being, in particular addressing the UK context, and outline what is known about indicators of personal financial well-being
- assess levels of debt and perceptions of financial well-being among individuals in employment and identify the characteristics of those groups most vulnerable to financial problems
- identify any links between financial well-being and individual performance in the workplace.

The remainder of the report is structured as follows:

- Chapter 2 is a literature review which defines financial well-being and associated terms, discusses the measures of financial well-being used and

summarises the evidence available on levels of debt in the UK and the characteristics of those affected. It then considers evidence on the links between financial well-being and employee performance and discusses what action can be taken by the government and employers to improve employee well-being.

- Chapter 3 outlines the methodology used for the data collection and analysis covering the questionnaire design and measures used, background to participating organisations, development and piloting, questionnaire administration and the analysis and presentation of findings.
- Chapter 4 reports the findings of the questionnaire. It begins by outlining basic information on the profile of respondents and current and future financial well-being indicators. These cover:
  - primary and secondary objective measures of financial well-being such as debt and income levels, saving and budgeting habits
  - subjective financial well-being indicators based on employee perceptions such as the degree of worry about finance and level of confidence in future financial security.

The chapter goes on to explore the demographic characteristics of those who suffer from poor financial well-being and the factors which predict above average or below average financial well-being. It then examines links between financial well-being and employee behaviour in the workplace covering time spent on personal financial issues in the workplace, absence, and self-reported perceptions of qualitative and quantitative performance. Lastly it explores the use of, and attitudes to, financial education programmes and employee preferences for sources of financial information.

- Chapter 5 presents the conclusions and implications of the report.

2 Literature Review

This literature review has been prepared by IES to inform the development of an employee survey on the state of employee financial well-being in the UK, and consequent links with employee productivity. It is based on literature found through a search of international databases of practitioner and academic journals, newspapers and reports, and a search of the Internet to access material from relevant websites, focussing in particular on organisations which have interests in personal financial status. During the process of the search, we also contacted a number of experts, charities and voluntary organisations to try to ensure that no further (un)published material had been omitted.

This review has six main sections. This introduction sets out the structure for the literature review, and provides a brief indication of why financial well-being is of interest and importance, before setting out and defining the terms that will be used in the literature review. The second examines the concept of financial well-being, comparing the strengths and weaknesses of different definitions and models used. The third part examines the state of financial well-being in the UK population, covering indicators of financial distress and reviewing the evidence on the types of people who are most likely to suffer from financial ill-health. The fourth part reviews the available evidence on the consequences of financial problems, focussing particularly on its impact on employee behaviours in the workplace. The fifth part discusses ways of preventing and curing financial ill-health, specifically examining the role of financial education, and the role of employers in facilitating and delivering this type of support for employees. The sixth part summarises our findings and draws out conclusions and implications.

2.1 Why worry about financial well-being?

Personal poverty is of concern to policy makers because of its associations with lower educational attainment, ill-health, lower life expectancy and national productivity, as well as the policy question of what type of welfare regime is most

appropriate to support impoverished systems, how generous it should be and how it should be funded. There is a wide body of literature in this area. However, in the UK, much more attention has been given to the financial health or ill-health of people without employment, rather than those at work. In particular, we know very little about the consequences of individual financial well-being for how employees perform in the workplace. This is of particular concern now that the UK, and much of the global economy, is entering a difficult period, following a long period of sustained economic growth and a beneficial economic climate for consumers. Evidence suggests that recent changes in the personal finances of UK citizens may make them ill-prepared to cope with a harsher economic climate.

2.2 Definitions of financial well-being and related terms

In this literature review we use three terms for different dimensions and concepts which describe individuals' financial state and financial behaviours.

Financial well-being

This is a composite indicator made up of objective and subjective measures. We discuss the development of the term and its measures in more detail below.

Financial capability

This is a broader term. It refers to the end state of financial well-being in the sense of making ends meet through avoidance of debt but also incorporates the knowledge and skills which are required to achieve and maintain it (Atkinson et al., 2006). These include 'healthy' financial behaviours such as planning ahead, choosing appropriate financial products and staying informed regarding financial changes.

Financial competence

We use this term to refer solely to the knowledge and behaviours which contribute to financial capability.

2.2.1 Origins of financial well-being, financial capability and financial competence

The literature which conceptualised financial well-being in the workplace is much more developed in the USA, where experts have been undertaking work to define and model it for over ten years. It is this literature from which most of the available definitions are drawn. Financial well-being is a composite concept, consisting of *objective* and *subjective* dimensions, and different studies focus on either or both of these dimensions. We now consider each of these approaches in turn.

2.2.2 Objective measures of financial well-being

The simplest *objective* measure of financial well-being is income level. This has been used as a single indicator of financial well-being (Williams, 1983; Fletcher and Lorenz, 1985) but this fails to take expenditure into account. As memorably described in Dickens' novel *David Copperfield*, the relationship between the two is important:

> *'Annual income 20 shillings, annual expenditure 20 shillings and sixpence: result misery. Annual income 20 shillings and annual expenditure 19 and sixpence: result happiness.'*

However, this definition of financial 'happiness' is deficient because it is restricted to the immediate present. This ignores the need to make adequate financial plans for future events which could involve a short-term or long-term planning horizon. For both perspectives, budget management is required to ensure cash is available – for example, for domestic repairs, or long-term for events such as retirement, or to protect against a sudden drop in, or cessation of, income and sudden need for unanticipated expenditure. Therefore, Hong and Swanson (1995) propose three measures of financial well-being, incorporating household income, emergency fund adequacy, and debt-to-income ratio. In the UK, the Department for Business, Enterprise and Regulatory Reform note that: *'there is no universal agreement on a definition of consumer over-indebtedness'* (2007:24) and suggest using three indicators:

1. arrears of at least two months on a mortgage, household bill or credit cards
2. 'burden' of debt measured by proportion of income being spent on credit repayments
3. number of outstanding credit commitments.

They also note that work is being undertaken within the European Union to develop a measure of indebtedness at the household level and a report is due this year (BERR, 2007:26).

2.2.3 Subjective measures of financial well-being

Subjective financial well-being is the second important dimension of financial well-being. It is important to take this into consideration because individual responses to their financial status may be idiosyncratic and may influence their behaviours, including workplace behaviours. Individuals vary in the norms they apply to financial concerns, such as their income expectations, the comparisons they use to determine income adequacy and their attitudes to financial risk and debt. Some authors (eg Hayhoe, 1990; Porter, 1990) argue that an individual's subjective view of their income's adequacy is likely to be a better predictor of their overall life quality than more objective measures. Bagwell makes the point that: *'An individual*

may be "well-off" in terms of quantifiable, objective financial measures … but he or she may be personally very dissatisfied and experience a sense of poor financial wellness. Conversely, a person with few financial assets may be personally very satisfied and experience a sense of financial wellness' (2000:13).

2.2.4 Combined measures of financial well-being

Few authors rely entirely upon subjective measures to define financial well-being, since individuals can be misguided in their estimation of their financial situation. Furthermore, 'ostrich' behaviour is well documented among those encountering debt problems, where people ignore financial difficulties until the consequences become acute. Most research uses a composite concept of financial well-being, including both objective and subjective measurements, and subjective measures are often particularly important in influencing behaviours (see Section 3.4). Joo gives a definition of financial well-being as: *'satisfaction with material and non-material aspects of one's financial situation, perception of financial stability including adequacy of financial resources, and material and non-material financial resources that each individual possesses'* (1998:8).

The most dominant and influential framework for financial well-being incorporates subjective and objective measures, and was developed by Porter and Garman (1993). This model takes its inspiration from the *Model of Life Satisfaction* (Campbell, Converse and Rogers, 1976) which is a measure of general well-being. The authors adapt this framework to take into account financially healthy behaviours and the individual's perspective on their financial situation. They add a further two areas for analysis. The first is an individual's subjective comparison of their financial situation with their peer group, as these act as the reference points that people use for judging their financial status. The second is an individual's assessment of changes in their financial history and perceptions of likelihood of positive or negative future change.

Tests of the model showed that it has more comprehensive explanatory power than any previous measures; previous models explained up to 46 per cent of the factors that contribute to financial well-being (Davis and Helmick, 1985; Goodwin and Carroll, 1985; Hafstrom and Dunsing, 1973), whereas the Porter model accurately accounts for 71 per cent of the causes of financial health. However, the concept of financial well-being has been further refined in more recent work. Joo and Grable (2004) elaborate on it by adding further measures, such as perceptions of financial stress levels, financial knowledge, solvency, risk tolerance and education. In the UK, the Financial Services Authority commissioned extensive conceptual work in 2006 to develop a definition of financial capability which encompasses behaviours which result in the end state of financial well-being as well as indicators of that state.

The role of these elements of financial competence in fostering financial well-being can be important. Ackerman and Paolucci (1983) examined both objective and subjective income adequacy, and their relationship to life quality measures from over 1,000 individuals in a study in the USA. While both objective and subjective income adequacy explained more of the variation in each of the three life quality measures used (satisfaction with family income, satisfaction with level of consumption and satisfaction with overall life quality), subjective income adequacy was found to be more important to individuals than objective adequacy. Given Bagwell's (2000) observations that subjective perceptions of financial status may not correlate with objective indicators, financial competence may induce greater realism in individual perceptions.

While definitions of financial well-being are a useful starting point, the debate has moved on significantly since early work. Now that models of financial well-being have been created, more attention should be given to how individual financial capability can be developed in practice.

2.2.5 Financial well-being in the UK

Almost all of the empirical data which measures financial well-being in practice, like the concepts underpinning it, is based on USA findings, although a limited amount of research has also been conducted in mainland Europe. There are a number of basic questions to address concerning indicators of financial well-being. Firstly, how prevalent are financial problems in the UK? Secondly, are they increasing or decreasing in number and severity? Thirdly, what kinds of individuals or demographic groups are most likely to suffer from them?

2.3 Primary indicators of financial well-being – prevalence and changes in numbers of people with immediate financial problems

2.3.1 Types and levels of debt and their increase

The major sources of data which measure the extent of financial problems suffered by people in the UK are those focussed on immediate financial problems, which record levels of personal debt.

Talbot (2008) finds that average household debt is £9,223, excluding mortgage debt, in a report for the charity Credit Action based on data from April 2008, of which average consumer borrowing via credit cards, motor and retail finance deals, overdrafts and unsecured personal loans is £4,840 for each UK adult.

Figures calculated by the government's National Statistician, Karen Dunnell, show that during 2007 the average household owed debt (including mortgages, credit cards and personal loans), totalling 164 per cent of total household gross disposable income, an increase of almost 60 per cent since 1997 (House of Commons Hansard Written Answers, 2007). Although some of this increase can be explained simply by the rapid increase in house prices, these figures also show unsecured debt (excluding mortgages) reaching 39 per cent of household gross disposable income, compared to 28 per cent in 1997.

The DTI (2007) reports that among households with outstanding credit commitments, the average amount owed on credit cards, store cards, overdrafts, hire purchase agreements and loans (excluding mortgages) rose between 2002 and 2007, with a decrease only in amount owed for mail order purchases that reflects a longstanding decline in the popularity of this purchase method. CCCS and National Debtline agree that the source of most clients' debt is personal loans or overdrafts from banks and building societies, and credit cards (National Debtline, 2008; CCCS, 2008).

Table 2.1 gives details of recent changes in debt levels according to creditor.

Table 2.1: Comparison over time of types of credit in use and average amounts owed by households with an outstanding credit commitment

	Average amount owed per household with outstanding commitment (£) (nominal values)	
	2007	**2002**
Credit card	3,220	1,570
Store card	500	210
Overdraft	1,200	450
Hire purchase/credit sale	4,380	3,800
Mail order	335	240
Loans	6,650	5,000

Source: Tackling Over-Indebtedness Annual Report 2007, BERR

Some commentators argue that a more subtle approach should be taken to evaluating the extent to which debt is a problem by considering whether any benefit gained from incurring the debt ceases before the debt is paid off (see Wright, 2007). For example, someone borrowing money on a credit card to pay for a luxury holiday arguably ceases to benefit fairly quickly while paying off the loan. In contrast, someone who borrows money on a credit card to pay for a new energy efficient boiler or home insulation arguably continues to benefit from reduced heating bills, while paying off the debt. However, this approach to evaluating the duration of debt is not, as yet, generally used.

2.3.2 Problem debt is relatively widespread

Evidence is mixed on the level at which debt causes problems among people who seek advice on handling it. Just under half of Citizens Advice (CA) clients who present with debt problems have priority debts (which threaten loss of essential goods, services or housing), worth on average £2,360, and most of these also have non-priority debts (Phipps and Hopwood Road, 2006). Over 80 per cent of the total group of CA debt clients have non-priority debts of an average of £12,000 (ibid.). Consumer Credit Counselling Service (CCCS) clients appear to be in a worse position, with an average debt of £28,300 (Saxon, 2006).

Research for the Department of Work and Pensions (DWP) into families with debt, using secondary analysis of a number of large-scale government sponsored surveys, found that 22 per cent of families were in arrears with payments to creditors in 2002 (Kempson, McKay and Willitts, 2004). Further evidence comes from charities and other interest groups. The CCCS is a UK charity part-funded by creditors which publishes annual statistics gathered from its clients. In 2007, CCCS handled 250,000 first-time calls to its helplines and provided in-depth counselling sessions to nearly 64,000 people (CCCS, 2008). Another charity, National Debtline, similarly took over 270,000 calls to its service in 2006 (National Debtline, 2008). CCCS also introduced an online facility to provide debt advice, which was used by over 75,000 people in the first year of its operation. By the end of December 2007, over 86,000 people were repaying debts using a Debt Management Plan (DMP) administered by CCCS. The CCCS believes that the numbers of people using their services makes their data likely to be representative of the group of UK citizens who are experiencing debt. Citizens Advice, which is perhaps the best known advice source and most likely to be accessed, advised 1.7 million people with debt problems in 2006/07 (Talbot, 2008). Debt is now the single biggest reason for people seeking advice from CA, and accounts for one-third of all enquiries (reported by Talbot, 2008). CA deals with 6,600 new debt problems a day, and debt-to-income ratios are high, with the average debtor owing £13,000, which is nearly 17.5 times their monthly income. We cannot, of course, determine whether people seek advice from multiple sources and so cannot identify whether these figures double count individuals.

Estimating the numbers of people affected by problem debt is difficult as the UK government keeps no central records. However, in the final report of *The Thoresen Review of Generic Financial Advice*, commissioned by HM Treasury, projections are made of the proportions of the UK population with differing levels of likely need for personal financial guidance. The report estimates that 7.5 million UK adults fall into the 'most vulnerable' category, 70 per cent of whom will be aged under 45, of which almost half will be 'over-indebted' (2008:26). A further 11.7 million are estimated to have significant needs, one-third of whom are estimated to suffer

from 'over-indebtedness'. This gives a potential total of over seven million people affected by problem debt.

2.3.3 Numbers of people affected by problem debt is increasing, as is the size of their debts

The Department of Business, Enterprise and Regulatory Reform's most recent figures on indicators of over-indebtedness are based on new methods of calculation which makes it unreliable to compare recent statistics over time (BERR, 2007:27). However, much evidence from charities dealing with consumers' financial problems reports that the number of people seeking advice due to problem debt has increased over the past ten years, with sharp recent rises. The number of debt problems seen by Citizens Advice has doubled in the last ten years and at the National Debtline, the numbers of callers has risen from just over 36,000 in 1994 to over 270,000 in 2006 (National Debtline, 2008). Talbot (2008) reports that debt enquiries to CA in England and Wales are at record levels, having increased by 20 per cent in the last year. Read (2007) uses Ministry of Justice statistics to show that from 2000 to 2007 the number of people in the UK applying for bankruptcy has increased by over 400 per cent to 52,717 people, whilst the previous five years showed only a 125 per cent increase.

Evidence on trends in individual debt levels over time is mixed, partly because data sources are not comparable. Phipps and Hopwood Road (2006) note that total debt among CA debt clients had grown by an average of 30 per cent in the three years prior to 2004. Figures from the Consumer Credit Counselling Service (2008) show individual debt levels dropping slightly since 2005. In contrast, research for the DWP over a longer earlier period revealed that the average amount owed by people with outstanding credit commitments to credit card companies had more than doubled between 1995 and 2000 (Kempson, McKay and Willitts, 2004).

2.3.4 Secondary indicators of financial well-being: future vulnerability to financial problems

The statistics on people suffering current financial problems do not recognise those who may be at risk in the event of changes in personal circumstances, or the effects of wider changes in the economy. These indicators are of particular interest given the current increases in the costs of domestic commodities such as food and fuel, and reduced availability of cheap fixed-rate mortgages.

A survey of over 5,000 people, involving an assessment of their financial capability, was conducted in 2006 for the Financial Services Authority (FSA). This focussed not just on individuals' immediate financial situation by measuring how well they made ends meet and kept track of money, but also the other 'healthy'

behaviour components of financial capability, such as planning ahead, choosing appropriate financial products and staying informed regarding financial changes.

Their findings suggest that a minority of people are in optimum financial health. Few individuals were found to plan ahead financially, with almost half of those surveyed possessing no savings at all. Associations between lack of financial planning and debt have been found in studies from other countries. Webley and Nyhus (2001) conducted a longitudinal study of over 1,000 individuals who were nationally representative of the Dutch population. They found that those in debt were less likely to undertake financial planning. The FSA found further evidence of poor financial planning in the UK – 70 per cent of survey respondents had no personal provision for changes in their financial circumstances such as unemployment or long-term sickness, although 28 per cent had experienced an unplanned drop in income in the past three years and 21 per cent had encountered a large unanticipated expense equivalent to at least one month's income.

This is consistent with findings from other studies. McKay and Kempson (2003) analysed *British Household Panel Survey* data for 1991 to 2000, and found that in 2000 only 43 per cent of those surveyed reported saving money, and only 30 per cent saved on a regular basis. During the previous ten years, only seven per cent saved throughout, and most people (75 per cent) saved intermittently. Holding savings is important because other studies have identified it as a factor offering protection against falling into debt, which enabled families to adapt quickly in the event of job loss, and increased the speed at which families got out of debt (Kempson, McKay and Willitts, 2004).

Many in the FSA survey also scored poorly on other indicators of financial capability, such as financial awareness. Only 21 per cent of people shopped around or compared financial products to obtain the best deals, and a number of individuals demonstrated misconceptions regarding how financial products worked (FSA, 2006). For example, 40 per cent of those surveyed who owned an equity ISA were unaware that its value is linked to the stock market. The kinds of indicators people monitored were more likely to be macro-economic ones such as interest rates, whereas only 11 per cent claimed that they kept up to date on the best deals in financial products. There was also evidence of irrational financial behaviour; only 37 per cent of people with savings accounts claimed they chose them based on the interest rate paid. Younger people aged under 30 performed significantly less well in choosing financial products. Although improved knowledge cannot guarantee any change in attitudes towards finance, more discerning behaviour or a reduction in debt, these findings suggest that considerable numbers of people may benefit from financial education. We discuss this further in Section 2.5.3.

2.3.5 Who suffers from financial distress?

There is no ready-made UK dataset which can be used to assess financial well-being but some studies do give indicators of the demographic characteristics of groups most likely to suffer financial difficulties.

A number of measures are associated with indebtedness or other measures of financial distress. These are: low income, low or no savings, young age (between 16 and 50), having dependent children (although proportions of debtors without children appears to be rising), renting rather than owning accommodation, and experiencing a 'life change' such as birth of a child, death of a relative, divorce or job loss. Unsurprisingly, a number of these are associated with a greater likelihood of poverty in general terms. However, there is also evidence to suggest that risk factors do not automatically translate into indebtedness. Debtors share a number of attitudinal characteristics towards money, debt and savings which indicate that people have control over whether they actually accrue debts. At present, there is insufficient evidence to be able to assess which are most influential in identifying the demographic groups likely to be affected by financial problems.

2.3.6 Low income

Average income amongst households in the CA survey of people with financial difficulties was £833.11 per month – less than half the (then) UK average household income of £408 per week (Phipps and Hopwood Road, 2006). CCCS clients with debt problems were likely to have a low income, of less than £10,000 per year (CCCS, 2008). In the DWP study of debt, among families with children, having an income in the bottom 20 per cent of the sample was strongly linked to higher arrears (Kempson, McKay and Willitts, 2004). Government research indicates that although only four per cent of all UK respondents have problem debts this rises to 64 per cent among those on annual incomes of less than £9,500 (DTI, 2005). There are also loose associations between financial capability and levels of education which relate to income. Atkinson et al. (2006) found that those with degrees tended to have better overall financial capability scores. Interestingly, however, this does not appear to be as a result of higher levels of education being associated with better financial capability, since people with higher levels of education were no better at managing money and planning ahead. This suggests that they are being protected from debt by higher levels of income rather than their ability to manage money well.

2.3.7 Lower (or no) savings

In the DWP study of families with children, having lower amounts of savings than average was strongly linked to higher arrears (Kempson, McKay and Willitts,

2004). In the CA survey, only ten per cent of those with debts had savings, in contrast to 73 per cent of the UK population (Phipps and Hopwood Road, 2006). McKay and Kempson's analysis of *British Household Panel Survey* data for 1991 to 2000 found, unsurprisingly, that the more comfortable people perceived their finances to be, the more likely they were to save (2003). In contrast, only three per cent of those who considered themselves to be *'finding it very difficult'* financially put money aside on a regular basis. In other words, those likely to be most in need of savings to buffer them through a difficult financial period are least likely to be contributing to such a savings pot. Livingstone and Lunt, in an early survey of 300 people, also found that low levels of savings were related to higher debt levels (1991). This is worrying in the light of the evidence from the FSA survey that nearly half the respondents had no savings.

2.3.8 Age: debt problems are most common between people aged 25 to 50

Those aged over 60 tend to have fewer debts, although the proportion in this age group using CCCS has risen from five per cent to nine per cent since 2005 (CCCS, 2008). CCCS data shows that their average client is aged 25 to 39 (Saxon, 2006). Most callers to National Debtline are aged between 25 and 50 (National Debtline, 2008). This finding has also been replicated in a longitudinal study of over 1,000 individuals who are nationally representative of the Dutch population which showed that younger people were more likely to be in debt (Webley and Nyhaus, 2001). Age also appears important for people with children. Those with a head of the household who was aged under 30 were more likely to fall into debt (Kempson, McKay and Willitts, 2004) and BERR report that households where the eldest household member is aged 16 to 24 are most likely to be in arrears on repayments (2007:29). This is unsurprising as those who start families early in life are less likely to have built up reserves of savings to cushion them through any difficult times, as they will have spent less time in work, and are likely to be in less senior positions and on lower salaries. Thus, age in itself is unlikely to be a direct cause of debt; rather, it reflects other life changes that influence income, expenditure and savings. Differing levels of debt between generations of the population may also reflect demographic changes. For example, those who completed higher education over the past decade are likely to enter the labour market with higher levels of debt than previous generations, due to the introduction of student loans and university tuition fees. Evidence from the *National Student Income and Expenditure Surveys* conducted in 1998/99 and 2004/05 showed that the outstanding average loan debts of full-time students increased from £2,854 to £5,701 in that period (Finch et al., 2005:264).

2.3.9 Gender

Men have historically been more likely to be in debt than women, which may be attributed to a legacy of cultural norms about the earning and control of household finances. However, the CCCS report that in the year 2005 women's average debts were higher than men's in some age categories for the first time (Saxon, 2006). Women also tend to have their debt spread out over more creditors than men. The *Thoresen Review* estimates that more women than men are likely to fall into the two most vulnerable groups who are most in need of financial advice (Thoresen Review, 2008: 26). These groups consist of people who are less likely to own their own accommodation, have low incomes, often live alone or as a single-parent family, with a lower education level than average and lack knowledge of financial products.

2.3.10 Having children

Atkinson et al. (2006) found that couples who had no dependent children were more likely to score highly in their financial capability index and BERR's analysis shows they are under-represented on over-indebtedness scores (2007). This is consistent in the Dutch study, where parents were more likely to be in debt (Webley and Nyhaus, 2001). Kempson, McKay and Willitts also find that having larger numbers of children predicts indebtedness (2004) and BERR find that households with a new baby born in the last 12 months are over-represented in all indicators of over-indebtedness (2007:31). The average CCCS debt client also had children according to earlier statistics (Saxon, 2006) but more recent CCCS data shows that the majority of their clients are single and have no children, a trend which has increased since 2005 (CCCS, 2008). This is also reflected in the findings of CA which show that while 53 per cent of debtors were parents, single childless people emerged as a 'new category' of debtors, with 47 per cent of CA debt clients in this group (Phipps and Hopwood Road, 2006). No explanation is offered for the growth of debt in this group but they may be affected by the recent rises in the costs of higher education.

2.3.11 Being a single-parent family

The report into family debts for the Department of Work and Pensions (DWP) found that single-parent families were more likely to be in debt, as did the large study of the Dutch population (Webley and Nyhaus, 2001). The CA found that 56 per cent of parents with debts were lone parents (Phipps and Hopwood Road, 2006). BERR's research also shows that single people with children are over-represented on some over-indebtedness indicators (2007).

2.3.12 Renting rather than owning accommodation

Kempson, McKay and Willitts (2004) found that renting rather than owning a home was a predictor of being in debt and BERR find that tenants are likely to be over-represented as being in arrears on credit commitments (though mortgage holders are also over-represented in the number of credit commitments, and those credit commitments being a 'heavy burden' to them) (2007:31). Only 22 per cent of those with debt problems in the CA survey were owner occupiers (Phipps and Hopwood Road, 2006). This finding is consistent with having a lower income and insufficient savings to be able to secure a mortgage. This is likely to become increasingly difficult as cheap fixed-rate mortgage deals have been withdrawn by most lenders as a result of the sub-prime lending crisis.

2.3.13 Experiencing a life change

Among families in debt, one factor which increased the risk of being in arrears among households with active credit commitments was leaving paid work. Those experiencing a resulting drop in income in the past year had twice the levels of arrears compared to those with stable or increasing incomes (Kempson, McKay and Willitts, 2004). Evidence shows that life changes affect people's capacity to protect themselves from debt. McKay and Kempson's analysis of the *British Household Panel Survey* showed that unemployment had the greatest effect on individuals' subsequent saving and pension payments; getting divorced or separated reduced the proportion of people saving from 34 per cent to 29 per cent; while among individuals starting families, the proportion saving dropped from 45 per cent to 39 per cent.

2.3.14 Attitudes to debt and money

Livingstone and Lunt (1991) have carried out a systematic analysis of the determinants of debt, including the demographic, economic, social and psychological factors involved, through a survey of nearly 300 people in the UK. Their findings that disposable income levels, number of children, social class or level of education did not distinguish between those in debt and those not in debt, nor did, are largely contradicted by the majority of research reviewed above. However, there is some wider agreement with their findings that personal attitudes are influential and debt is not pre-determined by demographic characteristics. In other words, even those at most risk of debt have some degree of influence on whether they actually become indebted.

Their analysis shows that individuals with debts believe they have lower levels of control and take pleasure in consumer spending, blaming their own management of money and the temptations of freely available credit (Livingstone and Lunt,

1991). Those not in debt were less interested in demonstrations of consumer culture such as talking about money with friends or taking pleasure in shopping. The same theme recurs in an analysis of the respected *British Household Panel Survey* by McKay (2005). This found that people who are envious of others' possessions tend to have higher levels of debt and greater difficulty in making repayments, although the author cautions that income and changes in circumstances are more important influences. Similarly, evidence from Brown et al. (2005) shows that attitudes matter. They use robust data from the same survey to show that optimistic financial expectations about the future are predictors of debt, in contrast with those who are more cautious. Similarly, Atkinson et al. (2006) found holding a preference for being 'spenders rather than savers' was associated with the inability to make ends meet. This is amplified in the Dutch study by Webley and Nyhaus who found that people in debt had lower ratings of self-control and their attitudes toward debt were less unfavourable (2001).

2.3.15 Are people in employment affected by debt?

The characteristics of people in debt identified by the literature reviewed so far say nothing about the distribution of debt between people who are in or out of work. This is important for employers because they need to know whether workers are likely to be affected by financial problems. Much research into poverty focuses on people without employment. Atkinson et al. (2006) found that people who were unemployed or working part-time were likely to struggle to make ends meet. However, figures from a range of different sources suggest that a large proportion of people in debt are those of working age who are in employment. Most callers to National Debtline are aged between 25 and 50, and 45 per cent of callers are in full-time employment, with a further ten per cent in part-time employment (National Debtline, 2008). According to a survey of 500 clients with debt problems in a random sample of ten per cent of Citizens Advice centres, 48 per cent were in work (Phipps and Hopwood Road, 2006). The CCCS also reports that their average client is in work (Saxon, 2006).

We can infer from the factors discussed above that people in lower paid jobs are more likely to be affected by debt because their incomes are likely to be lower, but no direct evidence has been located for this literature review which shows any association between occupation or sector and financial well-being. In other words, there is no evidence to suggest that debtors are concentrated in particular occupations.

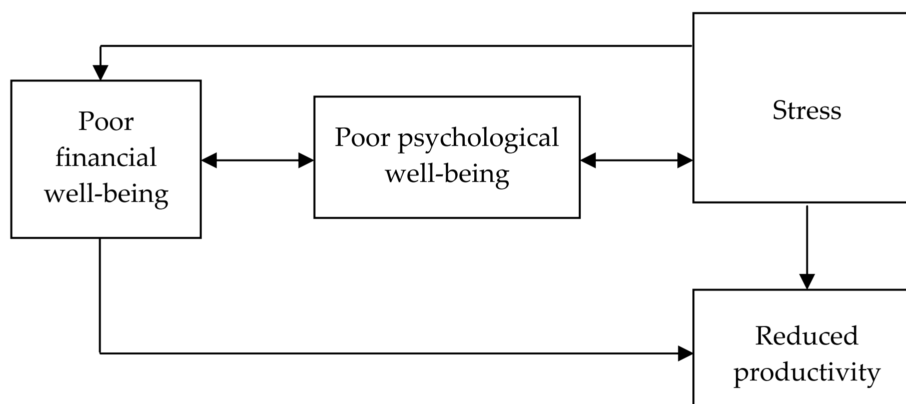
2.4 Financial well-being and outcomes in the workplace

The research discussed above suggests that poor financial well-being, as measured by propensity to debt, is by no means the preserve of people without work.

However, there is very little UK research which has documented the impact of financial well-being on employee performance in the workplace. For this, we have to return again to data from the United States. From this evidence, there appears to be a plausible association between poor financial well-being, stress, and indicators of employee productivity, as well as direct links between poor financial well-being and reduced productivity. These are shown in the model in Figure 2.1.

First, poor financial well-being contributes to poor psychological well-being. In turn, this manifests itself as stress, which causes negative behaviours that affect workplace productivity. These include lack of concentration or attention to detail, poor customer service, the effects of ill-health problems caused by stress (such as alcohol and substance abuse) which may lead to higher levels of absence and even workplace violence. Additionally, poor financial well-being may reduce productivity even if it does not cause stress, since employees may use work time to make calls to creditors and financial advisers in order to resolve their difficulties.

Figure 2.1: Links between (financial) well-being, stress and productivity



Source: IES

2.4.1 The connection between poor financial well-being and stress

Kim et al. review a number of studies and conclude that: *'financial strain … often predicts psychological distress'* (2006:460), noting that a number of studies have found links between financial stress and lower levels of well-being. There is some evidence to show that poor financial well-being is linked to general psychological stress but the influences are likely to be mutual and complicated, which makes proving causality difficult. This is reflected in the bi-directional arrows in Figure 2.1.

Garman, Leech and Grable (1996) undertook a literature review from which they argue that poor financial management contributes to stress and depict the start of a vicious cycle, in which heightened stress intensifies poor financial behaviours. Davis and Mantler (2004) found links between financial stress, reduced self-esteem

and lower levels of mental health, and evidence of increased depression and hostility. Bailey et al. (1998) found that financial stress explained around half of the variation in different levels of overall stress in a survey of nearly 200 mental health staff. One UK study analysed links between debt and psychological well-being using longitudinal survey data from 5,000 people. It found that individuals with higher amounts of debt were significantly less likely to report positive psychological well-being, and that having savings or receiving a windfall did not improve or offset negative emotions (Brown, Taylor and Price, 2005).

Causality of course needs investigating here, since as Williams, Haldeman and Cramer note: *'the disentanglement of financial problems from other problems is difficult'* (1996: 150). Joo (1998) argues that financial stress is largely caused by major life events such as having another child, changes to employment and sudden illness, as well as general difficulty in managing debt, but each of these events is likely to provoke stress independently of its effects on personal finances. Similarly, poor mental health in itself can lead to problems in securing and retaining work, which then cause poor financial well-being. Other research shows that individuals with mental health problems (including anxiety, stress and depression) are three times as likely to report having debt compared with individuals without such conditions (Fitch, Chaplin, Trend and Collard, 2007, p.194).

However, some studies have tried to argue a causal link between financial problems and stress. Ross and Huber (1985) found that ongoing economic hardship in a national sample of US families was linked to depression among married couples, and was also associated with lower earnings, lower levels of education and having higher numbers of children. Although their data is cross-sectional, they argue that previous research is supportive of a causal link between financial problems and mental health. Subsequently, Webley and Nyhaus (2001) using longitudinal panel data claimed that there is a likely causal link between debt and poor psychological outcomes.

2.4.2 The connection between (financial) stress and indicators of employee productivity

The wider literature on workplace stress shows clear links between stress and workplace productivity in the UK. Work-related mental ill-health (defined as anxiety, depression and stress) is estimated to account for 10.5 million working days lost yearly, and an average of 30.1 working days were lost per individual case of work-related mental ill-health (HSE, 2007). The costs to individuals and their employers of mental ill-health are therefore significant, and estimates suggest that absenteeism may cost as much as £8.4 billion, while those who turn up to work but function at less than full capacity because of ill-health cost as much as £15.1 billion to UK employers (The Sainsbury Centre for Mental Health, 2007).

There are some US studies, but to date no systematic UK studies, showing the links between poor financial well-being, stress and employee performance outcomes. Garman, Leech and Grable (1996) argue, based on a literature review, that there are a number of ways in which poor personal financial behaviours contribute to stress and consequently have negative outcomes for employers. These include employees being more likely to resort to alcohol and substance abuse, and even become violent as a result of stress caused by money worries. All of these are argued to lead to lower workplace productivity. Garman, Leech and Grable's analysis tends to assert rather than prove the contribution of poor financial well-being to stress and negative workplace behaviours (1996) but this was remedied in later work.

Joo and Garman (1998a) analysed data on self-reported workplace absence from nearly 300 clerical employees in a survey with a response rate of just over 60 per cent. They found that demographic variables such as age, education, number of children and income were unrelated to absence. However, those experiencing more financial stressful events in the past year were more frequently absent from work. Personal financial well-being was also related to absence. Those with lower levels of savings and who rated their financial behaviours as worse were also more frequently absent from work.

Poor financial well-being is also shown to affect productivity among those who are at work. Joo and Garman (1998a) found that those who reported higher financial wellness scores spent less time on personal financial matters at work, although this factor accounted for only 11 per cent of the variation in work time use. It could be equally plausible that those who spend working time managing their finances may keep better track of them. Kim, Sorhaindo and Garman (2006) report that among individuals receiving telephone-based credit counselling, those who reported the highest level of stress in relation to their financial situation also spent the most time involved with personal financial matters at work, and reported the highest number of days on which they were partially unable to work.

An article by Brown (1999), based on practitioner experience in offering workplace counselling to over 1,000 employees in ten organisations over a 20 year period, points to some of the more extreme consequences of poor financial well-being. He estimates that 17 per cent of employees with financial problems are involved in a threat of violence at work with consequent disruption to productivity.

A number of authors have sought to quantify the impact of reduced productivity resulting from poor financial well-being on employers and a general formula has been developed. Estimates of the proportion of workers affected by financial problems in any organisation vary from ten per cent (based on observations from an employee counsellor) (Brown, 1979), 10 to 20 per cent (Tittemore, 1994) or 15 per cent (Garman, Leech and Grable, 1996). Employees with financial problems

are estimated to be between 10 to 30 per cent less productive than an average employee. Multiplying the percentage of workers with financial problems by their reduced productivity by the average employee salary and the number of workers yields a rough estimate of the costs to the organisation.

However, no published evidence has been found of these calculations being used to measure reduced productivity in UK organisations. This is unsurprising given the sensitivity of the subject matter and likely commercial confidentiality concerns. The measures proposed are also indirect ones of organisational productivity. None of the literature uses a measure derived from employees' output, such as revenue created, sales, change in managers' perceptions of performance or the potential impact of poor employee financial capability on business performance, through poor management of the organisation's finances. Notwithstanding the difficulties of measurement, it would be worthwhile calculating the impact of financial problems on organisations, using some of these indicators. This exercise could provide useful information to help employers assess the value for money likely to be obtained from any support provided to help employees with financial problems.

2.5 How can employees' financial well-being be improved?

The evidence and arguments put forward in the discussion so far suggest that considerable numbers of employees are at risk of experiencing poor financial well-being, with potentially negative effects on their personal productivity and that of their employer. This analysis therefore gives some justification for action to improve financial well-being, providing that a feasible cost-effective solution can be found. The question arising is what kind of action should be taken and by whom. We now review initiatives being undertaken by the government and employers.

2.5.1 Forms of government action

The government could take action across a range of issues, from improving individual financial capability to changes to the marketing and regulation of financial products. For the purpose of this literature review, the discussion is confined to the first of these policy options. First, there is a case for improving financial literacy and awareness among children and young people, especially given the poor relative performance of the UK in numeracy. This is currently being undertaken by the government through a number of projects. For example, ten per cent of Citizens Advice centres are working with schools to run financial skills workshops as part of the Personal Health and Social Education (PHSE) strand of the curriculum (WA Partnership, 2006). Secondly, the government

commissioned the *Thoresen Review* which examined the case for providing generic financial advice to citizens and has recommended the development of a national service. However, the evidence discussed shows that a large number of people with financial problems, or at risk of developing them, are already in the workforce, so employers also have an incentive to take action.

2.5.2 Forms of employer action

Employers have pursued either one or both of two courses of action to date. The first is provision of employer-sponsored resources and support for employees to access in the event of financial problems, in the form of Employee Assistance Programmes (EAPs), and the second is specialist financial education.

Employee Assistance Programmes

EAPs typically constitute a telephone advice and counselling line, often provided by an independent organisation, and are usually supplemented by access to face-to-face counselling and referrals to appropriate professional expertise, such as legal or health advice, depending on the nature of the employee's problem. Employers may choose to provide EAPs to provide independent advice on a number of issues, so the advantage of this approach is that there is no extra administration cost. However, EAPs are a passive and reactive technique for improving financial well-being. EAPs usually rely on self-referral so take-up of support depends on employees recognising a need for advice and being willing to seek help.

Syedain (2008) reports that two major EAP providers, Icas and Ceridian, cover around a million UK employees and estimate that debt enquiries account for five to six per cent of total calls. Given the current unfavourable economic climate, this level may increase further. Anecdotal evidence from one organisation shows that their EAP is playing an increasing role in advising employees on financial problems. They analysed annual changes in the reasons why employees seek advice from the organisation's Employee Assistance Programme and found that financial problems have risen from tenth position last year to second position this year.

Specialist financial education

An alternative is financial education, which can be promoted to all employees and may therefore help to reduce future financial problems, as well as helping workers in current difficulties. In the UK, the Financial Services Authority has been offering free one-hour workplace-based financial education workshops since 2006 as part of the government's National Strategy for Financial Capability and to help

fulfil its statutory objective of promoting public awareness of financial systems. It has ambitious plans to reach four million employees with written material, and to deliver seminars or e-learning packages to 500,000 employees, by 2011. The Chartered Institute of Personnel and Development's (CIPD) survey of nearly 500 organisations shows some evidence of employer engagement, in that around 23 per cent of employers offer financial education to their workers, usually using an independent provider (2007). The costs to the employer of participation are those of administration and employee downtime during attendance, if run during working hours. Some employers support employees with time in the workplace to ensure they apply what they have learned from financial education but this is relatively unusual. In one notable example, AXA give all employees one hour of time per month to use for managing their finances.

2.5.3 Benefits to employees and employers

Opinions are mixed on the level of benefits obtained from financial education, largely due to shortages in and limitations of evaluation studies.

After reviewing 70 different evaluation studies, Atkinson concludes, rather depressingly, that: *'we know virtually nothing about the impact of initiatives on particular aspects of financial capability, or the most appropriate delivery mechanisms for use with particular groups, or to cover particular information'* (2008:10). It is possible that more intensive programmes of financial education may be needed as Atkinson's found that: *'a short seminar was not sufficient to make substantial changes to attitudes, knowledge or behaviour'* (2008:8).

However, FSA evaluation data shows that 86 per cent of financial education seminar participants claim to take action on their finances as a result of attendance (FSA website). Two-thirds of participants believed they had a better understanding of their finances and had gained financial capability skills as a result. US research also shows that workplace financial education may increase the amounts that people save for retirement in the medium to long-term and that the effects are particularly pronounced among people who are at risk of insufficient savings (Bernheim and Garrett, 2003, cited in Atkinson, 2008).

Elsewhere, individual responses to financial education are similarly encouraging, especially where these concern people who already have acute financial problems. In Canada, Tittemore (1994) asserts that 75 per cent of personal financial problems can be resolved through professional counselling. Garman et al. (1999) found in a survey of around 200 workers in a US chemical company that those who participated in financial education programmes reported improved financial knowledge and awareness, and took action to improve their financial well-being, resulting in an improved financial position. Xiao, Sorhaindo and Garman (2006)

obtained the views of over 3,000 participants in credit counselling from a survey with a response rate of just under 50 per cent. Their results showed that credit counselling had a positive effect on the number of positive financial behaviours individuals displayed. This, in turn, appears to reduce stress around financial matters and increase financial satisfaction.

There is also some evidence on the wider impact of financial education and whether it influences employee performance and attitudes to their employer. Hira and Loibl (2005) gathered views from nearly 1,500 employees in a survey of workers in a US insurance company with a response rate of over 60 per cent. Their analysis showed links between employee participation in financial education and attitudes towards the employer. Employees who took part in financial education gained improved understanding of personal finances and confidence in financial planning, and were also more likely to be committed to their organisation. However, this study was not able to show the direction of causality between these relationships, so it is possible that employees who are more committed to their organisation may be more likely to take up the financial education opportunities provided. Atkinson also notes some evidence of improved recruitment and retention among employers providing financial education in the workplace (2008).

Evidence on the financial benefits to employers of offering financial education is positive, albeit not extensive. The UK's CIPD reports that 41 per cent of employers using financial education programmes do not assess their effectiveness, and just ten per cent attempt to assess their impact on business measures (2007). However, managers in organisations which provided financial education were able to cite a number of positive outcomes, including increased engagement, better understanding and appreciation of employee benefits, increased take-up of pension provision, improved individual motivation, and improved financial awareness of both individual and employer financial issues. Estimates on cost savings to the employer vary widely. In the US, Joo (1998) calculates that if workplace financial education is successful in improving the financial well-being of an employee with low productivity, their employer could save more than $400 per worker for the first year through improvements in job productivity. Joo and Garman (1998) similarly argue that costs saved by indirectly reducing absence through financial education could be significant. Syedain (2008) cites research by Garman which claims that 12 per cent of financial education participants will receive an improved job performance rating, 16 per cent will have reduced absenteeism and the employer will see falls of five per cent in employee turnover and in theft of five per cent, accompanied by significantly increased contributions to pension plans.

2.6 Conclusions

The concept of financial well-being is a relatively recent one and is poorly integrated within mainstream research into either literature on employee commitment/engagement or health and well-being. Many of the theoretical and empirical studies on the topic of personal finance, employee and organisational performance come from the US and there is less UK-based evidence. However, there is sufficient UK research to be reasonably certain that substantial numbers of people are experiencing financial problems and evidence that these numbers are rising. More worryingly, it is likely that an even greater number are at risk of experiencing poor financial well-being in the imminent future, due to low levels of savings and a shift towards an unfavourable economic climate for individuals and organisations. Poor financial well-being does not solely affect people without employment, as data from organisations providing debt advice shows that significant proportions of their clients are in work. While parents of dependent children in their 20s and 30s constitute a large proportion of those affected by debt, there is evidence that growing numbers of younger single people are also in debt.

There is plausible evidence from the US to suggest that poor financial well-being has a negative effect on individuals' health and performance in the workplace and a number of estimates of the impact on workplace productivity have been made, although little robust evidence appears to be available. The relationship is complicated because suffering from stress or other health problems may exacerbate financial problems. Studies have shown that action taken to improve financial well-being through employee financial counselling and education has beneficial outcomes mostly at the level of employees. Cost-benefit analyses of the outcomes for employers are based on estimates of potential gains, based on hypothetical scenarios, rather than systematic evaluations undertaken by employers planning to launch financial education initiatives. There is a clear case for undertaking UK research into the links between financial well-being, and employee/organisational performance and the results of employee surveys in two organisations are presented in the next chapter.

3 Methodology

3.1 Choice and design of data collection method

An online survey was selected as offering several advantages for collecting sensitive personal data from individuals. The questionnaire design process involved scrutiny of the existing literature on the financial well-being area and detailed interrogation of existing surveys on the subject.

The questionnaire design and administration used a number of measures to maximise response rates, given the sensitive nature of the data sought. For example, income-related questions often generate high levels of non-response, so these were presented to respondents in categories to offer a degree of privacy. The questionnaire was piloted among a range of individuals with different demographic characteristics to obtain feedback on the sensitivity and clarity of content, and to test out acceptability of the average completion time. Useful suggestions to improve the individual questions and scales were subsequently adopted in the final version of the questionnaire. Completion time was around 10 to 15 minutes.

Reassurances about the use of the data and the independence of IES were provided in an introduction page. This page also included the purpose of the research, a guarantee that individual responses would remain anonymous, confidential and not be seen by any individual outside the research team. Contact details of the person responsible for data processing and an offer of support in completing the questionnaire were also provided.

3.2 The measures of financial well-being used in the survey

The online questionnaire developed for this project treats financial well-being as a composite concept, consisting of both *objective* and *subjective* dimensions. The literature which conceptualised financial well-being is much more developed in

the USA, so the survey tool developed for this work reflects the existing definitions from the existing literature on financial well-being and involved customisation of measures for the UK context.

3.2.1 Objective measures

A variety of objective measures were included in the online questionnaire to gather as much information as possible from individuals on their financial circumstances. These measures included:

- personal and household income
- average amount of money saved each month
- outstanding mortgage amount on property
- outstanding debt on various sources of credit taken out in the last two years, eg personal or secured loans, student loans, goods from mail order catalogue or on HP etc.
- outstanding debt on credit or store cards in the last 12 months
- agreed overdraft limit on an overdraft facility.

In addition to the above objective measures, employees were also asked about their experience of significant life events in the last three years, since literature shows clear links between these events and financial well-being. For example, purchasing a property or becoming a parent is reported to have direct implications not only for people's personal income but also for their household income. Therefore, the questionnaire covered a range of significant life events falling under four broad categories as follows:

- education, house purchases/repairs etc.
- marriage and children
- changes in personal circumstances, including job loss, reductions in working time, health problems etc.
- family members having an impact on finances, such as death or retirement of partner, marriage of children etc.

3.2.2 Subjective measures

Subjective financial well-being has been the focus of many articles published in the literature. Subjective measures are very important to take into consideration because individuals differ in their attitudes to financial risk and debt. Research

shows that people vary in the norms they apply to financial concerns, such as income expectations, risk tolerance/aversion and comparisons used to determine income adequacy. Therefore, the following subjective measures were included to find out how individuals' subjective views varied:

- Attitudes about personal finances regarding income, both current and future income:
  - satisfaction with levels of current income, monthly savings and retirement income
  - feeling in control of, and positive about, personal finances
  - being knowledgeable about credit terms and interest rates.
- Attitudes about the way individuals deal with personal finances, including:
  - feeling worried about personal finances generally
  - financial worries affecting physical and psychological health, eg sleep problems, anxiety-related problems or drinking more alcohol due to financial worries.

3.2.3 Combined measures

The literature shows that the most influential framework for financial well-being incorporates subjective and objective measures. One of the most commonly used financial well-being scales has been developed in the USA by Garman and his colleagues who have been working in this area for the past 20 years. The content of their scale has been rigorously tested and re-tested, providing very high reliability scores with different sample groups each time. Rather than a word-for-word use of the items of their scale (often used as an 8-item scale but 7 of the items are considered to be the core ones), it was decided that the 7 core items were reworded for cultural fitness and included in the questionnaire. These items were:

- individuals' rating on how they feel they manage financially
- individuals' satisfaction rating of their current personal financial situation
- their rating on how likely they would be able to meet a financial emergency for £500 without borrowing
- their rating on how often they have gone without doing things, such as eating out or going to the cinema, because they cannot afford to (the time frame is the last 12 months)
- their rating on how often they worry about personal finances in general

- their rating on how frequently they found themselves running out of money before their next pay day (the time frame is the last 12 months)
- their rating on how thinking about finances makes them feel today.

A question about individuals' perception of positive or negative future change was also included in the questionnaire to examine future predictions of their personal finances.

3.3 Administration of the questionnaire

3.3.1 Choice of organisations, timing and response rates

IES sought and secured participation from two contrasting companies with different employee demographics which were granted both individual and corporate anonymity and confidentiality.

Private Co. is based in a number of sites across England. It has an interest in improving employee well-being, including personal finance, and has run financial education workshops for staff on this topic.

Around a quarter of employees had no access to email at work so the survey sample was drawn from 6,000 email addresses of staff members with email access, who constituted around half the workforce with email access within this organisation. A number of units and departments within the organisation were chosen to cover as wide a range of demographic groups of employees as possible. The email addresses were checked for accuracy and duplication which reduced the total numbers eligible to 5,893. Individual emails with the online survey link were sent out to all eligible numbers in the sample, of which 604 were undeliverable, reducing the total to 5,289. The survey was open for three weeks from mid-May 2008 and all target respondents received a reminder email one week after the initial invitation to participate to boost the response rate. Of the 5,289 emails delivered successfully, a total of 1,439 returns were received. This gives a 27.2 per cent response rate, which is a respectable rate for a survey of this kind.

Public Co. is located at a number of sites in Southern England. It has received national recognition for its work in improving employee health and well-being and was also running financial education workshops for staff. It wished to explore staff attitudes to financial well-being and some of the benefits offered by the organisation.

Public Co. emailed the survey link to its entire workforce of 4,000 employees at the beginning of July 2008. The online survey was open to the employees of Public Co. for seven weeks with two internal reminder emails during the course of the

survey. Of the 4,000 emails sent out, a total of 470 returns were received. This gives a response rate of 11.8 per cent. The timing of the survey coinciding with summer holidays and internal rather than external promotion of the survey may have affected response rates.

3.4 Analysis and presentation of the findings

Questionnaire data was cleansed and analysed using SPSS, involving a variety of techniques from simple descriptive statistics such as means and percentages, bivariate analysis such as cross-tabulation and more complicated modelling involving logistic regression. The techniques used, including the development of scales, are described at the appropriate points in Chapter 4.

Key relationships between the relevant variables are presented in the charts of tables in the report and significant relationships are highlighted appropriately. The respondent numbers for each question are given underneath the relevant chart/table, and non-responses are not included in the base. Similarly, the percentages reported in the tables exclude non-responses and therefore they are valid percentages. A more detailed note on statistical tests used and presentation of results from them is given in the Appendix.

4 Financial Well-being in the UK – Survey Results

4.1 Financial well-being in two UK organisations

Before the financial well-being indicators are discussed, a brief summary is given below of the major demographic characteristics of employees from each firm to provide a coherent context for the survey. Full details can be found in the Appendix.

- Respondents were evenly divided by sex at Private Co., but women made up 65 per cent of the sample at Public Co. This is broadly representative of the workforce in the two organisations.
- Private Co. had a significantly younger workforce than Public Co, with a significant proportion of employees aged 25-34 and a substantial number of young women aged under 24 in the workforce.
- More Private Co. respondents had GCSEs as their highest level of qualification, while significantly higher numbers in Public Co. reported having professional qualifications.
- Over 90 per cent of respondents came from white ethnic groups. Private Co. had a greater proportion of non-white males.
- Sixty-eight per cent of respondents in each organisation were married or living with a partner.
- Over half the respondents in each organisation said their health was as good or better as people of the same age, but significantly more Private Co. employees rated their health as good or better than their peer group than did Public Co. respondents.

- Over 20 per cent of respondents in each organisation stated that they had a long-term illness, health problem or disability.
- Approximately half the respondents in each organisation had children and at least 15 per cent of respondents stated that they had caring responsibilities for a sick, disabled or elderly family member.
- At least 90 per cent of respondents in each organisation had a permanent contract.
- Eighty-eight per cent of respondents in Private Co. were employed on a full-time basis, in contrast to 79 per cent in Public Co. In both companies, more women than men worked part-time.
- Average tenure among Private Co. respondents was 8.7 years, compared to 8.1 years for Public Co. respondents.
- Higher proportions of respondents held managerial or professional positions in Public Co. compared to Private Co., which had higher proportions of respondents in skilled trades, services and sales.

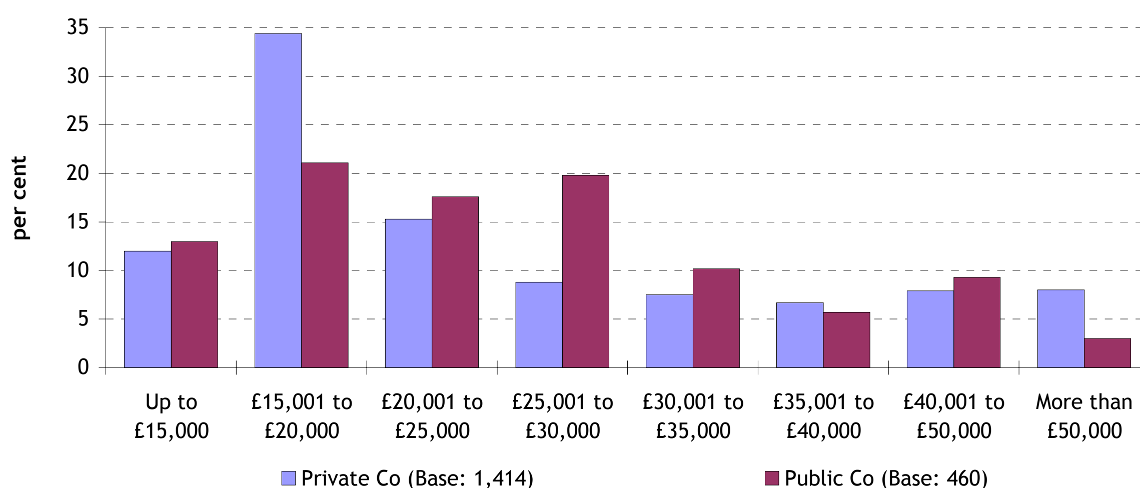
4.2 Primary objective financial well-being indicators

4.2.1 Income levels

Personal annual gross income

Figure 4.1 displays the pay levels on personal annual gross income. The survey had very small proportions of missing responses for the personal income question (1.6 per cent in Private Co. and 2.1 per cent in Public Co).

Figure 4.1: Personal annual gross income



Source: IES, 2009

In the questionnaire, employees were presented with ten pay bands in total but the first pay band (less than £10,000) contained very small numbers and therefore was combined with the second band (£10,000 to £15,000) to be presented as the 'up to £15,000' category. Similarly the last two pay bands in the questionnaire, which were '£50,001 to £70,000' and 'more than 70,000', were amalgamated to 'more than £50,000', due to the very small number of respondents in the latter category.

As can be seen in Figure 4.1, significantly higher numbers of employees were in the £15,001 to £20,000 pay category in Private Co. (34 per cent) than those in this category in Public Co. (21 per cent). On the other hand, 20 per cent in Public Co. reported being in the £25,001 to £30,000 pay band, as compared to just nine per cent of those in Private Co. When the pay figures provided in this chart were smoothed by their mid-points, however, they indicated very similar *estimated* averages for both firms participating in this research; an estimated average of £25,226 for Private Co. and £25,452 for Public Co. This is just slightly higher than the most recent UK figures of national average income, which is £24,769 (Annual Survey of Hours and Earnings, 2007).

Household annual gross income

Figure 4.2 displays pay levels on household annual gross income. In the questionnaire, employees were presented with ten pay bands in total but the last two pay bands, which were '£85,001 to £100,000' and 'more than 100,000', were combined together due to very small numbers in the last category and presented as 'more than £85,000' in the chart.

Figure 4.2: Household annual gross income

Source: IES, 2009

As can be seen in Figure 4.2, the distribution of pay levels on household income was much more similar between the two firms than the distribution on personal

income. Consistent with these findings, when the pay figures provided in this chart were smoothed by their mid-points, they indicated very similar *estimated* averages of household income for the firms; an estimated average of £43,138 for Private Co. and £43,571 for Public Co.

The results of the survey showed that, as compared to personal income, the proportions of missing responses on the household income question were notably higher (3.4 per cent in Private Co. and 4.5 per cent in Public Co).

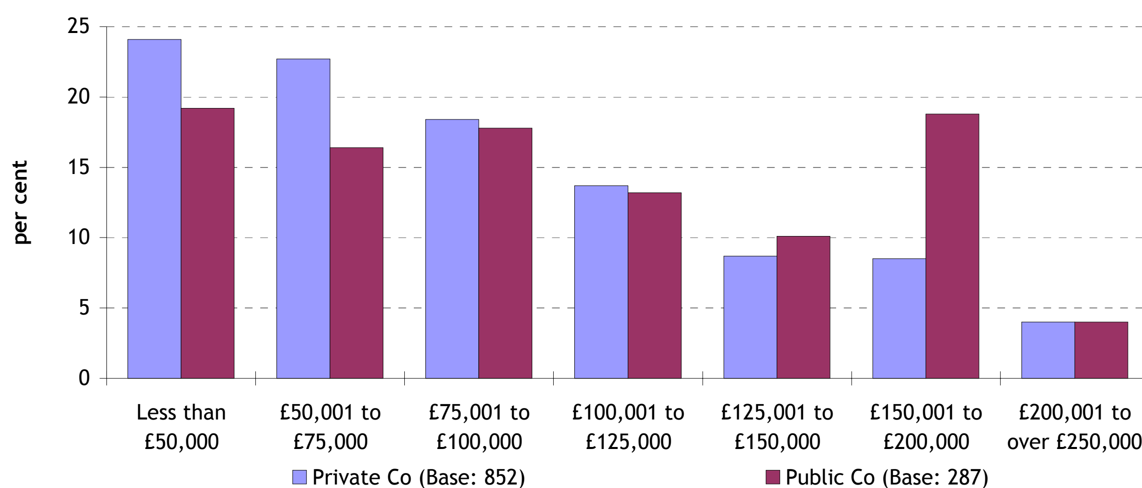
4.2.2 Types and levels of debt

Mortgages

Respondents were asked to provide the details of a variety of sources of debt. The principal source of debt for most people is mortgaged housing. A majority in each organisation were homeowners: 69 per cent in Private Co. and 75 per cent in Public Co. Most of these had mortgages: 88 per cent in Private Co. and 81 per cent in Public Co. Around one-fifth rented accommodation (20 per cent in Private Co. and 18 per cent in Public Co) but only seven per cent of those in Public Co. lived with parents/relatives or friend, as compared to 12 per cent of those in Private Co. However, this finding is unsurprising, as Private Co. had a younger workforce.

Figure 4.3 shows the variations in the outstanding amount on mortgages by organisation.

Figure 4.3: Outstanding amount on your mortgage



Source: IES, 2009

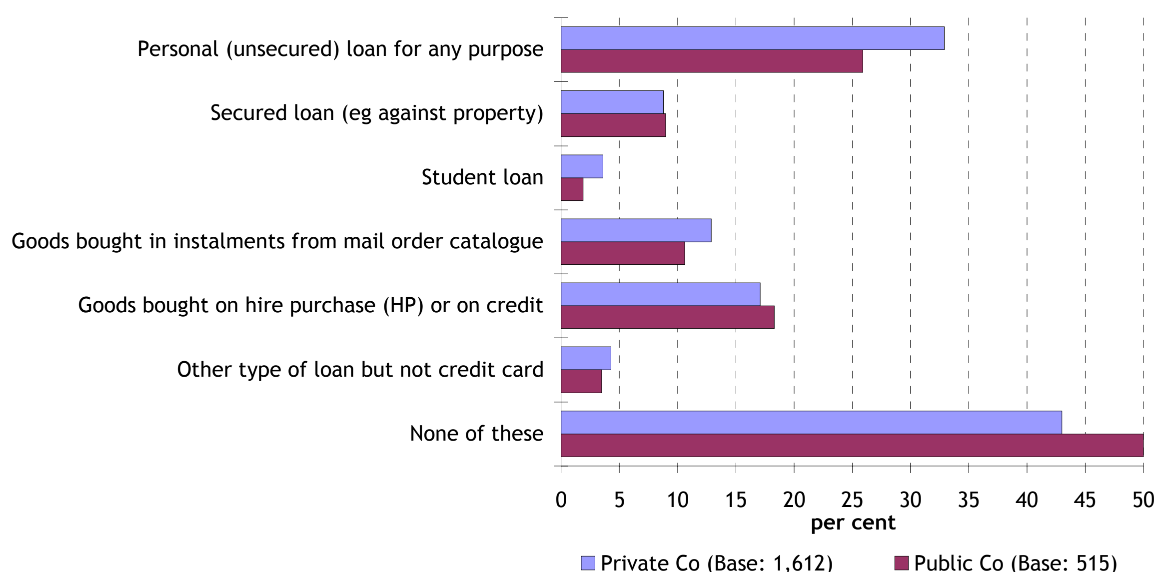
Almost half of all employees in Private Co. (47 per cent) reported having an outstanding amount of up to £75,000 on their mortgages, compared to just over one-third of those in Public Co. who owed this amount. However, 19 per cent of

those in Public Co. reported having an outstanding amount of £150,001 and £200,000 on their mortgages, compared to nine per cent in Private Co. When the outstanding mortgage amounts in this chart were smoothed by their mid-points, the figures indicated that employees of Private Co. had significantly lower *estimated* averages of mortgages than those working for Public Co. (an estimated average of £91,324, compared to £106,481). This may reflect differences in housing costs as Public Co. sites were all based in relatively expensive parts of Southern England.

Types of credit taken out in last two years

The responses displayed in Figure 4.4 were obtained from the question asking employees which, if any, types of credit they had taken out in the last two years. As can be seen, half of all employees in Public Co. had taken none of these credits, as compared to 43 per cent of those working for Private Co.

Figure 4.4:Types of credit taken in the last two years



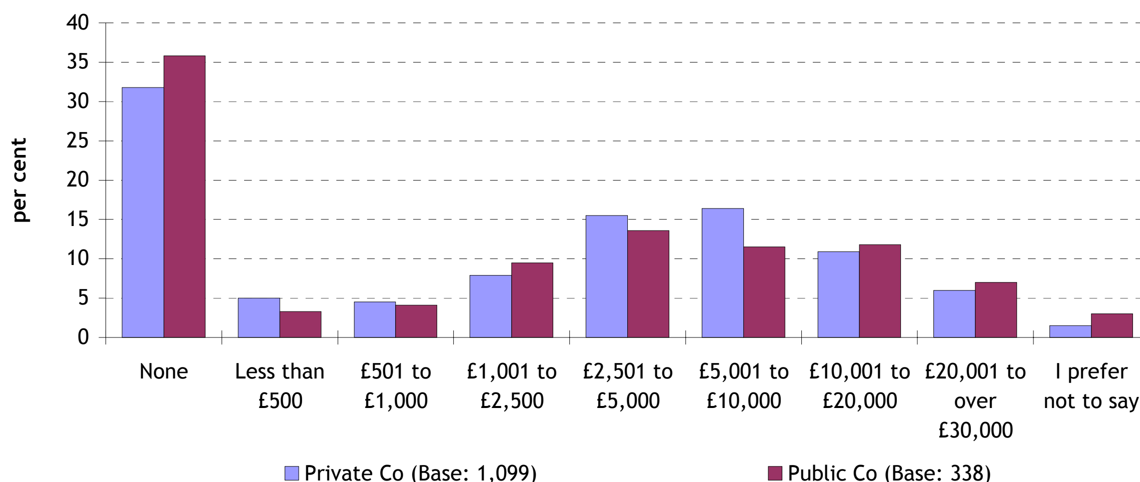
Note: These responses sum to more than 100% as this was a multiple response question which allows respondents to tick all that apply to them.

Source: IES, 2009

Significantly higher numbers in Private Co. reported taking out a personal (unsecured) loan (33 per cent, as compared to 26 per cent in Public Co). The same proportions in both organisations had taken out secured loans against property (nine per cent in each), while four per cent of those in Private Co. and two per cent of those in Public Co. held student loans. Similar numbers reported buying goods from mail order catalogues or hire purchases. However, the results on different types of credit are based on multiple responses, ie employees were allowed to tick all that applied to them and therefore the figures sum to more than 100 per cent.

Figure 4.5 presents the total amount borrowed from the different sources of credit described above, excluding credit cards.

Figure 4.5: How much in total did you borrow from these sources in the last two years?



Source: IES, 2009

As can be seen in Figure 4.5, the minimum amount borrowed was less than £500, while the maximum was over £30,000. An *estimated* average was calculated using the mid-points of each response category for the total amount borrowed from the described credit sources. The figures showed that employees in Public Co. borrowed slightly more credit, with an estimated average of £8,985, than those in Private Co. that had an estimated average of £8,392. No directly comparable data was found in our literature review against which these results can be assessed. However, amounts owed by those with problem debts tended to be somewhat higher in other surveys, ranging from £13,000 according to Citizens Advice (Talbot, 2008) to £28,300 among CCCS clients (Saxon, 2006). Some of the evidence presented in the literature review showed that average UK household debt excluding mortgages was £9,223 (Talbot, 2008). Our survey questions examined individual rather than total household debt, so the amounts owed are likely to be smaller, but these results overall are reasonably similar to the available national data.

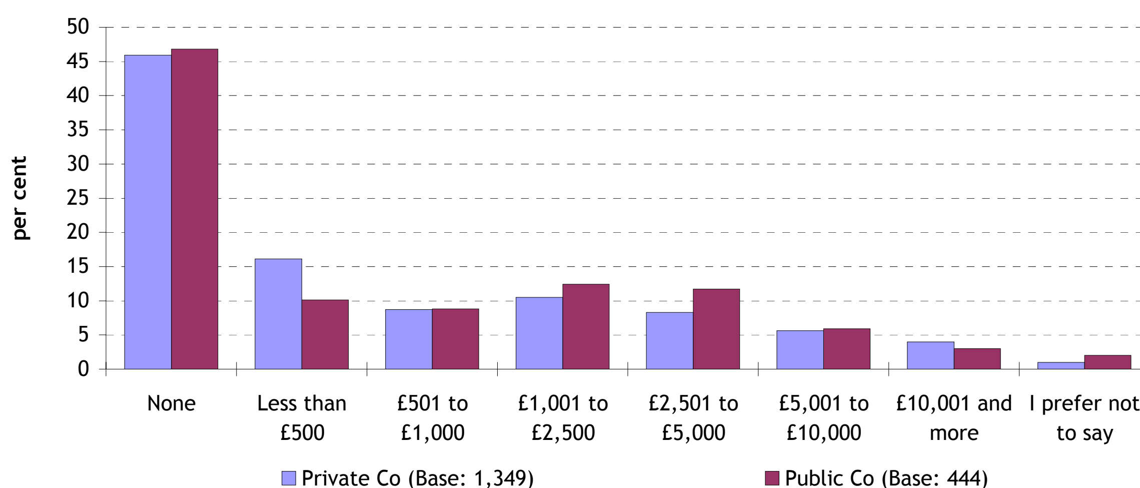
Overall, the estimated debt-to-income ratios for the described sources of credit in this section varied from 12 per cent to 136 per cent for Private Co., with an average of 38 per cent of monthly income. For Public Co, the estimated debt-to-income ratio varied from 14 per cent to 96 per cent, with an average of 34 per cent of monthly income. The average debt-to-income ratio is therefore much lower than those with problem debts who approach CA – these debtors owed nearly 17.5 times their monthly income. While the average financial health of the two employee populations therefore appears better than those in immediate problem debt, we need to examine the results in more detail to locate any pockets of potentially problematic debt.

Credit/store cards

Employees participating in the survey were also asked which credit or store cards they had used in the last 12 months. Seventy-three per cent in Private Co. and 76 per cent in Public Co. reported using credit cards (eg MasterCard or Visa), while 16 per cent and 20 per cent, respectively, used store cards. When the response overlap was filtered out, the findings showed that 75 per cent of Private Co. and 78 per cent of Public Co. used either a credit or store card in the last 12 months.

Figure 4.6 displays the proportions for each firm for the typical outstanding balance on credit and store cards held.

Figure 4.6: Typical outstanding balance on credit and store cards held



Note: This was a multiple response where employees were asked to tick all that apply.

Source: IES, 2009

Almost half of the employees in both firms said that they owed no money on these cards (46 per cent and 47 per cent, respectively). There were significantly higher numbers of employees in Private Co. with an outstanding balance of less than £500 (16 per cent) than those with the same amount in Public Co. (ten per cent). Also, higher proportions in Public Co. had an outstanding balance of £2,001 to £5,000 (12 per cent) than those with the same balance in Private Co. (just eight per cent). However, the *estimated* average outstanding balance was quite similar across the two, with £3,117 for an employee in Private Co. and £3,002 for Public Co. These figures are very similar to the results from BERR's analysis of individual UK debt (2007) which showed that the average amount owed on credit cards per household with an outstanding credit commitment was £3,220. However, we must note that the results for our two surveys of employees refer to individual rather than household debt; it is likely that household debt may be larger.

Overall, the estimated debt-to-income ratios for credit or store cards varied from only one per cent to 215 per cent for Private Co., with an average of 14 per cent of their yearly income. The range of the estimated debt-to-income ratios for credit or store cards for Public Co. was significantly narrower than that for Private Co., varying from one per cent to 92 per cent, with an average of 11 per cent of yearly income. These calculations exclude those employees who stated that they had made full payments each month to their card balances (46 per cent in Private Co. and 45 per cent in Public Co). Around 15 per cent of employees in each firm reported making minimum payments each month towards their balance and 40 per cent in each said that the amount of payment they made varied each month.

Overdraft facility

In all, 73 per cent of employees in Private Co. and 83 per cent in Public Co. cited that they had an overdraft facility on their bank accounts. However, only 68 per cent and 73 per cent, respectively, were able to specify the agreed overdraft limit. The valid responses on this questions showed some variations across the two organisations, as presented in Figure 4.7.

Figure 4.7: Agreed overdraft amount

Source: IES, 2009

Higher proportions of employees in Private Co. specified an agreed overdraft limit of up to £500 (41 per cent, as compared to 35 per cent of those in Public Co). On the other hand, significantly higher numbers in Public Co. reported having an agreed limit of more than £2,000 (25 per cent, as compared to 18 per cent of those in Private Co.). The average overdraft limit for employees in Private Co. was £1,231 and this was £1,426 for those in Public Co. Again this is very similar to the results from BERR's analysis of individual UK debt (2007) which showed that the average overdraft per household with an outstanding credit commitment was £1,200.

When all types of debt are taken into consideration, ie mortgages, personal or secured loans, hire purchases, credit or store cards and overdraft facilities, our calculations indicate a much higher average of debt for those working for Public Co. In particular, the average amount of mortgage debt and the agreed overdraft limit were both much higher for these employees, indicating higher estimated debt-to-income ratios. However, Public Co. has a higher proportion of middle income earners than Private Co., so we cannot presume that these debts are unmanageable.

Further bivariate analyses examined personal income by type of outstanding debt. The results showed some significant variations in responses to levels of outstanding debts for Private Co. Those in the income band of £20,000 to £25,000 in Private Co. were significantly more likely to have outstanding credit card debts (18 per cent, compared to 15 per cent for the whole survey sample). Those in the £15,000-£20,000 income band were mostly likely to have outstanding loans (40 per cent, as compared to 34 per cent for the survey total in this organisation). The results of bivariate analyses showed no significant variations in responses to debt levels and personal income levels for Public Co.

4.3 Secondary objective financial well-being indicators

The literature suggests that, in general, individuals who report a set of 'healthy' behaviours towards personal finances have high levels of financial well-being. In this survey, respondents were asked a variety of questions about their financial behaviour, as well as their attitudes to personal finances so that the links between these components can be explored.

4.3.1 Budgeting

Sixty-six per cent of employees in Private Co. and 70 per cent in Public Co. reported that they budgeted either monthly (60 per cent and 65 per cent, respectively) or weekly (six and five per cent, respectively). Of those budgeting, nearly half in each firm (47 per cent of employees in Private Co. and 41 per cent of Public Co) said they stuck to their budget. Similar proportions (42 per cent and 47 per cent, respectively) cited that they stuck to the budget every few months, whereas 11 per cent in Private Co. and 12 per cent in Public Co. said they rarely or never stuck to their budget.

Bivariate analysis using cross-tabulation of responses to budgeting and personal characteristics and objective measures showed that those who were more likely to budget on a regular basis were:

- Younger employees in Private Co. (47 per cent of those aged over 55 reported budgeting, as compared to 67 per cent of those aged 16 to 24; however, the age effect was not found to be significant in Public Co).
- Female employees in Private Co. (69 per cent, as compared to 66 per cent of males); however, the gender effect was not found to be significant in Public Co.
- Those with outstanding credit card debt (excluding personal or secured loans, overdraft and mortgages) in both organisations (70 per cent of those with outstanding credit card debts said yes to budgeting, as compared to 63 per cent of those without this type of debt in Private Co.; the proportions were 75 and 64 per cent in Public Co).
- Employees who were on lower than average personal or household income in Private Co., as compared to those who were on higher income in this company (70 per cent, as compared to 60 per cent); however, the income effect was not found to be significant in Public Co.

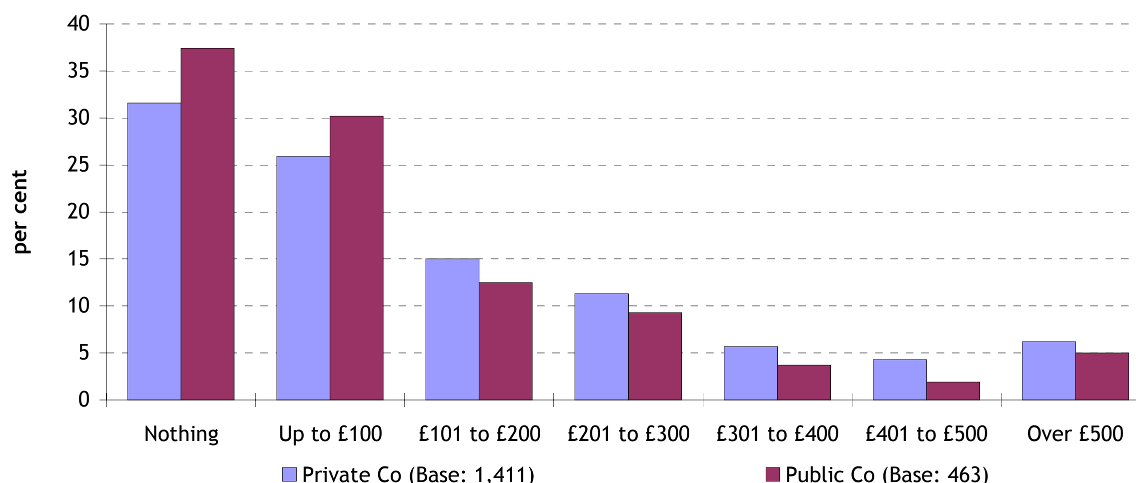
Analysis using cross-tabulation showed that those least likely to budget successfully were younger employees and those with high levels of debt, including credit card, personal or secured loans, overdraft and mortgages. Together with the characteristics of those who budget, this suggests that people who budget are vulnerable to debt or already in debt. However, budgeting is more likely to be a response to debt difficulties rather than a cause of being in debt. These findings raise the question of how widely effective budgeting is practised among those who are less vulnerable to debt and to what extent it is a useful preventive measure against debt.

4.3.2 Saving

A number of studies show that saving is an important means of protecting against debt (see Section 2.3.7). While almost one-third of all respondents in Private Co. (32 per cent) and even higher proportions in Public Co. (37 per cent) reported not being able to save, a substantial proportion did. Fifty-seven per cent of respondents in Private Co. and 52 per cent of those in Public Co. stated that they put aside savings on a monthly basis (excluding their monthly pension contribution). This is somewhat higher than figures based on national surveys, for example McKay and Kempson (2003) found that only 30 per cent saved regularly, according to an analysis of the *British Household Panel Survey*.

Employees were also asked on average, how much they were able to save each month. Figure 4.8 presents the amount saved by employees. The largest proportion of respondents saved the smallest amount of money per month (under £100) in both organisations.

Figure 4.8: On average, how much are you able to save each month?



Source: IES, 2009

Forty-six per cent of employees in Private Co. reported that other expenses had stopped them saving or made them reduce the amount saved on a monthly basis (23 per cent) or most months (23 per cent). The proportions were even higher for Public Co. where 57 per cent said this was the case on a monthly basis (32 per cent) or most months (25 per cent).

Furthermore, in both firms, significantly larger proportions of the following groups also reported that other expenses had stopped them saving or made them reduce the amount saved on a monthly basis or most months:

- Employees under the age of 25.
- Those who were in rented accommodation.
- Employees who were in high levels of debt, including credit card, personal or secured loans and mortgages but excluding overdrafts.
- Those with less than average personal (less than £25,000) or household income (less than £45,000).
- Those who experienced significant life events in the last three years, particularly when the events included changes in personal circumstances, eg divorce, job loss, reducing work hours etc.
- Those who had caring responsibilities for a family member who was sick, disabled or elderly (the proportions in this category were particularly higher for those in Public Co).

Employees were also asked if they had lost their jobs, how many months they could manage living on their savings. Almost one in four (39 per cent) in Private

Co. and over one in four (43 per cent) in Public Co. cited zero months; 29 per cent of those in Private Co. and 26 per cent in Public Co. reported that they could manage living on savings between one and three months. Almost one in five in the participating firms (19 and 18 per cent, respectively) reported being able to manage on savings for more than six months if they had lost their job today.

Significantly higher proportions of some groups of employees in both firms reported that they would suffer immediate financial problems if they lost their income. The groups affected had low or no savings and were:

- employees aged under 25
- those in rented accommodation
- employees with high levels of debt, including credit card, personal or secured loans and overdrafts
- those with less than average personal (less than £25,000) or household income (less than £45,000)
- employees who had experienced significant life events, particularly when the events included changes to personal circumstances, eg divorce, job loss, reducing work hours etc.
- a much higher proportion of females in Private Co. stated that they would suffer immediate financial difficulty in the event of job loss, but there were no significant differences in male and female proportions in Public Co.
- a much higher proportion of those with long-term health problems in Public Co. believed they would encounter immediate financial difficulty in the event of job loss but the proportions of the able bodied and those with a disability who believed that they would suffer immediate problems were similar in Private Co.

4.3.3 Paying bills

Ability to pay bills is a primary indicator of solvency and ability to manage debts. Respondents were asked to indicate how frequently they had been unable to pay bills at the final reminder due to lack of money by using a five point scale ranging from 1 (never) to 5 (more often than not). Nearly two-thirds of employees in both firms reported that this had *never* happened to them (64 per cent in Private Co. and 63 per cent in Public Co). A further 17 per cent in Private Co. and 21 per cent in Public Co. reported that they had *rarely* been unable to pay bills, while 14 per cent of employees in these firms (same proportions in each firm) had *sometimes* or *occasionally* been unable to pay bills at the final reminder. Very few in Public Co.

(two per cent) and five per cent in Private Co. cited *more often than not* for their experience of paying bills at the final reminder due to lack of money.

Significantly higher proportions of employees in the following groups reported falling behind with paying their bills due to lack of money:

- Female employees (but the difference in numbers between men and women was much wider for Private Co. than Public Co).
- Employees aged under 25 were much more likely to fall behind and those over 55 were least likely to do so in Private Co. However, the difference in age groups was more significant between those aged under 45 and those over 45 in Public Co, as under 45s were more likely to fall behind than those over 55s.
- Single employees (including divorced or separated), as compared to those who were married were more likely to fall behind.
- Employees with a long-term health problem or disability, as compared to those without.
- Those living in rented accommodation, as compared to home owners.
- Employees with different types of loans, credit card debts and overdraft facilities, as compared to those without these debts were more likely to fall behind.
- Those who were not saving, as compared to those who saved regularly.
- Employees with lower personal (under £25,000) and lower household income bands (under £45,000).
- Those in non-managerial or non-professional roles than those who were in managerial/professional roles.
- Employees who reported experiencing life events involving changes to their personal circumstances, as compared to those who did not have these events.

These findings are entirely consistent with evidence in the literature on the groups who are most vulnerable to debt problems (see Section 2.3).

4.3.4 Subjective financial well-being indicators – perceptions of current and future financial status

Financial behaviours and financial worries

The financial well-being scale used consisted of seven core items which collectively formed a composite scale.

These items used and the employee responses are given in Table 4.1.

Table 4.1: The statements of the financial well-being measure/scale (per cent)

	Private Co.	Public Co.	Private Co.	Public Co.	Private Co.	Public Co.	Private Co.	Public Co.	Private Co.	Public Co.
	All the time		Sometimes		Occasionally		Rarely		Never	
How often respondents have gone without social outings etc. due to financial constraints	21	12	29	24	19	19	16	21	15	24
How often respondents worry about personal finances in general	20	16	34	27	28	29	14	22	4	6
How frequently respondents found themselves running out of money before their next pay day	25	22	22	19	16	16	15	18	22	25
	Living comfortably		Doing alright		Just about getting by		Finding it quite difficult		Finding it very difficult	
How well respondents feel they manage financially these days	10	13	32	40	35	31	17	11	6	5
	Very satisfied		Satisfied		Neither satisfied nor dissatisfied		Dissatisfied		Very dissatisfied	
How satisfied are respondents with their current personal financial situation	4	4	29	36	17	19	38	31	12	10
	Very likely		Likely		Neither likely nor unlikely		Unlikely		Very unlikely	
How likely respondents would be able to meet a financial emergency for £500 without borrowing	32	36	25	22	3	2	15	17	25	23
	Highly stressed		Stressed		Neutral		Not stressed		Not at all stressed	
How stressed thinking about finances makes them feel today	5	5	39	27	35	37	12	20	9	11

Source: IES, 2009

The results show that Private Co. respondents gave significantly higher mean scores for all but one statement (*'likelihood of meeting a financial emergency for £500 without borrowing money'*, on which both firms had similar mean scores). Those in Private Co. felt that they managed better financially in general and were more satisfied with their current personal financial situation. Employees in Public Co, on the other hand, were significantly more likely to reduce expenditure such as social outings, were more likely to run out of money before their next pay day and more likely to worry about their finances in general. Those from Public Co. also expressed higher levels of stress caused by thinking about their personal finances at the time of the survey. The overall financial well-being scores calculated from the individual statements confirmed these variations, as Private Co. had a higher average score with 3.1 while Public Co. had an average score of 2.9.

Perceptions of current personal finances

As part of the subjective measures of financial well-being, employees were asked to agree or disagree with a series of attitudinal statements shown in Table 4.2.The proportions displayed in the table were of those who either strongly agreed or agreed with these statements.

These results show that a majority of respondents overall felt in control of their finances and knowledgeable about credit terms and interest rates. However, significant minorities had concerns about the sufficiency of their retirement provision and were not positive about the future, and over a quarter were anxious about debt and worried about finances every day. Nearly 20 per cent reported debt levels kept them awake at night and almost one in ten in both firms reported that their financial situation had a damaging effect on their work performance.

Overall, higher satisfaction levels were expressed by employees of Private Co; the numbers citing positive feelings about the future and retirement were also higher in this organisation. Almost two-thirds of employees in both firms (60 and 61 per cent, respectively) reported that they were in control of their finances, while notably higher numbers in Public Co. believed that they were knowledgeable about credit terms and interest rates (65 per cent, as compared to 60 per cent of the Private Co. employees). The number of employees expressing financial worries and anxiety seemed slightly higher in Public Co. than those in Private Co. For example, a quarter of all employees in Private Co. stated that they worried about finances every day, compared to almost one in three (28 per cent) in Public Co.

Table 4.2: Respondents' attitudes towards their personal finances

	Private Co			Public Co		
	Agree	Neither	Disagree	Agree	Neither	Disagree
I am satisfied with the amount of money I am able to save each month	32	11	57	25	9	66
The amount of debt I have keeps me awake at night	18	17	65	19	19	62
Compared to people on a similar income, I'm satisfied with my financial situation	46	23	31	41	24	35
I find myself drinking more alcohol because of financial worries	7	8	85	5	11	84
I think I'll have enough money for my retirement	29	24	47	21	18	61
My health is suffering as a result of financial worries	13	14	73	16	23	61
I am in control of my finances	61	17	22	62	18	20
Worrying about my debt is making me feel anxious	26	13	61	28	16	56
I am knowledgeable about credit terms and interest rates	60	17	23	65	18	17
I worry about finances every day	25	15	60	28	17	55
When I think about finances, I feel positive about the future	33	29	28	20	28	52
My financial situation has a damaging effect on my work performance	9	16	75	9	23	68
Base:		*1,439*			*470*	

Source: IES, 2009

When characteristics of employees were compared to examine variations across different groups, the results were consistent with the analysis so far. In Private Co, higher numbers of men than women reported being satisfied with the amount of money they were able to save each month; higher proportions of males were satisfied with their financial situation, were knowledgeable and in control of their finances. Men from Private Co. were also more likely to report positive views and attitudes in terms of having enough money for retirement. On the other hand, Private Co. women were much more likely to cite worrying about finances every day, their debt keeping them awake at night, and their health suffering as a result of financial worries. The difference between genders was not notable in Public Co, as very similar proportions agreed or disagreed with presented statements about their finances. The numbers of young female employees in Private Co. were significantly higher than those of males (as described in demographics section in the Appendix), the overall average income

of females was much lower and this group was more likely to have higher levels of debt. The difference between genders was not notable in Public Co, as very similar proportions agreed or disagreed with presented statements about their finances.

Bivariate analysis using cross-tabulation was used to explore variations across employee groups in both organisations. In terms of age, in both organisations, over 55s reported being most positive, satisfied and knowledgeable about their personal finances, while those under 25 in Private Co. and those under 35 in Public Co. (due to variations in the distribution of age groups across these two firms) were more worried, more anxious and least satisfied with finances.

In both firms, employees who were single, including divorced or separated, reported less satisfaction and more anxiety, concerns, or worries about finances than those who were married. Those who were home owners were also much happier than employees in rented accommodation. Not surprisingly, employees who saved regularly were significantly more likely to report being in control of their finances, feeling knowledgeable, positive and satisfied and consistently less likely to report negative attitudes including anxieties and worries over personal finances. The amount of saving was also important. Significantly higher numbers of employees who saved more than £300 a month reported positive feelings of financial well-being, as compared to those who either did not save or saved less than £300, levels of satisfaction being lowest amongst those who did not save.

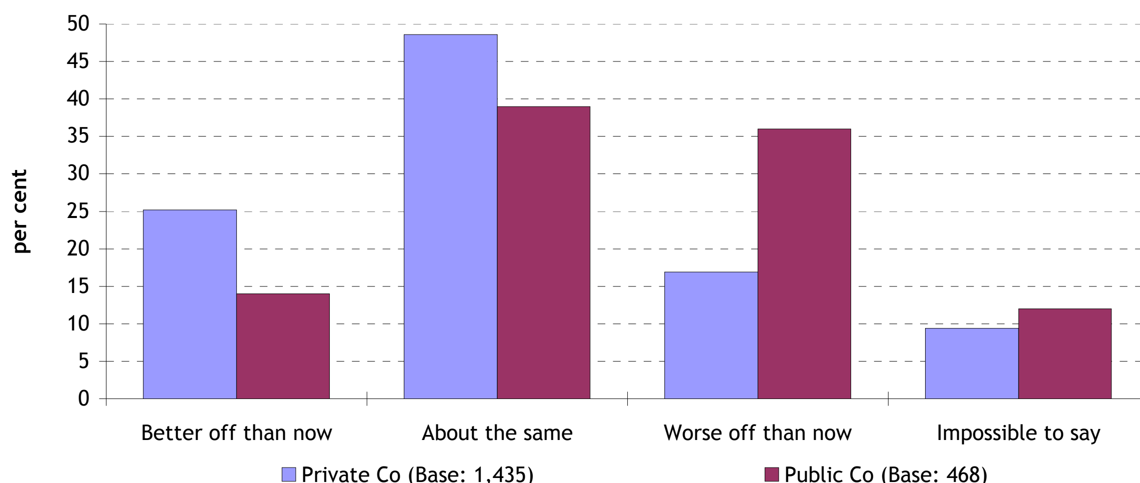
Although there were no significant differences between employees with children and those without on most of the statements, parents were more likely to report that they were knowledgeable about credit terms and interest rates. Employees with higher personal and higher household income levels were much happier on the whole than those who were on lower levels of income; in particular, employees who earned more than £35,000 per year were significantly more likely to report positive attitudes. Those in managerial or professional roles were more positive and satisfied and less worried than those in other occupational categories.

In terms of significant life events in the last three years, those who experienced events involving house moves or major house or car repair expenses reported being more worried about finances and less satisfied with their personal finances. Similarly, those experiencing changes to their personal circumstances, eg divorce, job loss, health problems or reduction in working hours, were much more likely to report dissatisfaction and less positive views about finances than those who did not experience these changes.

Perceptions of future financial status

Employees were asked to estimate how well they would be managing financially in a year's time. Their responses are given in Figure 4.9.

Figure 4.9: Looking ahead, how well do you think you will be managing financially a year from now?



Source: IES, 2009

Employees in Private Co. were more optimistic about how well they would be managing in 12 months' time; one in four thought that they would be better off, as compared to 14 per cent of respondents in Public Co. Consistent with this finding, over one-third of all employees in Public Co. (36 per cent) reported that they would be worse off than now, compared to fewer than one in five (17 per cent) citing this prediction for the future in Private Co.

4.3.5 Who suffers from financial distress?

Variations in financial well-being levels between different employee groups

Table 4.3 displays the variations in financial well-being levels of various employee groups across the two organisations participating in the survey. The variations shown by the findings of this research across these groups appear to support the findings in the literature.

Table 4.3: Variations in financial well-being levels of employees in Private Co

		Private Co
Gender**	Male	3.3
	Female	2.9
Age groups**	16-24	2.7
	25-34	2.8
	35-44	3.3
	45-54	3.5
	Over 55	3.8
Long-term health problems*	Yes	2.9
	No	3.1
Marital status*	Single/divorced/separated	2.8
	Married	3.2
Having children*	Yes	3.2
	No	3.0
Housing situation**	Home owner	3.3
	Living in rented accommodation	2.6
Outstanding debt on loans, cards etc.**	Yes	2.7
	No	3.5
Overdraft	Yes	3.1
	No	3.1
Budgeting*	Yes	3.2
	No	3.0
Savings**	Yes	3.6
	No	2.5
Personal/Household income**	Lower than average	2.8
	Higher than average	3.6
Occupational status**	Managerial/professional roles	3.4
	Other roles	2.8
Life Event 1 (education/house purchase/major repairs)*	Yes	3.0
	No	3.3
Life Event 2 (changes to personal circumstances)**	Yes	2.7
	No	3.3
Life Event 3 (marriage and children)*	Yes	2.9
	No	3.2
Life Event 4 (family members' impact on finances)	Yes	3.0
	No	3.1

* = indicates significance at the 95 per cent level, ** = indicates significance at the 99 per cent level

Source: IES, 2009

Table 4.4 displays the variations in financial well-being levels of various employee groups within Public Co.

Table 4.4: Variations in financial well-being levels of employees in Public Co

		Public Co
Gender	Male	2.9
	Female	2.9
Age groups*	16-24	2.3
	25-34	2.5
	35-44	2.7
	45-54	3.2
	Over 55	3.4
Long-term health problems**	Yes	2.6
	No	3.0
Marital status**	Single/divorced/separated	2.6
	Married	3.0
Having children*	Yes	3.0
	No	2.8
Housing situation**	Home owner	3.1
	Living in rented accommodation	2.3
Outstanding debt on loans, cards etc.**	Yes	2.6
	No	3.3
Overdraft*	Yes	2.8
	No	3.2
Budgeting**	Yes	2.7
	No	3.2
Savings**	Yes	3.3
	No	2.4
Personal/Household income**	Lower than average	2.6
	Higher than average	3.3
Occupational status**	Managerial/professional roles	3.1
	Other roles	2.5
Life Event 1 (education/house purchase/major repairs)**	Yes	2.7
	No	3.2
Life Event 2 (changes to personal circumstances)**	Yes	2.6
	No	3.0
Life Event 3 (marriage and children)*	Yes	2.7
	No	2.9
Life Event 4 (family members' impact on finances)	Yes	2.8
	No	2.9

Source: IES, 2009

The following statistically significant differences in mean scores were found across different employees groups:

- Men rated their financial well-being significantly higher than women, but this was only the case for those in Private Co; no difference was found in Public Co.
- In both firms, older respondents reported better financial well-being than younger ones. Respondents aged 16 to 24 had financial well-being scores which were over ten per cent lower than for those aged over 55 for both firms.
- Employees without a long-term health condition or disability in general reported significantly better financial well-being than those with a disability. Although this difference occurred in both firms, the difference in mean scores was much higher in Public Co. than in Private Co.
- Married employees had significantly higher financial well-being scores compared to those who were either single, divorced or separated in both companies.
- Those living in rented accommodation reported significantly lower financial well-being scores than those who were home owners.
- In both companies, those without outstanding debts on personal loans or other types of credit, including credit and store cards, reported significantly higher well-being scores than those with outstanding debts.
- In Private Co, no difference in financial well-being scores was found between those with an overdraft facility and those without, but employees without overdrafts reported significantly higher scores in Public Co. than those who were overdrawn every month.
- In both companies, those who budgeted on a regular basis reported higher well-being scores than those who did not, but the mean difference between the two groups was twice as large in Public Co.
- Employees who saved on a regular basis showed significantly higher financial well-being scores in both firms, and the difference between savers and non-savers was as much as ten per cent.
- Those with a higher than average personal or household income reported much higher financial well-being scores in both firms than those with lower than average pay.
- In both firms, employees who had managerial or professional job roles scored much higher on the financial well-being scale than those in non-managerial roles.

- Those who experienced all four types of life events described above scored lower on financial well-being than those who had not experienced these events. However, the difference was smaller for the fourth category which includes family members' impact on finances.

4.4 Characteristics linked to different levels of financial well-being

The literature has shown that the level of financial well-being is determined by the interaction of many different variables. To extend the analysis, multivariate techniques are now used to distinguish the separate effects of variables identified through the previous bi-variate analysis as the most important factors.

Logistic regression is the appropriate form of multivariate analysis, as it enables creation of a hypothetical reference establishment with certain characteristics (or independent variables). These are selected as being most likely to influence financial well-being. It is then possible to observe separate effects of the different characteristics on the dependent variable (financial well-being).

4.4.1 Summary of significant predictors of financial well-being

Overall, the findings are entirely consistent with existing literature. Our analysis found that being younger, having a disability, holding loans or credit cards, poorer budgeting and saving behaviours, and lower income levels all had negative associations with financial well-being.

4.4.2 Predictors of financial well-being in Private Co

The statistical model below tested how each of these variables independently influenced levels of financial well-being, ie how each of these variables predicted the financial well-being outcome. The types of independent variables used in the model included biographical characteristics of employees (age, gender, disability etc.), their objective financial measures (eg types of debts), as well as financial behaviours (eg budgeting, saving etc.).

The results from this model are shown in Table 4.5. This model was a statistically good fit, as 49 per cent of the variance in responses was explained by the independent variables. The model predicted 77 per cent of those who rated their financial well-being as 'less than average' in Private Co, ie less than a mean value of 3.1, and 79 per cent of those rated their financial well-being as 'above average' in Private Co, ie more than a mean value of 3.1. This amounts to 78 per cent of respondents overall.

Table 4.5 shows the effects of each of the independent variables on financial well-being. A coefficient value of less than 1 means that the independent variable *reduces* the likelihood of a respondent reporting average financial well-being. A coefficient value greater than 1 indicates that the variable *increases* the likelihood of a respondent reporting average financial well-being.

Table 4.5: Logistic regression estimates of the odds of being in the financially well category predicted by independent variables in Private Co

Variables	Sig.	Coefficient: Exp(B)
Age of employees in years	.001**	1.044
Gender (reference category is male = 1, female=0)	.016*	1.445
Disability (no = 0, yes =1)	.039*	.682
Having children (no = 0, yes =1)	.003**	.566
Caring responsibilities (no = 0, yes =1)	.209	.772
Housing (renting = 0, home owner = 1)	.009**	1.626
Outstanding personal/secured loans, HP purchases etc. (no = 0, yes =1)	.001**	.350
Outstanding credit card debts (no = 0, yes =1)	.001**	.364
Overdraft (no = 0, yes =1)	.343	.850
Budgeting (no = 0, yes =1)	.368	.868
Savings (no = 0, yes =1)	.001**	4.220
Higher HH income of > £45k (no = 0, yes =1)	.001**	2.966
Managers/professionals (no = 0, yes =1)	.004**	1.589
Life event 1 (no = 0, yes =1)	.001**	.530
Life event 2 (no = 0, yes =1)	.551	1.106

Note: Significance levels are shown in the column marked sig. and results which are statistically significant are marked thus: (*) for a 95 per cent level of confidence or (**) for a 99 per cent level of confidence, ie we can be 95 or 99 per cent sure that the independent variable is influencing financial well-being.

IES, Survey data 2009

What factors independently and significantly predict financial well-being in Private Co?

After taking into account the other variables in the model, each of the following variables had a separate and independent effect on financial well-being:

- Employees who save were 4.22 times more likely to be financially well than those who did not save.
- Those with higher than average household incomes (>£45,000) were 2.97 times more likely to be financially well than those who had lower household incomes.

- Homeowners were 1.63 times more likely to be well than those renting.
- Managers and professional employees were 1.59 times more likely to rate their financial well-being as above average than those in other occupational groups.
- Men were 1.45 times more likely to rate themselves as financially well than women.
- Older employees were 1.04 times more likely rate themselves as financially well than younger employees.
- Those without health problems were 1.47 times more likely to rate themselves as financially well than those with health problems.
- Non-parents were 1.30 times more likely to rate themselves as financially well than parents.
- Those without outstanding debts on personal/secured loans or HP purchases were 2.86 times more likely to rate themselves as financially well than those with loans.
- Respondents without outstanding credit card debts were 2.75 times more likely to be well than those with the credit card debts.
- Those who did not experience life events involving graduation, house moves and major repairs in the last three years were 1.89 times more likely to rate themselves as financially well than those who had experienced these events.

4.4.3 Model for Public Co

A second statistical model was run for Public Co. to find out if similar independent variables were also able to predict financial well-being independently.

What factors independently and significantly predict financial well-being in Public Co?

The results from the second model are shown in Table 4.6. This model was also a good fit statistically, as 49 per cent of the variance explained by the independent variables within the model. The model predicted 86 per cent of those who rated their financial well-being as 'less than average' well-being in Public Co, ie less than a mean value of 2.9, and 72 per cent of those rated their financial well-being as 'above average' well-being in Public Co, ie more than a mean value of 2.9, amounting to 80 per cent of cases overall. The overall percentage covered by this model was slightly higher than for Private Co. and although the prediction of those with below average well-being was lower at 72 per cent, this is still satisfactory.

Table 4.6: Logistic regression estimates of the odds of being in the financially well category predicted by independent variables in Public Co

Variables	Sig.	Coefficient: Exp(B)
Age of employees in years	.003**	1.050
Gender (reference category is male = 1, female=0)	.640	.878
Disability (no = 0, yes =1)	.003**	.394
Having children (no = 0, yes =1)	.699	.890
Caring responsibilities (no = 0, yes =1)	.131	1.631
Housing (renting = 0, homeowner = 1)	.192	1.613
Outstanding personal/secured loans, HP purchases etc. (no = 0, yes =1)	.003**	.440
Outstanding credit card debts (no = 0, yes =1)	.001**	.415
Overdraft (no = 0, yes =1)	.284	.683
Budgeting (no = 0, yes =1)	.006**	.453
Savings (no = 0, yes =1)	.001**	3.649
Higher HH income of > £45k (no = 0, yes =1)	.001**	2.875
Managers/professionals (no = 0, yes =1)	.025*	1.968
Life event 1 (no = 0, yes =1)	.004*	.446
Life event 2 (no = 0, yes =1)	.292	.717

* = indicates significance at the 95 per cent level, ** = indicates significance at the 99 per cent level

IES, Survey data 2009

Each of the following variables had a separate and independent effect on financial well-being:

- Those who saved regularly in Public Co. were 3.65 times more likely to rate themselves as financially well than those who did not save.
- Employees with a higher household income were 2.88 times more likely to rate themselves as financially well than those with a lower income.
- Managerial and professional job-holders were 1.97 times more likely to rate themselves as financially well than those in other occupations.
- Male respondents were 1.05 times more likely to rate themselves as financially well than female respondents.
- Those without a disability were 2.54 times more likely to rate themselves as financially well than those who had a disability.
- Employees without outstanding debts on personal/secured loans or HP purchases were 2.41 times more likely to rate themselves as financially well than those with loans.

- Those without credit card debts were 2.27 times more likely to rate themselves as financially well than those with credit card debts.
- Those who did not budget were 2.27 times more likely to rate themselves as financially well than those who budgeted regularly. Further analysis would be required to assess whether these perceptions are objectively justified.
- Those who had not experienced life events involving graduation, house moves and major repairs in the last three years were 2.24 times more likely to rate themselves as financially well than those who had experienced these life events.

The variations in the findings across the two statistical models show some factors predicting financial well-being were organisationally specific. Having children, not owning one's own home and being female reduced the likelihood of employees reporting average financial well-being in Private Co. but not at Public Co.

4.5 The link between financial well-being and work performance

4.5.1 Work attendance and financial well-being

The following summary gives an overview of the relationship between absence and financial well-being. Full details are given in the Appendix.

- Respondents in both companies had a median annual absence of three days.
- Employee groups with above average absence levels included: respondents with outstanding debts excluding mortgages, non-savers, those with lower than average incomes, employees with long-term health problems, those in rented accommodation and those experiencing a recent change in personal circumstances.

These findings suggest a relationship between financial status and absence, and are plausibly consistent with the relationship between financial well-being, stress and productivity in Figure 2.1 of the literature review. It is not possible to identify whether financial well-being is a cause or consequence of absence; indeed, it is likely that the relationship is mutually reinforcing, in that absence causes poor financial well-being and poor financial well-being in turn leads to absence.

4.5.2 Work time spent on managing financial well-being

Employees may spend time at work directly and indirectly connected with their financial well-being. Given relatively long working hours in the UK, some organisations have allocated a small amount of working time to employees to enable them to manage their finances during hours when financial services providers etc. are likely to be open. Time spent at work on managing financial

affairs may be indicative of prudent financial behaviour but may also indicate financial difficulty and distraction, resulting in reduced productivity, depending on the nature of the activity and the circumstances of the individual.

Figure 4.10 displays the proportions of employees reporting on how often they conduct the activities specified in the chart. Most respondents claimed that they rarely or never spent any work time in dealing with financial issues. Around one-third of respondents used the Internet to find information on financial issues and visit price comparison websites, while fewer than 20 per cent checked their bank accounts online at least weekly. Under ten per cent had talked to a financial adviser, checked their online credit rating or contacted creditors while at work.

Around half of employees contacted their GP during work time at least once or twice a year. We know from broader studies on the effects of income inequality that health can be related to financial well-being. This is partly supported by this data. Statistical analysis using an ANOVA (Analysis of Variance) technique showed that respondents from Private Co. who called the GP from work monthly or more frequently had significantly lower average self-reported financial well-being.

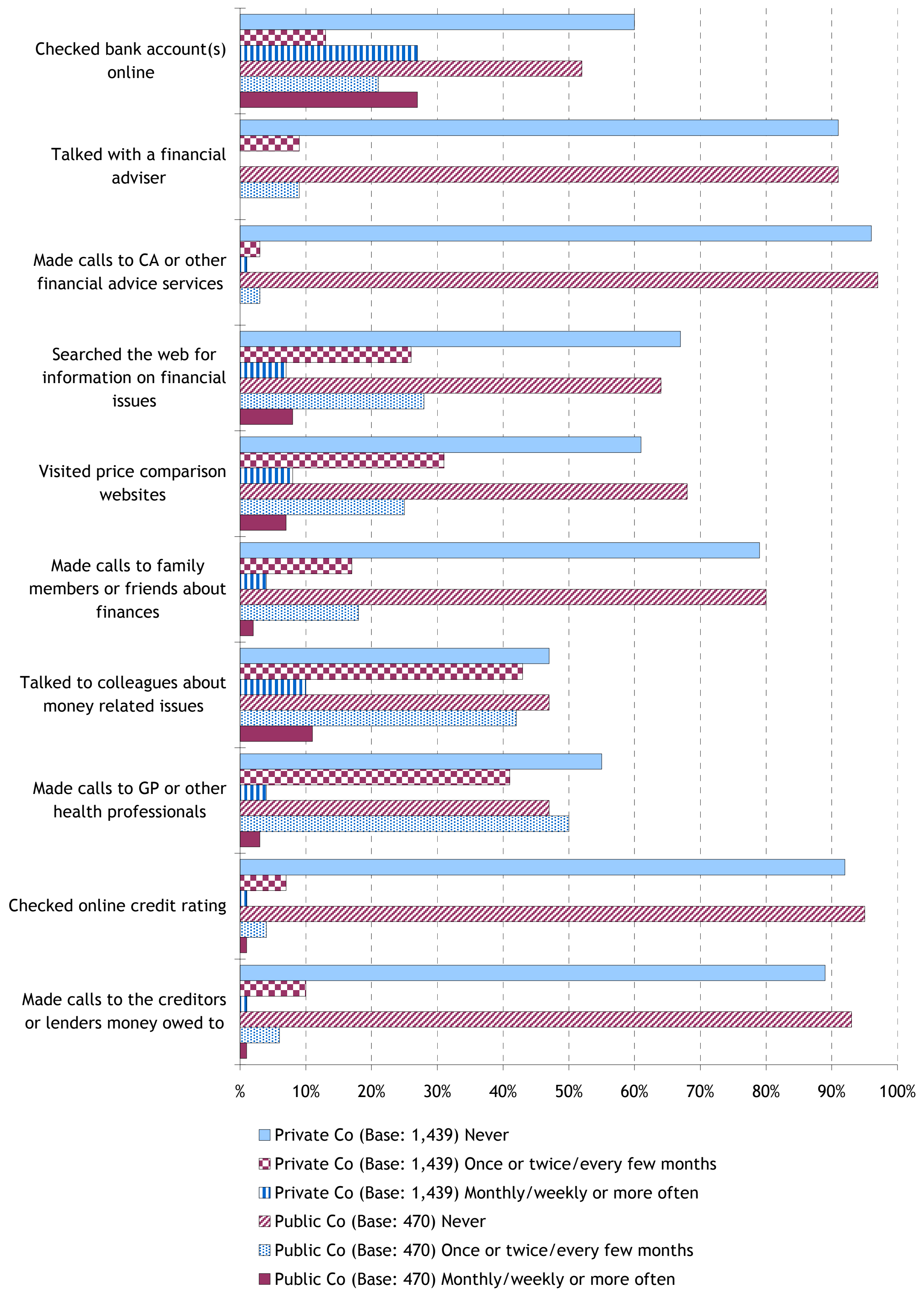
4.5.3 Behavioural patterns of reduced productivity

The literature in the area of financial well-being also shows that individuals who experience financial distress tend to exhibit a variety of behavioural patterns, such as avoiding calls to their direct number, being late to work, finding it difficult to concentrate at work etc. These behaviours are listed in Table 4.7, together with some positive indicators of engagement at work, and employees in both firms were asked to indicate how often, in the last 12 months, they had demonstrated each behaviour.

There is very little variation between the two organisations in the responses. Employees in both firms reported that they were more likely to exhibit 'engaged' behaviours rather than 'distracted' behaviours.

An explanatory factor analysis conducted on these 12 statements showed two distinct factors; the first factor included all four engagement items, and the item referring to staying late at work to finish all tasks, so a scale was developed from these five items called 'engaged employee'. The second factor included six statements which indicated distraction from work so these were used to construct a 'distracted employee' scale to be used in the statistical models testing the links between financial wellness and productivity. The statement about doing more overtime did not fit with either of these scales so it was excluded from further analysis. It is possible that overtime is a standard feature or norm of a particular occupation, so employees in practice may have limited choice about undertaking it.

Figure 4.10: Over the last 12 months, while at work I have …



Source: IES, 2009

Table 4.7: In the last 12 months, how often have you … ?

	Private Co			Public Co		
	Never/ rarely	Some- times	Most of the time/often	Never/ rarely	Some- times	Most of the time/often
Stayed late at work to complete all my tasks	41	33	26	30	41	29
Turned up late at important meetings	96	3	1	94	6	0
Found it difficult to concentrate on my job	60	32	8	49	41	10
Volunteered to do things outside my job that contribute to company's objectives	46	36	18	43	39	18
Avoided incoming calls to my direct number	86	11	3	86	11	3
Been late for work	86	11	3	87	11	2
Done more than was actually required in my job	12	44	44	9	42	49
Felt irritable with work colleagues	45	41	14	39	45	16
Been doing more overtime than usual to make ends meet	81	11	8	86	9	5
Made suggestions to improve the work of my team/depart.	20	44	36	15	50	35
Worked well together with colleagues to solve problems	4	26	70	3	28	69
Taken more personal phone calls than usual	87	11	2	87	11	2
Base:		*1,439*			*470*	

Source: IES, 2009

4.6 Testing the link between financial well-being and work performance

In undertaking this analysis, personal finance activities undertaken during work time were categorised into three types through an explanatory factor analysis. The first factor included checking bank accounts and credit ratings online, searching for financial information on the Internet, and using Internet price comparison sites ('web time at work'). The second factor included three activities involving making calls to financial advisers, CA or other financial advice services or telephoning creditors/lenders ('professional finance time at work'). The last factor also included three activities which involved calling friends or family members to talk about finances, talking to colleagues about finances and calls to GP or other health professionals ('personal talk time at work'). These three factors were constructed

into scales to be used in the statistical models examining the links between financial well-being and work performance and productivity.

4.6.1 Logistic regression model for quantitative work performance and financial well-being

Logistic regression techniques were used to examine the link between work performance and financial well-being. The objective was to find out how well each of the independent variables predicted productivity in terms of how much work employees accomplished. The narrow range of responses regarding work performance (ie most people rated their performance as good) limits the models' predictive power as they cannot explain high percentages of variances in the data. However, they still provide strong indications as to whether links exist between work performance and financial well-being.

Overall, in both models, having high engagement and low distraction levels at work significantly predicted higher self-reported quantitative work performance. Better financial well-being also predicted better work performance in Private Co, but not in Public Co. Having caring responsibilities had an adverse effect on employees' rating of their work performance in Public Co. Being male and having a lower number of days absence were also significant predictors of work performance in Private Co. but these were not significant in Public Co.

What factors independently and significantly predict quantitative work performance in Private Co?

The results from the statistical model are shown in Table 4.8. This model was statistically a moderate fit; 20 per cent of the variance was explained by the independent variables within the model. The model predicted 29 per cent of those with 'poor to average' work performance rating and 92 per cent of those were in the 'above average to excellent' rating, amounting to 75 per cent of cases overall.

Table 4.8: Logistic regression estimates of factors predicting above average quantitative work performance in Private Co

Variables	Sig.	Coefficient: Exp(B)
Age of employees in years	.103	.986
Number of absent days	.026*	.993
Financial well-being (lower than 3.1 = 0, higher than 3.1 =1)	.026*	.694
Gender (reference category is male = 1, female=0)	.037*	.734
Disability (no = 0, yes =1)	.615	1.097
Having children (no = 0, yes =1)	.268	.824
Caring responsibilities (no = 0, yes =1)	.230	.785
Life event 1 (no = 0, yes =1)	.230	1.192
Life event 3 (no = 0, yes =1)	.643	1.081
Life event 4 (no = 0, yes =1)	.132	1.308
Web time at work (lower than average usage = 0, higher =1)	.683	.937
Professional finance time at work (lower than average usage = 0, higher than average usage =1)	.925	1.018
Personal talk time at work (lower than average usage = 0, higher than average usage =1)	.525	.910
Engaged employee (lower than average score = 0, higher = 1)	.001**	4.629
Distracted employee (lower than average score = 0, higher than average score = 1)	.001**	.363
Outstanding personal/secured loans, HP purchases etc. (no = 0, yes =1)	.145	1.252
Outstanding credit card debts (no = 0, yes =1)	.441	1.123
Savings (no = 0, yes =1)	.358	.868

* = indicates significance at the 95 per cent level, ** = indicates significance at the 99 per cent level

IES, Survey data 2009

Each of the following variables had a separate and independent effect on work performance in terms of quantity of work done:

- Employees with higher than average financial well-being were 1.44 times more likely to rate themselves above average on quantity of work done.
- Those who reported fewer days absent were 1.02 times more likely to rate themselves above average on quantity of work done.
- Male employees were 1.30 times more likely to rate themselves above average on quantity of work done.
- Employees who reported higher engagement scores were 4.63 times more likely to rate themselves above average on quantity of work done.
- Those who were less distracted at work were 2.75 times more likely to rate themselves above average on quantity of work done.

What factors independently and significantly predict quantitative work performance in Public Co?

The results from the statistical model for Public Co. are shown in Table 4.9. This model was statistically a moderate fit; 14 per cent of the variance was explained by the independent variables. The model predicted only ten per cent of those who rated their work performance as 'poor to average' and 97 per cent of those who rated their work performance as 'above average to excellent', amounting to 77 per cent of cases overall. Although satisfactory overall, this model was skewed due to the restricted variations in responses.

Table 4.9: Logistic regression estimates of factors predicting above average self-rating on quantitative work performance in Public Co

Variables	Sig.	Coefficient: Exp(B)
Age of employees in years	.583	.992
Number of absent days	.225	.992
Financial well-being (lower than 3.1 = 0, higher than 3.1 =1)	.187	.666
Gender (reference category is male = 1, female=0)	.771	1.082
Disability (no = 0, yes =1)	.382	.759
Having children (no = 0, yes =1)	.665	1.142
Caring responsibilities (no = 0, yes =1)	.016*	.469
Life event 1 (no = 0, yes =1)	.134	1.494
Life event 3 (no = 0, yes =1)	.684	1.134
Life event 4 (no = 0, yes =1)	.970	.988
Web time at work (lower than average usage = 0, higher than average usage =1)	.942	1.021
Professional finance time at work (lower than average usage = 0, higher than average usage =1)	.267	1.525
Personal talk time at work (lower than average usage = 0, higher than average usage =1)	.214	.712
Engaged employee (lower than average score = 0, higher than average score = 1)	.001**	2.472
Distracted employee (lower than average score = 0, higher than average score = 1)	.001**	.577
Outstanding personal/secured loans, HP purchases etc. (no = 0, yes =1)	.145	.991
Outstanding credit card debts (no = 0, yes =1)	.441	.747
Savings (no = 0, yes =1)	.358	.810

* = indicates significance at the 95 per cent level, ** = indicates significance at the 99 per cent level

IES, Survey data 2009

Each of the following variables had a separate and independent effect on work performance in terms of the quantity of work employees did:

- Employees who had no caring responsibilities were 2.13 times more likely to rate themselves above average on quantity of work done.
- Employees with higher engagement scores were 2.47 times more likely to rate themselves above average on quantity of work done.
- Those who were less distracted at work were 1.73 times more likely to rate themselves above average on quantity of work done.

4.6.2 Logistic regression model for qualitative work performance and financial well-being

Since employees in both organisations have reported skewed ratings on the quality of their work performance, it is harder to develop a strong statistical model with high prediction power but the models reported here provided very good fits.

What factors independently and significantly predict qualitative work performance in Private Co?

The results from the statistical model for Private Co. are shown in Table 4.10. This model was a statistically good fit; 32 per cent of the variation in responses was explained by the independent variables within the model. The model predicted 75 per cent of those with 'poor to average' work performance ratings in terms of quality and 73 per cent of those with 'above average to excellent' ratings, amounting to 74 per cent of cases overall.

Overall, in both companies the engagement and distraction scales were significant predictors of employees' perceived qualitative work performance. While being older was also significant in Private Co, spending work time to make calls to financial advisers was a significant predictor of high quality rating of work performance in Public Co.

Each of the following three variables had a separate and independent effect on quality of work performance in Private Co:

- Older employees were 1.03 times more likely to rate the quality of their work performance as above average.
- Employees with higher engagement scores were 7.26 times more likely to rate the quality of their work performance as above average.
- Those who were less distracted at work were 3.01 times more likely to rate the quality of their work performance as above average.

Table 4.10: Logistic regression estimates of the factors predicting above average self-rating of work quality in Private Co

Variables	Sig.	Coefficient: Exp(B)
Age of employees in years	.034*	.970
Number of absent days	.967	1.000
Financial well-being (lower than 3.1 = 0, higher than 3.1 =1)	.168	1.396
Gender (reference category is male = 1, female=0)	.949	.985
Disability (no = 0, yes =1)	.698	.724
Having children (no = 0, yes =1)	.500	.893
Caring responsibilities (no = 0, yes =1)	.823	.928
Life event 1 (no = 0, yes =1)	.176	1.386
Life event 3 (no = 0, yes =1)	.143	1.474
Life event 4 (no = 0, yes =1)	.877	1.045
Web time at work (lower than average usage = 0, higher than average usage =1)	.920	.975
Professional finance time at work (lower than average usage = 0, higher than average usage =1)	.311	.722
Personal talk time at work (lower than average usage = 0, higher than average usage =1)	.180	.727
Engaged employee (lower than average score = 0, higher than average score = 1)	.001*	7.263
Distracted employee (lower than average score = 0, higher than average score = 1)	.001*	.332

* = indicates significance at the 95 per cent level, ** = indicates significance at the 99 per cent level

IES, Survey data 2009

What factors independently and significantly predict qualitative work performance in Public Co?

The results from the statistical model for Public Co. are shown in Table 4.11. This model was a statistically good fit; 35 per cent of the variance explained by the independent variables within the model. The model predicted 73 per cent of those who rated the quality of their work as 'poor to average' and 72 per cent of those who rated the quality of their work as 'above average to excellent', amounting to 73 per cent of cases overall.

Each of the three following variables had a separate and independent effect on the quality of work performance in Public Co:

- Employees who spent more than average time on activities involving calls to financial advisers, CA or other financial advice services or calls to creditors or

lenders were 3.86 more likely to rate the quality of their work as above average or excellent. This may be because taking control over financial issues is associated with a quality focus among employees, or because solving financial issues enables employees to devote attention to the quality of their work.

- Employees with higher engagement scores were 7.29 times more likely to rate the quality of their work as above average than those who were less engaged.
- Those who were less distracted at work were 5.81 times more likely to rate the quality of their work as above average.

Table 4.11: Logistic regression estimates of the factors predicting above average self-rating of qualitative work performance in Public Co

Variables	Sig.	Coefficient: Exp(B)
Age of employees in years	.410	.981
Number of absent days	.400	1.008
Financial well-being (lower than 3.1 = 0, higher than 3.1 =1)	.584	1.291
Gender (reference category is male = 1, female=0)	.741	1.159
Disability (no = 0, yes =1)	.537	.735
Having children (no = 0, yes =1)	.349	.621
Caring responsibilities (no = 0, yes =1)	.770	.861
Life event 1 (no = 0, yes =1)	.153	.537
Life event 3 (no = 0, yes =1)	.437	1.465
Life event 4 (no = 0, yes =1)	.337	.623
Web time at work (lower than average usage = 0, higher than average usage =1)	.425	1.455
Professional finance time at work (lower than average usage = 0, higher than average usage =1)	.022*	3.853
Personal talk time at work (lower than average usage = 0, higher than average usage =1)	.563	1.294
Engaged employee (lower than average score = 0, higher than average score = 1)	.001**	7.278
Distracted employee (lower than average score = 0, higher than average score = 1)	.001**	.172

* = indicates significance at the 95 per cent level, ** = indicates significance at the 99 per cent level

IES, Survey data 2009

What factors independently and significantly predict recent changes in work productivity in Private Co?

The last question on work performance involved asking employees to indicate how their productivity had changed in the last year, compared to their average work performance. Again, logistic regression technique was used to examine the significant predictors of workplace productivity. Table 4.12 presents the findings of the model conducted with the Private Co. data.

This model was a moderate fit statistically; 19 per cent of the variance was explained by the independent variables within the model. The model predicted only 17 per cent of those whose productivity decreased and 96 per cent of those whose productivity increased over the last 12 months, amounting to 78 per cent of cases overall.

Analysing data based on both organisations, rather than focusing on differences, the results show that those who report better financial well-being are 1.54 times more likely to say their productivity has increased in the past year. Overall, being older and having lower distraction levels were also significant in predicting increased productivity in both organisations.

Financial well-being had significant associations with recent improved productivity in Private Co, where employees with better financial well-being were 1.71 times more likely to say that their productivity had increased. This finding provides a direct link between employee financial well-being and productivity at work but the same association was not found in Public Co. Some dissimilar demographics of respondents in the participating companies probably account for some of the variations in the data. Further variations included the factors of engagement, which was a strong predictor of work productivity at Private Co, and being a parent, which was a significant predictor of productivity in Public Co.

Each of the following five variables had a separate and independent effect on workplace productivity in Private Co:

- Older employees were 1.03 times more likely to say their productivity had increased in the last 12 months.
- Employees who reported having better than average financial well-being were 1.72 times more likely to cite increased productivity.
- Those who spent less time at work talking to colleagues or phoning friends or relatives were 1.50 times more likely to report increased productivity.
- Employees with higher engagement scores were 1.95 times more likely to cite increased productivity.
- Those with lower scores on distraction at work were 4.22 more likely to report increased productivity.

Table 4.12: Logistic regression estimates of factors predicting self-reported increase in work productivity over the past year in Private Co

Variables	Sig.	Coefficient: Exp(B)
Age of employees in years	.010*	.970
Number of absent days	.946	1.000
Financial well-being (lower than 3.1 = 0, higher than 3.1 =1)	.014*	.581
Gender (reference category is male = 1, female=0)	.297	.815
Disability (no = 0, yes =1)	.713	1.092
Having children (no = 0, yes =1)	.640	1.113
Caring responsibilities (no = 0, yes =1)	.972	1.010
Life event 1 (no = 0, yes =1)	.617	.905
Life event 3 (no = 0, yes =1)	.115	.706
Life event 4 (no = 0, yes =1)	.833	1.050
Work time web (lower than average usage = 0, higher than average usage =1)	.154	.741
Work time talk (lower than average usage = 0, higher than average usage =1)	.567	1.146
Work time chat (lower than average usage = 0, higher than average usage =1)	.039*	.666
Engaged employee (lower than average score = 0, higher than average score = 1)	.001**	1.947
Distracted employee (lower than average score = 0, higher than average score = 1)	.001**	.237
Outstanding personal/secured loans, HP purchases etc. (no = 0, yes =1)	.332	1.225
Outstanding credit card debts (no = 0, yes =1)	.829	1.044
Savings (no = 0, yes =1)	.631	.905

* = indicates significance at the 95 per cent level, ** = indicates significance at the 99 per cent level

IES, Survey data 2009

What factors independently and significantly predict recent changes in work productivity in Public Co?

Table 4.13 displays the findings of the model conducted with the Public Co. data. This model was also a moderate fit statistically; 17 per cent of the variance was explained by the independent variables within the model. The model predicted 32 per cent of those whose productivity decreased and 90 per cent of those whose productivity increased over the last 12 months, amounting to 71 per cent of cases overall.

Table 4.13: Logistic regression estimates of factors predicting self-reported increase in work productivity over the past year in Public Co

Variables	Sig.	Coefficient: Exp(B)
Age of employees in years	.011*	.955
Number of absent days	.255	.991
Financial well-being (lower than 3.1 = 0, higher than 3.1 =1)	.621	.835
Gender (reference category is male = 1, female=0)	.752	1.108
Disability (no = 0, yes =1)	.575	.812
Having children (no = 0, yes =1)	.050*	1.973
Caring responsibilities (no = 0, yes =1)	.891	.949
Life event 1 (no = 0, yes =1)	.773	.909
Life event 3 (no = 0, yes =1)	.789	.905
Life event 4 (no = 0, yes =1)	.329	
Web time at work (lower than average usage = 0, higher than average usage =1)	.258	.676
Professional finance talk time at work (lower than average usage = 0, higher than average usage =1)	.380	.694
Personal talk time at work (lower than average usage = 0, higher than average usage =1)	.430	1.296
Engaged employee (lower than average score = 0, higher than average score = 1)	.762	1.104
Distracted employee (lower than average score = 0, higher than average score = 1)	.015*	.431
Outstanding personal/secured loans, HP purchases etc. (no = 0, yes =1)	.751	.903
Outstanding credit card debts (no = 0, yes =1)	.454	.771
Savings (no = 0, yes =1)	.455	1.284

* = indicates significance at the 95 per cent level, ** = indicates significance at the 99 per cent level

IES, Survey data 2009

Each of the three following variables had a separate and independent effect on workplace productivity in Public Co:

- Older employees were 1.05 times more likely than younger employees to report increased productivity.
- Parents were 1.97 times more likely than non-parents to cite increased productivity.
- Those with lower scores on distraction at work were 2.32 times more likely to report increased productivity.

4.7 Views on financial education and sources of information about finance issues

Given employee concerns about their financial futures, it is interesting to gauge their views on financial education and their preferred sources of advice and information.

4.7.1 Participation in, and views on, financial education

Both organisations had run financial education workshops for employees, and Private Co. also offered an Employee Assistance Programme. This report now considers employee responses to financial education and variation in participation according to different employee characteristics.

Participation in workshops was relatively low among respondents in both organisations but those who did appeared to find them useful. Eleven per cent of respondents in Private Co. and three per cent in Public Co. had attended the seminars. Of those who participated in these seminars, eight per cent in Private Co. rated them as 'excellent', a further 40 per cent as 'good', 38 per cent as 'fair' and 14 per cent as either 'poor' (ten per cent) or 'inadequate'. The numbers were too small in Public Co. to report detailed ratings but almost two-thirds of those who had participated in these seminars found them either 'excellent' or 'good'.

Some groups[1] identified by our earlier analysis as most vulnerable to financial problems were actually less likely to participate in financial education. Employees in Private Co. with a long-term health problem or disability were significantly less likely to have participated in financial education seminars than those without a disability (eight per cent, as compared to 12 per cent). Those who reported having life events involving changes to their personal circumstances, including redundancy, reducing working hours or suffering from long-term health problems were also significantly less likely to have participated in these seminars. Further research into accessibility and promotion of financial education to make it attractive and participation feasible for some of the groups who may be most likely to benefit from it may therefore be worthwhile.

Strikingly, debt and income levels were not significantly associated with participation in financial education by employees at Private Co. This may indicate that financial education is also of interest to a broader spectrum of employees than solely those with immediate financial difficulties.

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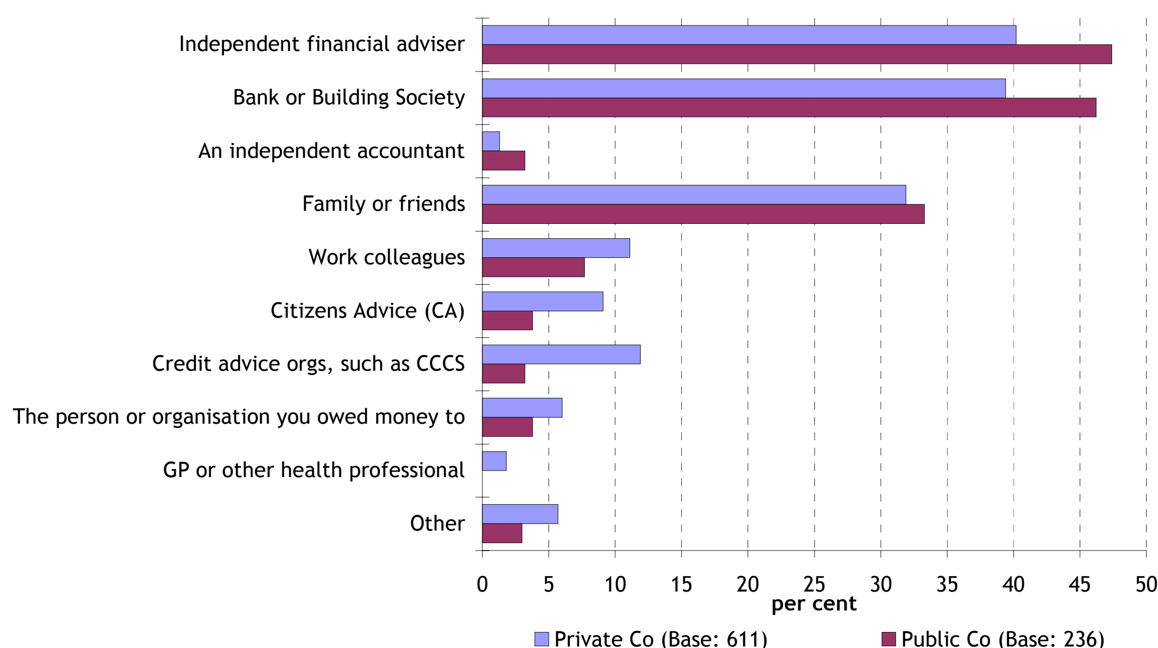
[1] Small numbers of participants meant that analysis of participation in financial education or employee ratings of its usefulness by different employee characteristics could not be undertaken for Public Co.

The only significant difference in employee views on the usefulness of financial education hinged on income levels. Significantly higher proportions of employees earning less than £25,000 per year individually and less than £45,000 per year in their household rated these seminars as excellent or good. This would indicate that the financial education offered in these organisations is meeting the needs of those most vulnerable to financial problems but perhaps not addressing what may be the very different concerns of higher earners.

4.7.2 Preferred sources of financial information

There is much policy interest in improving access to high quality financial information and streamlining the plethora of existing sources of information and advice. Employees were asked both which sources of information they had used and which they would prefer to use in the future.

Figure 4.11: Who did you ask for advice in the last 12 months?



Source: IES, 2009

A substantial minority of over 40 per cent of staff in each organisation had made some attempt to inform themselves about financial matters during the past year, with independent financial advisors and building societies/banks being the most popular sources of information. Larger proportions of Private Co. employees used credit advice organisations, while larger proportions of Public Co. employees used finance professionals and institutions such as independent financial advisors and financial services providers. These findings do not distinguish between information sought in person and information sought over the Internet, but the extent to which financial advice and information can be provided online is worthy of further investigation.

It is also important to ensure that the views of employees who have not yet accessed formal sources of financial advice but may do so in the future are captured, and the results for this are shown in Table 4.14.

Table 4.14: Which of the following sources of information would you be most likely to use, if it was available to you?

	Private Co %	Public Co %
Independent financial adviser	56	59
Citizens Advice (CA)	23	27
Credit advice organisations, such as CCCS	15	12
Bank or Building Society advisers	35	33
An independent accountant	20	17
None of these	17	19
Base	*2,305*	*741*

Source: IES, 2009

The results are very similar to preferences among existing users of advice sources. Over half the respondents would use financial advisers with banks/building societies being the second most popular option.

Lastly, respondents were asked which financial topics were of most interest to them and the results for this are shown in Table 4.15.

It is unsurprising given the concerns respondents expressed about their financial futures that pension planning emerged as the topic in which respondents expressed more interest in gaining information than any other. However, budgeting also gained a fair amount of interest. It is perhaps surprising that a relatively fundamental financial topic attracted such interest and it would be intriguing to know whether self-perceptions of budgeting problems are concerned with lack of knowledge about how to budget or difficulties in sticking to one. It suggests, however, that employees may be feeling the effects of gaps in their financial education which should be met relatively early in life, through parental instruction, guidance and support or the education system. This finding could be argued to endorse the inclusion of financial education on the Personal, Social and Health Education (PSHE) curriculum.

Table 4.15: If wanted to improve your understanding or ability to manage personal finances, which topics would you be most interested in?

	Private Co %	Public Co %
Managing credit	25	17
Credit terms and interest rates	18	12
Buying a home	25	17
Consumer credit services	7	2
Getting out of debt	32	24
Understanding benefits/tax credits	27	24
Budgeting	40	33
Pension planning	49	57
Saving for children's education	19	13
Student loans	9	9
Other	6	6
Base	*3,086*	*764*

Note: These responses sum to more than 100% as this was a multiple response question which allowed respondents to tick all that applied to them.

Source: IES, 2009

5 Conclusions

This report has presented the results of one of the first studies of financial well-being among UK employees.

The literature review showed that debt problems are relatively widespread across the UK but there is no comprehensive source of information on the numbers of people affected. The *Thoresen Review* (2008) estimated that 7.5 million people may fall into the most vulnerable group which is likely to suffer financial problems. The evidence reviewed for this report, including information from some of the debt advice charities, suggests that a substantial proportion of those affected by debt are in employment, and debt is by no means the preserve of people outside the labour market. There is also consistent evidence to suggest that both debt levels and the numbers of people affected are growing.

The survey data has illustrated the importance of using both subjective and objective measures of financial well-being as the former can capture concerns about future financial problems, whereas objective data is more readily available to assess immediate financial status. There appear to be plausible links between poor financial well-being, stress and mental health problems, though the causal relationships between these factors are likely to be mutual. Studies from the United States claim a significant impact of poor financial well-being on individual performance in the workplace, relating this to outcomes such as absence, alcoholism and workplace violence. Like the results of the survey conducted for this report, the studies reviewed rely on self-reported data from employees on their performance and this requires supplementing with measures of employee output and organisational performance for a more accurate assessment of the impact of financial well-being on employers.

The surveys from which data was drawn for this report were conducted on a relatively small scale, but there are a number of indications that the findings are credible. The results appear to be broadly consistent in terms of the types and levels of debt that survey respondents report with those found in the wider literature. Their average income is also broadly consistent with the UK national average.

Factors which predicted poor financial well-being among the survey respondents were consistent with those in previous research. Younger people, single individuals, people with health problems or a disability, those in rented accommodation and with lower incomes were more likely to face financial distress and have difficulty in paying bills. Notably, financial behaviours as well as demographic characteristics were also influential in predicting financial well-being: those who did not budget, had lower levels of savings and higher debts were likely to have lower financial well-being than the rest of the respondents. There was some limited evidence of direct links between financial well-being and individual performance in the workplace but distraction from work and engagement with work were also important factors. These factors are, of course, also likely to be influenced by financial well-being.

Perhaps one of the most interesting findings from the literature review is that while indicators of deprivation may predispose individuals to a greater likelihood of falling into debt, it is avoidable. A major theme from a number of different studies reviewed was that individuals' personal competence in handling money and their attitudes towards money, savings and debt also played an important role in influencing their behaviours. These findings are echoed by the evidence from the survey data reported in Chapter 4, which showed that those who were better at managing money in terms of budgeting and building up savings rated their financial well-being as higher than those who were less successful in these activities. Even those who are financially vulnerable have some discretion and can make better or worse choices.

This strengthens the case that individuals should be appropriately equipped with financial capability and competence. Studies have shown that action taken to improve financial well-being through employee financial counselling and education has beneficial outcomes mostly at the level of employees. Self-reported concerns about budgeting from our survey data, and concern about sufficiency of retirement savings reinforce the importance of policy efforts to improve the competence of the current and future workforce in this area. While both organisations were offering financial education, participation rates were relatively low, although a large proportion of the employees who did take up the offer reported finding it useful. However, further work is needed to investigate any need for and the feasibility of customising and targeting financial education among different sectors or occupations. This is especially important given the findings from both this survey and previous research that people who are vulnerable to debt may be less likely to participate in financial education. Furthermore, financial education of individual citizens is arguably more critical than ever, given the unfavourable economic climate. People in younger age groups who are more likely to be vulnerable to debt may never have experienced recession and an unfavourable labour market during their adult lives.

There is a dearth of research of relevance to employers which assesses the benefits that they can expect in return for investing directly or indirectly in supporting workplace financial education. The cost-benefit analyses of the outcomes for employers undertaken in the United States consist largely of estimates of potential gains, based on hypothetical scenarios, rather than systematic evaluations undertaken by employers launching financial education initiatives, using appropriate control groups and longitudinal data. Further evaluation requirements for financial education are outlined by Atkinson (2008) and these should be addressed in future research.

Lastly, the literature has suggested that people holding particular attitudes towards saving and spending may be predisposed to acquiring debts. It would therefore be interesting to assess whether they are evenly distributed across the workforce or whether they are concentrated in particular sectors or occupations. Mapping financial values according to the jobs people hold may be feasible if beliefs about money are associated with other facets of personality or personal competence which are desirable for particular types of work. In order to target support more effectively for the purpose of both preventing and alleviating financial problems among UK employees, these areas require further research.

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Appendix: Biographical Details of Respondents

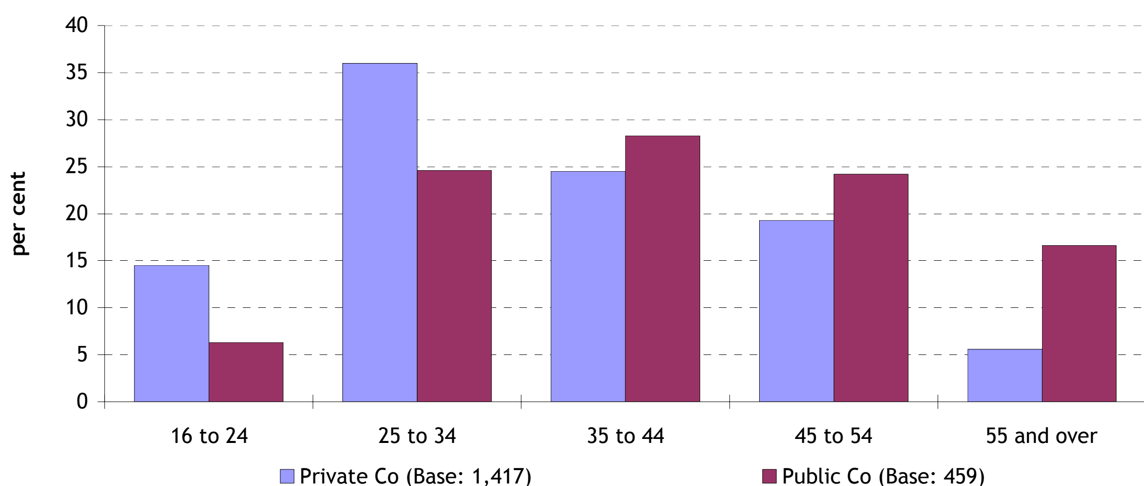
Gender

The results showed an even gender distribution for Private Co, as 50 per cent of the survey respondents were female. On the other hand, females constituted 65 per cent for Public Co.

Age

As presented in Figure A1.1, Private Co. had a much younger workforce. The youngest respondent was 17 and the oldest 65, with an average age of 35.9. The age group of those aged 55 and over contained only six per cent of employees.

Figure A1.1: Age groups



Source: IES, 2009

The gender distribution across these age groups in Private Co. showed that there were significantly higher proportions of female employees in younger groups (19

per cent of female employees were aged between 16 and 24, while only ten per cent of males were in this age band). On the other hand, a higher proportion of male employees were aged over 45 (31 per cent, as compared to 19 per cent of females in this age group). The average age of men (38) was also notably higher than women (34).

The average age of employees in Public Co. was much older at 41.6 years; the youngest employee was 19 and the oldest 69. Seventeen per cent of employees were older than 55. Although there was a notably higher proportion of female employees who were older than 45 at Public Co. (42 per cent of women, compared to 38 per cent of men), the average age of employees was similar for each sex – 42 years for men and 41 years for women.

Ethnicity

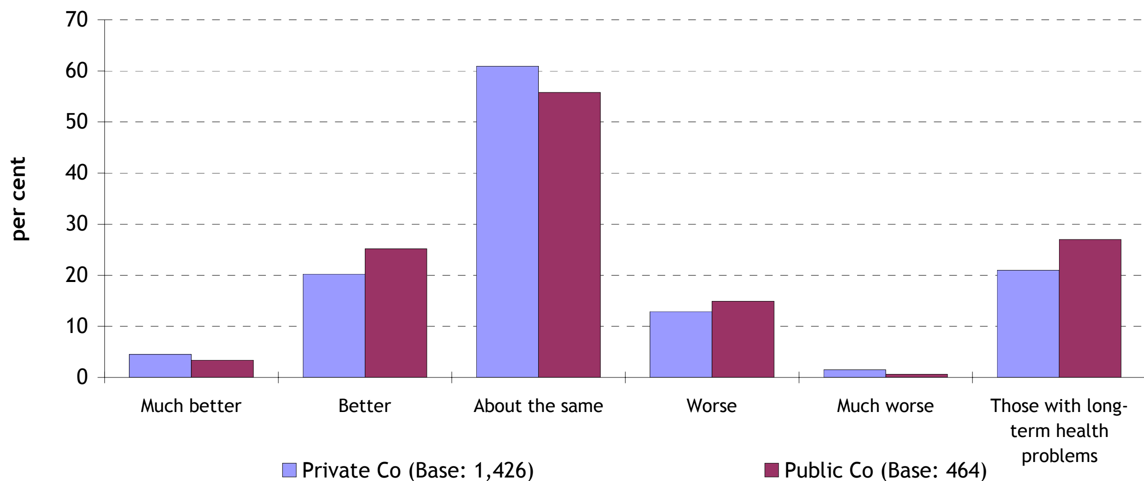
The profiles of the two organisations in terms of the ethnicity also differed somewhat: while 90 per cent of all employees classified themselves as 'white' in Private Co, in Public Co. 98 per cent had a white racial background. In terms of gender split by ethnicity, there were a significantly higher proportion of male employees classifying themselves as 'non-white' in Private Co. (13 per cent, as compared to eight per cent of female employees). However, equal numbers of male and female employees in Public Co. classified themselves as 'non-white' (two per cent of each).

Other personal characteristics

In terms of their current status, 26 per cent of Private Co. survey respondents were single, seven per cent were either divorced or separated and 68 per cent were married or living with a partner. The same proportion of respondents (68 per cent) were married or living with a partner in Public Co. but slightly lower numbers were single (20 per cent), ten per cent were divorced or separated and two per cent were widowed.

Employees were also asked to rate their health, compared to people of a similar age. As given in Figure A1.2, slightly higher numbers reported having the same health as their peers in Private Co. (61 per cent, as compared to 56 per cent in Public Co).

Figure A1.2: Compared to people of a similar age to you, how would you say your health is?



Source: IES, 2009

In all, there were slightly higher proportions of employees who reported having a long-term illness, health problem or disability in Public Co. (27 per cent, as compared to 21 per cent in Private Co). Furthermore, higher proportions in Public Co. cited that their problem had affected the amount or type of work they could do: 46 per cent of those with a disability stated that health affected their work in Public Co, as compared to 30 per cent of those with a disability in Private Co.

Fifty per cent of respondents in Private Co. had children, compared to 55 per cent in Public Co. A notably higher proportion of parents responding in Private Co. had only one child (57 per cent, as compared to 50 per cent in Public Co).

Higher numbers of respondents in Public Co. reported having caring responsibilities for a sick, disabled or elderly family member (21 per cent, as compared to 15 per cent in Private Co). There was a significantly higher proportion of carers who were male compared to female in Public Co. (27 per cent male versus 18 per cent female), while the gender split of carers was much more even in Private Co. (16 per cent of carers were male, compared to 14 per cent female).

Job details

Status of contract and working hours

Almost all respondents from Private Co. (99 per cent) were employed on permanent contracts at the time of survey, whereas nine per cent of respondents in Public Co. were on non-standard contracts.

While 88 per cent of respondents in Private Co. were employed on a full-time basis, the proportion of full-time employees was 79 per cent in Public Co. In both firms, significantly higher proportions of females were employed on a part-time basis (20 per cent of females and just three per cent of males were working part-time in Private Co; the gap was narrower with 25 per cent of females and nine per cent of males working part time in Public Co).

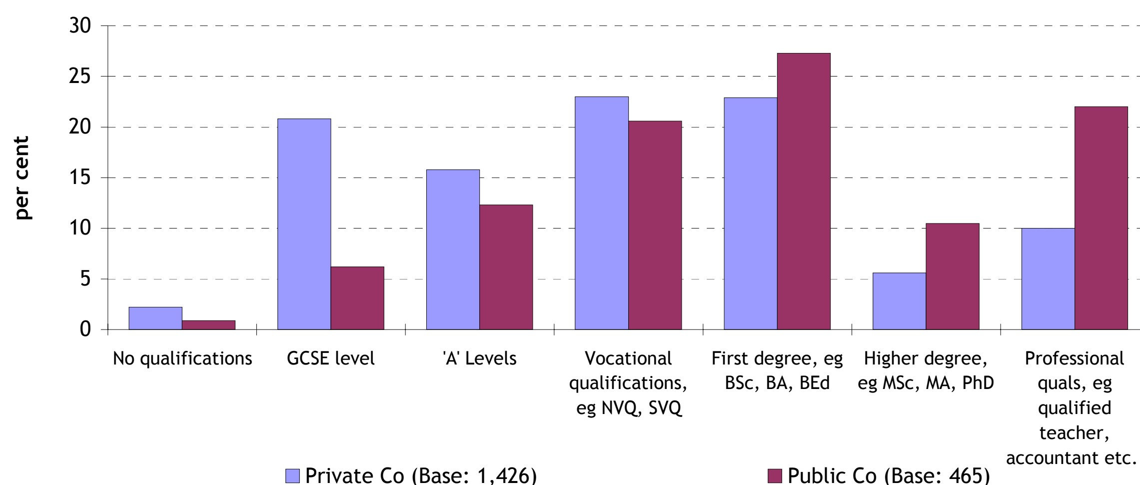
Length of tenure

The distribution of the length of tenure was very similar between the two organisations. Five per cent in Private Co. and six per cent in Public Co. reported tenure of less than one year. Similarly, 28 per cent of employees in Private Co. and 27 per cent in Public Co. reported tenure of more than ten years. The average length of time in employment at the organisation among Private Co. respondents was 8.7 years, while this was 8.1 years for Public Co. While there was a significant difference between male and female employees in Private Co. in their average length of tenure (10.8 years, as compared to 6.6 years), the length of tenure was very similar for male and female employees in Public Co. (8.3 and 8.1 years).

Highest level of qualifications

Employees were also asked to provide the highest level of education they had completed at the time of the survey. Figure A1.3 presents the proportions for each organisation.

Figure A1.3: Highest level of qualifications



Source: IES, 2009

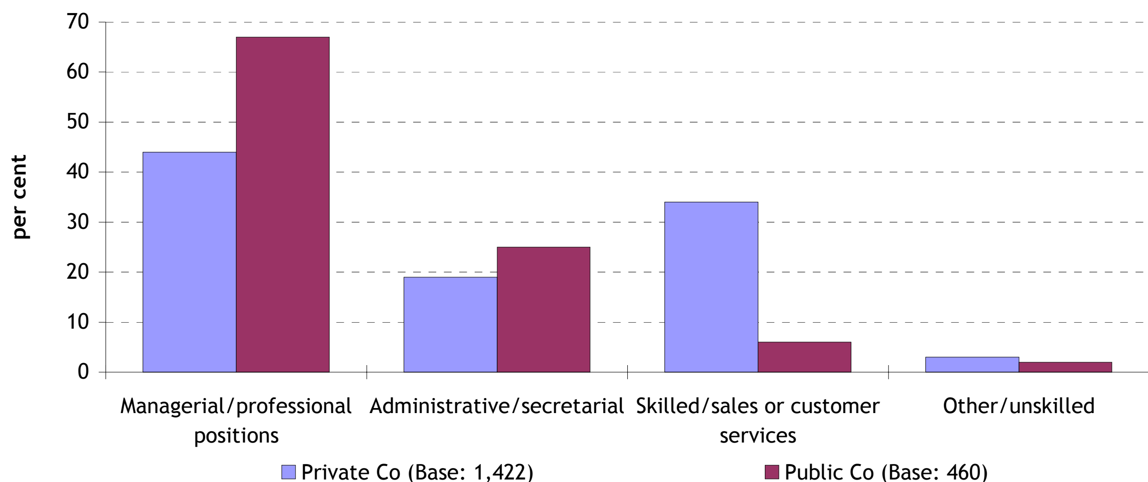
Few employees within each firm reported having no qualifications (two and one per cent respectively). Significantly higher numbers in Private Co. had GCSE level

qualifications as their highest level of qualification (21 per cent, as compared to six per cent in Public Co), while significantly higher numbers in Public Co. reported having professional qualifications (22 per cent, as compared to ten per cent in Private Co).

Occupational status

Figure A1.4 shows significantly higher proportions of respondents holding managerial or professional positions in Public Co. (67 per cent) than in Private Co. (44 per cent). This is consistent with the higher levels of professional qualifications held by respondents in Public Co. There were significantly higher numbers of respondents working in skilled trades, services and sales in Private Co. (34 per cent) than in Public Co. (only six per cent). Compared to Private Co. (19 per cent), there were slightly higher proportions of people in administrative or secretarial positions in Public Co. (25 per cent).

Figure A1.4: Occupational classification



Source: IES, 2009

Although there were significantly higher numbers of male managers in Private Co. (59 per cent of managers were male compared to 30 per cent who were female), the gender split was much narrower in Public Co, with 74 per cent of managers who were male, compared with 63 per cent of managers who were female.

Life events recently experienced

Employees were asked about their experiences of life events in the last three years which are known to affect financial well-being. The literature shows clear links between financial well-being and the impact of significant life events. Table A1.0.1

shows employee responses to the list of life events presented to them and the variations in these responses across the two participating organisations.

Table A1.0.1: Life events in the last three years

	Private Co %	Public Co %
Graduated from university	10	10
Bought first house/property	21	14
Got married, had civil partnership or moved in with partner	24	20
Moved house to a bigger house/property	26	24
Had a major house repair	17	23
Had a major car repair expense	30	36
Became mother/father for the first time	10	8
Had one or more children in the family	11	7
Divorced or separated from previous partner	13	10
Lost job or been made redundant	10	8
Moved from full-time to part-time work	8	11
Suffered from a long-term health condition/disability	9	15
Some (or one) of the members of household was diagnosed as disabled	3	6
Some (or one) of the members of household started university	8	11
Some (or one) of the members of household got married	3	2
Some (or one) of the members of household retired	3	3
Some (or one) of the members of household lost a job	10	6
Some (or one) of the members of household died	4	6
Any other event	9	12
Base	*2,610*	*906*

Note: These responses sum to more than 100% as this was a multiple response question which allows respondents to tick all that apply to them.

Source: IES, 2009

As can be seen, the list includes a range of significant life events which can be categorised under four broad events as follows:

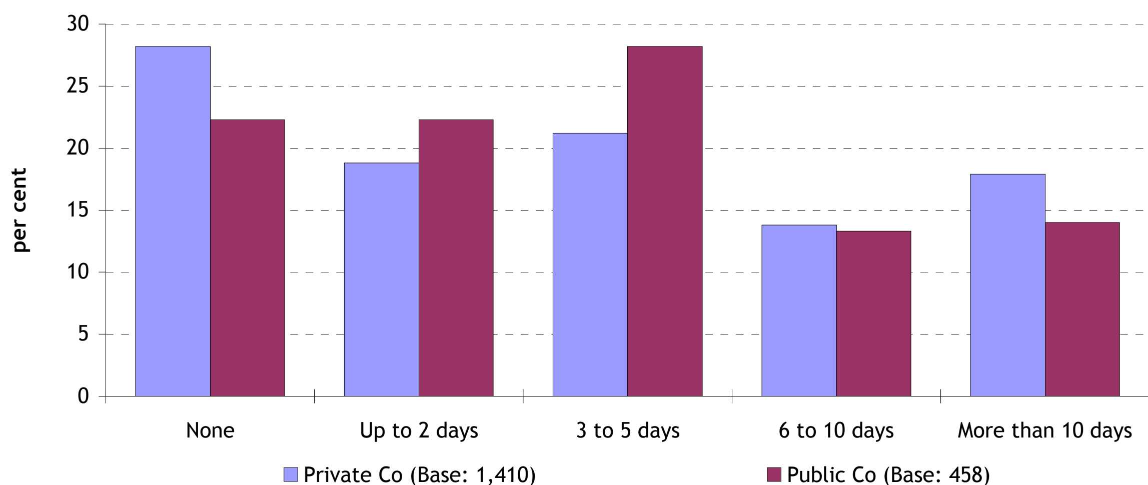
- Education, house purchases/repairs etc.
- Marriage and children.
- Changes in personal circumstances, including losing job, reducing work hours, health problems etc.
- Family members having an impact on finances, such as losing a partner, partner retiring, marriage of grown up children etc.

Higher proportions in Private Co. reported life events around marriage and children, including becoming a parent for the first time and having one or more children in the family. They were also more likely to report buying their first property, while those from Public Co. were more likely to cite major repairs either to their house or cars in the last three years. There were also variations in responses around changes to personal circumstances: higher proportions of those in Private Co. reported losing their job or getting divorced, while higher proportions in Public Co. reported reducing their working hours or suffering from a long-term health condition.

Work attendance

Employees were asked how many days absence they had from their job over the past 12 months. Figure A1.5 presents the findings on this question.

Figure A1.5: Number of absent days



Source: IES, 2009

The number of days' absence in Private Co. varied from 1 to 500, with an average of nine days. However, the median value (mid-point in the distribution of days) was three days, giving a more accurate indication of numbers of days' absence. The number of days' absence in Public Co. varied from 1 to 240, with an average of eight and a median value of three days.

There were some variations across employee groups in both firms:

- Female respondents had higher number of days off sick in Private Co. but there were no differences between the sexes in Public Co.
- In Private Co. the younger groups had the highest number of absences and the older groups had the lowest, but there was no age effect in Public Co.

- Single employees in both firms had higher numbers of sick days.
- Those with long-term health problems in both firms reported having higher numbers of absences.
- Non-parents in Private Co. and parents in Public Co. had higher numbers of absences.
- Those living in rented accommodation in both firms had higher numbers of sick days.
- Respondents with outstanding loans, credit card debt etc. in both firms reported having higher numbers of absences.
- Those who were unable to save regularly in both firms had higher numbers of absences.
- Respondents with lower income had higher numbers of absences.
- Those in managerial roles in Private Co. had higher numbers of absences but there was no difference in Public Co.
- Respondents who experienced changes in personal circumstances reported having higher numbers of absences.

Work performance

Most employees in both organisations rated the quantity and quality of their work as above average and very small numbers described their work performance as poor. Over 40 per cent in each organisation reported that their productivity had increased over the past year and a similar proportion reported that their productivity was unchanged.

Employees surveyed were asked to describe their work performance in terms of quantity of work done, using a five point scale with 1 = very poor to 5 = excellent. The variations in response categories were very limited as only 12 respondents in Private Co. described the quantity of work they had done as ‘poor’ or ‘very poor’ and only five in Public Co. used either of these categories. Almost one in six (58 per cent) in Private Co. and similar proportions in Public Co. (62 per cent) reported their work performance as being ‘above average’ in terms of what they accomplish. Around 15 per cent in both firms said that their work performance was excellent, while 27 per cent in Private Co. and 23 per cent in Public Co. described their work performance as average.

No significant variations were found across different groups of employees in their performance rating in general, and this was the case for both firms. Significantly higher numbers of employees think their work performance is either above

average or excellent, which is unsurprising and consistent with numerous studies in the organisational psychology field.

Respondents were also asked to rate the quality of their work. The findings on this question were similar to those reported above: no one in either firm used the 'very poor' category while one person in Private Co. and five in Public Co. used the 'poor' category for the quality of their work performance. Almost two-thirds in both organisations (63 and 62 per cent, respectively) said the quality of their work performance was above average, two in ten in these firms rated the quality of performance as average, while 17 per cent in Private Co. and six per cent in Public Co. rated it as excellent. Higher proportions of better ratings were received across all employee groups in the participating organisations.

Employees were asked how their work productivity has changed in the last year. Almost half of all employees in Private Co. (47 per cent) and over one in four in Public Co. (41 per cent) reported that their productivity had increased. Very similar proportions in these firms (39 and 40 per cent, respectively) said their productivity had stayed the same. Almost two in ten in Public Co. (19 per cent) and 14 per cent in Private Co. reported that the productivity had decreased.

There were no notable changes in the ratings of different employee groups across these firms when they compared how their productivity had changed over the last 12 months.

Lastly, employees in both firms were also asked if they had received verbal or written warnings about their work performance over the last 12 months. Four per cent of employees in Private Co. and only two per cent in Public Co. answered yes to this question and the numbers were too small to examine the variations across different employees groups in the participating organisations.

Statistical significance

Relationships are generally only reported in the text of the report if they are statistically significant, unless this is of particular interest to the report. It needs to be pointed out here that multiple response questions are the exception to this protocol. Due to overlap of responses, it is not appropriate to use significance testing on multiple responses. Therefore, the figures given in multiple response questions are not based on significance testing. These are percentage distributions of responses within each relevant response category.

Pearson's Chi-square has been used to test significance on cross-tabulations, and significance is measured at a cut-off of 95 per cent significance in a two-sided test. However, if the minimum expected frequency is less than one, or the number of cells with an expected frequency of less than five applies to more than 20 per cent of the cells, the sample size is too small for the test to be reliable, and the result is not reported as significant, regardless of the Chi-square statistic.

ANOVA (Analysis of Variance) has been used to examine significance on mean (average) scores. ANOVA is a statistical test which compares more than two groups' means and gives a result indicating whether these means are significantly different. Again, significance is measured at a cut-off of 95 per cent.