

# Summary

## Introduction

This report examines the relationship between life events and patterns of saving. It identifies the range of purposes for which people save, and how many and what kinds of people save. It identifies which life events are followed by an increase or a decrease in saving activity and lastly it examines whether savings affect later life events.

The project is based on secondary analysis of an existing dataset, the British Household Panel Survey (BHPS) for 1991-2000. The BHPS is an annual survey of adults in a nationally representative sample of more than 5,000 households; the same individuals are re-interviewed each year.

The savings questions in BHPS cover whether individuals are saving; if so, the monthly amount; the reason or purpose for saving; and whether they have non-state pension arrangements. For amounts of capital accumulated by families, there is a reasonably good match between the BHPS and Family Resources Survey (FRS), for 2000.

The BHPS provides representative snapshots of people's behaviour for each year, but also allows analysts to follow the behaviour of the same people over time. We use several different statistical approaches to the data – sometimes focusing on the overall picture in the most recent year (2000), sometimes on snapshots for particular years, but usually analysing changes among individuals.

## Who saves? Snapshot pictures of saving

In 2000, just over four in ten (43 per cent) of individuals said were saving money, and half of them (51 per cent) said that they or their partner was doing so. Overall, three in ten (30 per cent) said that they regularly put money aside; and about the same proportion (27 per cent) were saving for the long-term. The average amount saved was £154 a month (year 2000 money terms).

Four in ten (41 per cent) of all those who saved said that the money was not earmarked for anything in particular. The most common specific purpose was saving up for holidays (22 per cent), followed by saving for old age (nine per cent), house purchase (five per cent) and special events (five per cent).

People's subjective assessment of their financial situation had by far the greatest impact on regular saving (and also on long-term saving). So while 43 per cent of people who said that they were 'living comfortably' saved regularly, the proportion declined steeply with increasing financial stress so that only three per cent of those 'finding it very difficult' financially regularly put money by (Table 2.5). People in work were by far the most likely to save regularly even when other obvious factors such as income and benefit receipt were controlled for.

Two in ten (21 per cent) of self-employed people said that they were saving for their old age – twice the proportion (nine per cent) of employees. This only covers money saved into bank accounts and the like, not into pensions.

People with a non-state pension were both more likely to save than those without one and to save larger sums of money. The effect was greater, on saving regularly, among those with an occupational pension than it was for people with a personal pension. Moreover, the multivariate analysis showed that the effects persisted even when other factors, such as income and employment status, were included.

In 2000, 36 per cent of people (of all ages) interviewed in the British Household Panel Survey were putting money away for their retirement, either in the form of a non-state pension or as money in general savings they said was for old age. The main predictors of saving for old age were somewhat different from those for saving in general. The two variables with the largest impact were age (which had little effect on general saving) and employment status (which affected general saving far less).

## Patterns of saving over time

Between 39 per cent and 43 per cent of respondents were saving at any given wave, 1991-2000, average amounts saved over time have risen in real terms. The proportion of individuals saving for old age (or with a non-state pension) has been constant – at around 36 per cent – since the mid-1990s.

The youngest birth cohort is saving less than those up to ten years older than them. Their slightly older peers (born 1965-74; who elsewhere have been depicted as “Thatcher’s children”) had, if anything, been saving more than those who were slightly older than them but these ‘values’ did not appear to have been taken up by their younger peers.

Just over one in six (18 per cent) of those included in the study for all ten years said at each and every annual interview that they were not saving – although for some 30 per cent of this group there was at least one occasion when they had a partner who saved. Among those of working age, around nine per cent had never saved or ever had a spouse who was saving. Conversely, seven per cent were saving at each wave (Table 3.4). This means that most people (75 per cent) had a mix of occasions when they were saving and not saving, with at least one change of saving behaviour over the ten years. The factor most strongly associated with saving behaviour was people’s ‘subjective’ assessments of their financial situation.

About one-third of people could be described as ‘savers’ by virtue of their answers throughout ten years, whilst 53 per cent qualified as non-savers and a further 13 per cent had more mixed patterns of saving, not easily fitting into either group. Savers had notably more stable incomes over time than non-savers, as well as higher incomes.

## Savings and life events

Among those saving at a given interview, 31 per cent were not saving the following year. Conversely, 21 per cent of non-savers in a particular year were saving a year later. Overall, around 25 per cent of all individuals changed their saving behaviour year-on-year – with half this number starting to save, and half ceasing.

The proportion saving for old age was trivially small for people below the age of 30. There was some increase in saving for old age at 30, and after 35, but it was the age of 45 that appeared most decisive in kick-starting saving for this purpose (Figure 4.1).

A range of different life events affected the proportions that were saving. The effect of getting divorced (or separating) was to reduce overall saving by five percentage points, down from 34 to 29 per cent, the average amounts saved also reduced. Those getting married slightly reduced their saving, though this was from a relatively high base.

When people started families, the proportion saving dropped from 45 per cent to 39 per cent. When families added to their family size, the proportion of savers and amount of saving were already below average, and these reduced further.

There appeared to be positive effects on savings and non-state pensions between the ages of 21 and 22. There was some effect, though smaller, of having attained the age of 30. However, changes in people's work status had among the largest effects on savings and pension we could find.

Women were more likely than men to stop saving in the face of many events, except for drops in earnings where they were less likely to stop. Richer groups (in the top third of the income distribution) were *more* likely to start saving than others, following an expansion in family size, and were much less affected in their decision to start saving by any changes in income. Those with non-state pensions were less likely than others to change their saving behaviour in response to particular life events.

## The effect of savings: is there an 'asset-effect'?

Previous research has found important positive effects of savings on labour market outcomes, particularly for men, on avoiding marital breakdown, and on certain health questions. Few significant effects had been found for the effects of savings on parenting outcomes, nor on citizenship measures. For women, most labour market outcomes were not associated with holding assets.

When using the same methods as earlier work we also found that assets affected later outcomes. However, when a different approach was adopted – one that we argue is superior – we found no reliable effects of assets on life outcomes.

Results based on analysis of the BHPS successfully replicated the National Child Development Study (NCDS) results of Bynner and Paxton (2001). They confirmed there is something to investigate regarding the effect of savings on later outcomes. The effects on health (smoking) and on labour market outcomes were among the most robust findings. Asset-effects may be more important for men than women.

The effects of holding assets were much reduced, however, when simple tabulations included the outcomes of interest, measured in both 1995 and 2000. Holding assets was associated with positive *outcomes* in 2000 (e.g. not smoking), but much more weakly associated, if at all, with *changes* in behaviour during 1995-2000 (e.g. quitting smoking). Still, some labour market outcomes were statistically significant. However, models of change over this period, including a range of demographic variables, found that the effects of holding assets on *changes* of outcome were not statistically significant.



# 1 Introduction

## 1.1 Introduction

In this introduction we first outline the main aims of this research project (section 1.1.1), then discuss some theories and ideas about the determinants of saving behaviour (section 1.2). Lastly, we describe the complex secondary data on which this study is based (section 1.3), and our approach to analysing it.

### 1.1.1 Aims

The overall aim of this report is to study the relationship between life events and patterns of saving. Within this overall aim there are a number of specific objectives:

- To identify the range of purposes for which people save, and how many and what kinds of people save for specific life events (Chapter 2).
- To look at patterns of saving over time, and across different individuals (Chapter 3).
- To identify which life events are followed by an increase or a decrease in saving activity and the circumstances under which this tends to happen (Chapter 4).
- To identify how having savings affects later life events (Chapter 5).

## 1.2 Influences on saving behaviour

There are various motives for saving. Some of the main motives we might consider are<sup>1</sup>:

- A **precautionary motive**, building up a reserve against unpredictable events. Having savings might also contribute towards, or be required for, a feeling of independence and control over evolving circumstances. This might also be termed a 'rainy day' approach to saving.
- A **life-cycle motive**, to smooth consumption over the life cycle by saving in working age to maintain a certain level of consumption in retirement.
- To carry out **speculative** tasks, such as going into business.
- A **bequest motive**, leaving money to the next generation.

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<sup>1</sup> Browning and Lusardi (1996: 1797) extract from Keynes' work a total of eight main motives for saving, to which they add a ninth. This list is a simplified version of their categories.

- An **instrumental motive**, saving up money to buy particular larger items (cars, holidays, etc.).
- What Keynes memorably called the instinct to 'satisfy pure **miserliness**'.

Some recent work has also emphasised the merits of a 'buffer stock' model of saving. This is the idea that people have a 'target' level of liquid financial assets that they wish to maintain across a wide range of circumstances. This supports research evidence suggesting that people tend to put savings into one or more bank or building society accounts as a first choice and only 'diversify' into other forms of investment when they feel that they have sufficient put by in these accounts. People usually buy a house after they have started to save in a savings account, and very often start to pay into a private pension when they have bought a home (occupational pensions are different and related to employment opportunities).

We will begin, in Chapter 2, by looking at some of the cross-sectional influences on levels of saving. On the basis of our previous work, we have found the following main characteristics to be significant. Our previous work has looked at the relationship between these factors, and their effects on saving, its regularity and amount.

**Age** – savings increased quite steeply with age, but regular saving peaked at 60 and then declined slightly – but not nearly as much as life-cycle theories might predict.

**Marital status** – compared with single people, couples were more likely to have a savings account, had larger amounts saved, and were more likely to be regular savers.

**Children** – having children decreased saving; and the effect was greater the more children there were in the household.

**Householder status** – compared with non-householders, those owning or renting a home were more likely to have savings.

**Housing tenure** – Homeowners more likely than tenants to have savings.

**Employment** – as might be expected people with full-time jobs were more likely to have savings than those not in work. People in full-time but temporary jobs had levels of saving (again on all three measures) that were much more like people who were not working rather than other full-time (or even part-time) workers.

**Self-employment** – Self-employed people had higher levels of saving than others in full-time work. It may be that they save into a saving account because they are less likely to be paying into an occupational pension, or saving for a later tax bill.

**Ethnicity** – a low level of saving among Pakistani and Bangladeshi people; which is almost certainly linked to Islamic teaching.

**Credit use** – perversely, credit users were more likely to have a savings account and to say they saved regularly than non-users. But the median amounts the savers had saved were about half of their non-credit using counterparts.

**Insurance use** – On the whole the evidence suggests that people who have insurance policies are also more inclined to save.

### 1.2.1 Life events associated with increased saving and withdrawal of savings

It is possible to identify a series of life events that are likely to be associated with changes in savings behaviour – having children, getting married, losing a job. In some cases the event makes saving *possible* (e.g. leaving higher education, child leaving higher education, child leaving home and getting a job after being out of work), through lessening the stress on people's incomes. While relationship breakdown may reduce the ability to save if there has been a big drop in income, it can, in some cases, make saving easier for people whose partners were big spenders. Other events may make more saving more *desirable*, such as having children, or feeling concerned about future financial prospects.

Events can influence both the *ability* to save and the *propensity* to save. Some do one or the other; some do both. Having a child is a good example here. Having a baby often reduces the ability to save while also increasing the desire to save among some people. So we may find that the effect of an event differs according to household income (analysed in section 4.6). In some better-off families having a new baby may increase saving (usually for the child); while their poorer counterparts may want to save for their children but are unable to do so.

## 1.3 Data

This project is based on secondary analysis of an existing dataset, the British Household Panel Survey (BHPS) for 1991-2000. The BHPS contains individuals of all ages, interviewing those aged 16+ in each year. It was designed as an annual survey of each adult (aged 16+) member of a nationally-representative sample of more than 5,000 households, making a total of approximately 10,000 individual interviews in its first year, 1991. The same individuals were then re-interviewed in successive waves and, if they split-off from original households, all adult members of their new households were also interviewed. Children are interviewed once they reach the age of 16. The sample remains broadly representative of the population of Britain as it changes through the 1990s.

Recent top-ups to the sample have meant that the number of interviews with lower-income families, and with families in Wales and Scotland, has been increased. This is accounted for in the way the data is weighted, to arrive at conclusions representative of all individuals and households.

The savings module within BHPS asks all individual respondents a relatively comprehensive series of questions, and the core of this section on savings has been largely unchanged since 1991 (the first wave). The key savings questions cover **each** year:

- Income from interest/dividends.
- Whether individuals are saving: if so, the monthly amount and for what reasons they are saving.
- Whether they are contributing towards a personal pension (asked from 1992 onwards).
- Whether they are members of an occupational pension scheme.

Most questions about savings (and pensions) are asked of each individual. Questions about housing assets are asked once for each household from a single informant.

In 1995 and 2000, additional questions were asked about people's savings (and debts). These included questions about the amount of savings and investments that people had acquired. Respondents were also asked, at these two interviews, in more detail about the purposes for which they were saving – including whether they were saving regularly, and whether they were saving for longer-term or short-term reasons.

### 1.3.1 Data comparisons

Survey data on savings is generally regarded as less reliable than that on income and many other areas. However, it is likely that the BHPS has built up a good level of trust with its respondents once they have been included more than once. The rate of refusal to savings questions does fall as people remain in the study over time, from a very low base of around two per cent to below one per cent.

Evidence on the amount of savings mentioned by BHPS respondents may be compared with data available from other surveys that ask about savings, such as the Family Resources Survey (FRS). For amounts of capital accumulated by families, there is a reasonably good match between the BHPS and FRS, for 2000. Some results are shown in Table 1.1.

**Table 1.1 Comparison of FRS and BHPS capital/savings data**

	<i>Row percentages</i>			
	<b>Capital held within benefit unit</b>			
	<b>&lt;£1500</b>	<b>£1500-£3000</b>	<b>£3000-£8000</b>	<b>£8000+</b>
FRS 1999-2000	55	9	10	27
BHPS 2000	56	7	12	24

It is important to note that were there differences at each end of the savings spectrum. The FRS recorded more people than BHPS with some assets (if very small amounts) rather than zero. This might have been through their thoroughness in asking about even small amounts 'left over' in current accounts. The FRS also had more people than the BHPS with significant assets, of above £20,000, which it is not easy to explain.

### 1.3.2 Using longitudinal data

The BHPS is designed to provide representative snapshots of people's behaviour for each year, but also to allow analysts to follow the behaviour of the same people over time. This makes for a very powerful source of information. It also means that analysts can look at the data in a variety of different ways, depending on the purposes they have in mind. In this report we make full use of several different approaches – sometimes focusing on the overall picture in the most recent year (2000), sometimes on snapshots for particular years, sometimes analysing changes at the individual level, and some other methods, too.

Given the complexity of the different approaches, we now discuss several alternative ways of conceptualising individual panel data. Each makes different potential use of the data, and may be appropriate for different analytical questions. The data collected across different years may be shown in the form of a table, and a schematic form appears below for nine people who have provided some data at one or more of four waves of interviews (Table 1.2). So, persons D, E and F provided information for all four waves. Conversely, person B provided data for the first two waves, but then dropped out and has no further survey participation.

Person G was not included in wave 1, but appears in wave 2 (this might be because they have just become 16, or have moved into a household containing an original wave 1 respondent), and subsequently. And so on.

**Table 1.2 Schematic representation of individual panel data (9 people, 4 waves)<sup>2</sup>**

Person	Wave-1	Wave-2	Wave-3	Wave-4	
A					Drop-out after wave 1 Drop out after wave 2 Missed at wave 3
B					
C					
D					Successfully interviewed at all waves
E					
F					
G					New respondent at wave 2
H					New respondent at w3 (drop-out w4)
I					New respondent at wave 4

One way of handling complex data of this kind is to select only those people providing information at all waves of the study. The thick lines around the data table in Table 1.3 illustrate this group of respondents. This is relatively easy to do, and enables analysis of long-term patterns. However, clearly it discards a large amount of data. In the BHPS from 1991-2000, some 22,500 different people have provided interviews, but there is only complete data for some 5,400.

**Table 1.3 Balanced panel, complete case analysis**

Wave 1	Wave 2	Wave 3	Wave 4	
				Drop-out after wave 1 Drop out after wave 2 Missed at wave 3
				Successfully interviewed at all waves
				New respondent at wave 2
				New respondent at wave 3 (drop-out w4)
				New respondent at wave 4

Another approach, most useful in looking at changes in aggregate, over time, is to use all the available data (Table 1.4). This might be used to show the number of people who saved in each year, for example. This is also relatively simple to imply. The main disadvantage is that the data is then not well suited to look at changes in individual behaviour over time. If we wanted to use data in this way, other data sources (such as the FRS, or General Household Survey) would probably be better, assuming they had asked the appropriate questions of interest. However, this approach does enable us to look at consistency in overall responses to the same questions over time.

<sup>2</sup> The illustrative tables shown here are adapted from Frick (2001: p 34).

**Table 1.4 Using complete information**

Wave 1	Wave 2	Wave 3	Wave 4	
				Drop-out after wave 1
				Drop out after wave 2
				Missed at wave 3
				Successfully interviewed at all waves
				New respondent at wave 2
				New respondent at wave 3 (drop-out w4)
				New respondent at wave 4

Another possibility is to include information on individuals where we have data on *transitions*. If we include people providing data in two consecutive years, this follows the approach shown in Table 1.5. One set of lines shows the transitions for wave 1: wave 2; the dotted lines show the transitions for wave 3: wave 4. Of course, it is also possible, and certainly recommended, to pool the data between waves 2 and 3 as well, but this is not shown here to make the principle clearer.

**Table 1.5 Pooling longitudinal data (two longitudinal datasets of two waves each; a third selection is possible for w2:w3)**

Wave 1	Wave 2	Wave 3	Wave 4	
				Drop-out after wave 1
				Drop out after wave 2
				Missed at wave 3
				Successfully interviewed at all waves
				New respondent at wave 2
				New respondent at wave 3 (drop-out w4)
				New respondent at wave 4

Having extracted data on transitions between consecutive years/waves, we may then generate a dataset that is particularly suited to analysing shorter-term transitions. The resulting structure is shown in Table 1.6 – in practice this would also include the data signalling wave 2: wave 3 transitions.

**Table 1.6 Data created from pooling longitudinal data (two longitudinal datasets, of the three possibilities, of two waves each)**

w 1	w 2	
w 3	w 4	

Each of these different approaches has its place and potential usefulness. All are used in the course of this analysis (plus some minor variants).

Analysis based on all cases appears in section 3.2. This shows changes in the total proportion saving for all years. The description of individual savings patterns in section 3.3 is based on complete cases only. The analysis of the effect of life events on patterns of saving (Chapter 4) draws on the pooled longitudinal data structure.



## 2 Who saves? Snapshot pictures of saving

### 2.1 Introduction

This chapter provides a 'snapshot' picture of people saving in 2000. We begin with the main information on the proportions that save, and whether this is regularly (or not), and if for the short term or the long term. We also look at the amounts being saved each month (section 2.2), and the main goals for people's saving. Section 2.3 then looks in detail at the main factors associated with saving, drawing on a multivariate analysis of saving behaviour. A number of separate key characteristics are then analysed for their effect on savings, in sections.

The final section concerns saving for retirement. In this section we amalgamate those with non-state pensions, and those whose saving is explicitly for old age. There are some forms of providing for retirement that we do not consider, including building up housing assets or (for the self-employed) sale of business assets.

### 2.2 A snapshot picture of saving

In 2000, just over four in ten (43 per cent) of individuals (aged 16+) said that they were saving money from their regular income, and half of them (51 per cent) said that either they or their partner was doing so.<sup>3</sup>

As this suggests, there was a high degree of overlap in partners' patterns of saving, with a polarisation into dual-saver and no-saver couples. So, in two-thirds of couples, either both partners saved (38 per cent) or neither of them did (27 per cent).

Most people who saved from their regular income did so regularly and for the long term. So that, in 2000, three in ten (30 per cent) of those interviewed said that they regularly put money aside; and about the same proportion (27 per cent) said that they were saving for long-term needs (Table 2.1).

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<sup>3</sup> Strictly speaking, this is saving within the 'benefit unit'. Broadening the definition to the household as a whole; nearly six in ten (59 per cent) of households included at least one person who was saving.

**Table 2.1** Patterns of saving

	Proportion saving	Monthly amount saved (mean)	Monthly amount saved (median)
Saves from regular income	43%	£154	£100
Saves regularly	30%	£168	£100
Saves occasionally	12%	£113	£50
Saves mainly for the long-term	17%	£187	£100
Saves mainly for the short-term	16%	£107	£50
Saves for both equally	10%	£177	£100

In fact, there was some correlation between regular and long term saving, so that nearly seven in ten regular savers (68 per cent) put money away for the long-term; compared with just half (50 per cent) of people who saved only occasionally.

The average amount saved was £154 a month, with a median of £100. Regular and long-term savers put more money by than people who saved either occasionally or did so just for short-term needs (Table 2.1).

Four in ten (41 per cent) of all those who saved money out of their regular income said that the money was not earmarked for anything in particular. The most common specific purpose was saving up for holidays (22 per cent), followed by saving for old age (nine per cent), house purchase (five per cent) and special events (five per cent).

**Table 2.2** Main reason for saving

	<i>Column percentages</i>					
	All	Frequency of saving		Time period of saving		
		Regular	Occasional	Mainly Long term	Both equally	Mainly short term
No specific reason	41	39	47	45	45	35
Holidays	22	22	20	9	25	33
Old age	9	10	7	18	6	1
House purchase	5	6	2	7	5	2
Special events	5	5	5	2	4	9
Car	4	4	4	3	3	5
Children	3	4	2	5	2	1
Home improvements	3	3	3	1	3	5
Household bills	1	1	1	-	2	2
Own education	1	1	2	1	1	1
Other reasons	6	5	7	9	4	6
<i>Base</i>	<i>6,190</i>	<i>4,399</i>	<i>1,791</i>	<i>2,452</i>	<i>1,391</i>	<i>2,301</i>

On the whole, regular and occasional savers put money by for very similar reasons (Table 2.2). The differences were far greater between long- and short-term savers although it is important to bear in mind that people's time horizons will vary considerably, depending on their age and income. People who said that they saved mainly for the long term were far more likely to be saving for their old age, with no specific purpose in mind, for house purchase or for their children. In fact, together three-

quarters (75 per cent) of them said that they were saving for one of these reasons, compared with half that number of short-term savers (39 per cent). In contrast, half (47 per cent) of mainly short-term savers were putting money by for holidays, home improvements or special events, compared with only 12 per cent of people saving mainly for the long term.

The largest amounts were saved by people putting money away for their old age (£281 a month) for house purchase (£274) and home improvements (£209). People saved least for household bills (£94) and for special events (£85).

## 2.3 The main factors that relate to saving

Although multivariate analysis identified a relatively long list of factors that correlated with saving behaviour (Table 2.3), only a small number of them had a significant and considerable impact. All of these related to economic circumstances, including people's own assessment of their financial situation; income (after allowing for the number of people in the household); economic activity and having an occupational pension. Each of these is discussed in more detail below, focusing on their relationship with regular saving. An annex to this chapter contains full details of the multivariate models estimated, for those interested in the fine details and list of variables included.

**Table 2.3 Factors correlated with saving out of income, regular saving and saving mainly for the long term**

	Saving	Regular saving	Long-term saving
Assessment of financial situation	***	***	***
Income quintile (equivalised, BHC)	***	***	***
Economic activity	***	***	***
Pays into occupational pension	***	***	***
Housing tenure	***	*	***
Number of children in household	***	*	**
Highest level of education	***	***	***
Has received a windfall	***	***	***
Pays into personal pension	***	***	***
Change in financial situation	***	**	**
Expectations of financial situation	*	ns	ns
Receives Income Support	*	ns	ns
Age	ns	**	***

\*\*\* correlated at the 99.9% level or higher.

\*\* correlated at the 99% level.

\* correlated at the 95% level.

ns not significant at the 95% level/not included in final model.

Other points of note from Table 2.3 are the fact that age had no independent effect (after controlling for other factors) on saving from income, although it did influence saving for the long term and, to a lesser degree, saving regularly. In neither case, though, was the influence particularly great.

And, while it might have been expected that saving would be affected by an anticipated change in circumstances, in practice it had hardly any effect. Other factors with little or no independent impact on saving included being in receipt of Income Support, marital status, living with a partner, gender, health status, or being a head of household. In other words, personal circumstances played little role in explaining general saving.

### 2.3.1 Income

As might be expected, income had a large effect on people's propensity to save regularly. When we allowed for the number of people in the household (by equivalising income before housing costs), only 12 per cent of the poorest fifth of people were saving regularly. The proportion increased with income so that half of the richest fifth were regular savers (Table 2.4). In comparison, the level of occasional saving was relatively unaffected by income. The percentages saving regularly by income group were very similar when an alternative income measure, after housing costs, was investigated. The proportions saving regularly in each quintile of income (equivalised and after housing costs) were 13; 20; 30; 41; 47 – or in other words very similar to the figures for income quintiles before housing costs.

**Table 2.4 Impact of income (equivalised before housing costs) on regular saving**

	<i>Percentage saving regularly*</i>	<i>Relative odds of saving regularly**</i>	<i>Amount saved per month (mean)*</i>	<i>Amount saved per month (median)*</i>
Quintile 1 (poorest)	12%	0.7	£75	£40
Quintile 2	21%	0.8	£85	£50
Quintile 3	29%	ref	£115	£80
Quintile 4	42%	1.3	£143	£100
Quintile 5 (richest)	47%	1.3	£256	£150
<i>All</i>	<i>30%</i>	<i>-</i>	<i>£154</i>	<i>£100</i>

\* based on bivariate analysis.

\*\* based on multivariate analysis.

ref reference group.

The multivariate analysis showed that income had an independent effect on regular saving, even when all other factors were controlled. Compared with the middle income quintile, those who were better off were 1.3 times as likely to be saving regularly, while those who were poorer had reduced odds.

The amounts people could afford to put by were, not unexpectedly, greatly affected by their income (Table 2.4), although the reasons for saving differed remarkably little.

### 2.3.2 Subjective assessment of financial situation

People's subjective assessment of their financial situation had by far the greatest impact on regular saving (and also on long-term saving). So while 43 per cent of people who said that they were 'living comfortably' saved regularly, the proportion declined steeply with increasing financial stress so that only three per cent of those 'finding it very difficult' financially regularly put money by (Table 2.5). The amounts put into savings also declined steeply. Again, there were few differences in the reasons why people saved.

Turning now to the results of the multivariate analysis, people's assessment of their financial situation had a very large independent effect on their propensity to save. Compared with those who were 'just getting by', people who were 'living comfortably' had odds of being a regular saver more than two and a half times higher, all other things (including income and family circumstances) being equal. While those who were 'finding it very difficult' had a little over a quarter of the odds of saving.

**Table 2.5** Impact of subjective assessment of financial situation on regular saving

	Percentage saving regularly*	Relative odds of saving regularly	Amount saved per month (mean)	Amount saved per month (median)
Living comfortably	43%	2.6	£216	£120
Doing alright	33%	1.7	£128	£100
Just about getting by	18%	ref	£74	£50
Finding it quite difficult	8%	0.4	£78	£40
Finding it very difficult	3%	0.3	**	**
<i>All</i>	30%	-	£154	£100

\*\* numbers too small for analysis.

ref reference group.

There are three plausible explanations for this. First people's subjective assessments of their circumstances will be a proxy for their *disposable* incomes. People with similar incomes may have quite different demands to be met from it. Some may, for example, have high housing costs; while others may have none at all. Similarly, other household and personal commitments can vary quite markedly.

Secondly, people who feel that they are living comfortably often include those who have more modest aspirations of their lifestyle and, as a consequence, have more money to put into savings (see for example, Collard, Kempson and Taylor, 2002).

Finally, it is quite possible that putting money into savings increases people's feelings of economic wellbeing.

In practice all three are likely to play a part to some extent. Indeed, they may even be reinforcing one another so that people who are comfortable financially and have money to spare will be in a better position to put money away, increasing their feeling of being comfortably off and their propensity to save.

Naturally, income and subjective wellbeing were correlated, but the degree of match between them was far from perfect. Close to half (47 per cent) of the lowest income quintile said that they were 'living comfortably' or 'doing all right' (Table 2.6), while 15 per cent of the richest quintile were 'just getting by' or doing less well. There is sufficient mismatch to include both in statistical models of saving, and obtain independent effects for each.

**Table 2.6** The association between income (equivalised before housing costs) and subjective wellbeing

	Income quintile					All
	1 (poorest)	2	3	4	5 (richest)	
Living comfortably	17	25	27	36	48	31
Doing alright	30	35	42	41	37	37
Just about getting by	39	30	25	19	13	25
Finding it quite difficult	9	7	5	3	2	5
Finding it very difficult	5	2	1	1	*	2

Spearman's rho = 0.31, Kendall's tau=0.20.

### 2.3.3 Employment status

People in work were by far the most likely to save regularly and among these, employees were more likely to save than people who were self-employed. It could be that the irregular incomes of self-employed people impede regular saving – certainly their likelihood of saving for long-term needs was not greatly different from employees.

The lowest levels of saving were to be found among those not in work – and especially among unemployed people, only eight per cent of whom saved regularly. It is particularly interesting to note that, although saving among retired people was below average, one in five of them still regularly put money by.

**Table 2.7 Impact of employment status on regular saving**

	<b>Percentage saving regularly*</b>	<b>Relative odds of saving regularly</b>	<b>Amount saved per month (mean)</b>	<b>Amount saved per month (median)</b>
Self-employed	29%	0.8	£284	£175
Employee	41%	ref	£165	£100
Unemployed	8%	0.4	£80	£50
Retired	21%	0.8	£118	£50
Family care	15%	0.6	£100	£50
Full-time student	17%	0.4	£64	£50
Long-term sick or disabled	15%	0.7	£101	£50
<i>All</i>	<i>30%</i>	<i>-</i>	<i>£154</i>	<i>£100</i>

ref reference group.

Interestingly, the multivariate analysis showed that employment status had an impact on the propensity to save, even when other obvious factors such as income and benefit receipt were controlled. Most notably, being unemployed halved the chances of saving regularly, compared with someone in work with an identical income and other circumstances. Almost certainly this is because people usually enter unemployment with commitments that cease to be manageable on a very low income. Being a full-time student also halved the chances of saving, compared with an employee.

The amounts of money saved also varied greatly by employment status. Again, people in work saved by far the most – although, in this case, self-employed people saved more than employees. The amounts saved by retired people were, however, quite significant, unemployed people and full-time students saved the least (Table 2.7).

**Table 2.8 Main reason for saving by employment status**

	<i>Column percentages</i>							
	<b>All</b>	<b>Self- employed</b>	<b>Employee</b>	<b>Unemployed</b>	<b>Retired</b>	<b>Family care</b>	<b>FT student</b>	<b>LT sick/ disabled</b>
No specific reason	41	45	41	51	4	38	32	40
Holidays	22	13	22	17	22	24	15	30
Old age	9	21	9	1	7	5	-	2
House purchase	5	5	7	1	*	2	2	3
Special events	5	2	5	3	6	12	3	8
Car	4	2	4	6	3	1	17	-
Children	3	1	3	3	3	7	1	2
Home improvements	3	3	3	4	3	5	-	6
Household bills	1	2	1	3	2	1	1	*
Own education	1	*	*	3	-	-	15	-
Other reasons	6	6	5	8	9	5	14	9
<i>Base</i>	<i>6,190</i>	<i>428</i>	<i>3,820</i>	<i>80</i>	<i>1,174</i>	<i>230</i>	<i>295</i>	<i>136</i>

\* less than 1 per cent - none.

Also of interest is the fact that two in ten (21 per cent) of self-employed people were saving for their old age – twice the proportion (nine per cent) of employees (Table 2.8). This excludes any provision made through pensions.

Indeed, there were other interesting differences in the reasons for saving. The most notable included the high proportion of unemployed people saving for no particular reason. Over half of the small number of unemployed savers put money away with no particular purpose in mind. Among full-time family carers (many of whom would be lone parents) saving tended to be for short-term ‘treats’ such as special occasions or holidays. A similar pattern existed for people who were unable to work through long-term sickness or disability. Both these groups would be living long term on restricted incomes and such treats would only be afforded by saving up. Full-time students saved primarily for their education or to buy a car (Table 2.8).

### 2.3.4 Private pension holding

It might reasonably be expected that people who pay into a personal or occupational pension would have less money to save in other ways. On the other hand, previous research has shown that there is a group of ‘rainy day’ savers with a strong propensity to save in both a pension and in other savings vehicles (Whyley and Kempson, 2000a; Whyley and Kempson, 2000b).

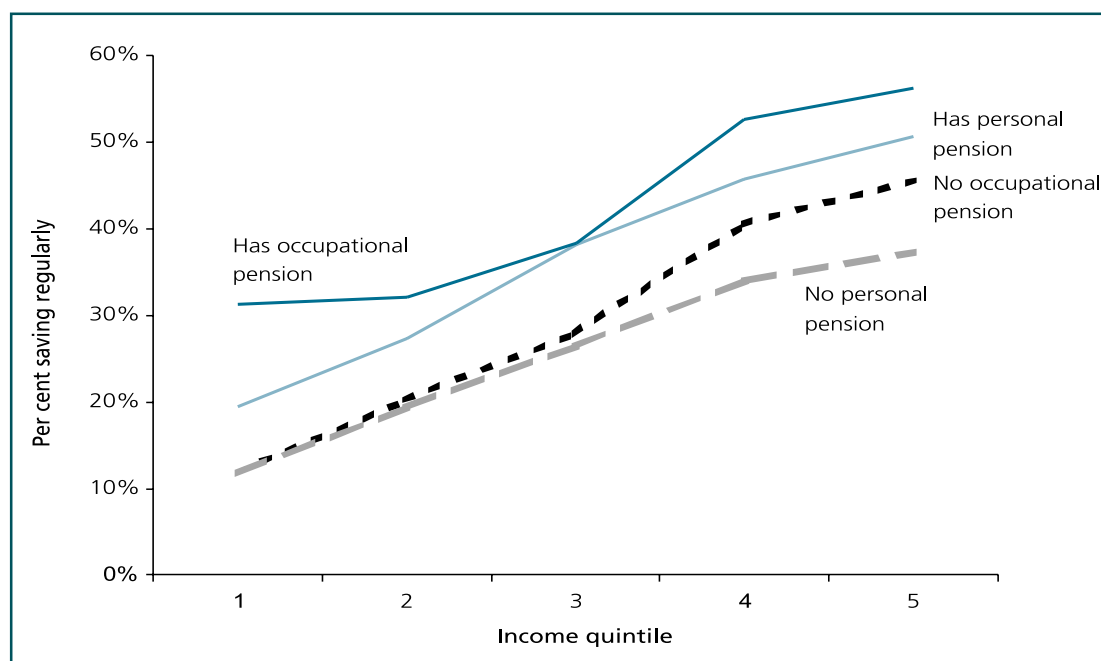
**Table 2.9 Relationship between paying into private pensions and regular saving**

	<i>Percentage saving regularly</i>	<i>Relative odds of saving regularly</i>	<i>Amount saved per month (mean)</i>	<i>Amount saved per month (median)</i>
Pays into occupational pension	49%	1.7	£180	£100
Pays into personal pension	42%	1.3	£207	£100
<i>All</i>	<i>30%</i>	<i>-</i>	<i>£154</i>	<i>£100</i>

The present analysis supports the second of these two hypotheses. The bivariate analysis showed that people with a personal pension were both more likely to save than those without one, and to save larger sums of money. The effect on regular saving was greater among those with an occupational pension than it was for people with a personal pension. Moreover, the multivariate analysis showed that the effects persisted even when other factors, such as income and employment status, were controlled. Indeed having an occupational pension almost doubled the odds of regular saving (Table 2.9).

This might be a surprising result. Even though the multivariate analysis controls for income, Figure 2.1 clarifies the links between income, saving regularly and pension arrangements. Even among those of the same income level, those with pension arrangements were more likely to be saving regularly than those without.

**Figure 2.1 Regular saving by income, controlling for pension arrangements**



Also of interest is the fact that people with occupational or personal pensions were more than twice as likely to be saving for their old age as the average. Saving for retirement is explored in more detail at the end of this chapter.

### 2.3.5 Other factors

In the course of the research we also investigated a range of other factors that might be expected to impact on saving. These included a range of personal characteristics: age, gender, whether living with a partner, the number of children in the household and health. We also looked at past or anticipated changes in income, receipt of benefits and having received an unexpected windfall.

#### Age

The life-cycle theory would predict a building up of assets, especially in middle age, when the demands of children have diminished, with these assets being run down in old age. To a degree there was some support for this, but the effects were nowhere near as great as might have been expected.

**Table 2.10 Regular saving by age**

	<b>Percentage saving regularly</b>	<b>Relative odds of saving regularly</b>	<b>Amount saved per month (mean)</b>	<b>Amount saved per month (median)</b>
16-19	25%	1.4	£81	£50
20-29	31%	ns	£147	£100
30-39	36%	ns	£160	£100
40-49	35%	ref	£177	£100
50-59	35%	ns	£187	£100
60-69	25%	ns	£160	£80
70 and over	19%	ns	£101	£50
<i>All</i>	<i>30%</i>	<i>-</i>	<i>£154</i>	<i>£100</i>

ns not significant.

ref reference group.

The proportion of people saving regularly gradually increased up to the 30-39 age group, where it reached a plateau at around 35 per cent until age 60, when it began to decline. Even so, one in five people in their seventies were saving. (Table 2.10). Although age was a significant factor in the multivariate analysis, in fact the only age group where the odds of saving were significantly affected was the youngest group – teenagers. All other things being equal, young people in their teens were *more* likely to be saving than people in their forties. This is almost certainly explained by the way that the model was constructed and, in particular, our measure of equivalised income (before housing costs). Most of these young people did not live independently and, as a consequence, their equivalised income (BHC) was based on that of their parents and did not accurately reflect their personal income unlike the 40 year olds.

Age did, however, have a bigger impact on saving for the long term and also on saving for retirement. This is discussed later in this chapter.

### Other personal factors

On the whole, personal factors had remarkably little effect on regular saving. The bivariate analysis seemed to show that more men than women were regular savers. But when income, employment and other factors were controlled in the multivariate analysis, women were 1.1 times more likely to save regularly than men.

We noted above that there was a high degree of coincidence in the saving behaviour of couples. In fact, people living with a partner were more likely to be saving regularly than singles (32 per cent compared with 23 per cent). This effect disappeared entirely in the multivariate analysis – meaning that other factors, such as a higher income, were responsible for the association between being part of a couple and saving regularly.

Similarly, having children in the household affected regular saving only marginally. Regular saving was below average among families with three or more children, but this effect also disappeared when other factors such as equivalised income (BHC) and subjective assessment of financial situation were taken into account in the multivariate analysis. In other words, children probably affect savings indirectly, by their impact on the household budget. Although parents often cite their children as the reason why they save, it does not appear that they have much of an independent effect in terms of an increased propensity to save.

People with health problems were less likely to save regularly than those with none and the proportion saving regularly declined with the severity of the ill-health or disability. Again, though, these effects were mediated through their effect on incomes and work status. So, in the multivariate analysis, being unable to work through ill-health or disability did decrease the propensity to save (see above) but poor health *per se* did not.

Likewise the effects of educational achievements were almost certainly mediated through income and job status. The multivariate analysis showed that having qualifications did increase the chances of saving regularly but only having A-levels reached the higher levels of statistical significance.

### **Economic factors**

As we saw above, the main drivers for saving were economic factors. The bivariate analysis showed that people who said that they were better off than a year ago were much more likely to save regularly than those whose finances had stayed about the same (40 per cent compared with 29 per cent). People who said that they were worse off were the least likely to save regularly (21 per cent). On the whole, though, it was their *level* of income rather than the *change* that was the determining factor. The multivariate analysis showed that improved finances only had a very small independent effect – increasing the odds of saving to 1.1; while worsening finances had no statistically significant effect at all.

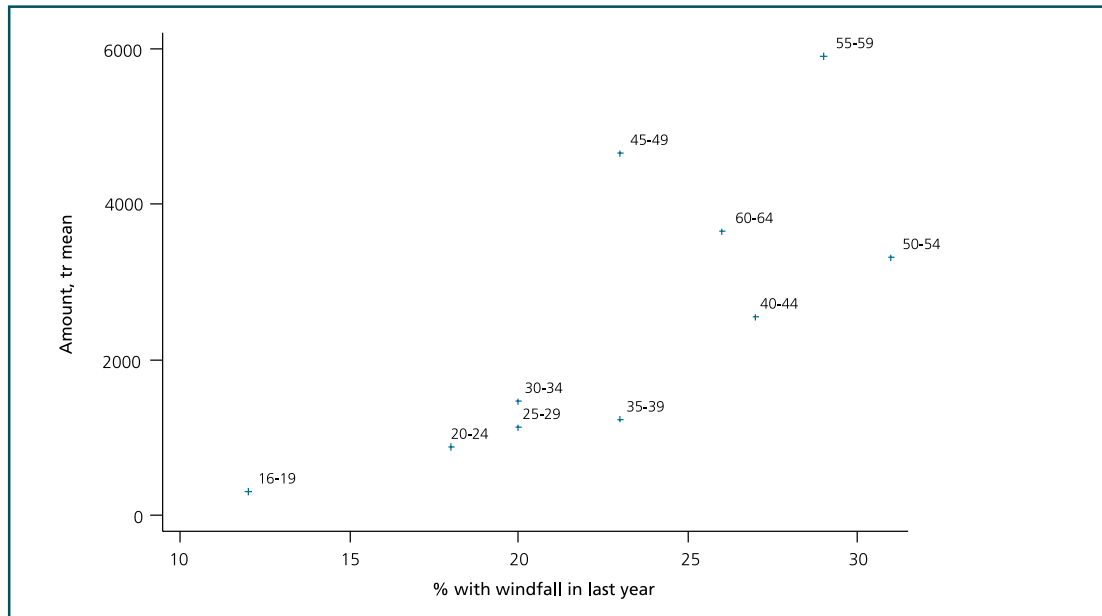
Future expectations of income had even less effect and were not statistically significant at all in the multivariate analysis. In other words, saving behaviour is affected by the situation people find themselves in – not how well off they expect to be in future.

Finally, previous qualitative research has provided contradictory evidence on the impact on saving behaviour of receiving a windfall. One study has shown that getting an unexpected lump sum encouraged some people to start saving for the first time (Rowlingson, Whyley and Warren, 1999). While another found that people who received a windfall often started to spend it and run down their savings (Whyley and Kempson, 2000b).

The current analysis supports both hypotheses. Compared with others, people who had received a lump sum were slightly more likely to save regularly (36 per cent compared with 26 per cent). But even so, half of them (50 per cent) were not adding to the lump sum at all and nearly two-thirds (64 per cent) were not doing so regularly. The multivariate analysis did, however, show a small but statistically significant independent effect – increasing the odds of saving regularly by a factor of 1.2.

The size and frequency of receiving windfalls is shown in Figure 2.2. Younger people were less likely to receive windfalls than older groups, but more particularly tended to receive smaller amounts of money when they did. The mean size of windfall for teenagers was a little over £300, and the median value just £57. The highest value windfalls, averaging £2,000 or more, were among those aged 40 or older. These were also the most likely, generally speaking, to receive them. Many of the smaller 'windfalls' were, in fact, relatively small winnings through the National Lottery or other forms of betting.

**Figure 2.2** Receipt and average size of windfalls<sup>4</sup> in last year, by age group



## 2.4 Saving for retirement

In 2000, over one in three people (36 per cent)<sup>5</sup> interviewed in the *British Household Panel Survey* were putting money away for their retirement, either in the form of a personal pension or as money in general savings:

- 25 per cent were paying into an occupational pension;
- 12 per cent were making contributions to a private pension;
- four per cent were saving generally for their old age.<sup>6</sup>

In other words, occupational pensions played by far the largest part in ensuring that people have an adequate income in old age. These three numbers sum to rather more than the 36 per cent cited, because there was significant overlap between them. Those paying into pensions were more likely to be saving generally for old age, than those not paying into pensions.

The main predictors of saving for old age were somewhat different from those identified in the multivariate analysis of saving in general (Table 2.11). The two variables with the largest impact were age (which had little effect on general saving) and employment status (which affected general saving far less).

<sup>4</sup> If people had more than one windfall, the separate amounts have been added together.

<sup>5</sup> This analysis was not restricted to those not yet retired as nine per cent of people aged over 65 and a similar proportion of those already retired said that they were still saving for their retirement.

<sup>6</sup> Among individuals of working age, 17 per cent were contributing to a personal pension whilst 34 per cent were members of an occupational pension scheme. These are slightly higher than figures from the Family Resources Survey. Five per cent of working age individuals were making liquid saving described as being for 'old age'.

**Table 2.11 Factors correlated with saving for old age**

	Saving for old age	Regular saving
Assessment of financial situation	***	***
Income quintile (equivalised BHC)	***	***
Expectations of financial situation	***	ns
Change in financial situation	**	**
Economic activity	***	***
Has received a windfall	*	***
Housing tenure	***	*
Age	***	**
Marital status	***	ns
Number of children in household	**	*
Highest level of education	***	***
Health status	***	ns

\*\*\* correlated at the 99.9% level or higher.

\*\* correlated at the 99% level.

\* correlated at the 95% level.

ns not significant at the 95% level/not included in final model.

While income-related variables were significant factors in explaining saving for old age, they had much less of an effect than they did on general saving and receipt of a windfall was far less significant.

In contrast, personal factors played slightly more of a role. Age was particularly important. In addition, being head of household, marital status, the number of children in the household, health status and housing tenure were all significant in explaining saving for retirement; while none of these played much of a part in saving generally.

### 2.4.1 Age

Saving for retirement peaked among people in their forties, when two-thirds of people were putting money by for their old age (Table 2.12). The bivariate analysis showed clearly that many young people, aged under 30, delay taking out a pension or saving for their old age in other ways. While the multivariate analysis showed that age had a large independent effect and the low level of retirement saving by young people was not explained by either income or strains on their household budget. This is consistent with previous qualitative research showing that many people in their twenties believe they are too young to be considering such things (Wood, 1999).

**Table 2.12 Impact of age on saving for retirement**

	Percentage saving for retirement	Relative odds of saving for retirement
16-19	2	0.0
20-29	34	0.3
30-39	56	0.8
40-49	62	ref
50-59	52	0.8
60-69	12	0.3
70 and over	1	0.1
All	36%	-

ref reference group.

It is also notable that many elderly people continue to save for their retirement. In fact, the multivariate analysis showed that, all other things being equal, the odds of someone in their sixties saving was the same as a young person in their twenties. Clearly, for some people saving is an enduring habit that persists in old age.

## 2.4.2 Employment status

Given the importance of occupational pensions in the overall level of saving for retirement it was hardly surprising to find that employees included the highest proportion of savers. In fact two-thirds of them were putting money aside (Table 2.13).

**Table 2.13 Impact of employment status on saving for retirement**

	Percentage saving for retirement	Relative odds of saving for retirement
Self-employed	51	0.5
Employee	63	ref
Unemployed	5	0.1
Retired	3	0.1
Family care	5	0.1
Full-time student	1	0.1
Long-term sick or disabled	4	0.1
<i>All</i>	36%	-

ns not significant.

ref reference group.

There has long been concern about the levels of retirement provision among self-employed people and our analysis supports that concern. Only half of self-employed people were contributing to a private pension or saving in some other way for their old age (Table 2.13). And the multivariate analysis showed that, all else being equal, self-employed people were only half as likely as employees to be putting money away. Some self-employed people may be able to draw an income from their business after they reach retirement age or else sell the business, though this is likely to benefit only a small proportion of them (Pension Provision Group 2001). Along with others not covered by financial products, the self-employed may view their home as an asset to be used to fund retirement income.

Beyond this, the link between retirement saving and being in employment was stark. Fewer than one in ten people who did not work were saving for retirement – regardless of the reason why they were not working. And the multivariate analysis showed that people who were either unemployed or economically inactive had only a tenth of the odds of saving for retirement as those working for an employer (Table 2.13). This was not because they had lower incomes as the multivariate models controlled for both their economic and personal characteristics. Rather it seems as if the opportunity for saving, in the form of an occupational pension, plays an important part.

The overriding importance of being in work – and of being employed in particular – will be of considerable importance in tackling the financial under-provision of many people as they enter retirement. Moreover the relatively high take-up of occupational pension schemes (76 per cent) shows the importance employers can play in encouraging people to make financial provision for their old age.

### 2.4.3 Other personal factors

A range of other personal characteristics influenced whether or not people were saving for retirement (Table 2.14) but most of these had only a small impact when we controlled for other factors in the multivariate analysis.

The one exception was the effect of not being the head of household, which, in the multivariate analysis, greatly reduced the odds of someone making their own provision for old age. This is particularly interesting, given the concern about women's financial under-provision for retirement, as gender did not have a significant effect. In other words, it would seem that women are less likely than men to save for their retirement for one of two reasons. First, women who live with a partner are more likely to rely on their husbands to make the financial provision for their old age. Secondly, female heads of household are more often lone parents or elderly people living alone whose under-provision can be explained by their age and employment status.

**Table 2.14 Impact of other personal factors on saving for retirement**

	Percentage saving for retirement	Relative odds of saving for retirement
<b>Marital status</b>		
Married	43%	1.3
Living as a couple	46%	ref
Widowed	6%	ns
Divorced	31%	ns
Separated	35%	ns
Never married	26%	ns
<b>Number of children in household</b>		
None	31%	1.3
1	52%	ref
2	54%	ns
3	42%	ns
4 or more	23%	ns
<b>Head of household</b>		
Yes	39%	ref
No	32%	0.5
<b>Health status over past 12 months</b>		
Excellent	48%	1.3
Good	34%	ns
Fair	28%	ns
Poor	18%	ns
Very poor	9%	ns
<i>All</i>	36%	-

ns not significant.

ref reference group.

### 2.4.4 Other economic factors

Three economic variables were significantly correlated with saving for retirement: income, people's assessment of their financial circumstances and their expectations for the year ahead. Again, though, the effects were relatively small (Table 2.15).

The multivariate analysis showed that, relative to those in the middle-income quintile (equivalised and before housing costs), those with the highest incomes had one and a half times the likelihood of setting money aside for their retirement. While people in the two lowest income groups had only about half the chance (Table 2.15).

**Table 2.15 Impact of other economic factors on saving for retirement**

	Percentage saving for retirement	Relative odds of saving for retirement
<b>Assessment of financial situation</b>		
Living comfortably	41%	1.5
Doing alright	39%	1.2
Just about getting by	29%	ref
Finding it quite difficult	20%	0.6
Finding it very difficult	13%	ns
<b>Income (equivalised BHC)</b>		
Quintile 1 (poorest)	7%	0.5
Quintile 2	18%	0.7
Quintile 3	36%	ref
Quintile 4	53%	1.4
Quintile 5 (richest)	64%	1.7
<b>Financial expectations for year ahead</b>		
Better than now	41%	0.9
About the same	32%	ref
Worse than now	35%	ns
<i>All</i>	36%	-

ns not significant.

ref reference group.

Likewise, compared with people who said that they were just getting by, those who were living comfortably had one and a half times the odds of saving for retirement; and those finding things difficult financially had only half the odds of doing so.



## Annex to Chapter 2: Logistic regression models of saving

## Any saving

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Income Quintile BHC (Ref=Middle Quintile)</b>			<b>88.06875</b>	<b>4</b>	<b>0.0000</b>	
Quintile 1	-0.43166	0.067402	41.01497	1	0.0000	0.6
Quintile 2	-0.17893	0.05965	8.998159	1	0.0027	0.8
Quintile 4	0.166965	0.057833	8.334924	1	0.0039	1.2
Quintile 5	0.197179	0.061103	10.41362	1	0.0013	1.2
<b>Housing (Ref=Social Tenant)</b>			<b>31.8708</b>	<b>6</b>	<b>0.0000</b>	
Outright Owner	0.235024	0.063861	13.54405	1	0.0002	1.3
Mortgage Owner	0.102538	0.062924	2.655503	1	0.1032	1.1
Rent With Job	0.117175	0.210193	0.310763	1	0.5772	1.1
Rent Unfurnished	-0.17197	0.116593	2.175452	1	0.1402	0.8
Rent Furnished	-0.28049	0.131318	4.562395	1	0.0327	0.8
Other	0.145839	0.814141	0.032088	1	0.8578	1.2
<b>Number of Children (Ref=1)</b>			<b>27.34447</b>	<b>4</b>	<b>0.0000</b>	
None	0.218772	0.064473	11.51416	1	0.0007	1.2
2 Children	0.004993	0.080367	0.003859	1	0.9505	1.0
3 Children	-0.11756	0.119446	0.968681	1	0.3250	0.9
4+ Children	-0.4471	0.266817	2.807929	1	0.0938	0.6
<b>Economic Activity (Ref=Employee)</b>			<b>78.16084</b>	<b>8</b>	<b>0.0000</b>	
Self-employed	-0.15752	0.081821	3.70612	1	0.0542	0.9
Unemployed	-0.72168	0.142274	25.73009	1	0.0000	0.5
Retired	-0.40733	0.066912	37.05887	1	0.0000	0.7
Maternity leave	0.031301	0.342759	0.00834	1	0.9272	1.0
Family carer	-0.62043	0.093209	44.30735	1	0.0000	0.5
Ft education	-0.32133	0.093165	11.89562	1	0.0006	0.7
Disabled	-0.39763	0.121331	10.74001	1	0.0010	0.7
Other	-0.53201	0.259555	4.201257	1	0.0404	0.6
IS recipient	0.198245	0.098173	4.077747	1	0.0435	1.2
<b>Financial Situation (Ref=Getting By)</b>			<b>491.9349</b>	<b>4</b>	<b>0.0000</b>	
Living comfortably	1.026306	0.05604	335.396	1	0.0000	2.8
Doing all right	0.694885	0.050898	186.3939	1	0.0000	2.0
Quite difficult	-0.80435	0.124403	41.80533	1	0.0000	0.4
Very difficult	-1.38693	0.278073	24.87678	1	0.0000	0.2
<b>Change To financial situation (REF=Same)</b>			<b>38.51507</b>	<b>2</b>	<b>0.0000</b>	
Better off	0.185454	0.045543	16.58141	1	0.0000	1.2
Worse off	-0.1775	0.054932	10.44171	1	0.0012	0.8
<b>Expected financial situation (REF=Same)</b>			<b>7.540976</b>	<b>2</b>	<b>0.0230</b>	
Better off	-0.04829	0.045931	1.105229	1	0.2931	1.0
Worse off	0.16142	0.071323	5.122278	1	0.0236	1.2
Received windfall	0.255741	0.044305	33.31935	1	0.0000	1.3

Continued

## Any saving Continued

	B	S.E.	Wald	df	Sig.	Exp(B)
<b>Highest Academic Qual (Ref=CSE)</b>			<b>35.60311</b>	<b>7</b>	<b>0.0000</b>	
Higher degree	0.245219	0.154725	2.511802	1	0.1130	1.3
Degree	0.145309	0.10717	1.838368	1	0.1751	1.2
HND level	0.15894	0.11176	2.022535	1	0.1550	1.2
A Level	0.131573	0.096933	1.842418	1	0.1747	1.1
O Level	0.166854	0.092297	3.26813	1	0.0706	1.2
None	-0.12192	0.094739	1.656044	1	0.1981	0.9
Other quals	0.047418	0.141984	0.111535	1	0.7384	1.0
Personal pension	0.220394	0.059564	13.6909	1	0.0002	1.2
Occupational pension	0.419265	0.053178	62.16063	1	0.0000	1.5
Constant	-1.15821	0.125353	85.37059	1	0.0000	0.3

## Regular saving

	B	S.E.	Wald	df	Sig.	Exp(B)
<b>Age Group (Ref=40-49)</b>			<b>18.47411</b>	<b>6</b>	<b>0.0052</b>	
16-19	0.358801	0.142292	6.358401	1	0.0117	1.4
20-29	-0.02272	0.087369	0.067639	1	0.7948	1.0
30-39	0.104358	0.067342	2.401469	1	0.1212	1.1
50-59	-0.01607	0.073086	0.048319	1	0.8260	1.0
60-69	-0.06953	0.106722	0.424447	1	0.5147	0.9
70+	-0.2703	0.127685	4.481515	1	0.0343	0.8
Female	0.095487	0.042565	5.032401	1	0.0249	1.1
<b>Income Quintile BHC (Ref=Middle Quintile)</b>			<b>119.3218</b>	<b>4</b>	<b>0.0000</b>	
Quintile 1	-0.49876	0.079496	39.3632	1	0.0000	0.6
Quintile 2	-0.2237	0.066879	11.18803	1	0.0008	0.8
Quintile 4	0.27189	0.060639	20.10411	1	0.0000	1.3
Quintile 5	0.301557	0.063852	22.30438	1	0.0000	1.4
<b>Marital Status (Ref=Cohabiting)</b>			<b>14.22182</b>	<b>5</b>	<b>0.0143</b>	
Married	0.188454	0.082612	5.203914	1	0.0225	1.2
Widowed	0.347792	0.159124	4.777127	1	0.0288	1.4
Divorced	0.445252	0.150939	8.701765	1	0.0032	1.6
Separated	0.682883	0.210691	10.50509	1	0.0012	2.0
Single Never-married	0.329606	0.116146	8.053431	1	0.0045	1.4
<b>Economic Activity (Ref=Employee)</b>			<b>103.0229</b>	<b>8</b>	<b>0.0000</b>	
Self-employed	-0.212	0.089347	5.630033	1	0.0177	0.8
Unemployed	-1.01649	0.183548	30.66967	1	0.0000	0.4
Retired	-0.26086	0.09776	7.120164	1	0.0076	0.8
Maternity leave	-0.15736	0.363193	0.187732	1	0.6648	0.9
Family carer	-0.59629	0.107816	30.5877	1	0.0000	0.6
Ft education	-1.02907	0.134946	58.15287	1	0.0000	0.4
Disabled	-0.32413	0.138327	5.490625	1	0.0191	0.7
Other	-0.33398	0.281476	1.407823	1	0.2354	0.7
<b>Financial Situation (Ref=Getting By)</b>			<b>334.2851</b>	<b>4</b>	<b>0.0000</b>	
Living comfortably	0.954488	0.06168	239.47	1	0.0000	2.6
Doing all right	0.550873	0.057457	91.92143	1	0.0000	1.7
Quite difficult	-0.79688	0.149458	28.42786	1	0.0000	0.5
Very difficult	-1.33662	0.3501	14.57576	1	0.0001	0.3

Continued

## Regular saving Continued

	B	S.E.	Wald	df	Sig.	Exp(B)
<b>Change To financial situation (REF=Same)</b>			<b>12.70495</b>	<b>2</b>	<b>0.0017</b>	
Better off	0.129386	0.048016	7.261233	1	0.0070	1.1
Worse off	-0.08474	0.059594	2.022162	1	0.1550	0.9
Received windfall	0.205873	0.046868	19.29525	1	0.0000	1.2
<b>Highest Academic Qual (Ref=CSE)</b>			<b>32.70121</b>	<b>7</b>	<b>0.0000</b>	
Higher degree	0.309252	0.16062	3.707038	1	0.0542	1.4
Degree	0.224502	0.114879	3.819054	1	0.0507	1.3
HND level	0.291155	0.119883	5.898388	1	0.0152	1.3
A level	0.284944	0.105182	7.338945	1	0.0067	1.3
O level	0.127463	0.100825	1.5982	1	0.2062	1.1
None	-0.04323	0.106241	0.165604	1	0.6840	1.0
Other quals	0.054041	0.15604	0.119943	1	0.7291	1.1
Personal pension	0.254614	0.061714	17.02126	1	0.0000	1.3
Occupational pension	0.548376	0.055715	96.87647	1	0.0000	1.7
<b>Region (Ref=SW)</b>			<b>95.90293</b>	<b>19</b>	<b>0.0000</b>	
Region not known	-0.19921	0.31361	0.403493	1	0.5253	0.8
Inner London	-0.64434	0.147705	19.0302	1	0.0000	0.5
Outer London	-0.19007	0.106077	3.210674	1	0.0732	0.8
R. of South East	-0.08022	0.082871	0.93701	1	0.3330	0.9
East Anglia	-0.41679	0.128415	10.5344	1	0.0012	0.7
East Midlands	0.164682	0.098768	2.780063	1	0.0954	1.2
West Midlands Conurbation	0.013828	0.129146	0.011464	1	0.9147	1.0
R. of West Midlands	0.20708	0.109411	3.58226	1	0.0584	1.2
Greater Manchester	0.132237	0.119612	1.222233	1	0.2689	1.1
Merseyside	0.235767	0.150956	2.439304	1	0.1183	1.3
R. of North West	-0.09853	0.11847	0.691694	1	0.4056	0.9
South Yorkshire	-0.02683	0.14895	0.032434	1	0.8571	1.0
West Yorkshire	0.165633	0.126418	1.716631	1	0.1901	1.2
R. of Yorks & Humberside	0.29517	0.12973	5.176875	1	0.0229	1.3
Tyne & Wear	-0.23262	0.159667	2.122501	1	0.1451	0.8
R. of North	0.173937	0.125847	1.910269	1	0.1669	1.2
Wales	0.155253	0.116277	1.782744	1	0.1818	1.2
Scotland	0.192737	0.097376	3.917652	1	0.0478	1.2
Northern Ireland	0.36065	0.153507	5.519692	1	0.0188	1.4
<b>Household type (ref=couple no children)</b>			<b>31.24403</b>	<b>8</b>	<b>0.0001</b>	
Single non-elderly	-0.4196	0.124065	11.43876	1	0.0007	0.7
Single Elderly	0.052241	0.147856	0.124839	1	0.7238	1.1
Couple: dep children	-0.22657	0.067482	11.27283	1	0.0008	0.8
Couple: non-dep children	-0.0245	0.073796	0.1102	1	0.7399	1.0
Lone par: dep children	-0.50695	0.156071	10.55074	1	0.0012	0.6
Lone par: non-dep children	-0.26465	0.142124	3.467523	1	0.0626	0.8
2+ Unrelated adults	-0.19837	0.204817	0.938022	1	0.3328	0.8
Other households	-0.19601	0.184228	1.132035	1	0.2873	0.8
Constant	-1.71813	0.16416	109.5415	1	0.0000	0.2

## Long-term saving

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Age Group (Ref=40-49)</b>			<b>24.76253</b>	<b>6</b>	<b>0.0004</b>	
16-19	-0.14319	0.141797	1.019702	1	0.3126	0.9
20-29	-0.18649	0.089003	4.390423	1	0.0361	0.8
30-39	-0.11351	0.070905	2.56266	1	0.1094	0.9
50-59	0.214837	0.076437	7.899722	1	0.0049	1.2
60-69	-0.04551	0.110393	0.169946	1	0.6802	1.0
70+	-0.0078	0.128177	0.003699	1	0.9515	1.0
<b>Income quintile BHC (ref=middle quintile)</b>			<b>51.07161</b>	<b>4</b>	<b>0.0000</b>	
Quintile 1	-0.47416	0.083624	32.1497	1	0.0000	0.6
Quintile 2	-0.2161	0.070428	9.415024	1	0.0022	0.8
Quintile 4	0.05565	0.063021	0.779765	1	0.3772	1.1
Quintile 5	0.109758	0.065907	2.773406	1	0.0958	1.1
<b>Housing (ref=social tenant)</b>			<b>66.22029</b>	<b>6</b>	<b>0.0000</b>	
Outright owner	0.555561	0.079505	48.82872	1	0.0000	1.7
Mortgage owner	0.236897	0.078855	9.025327	1	0.0027	1.3
Rent with job	0.301266	0.227109	1.759682	1	0.1847	1.4
Rent unfurnished	0.182551	0.139336	1.716503	1	0.1901	1.2
Rent furnished	-0.13785	0.160882	0.734167	1	0.3915	0.9
Other	0.557753	0.921888	0.366039	1	0.5452	1.7
<b>Marital status (ref=cohabit)</b>			<b>12.3753</b>	<b>5</b>	<b>0.0300</b>	
Married	0.023016	0.084533	0.074135	1	0.7854	1.0
Widowed	-0.66211	0.312043	4.502299	1	0.0338	0.5
Divorced	-0.90355	0.315505	8.201497	1	0.0042	0.4
Separated	-0.57609	0.352651	2.668664	1	0.1023	0.6
Single never-married	-0.58866	0.30067	3.833137	1	0.0502	0.6
<b>Number of children (Ref=1)</b>			<b>15.70935</b>	<b>4</b>	<b>0.0034</b>	
None	0.227036	0.078266	8.414869	1	0.0037	1.3
2 children	0.075372	0.090676	0.690924	1	0.4059	1.1
3 children	-0.05422	0.141908	0.14597	1	0.7024	0.9
4+ children	-0.84663	0.4134	4.194154	1	0.0406	0.4
<b>Economic activity (ref=employee)</b>			<b>47.96752</b>	<b>8</b>	<b>0.0000</b>	
Self-employed	0.132076	0.08908	2.198301	1	0.1382	1.1
Unemployed	-0.50502	0.180543	7.824558	1	0.0052	0.6
Retired	-0.3279	0.100907	10.55914	1	0.0012	0.7
Maternity leave	0.300348	0.364851	0.677671	1	0.4104	1.4
Family carer	-0.5267	0.11631	20.50664	1	0.0000	0.6
FT education	-0.43172	0.136422	10.01455	1	0.0016	0.6
Disabled	-0.31906	0.152152	4.3974	1	0.0360	0.7
Other	-0.33687	0.300042	1.260543	1	0.2615	0.7
<b>Financial situation (Ref=Getting By)</b>			<b>417.3283</b>	<b>4</b>	<b>0.0000</b>	
Living comfortably	1.202178	0.066449	327.3089	1	0.0000	3.3
Doing all right	0.670537	0.063084	112.9805	1	0.0000	2.0
Quite difficult	-0.64821	0.163735	15.67284	1	0.0001	0.5
Very difficult	-1.65205	0.478801	11.90516	1	0.0006	0.2
<b>Changed financial situation (ref=same)</b>			<b>10.48099</b>	<b>2</b>	<b>0.0053</b>	
Better off	0.144012	0.049727	8.387229	1	0.0038	1.2
Worse off	-0.03306	0.062499	0.279796	1	0.5968	1.0
Received windfall	0.206323	0.04814	18.36933	1	0.0000	1.2

Continued

## Long-term saving Continued

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Highest Academic Qual (Ref=CSE)</b>			<b>86.7944</b>	<b>7</b>	<b>0.0000</b>	
Higher degree	0.551594	0.163021	11.44853	1	0.0007	1.7
Degree	0.341208	0.119677	8.128608	1	0.0044	1.4
HND level	0.293837	0.124927	5.532231	1	0.0187	1.3
A level	0.137323	0.111448	1.518249	1	0.2179	1.1
O level	0.062886	0.107245	0.343833	1	0.5576	1.1
None	-0.28622	0.113565	6.351752	1	0.0117	0.8
Other quals	0.187488	0.161013	1.355901	1	0.2442	1.2
Personal pension	0.280477	0.062436	20.18021	1	0.0000	1.3
Occupational pension	0.492993	0.058161	71.8485	1	0.0000	1.6
Spouse in household	0.726973	0.287728	6.383711	1	0.0115	2.1
Constant	-2.27215	0.171528	175.4706	1	0.0000	0.1

## Saving for old age (including non-state pensions)

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Age group (ref=40-49)</b>			<b>436.1101</b>	<b>6</b>	<b>0.0000</b>	
16-19	-3.21004	0.240503	178.1475	1	0.0000	0.0
20-29	-1.19218	0.094866	157.9279	1	0.0000	0.3
30-39	-0.20379	0.077343	6.942738	1	0.0084	0.8
50-59	-0.27453	0.085452	10.32161	1	0.0013	0.8
60-69	-1.3572	0.126494	115.1199	1	0.0000	0.3
70+	-2.10921	0.204301	106.5861	1	0.0000	0.1
Female	-0.19194	0.063528	9.128613	1	0.0025	0.8
<b>Income quintile BHC (ref=middle quintile)</b>			<b>177.7973</b>	<b>4</b>	<b>0.0000</b>	
Quintile 1	-0.59953	0.108341	30.62252	1	0.0000	0.5
Quintile 2	-0.41256	0.081564	25.58526	1	0.0000	0.7
Quintile 4	0.363198	0.072012	25.43764	1	0.0000	1.4
Quintile 5	0.547779	0.076731	50.96498	1	0.0000	1.7
<b>Housing (ref=social tenant)</b>			<b>111.947</b>	<b>6</b>	<b>0.0000</b>	
Outright owner	0.594384	0.098926	36.1002	1	0.0000	1.8
Mortgage owner	0.778028	0.086066	81.72027	1	0.0000	2.2
Rent with job	0.512489	0.241671	4.496949	1	0.0340	1.7
Rent unfurnished	0.194798	0.149461	1.698686	1	0.1925	1.2
Rent furnished	-0.05477	0.166901	0.107686	1	0.7428	0.9
Other	-0.99006	1.036685	0.912068	1	0.3396	0.4
<b>Marital status (ref=cohabit)</b>			<b>30.68427</b>	<b>5</b>	<b>0.0000</b>	
Married	0.279311	0.090341	9.558784	1	0.0020	1.3
Widowed	-0.2837	0.198369	2.045324	1	0.1527	0.8
Divorced	-0.08302	0.140199	0.350647	1	0.5537	0.9
Separated	-0.37837	0.20706	3.33917	1	0.0676	0.7
Single never-married	0.061298	0.10124	0.366593	1	0.5449	1.1
<b>Number of children (ref=1)</b>			<b>13.26131</b>	<b>4</b>	<b>0.0101</b>	
None	0.287353	0.084644	11.52501	1	0.0007	1.3
2 children	0.168529	0.094356	3.190192	1	0.0741	1.2
3 children	0.014463	0.137013	0.011142	1	0.9159	1.0
4+ children	-0.08339	0.295415	0.079677	1	0.7777	0.9

Continued

## Saving for old age (including non-state pensions) Continued

	B	S.E.	Wald	df	Sig.	Exp(B)
<b>Health status (ref=good)</b>			<b>21.29707</b>	<b>4</b>	<b>0.0003</b>	
Excellent	0.235563	0.062847	14.049	1	0.0002	1.3
Fair	-0.06584	0.067862	0.941394	1	0.3319	0.9
Poor	-0.1555	0.117843	1.741182	1	0.1870	0.9
Very poor	-0.11334	0.262269	0.186763	1	0.6656	0.9
<b>Economic activity (ref=employee)</b>			<b>1002.856</b>	<b>8</b>	<b>0.0000</b>	
Self-employed	-0.75691	0.083385	82.39769	1	0.0000	0.5
Unemployed	-2.51705	0.24261	107.6374	1	0.0000	0.1
Retired	-2.80982	0.135992	426.9052	1	0.0000	0.1
Maternity leave	-0.47318	0.354021	1.786477	1	0.1814	0.6
Family carer	-3.05719	0.170107	322.9988	1	0.0000	0.0
FT education	-3.3257	0.353264	88.62749	1	0.0000	0.0
Disabled	-2.97703	0.243451	149.5361	1	0.0000	0.1
Other	-2.09385	0.373295	31.46216	1	0.0000	0.1
IS recipient	-0.78031	0.261222	8.923044	1	0.0028	0.5
<b>Financial situation (ref=getting by)</b>			<b>52.79253</b>	<b>4</b>	<b>0.0000</b>	
Living comfortably	0.386091	0.077527	24.80148	1	0.0000	1.5
Doing all right	0.154179	0.067736	5.180882	1	0.0228	1.2
Quite difficult	-0.5097	0.129693	15.44545	1	0.0001	0.6
Very difficult	-0.3229	0.247393	1.703528	1	0.1918	0.7
<b>Changed financial situation (ref=same)</b>			<b>13.27574</b>	<b>2</b>	<b>0.0013</b>	
Better off	-0.09106	0.060255	2.283742	1	0.1307	0.9
Worse off	0.195772	0.073385	7.11687	1	0.0076	1.2
<b>Expected financial situation (ref=same)</b>			<b>15.92185</b>	<b>2</b>	<b>0.0003</b>	
Better off	-0.21526	0.058317	13.62471	1	0.0002	0.8
Worse off	0.070152	0.099017	0.501953	1	0.4786	1.1
Received windfall	0.118689	0.058291	4.145928	1	0.0417	1.1
<b>Highest academic qual (ref=CSE)</b>			<b>99.78119</b>	<b>7</b>	<b>0.0000</b>	
Higher degree	0.375543	0.193065	3.78367	1	0.0518	1.5
Degree	0.550517	0.130286	17.8545	1	0.0000	1.7
HND level	0.265625	0.138906	3.656775	1	0.0558	1.3
A level	0.282634	0.118112	5.726172	1	0.0167	1.3
O level	0.115313	0.112684	1.047204	1	0.3062	1.1
None	-0.35965	0.121356	8.783058	1	0.0030	0.7
Other quals	0.099851	0.177414	0.31676	1	0.5736	1.1
Not head of household	-0.60211	0.066975	80.82148	1	0.0000	0.5
Constant	0.115589	0.17997	0.412505	1	0.5207	1.1

# 3 Patterns of saving over time

## 3.1 Introduction

In this chapter we analyse whether there are particular patterns to saving, and to the extent of change in people's saving behaviour. We do not look at pensions, which are included as part of Chapter 4. Instead the analysis is based on the questions relating to people saving out of their incomes into bank accounts and similar products – see the 'definitions' page at the beginning of this report for more detail. Separate questions relate to personal pensions and occupational pensions (see Chapter 4).

The analysis of the degree of saving stability proceeds in three stages, moving from a more general approach, to more detailed analysis of individuals. As might be expected, there was much greater stability found at the aggregate level, than among individuals. Individuals made many changes to their saving over the first ten years of the data examined.

We analyse the overall or aggregate pattern of saving in section 3.2. For each year, we analyse how many people are saving, and what level of savings they are making. A slightly more detailed approach is then taken, comparing different birth cohorts in their pattern of saving at particular ages (section 3.3). The third part of the analysis (section 3.4) analyses the changes taking place among those individuals observed in the British Household Panel Study (BHPS) for ten complete years.

The different patterns observed were extremely diverse, but behaviour may be grouped into a smaller number of categories.

## 3.2 Saving patterns across the whole sample

Table 3.1 shows the proportion of individuals saving between 1991 and 2000, and the average amount saved each month. Three different types of average are shown – the mean, the median, and the mean based on removing the most extreme values. Between 39 per cent and 43 per cent of respondents were saving at any given wave, 1991-2000. Very optimistically the figures could be described as on an upward trend but not with any confidence.<sup>7</sup>

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<sup>7</sup> A regression equation linking the percentage saving to year of interview showed that year was significant at an eight per cent level, each year generating a +0.25% increase in saving, but this is below the standard of confidence applied in this report.

The cash amounts being saved increased over time. The rate of growth in the Retail Prices Index (RPI) between 1991 and 2000 was around 28 per cent, so the average amounts saved over time have risen somewhat in real terms.

**Table 3.1 Patterns of saving 1991-2000**

<i>Row percentages and monthly amounts</i>				
	Per cent saving	Average monthly savings, among savers		
		Mean	Median	5% trimmed mean
1991	41	£110	£60	£88
1992	39	£115	£50	£89
1993	41	£118	£60	£93
1994	40	£126	£70	£98
1995	40	£131	£77	£104
1996	41	£135	£80	£108
1997	42	£139	£80	£109
1998	43	£147	£100	£116
1999	40	£147	£100	£117
2000	43	£154	£100	£121
<i>Change 1991-2000</i>		<i>+40%</i>	<i>+66%</i>	<i>+38%</i>

The 5% trimmed mean excludes the highest and lowest 5% of values.

Some alternative measures of saving are shown in Table 3.2, but the picture they show is similar. The proportion of individuals saving for old age (or with a non-state pension) has been constant at around 36 per cent since the mid-1990s. The proportion saving more than a small amount has remained at around three in ten over the same period, perhaps slightly higher in the second half of the 1990s than in the first half. There was little if any change in the proportion of families where any of adults (in the 'benefit unit') was saving.

**Table 3.2 Patterns of saving 1991-2000**

<i>Row percentages</i>			
	Per cent saving for old age (or with a non-state pension)	Per cent saving above £20 (1991-96) or above £25 (1997-) per month <sup>a</sup>	Self or partner is saving
1991	n/a	27	50
1992	37	26	48
1993	38	29	50
1994	38	29	50
1995	36	29	50
1996	36	31	50
1997	36	31	52
1998	36	32	53
1999	36	30	50
2000	36	31	53

<sup>a</sup> This was the amount saved by the bottom 15 per cent in each year.

The patterns are shown separately in Table 3.3 for people of working age and people over the state pension age. People of working age were more likely to be saving than pensioners, though with a smaller gap than might have been expected. When they did save, working-age people were saving about half as much again as pensioners, although this gap does appear to have closed over the last 10 years. In other words, the average amounts saved by pensioners have grown faster than the amounts saved by people of working age during 1991-2000.

**Table 3.3 Patterns of saving 1991-2000: by age group**

	<i>Cell percentages and monthly amounts</i>			
	<b>Whether saving</b>		<b>Average amount saved per month (5% trimmed mean)</b>	
	<b>Working age</b>	<b>Pensionable age</b>	<b>Working age</b>	<b>Pensionable age</b>
1991	45	29	£93	£59
1992	42	31	£96	£58
1993	44	31	£99	£64
1994	43	32	£104	£72
1995	44	30	£110	£77
1996	44	32	£115	£75
1997	45	33	£118	£75
1998	46	33	£125	£79
1999	43	32	£125	£86
2000	46	34	£128	£92

The 5% trimmed mean excludes the highest and lowest 5% of values.

### 3.3 Saving patterns across different cohorts

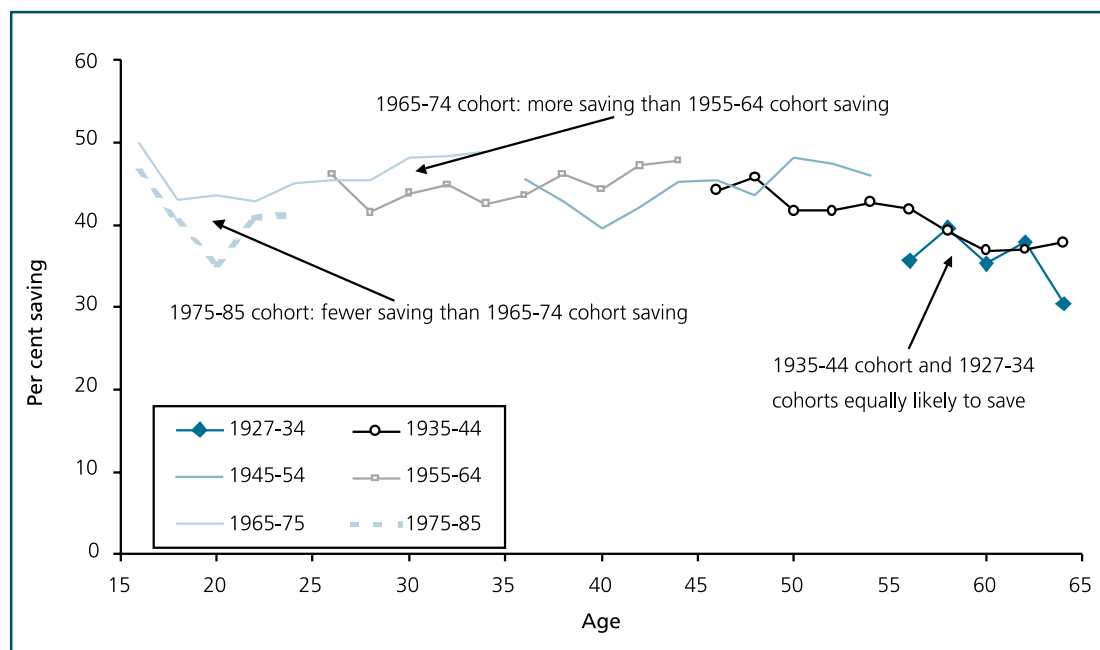
An alternative way to analyse the information is to consider people born in particular years, and contrast their behaviour at different ages. For example, in year 2000, those born in 1970 were aged 30. Their rate of saving may be contrasted with that of people born in 1965, observed in 1995 when they were 30. In this way it is possible to see if rates of saving have tended to increase or decrease across different birth cohorts.<sup>8</sup>

A cohort and age analysis of whether people were saving is shown in Figure 3.1. The fact that many of the lines are close together, even running into each other, indicates common patterns across the different birth cohorts. In particular, people born during 1935-44 had, when they were 55+, quite similar rates of saving to those people born in 1927-34, when they were aged 55+. Conversely, the 1965-74 cohort (aged 26-35 when last interviewed in 2000) had higher rates of saving in their late twenties and thirties, than had the 1955-64 cohort at the same age. This might have been evidence for higher rates of saving among younger groups, except that the pattern did not continue for the next cohort. Those born in 1975-1985 (aged 15-25 in 2000) had lower rates of saving than their peers born ten years earlier, for the same ages.

<sup>8</sup> It is possible, of course, that economic circumstances in 1995 and 2000 were also different, which would affect this comparison. This is the traditional problem that one cannot separate the effects of age, cohort and time-period. There was, however, considerable constancy over time in aggregate rates of saving, as shown in section 3.2. Hence a focus on age and cohort, rather than year, seems appropriate.

The youngest birth cohort is saving less than those up to ten years older than them. Their slightly older peers (born 1965-74; who elsewhere have been depicted as “Thatcher’s children”) had, if anything, been saving more than those who were slightly older than them. But these ‘values’ did not appear to have been taken up by their younger peers.

**Figure 3.1 Saving among different birth cohorts, by age and year of birth**



### 3.4 Saving patterns among individuals

The picture of overall stability was not matched by stability among individuals, where we found considerable change from year to year. At each annual interview around 40 per cent were saving, and 60 per cent were not. But among all the individuals analysed as part of the study (whether for just one wave or all ten), 61 per cent mentioned they were saving at least once, whilst 81 per cent said they were ‘not saving’ on at least one occasion. These results are based on some 23,000 individuals, participating for an average of 4.7 waves.

To look at longer-term changes among individuals, we now focus on those 5,000 individuals who took part in all ten years of the BHPS. Of this number, just over one in six (18 per cent) individuals said at each and every wave that they were not saving. Conversely, seven per cent were saving at each wave (Table 3.4). This means that most people (75 per cent) had a mix of occasions when they were saving and not saving; they had at least one change of saving behaviour over the ten years. It is because such changes occur that we are able to examine changes in personal and economic circumstances that may be associated with changes in saving.

Whilst 18 per cent were not saving at each and every interview, for some 30 per cent of this group, there was at least one occasion when they had a spouse or partner who was saving. This leaves 12 per cent of the sample who never said they saved personally (over the course of 1991-2000) and never lived with a partner who was saving.

Among those of working age, around nine per cent never saved personally *and* never had, during 1991-2000, a partner who was saving. This confirms that it is rare for a family not to be saving at some point in the course of ten years of interviews – even though 60 per cent were not saving at any particular time. (It is, of course, possible that some people among this group were saving at times in between their survey interviews. The interviews generally take place between September and December each year. Since the latter part represents the run-up to Christmas, this may not be the easiest time for families to be saving.)

### 3.4.1 Modelling saving: pooling all available data

Various models of saving behaviour were discussed and described in Chapter 2. These were based on the last wave of the data, for 2000, which had a number of different detailed savings questions. It is possible to pool the whole ten-year sample, and run a model to investigate what factors are associated with saving. Because we have data on the same individuals across a number of years, it is possible to include person-specific terms in the model, controlling for the non-varying characteristics of people, and look at the effects of those factors that did change over time.<sup>9</sup> The regression results are shown in an annex to this chapter. This model confirms the importance of the individual-specific characteristics, which account for a large proportion of the variation in saving. However, our attention is on the variables that also affect saving.

As in Chapter 2, the model attempts to show the effect of a variety of different characteristics, controlling for other factors included.

The factor most strongly associated with saving behaviour was people's assessment of their current financial situation. Where people were 'living comfortably', independently of their level of income or economic activity, the likelihood of saving was around 15 percentage points higher, than for those 'just about getting by' (say, 55 per cent saving compared to 40 per cent, other things being equal). Those people 'doing all right' were 10 per cent more likely to save than those 'just about getting by'. Conversely, there were strong negative effects of poorer evaluations. Those saying they were finding it 'very difficult' or 'quite difficult' had rates of saving around seven percentage points lower than for those getting by.

Changes in financial situation in the last year also had statistically significant effects on saving, though these effects were weaker than those found for people's assessment of their current financial situation. People's expectations of the future state of their finances had even less impact on their current saving, though these expectations still had a statistically significant effect.

These were among the largest effects identified. Being in paid work – whether as an employee or self-employed – was associated with a ten percentage point rise in saving. The effect of having a non-state pension on saving was also positive, at around + six per cent for those with an occupational pension and + two per cent for those with a personal pension, controlling for income and so on. Saving was also more likely if people were single, or a couple without children.

Perhaps surprisingly, differences in housing tenure and in qualifications were relatively unimportant. It may be that they are much less important once unchanging individual-specific factors are taken into account, as they are in this kind of model.

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<sup>9</sup> This is usually termed a fixed-effects model, or a random-intercept model. It is equivalent to each person having a separate intercept term.

### 3.4.2 Typologies of saving

To look in detail at the longer-term patterns, we now focus on those taking part for all ten waves. This 'balanced panel' sample numbered 5,404 individuals giving full interviews at all ten waves. With ten waves, and two valid outcomes (save or not saving) there are a potential  $2^{10} = 1,024$  different routes or trajectories that are theoretically possible. Of these, 783 different combinations were actually observed. Some examples of these patterns are shown in Table 3.4.

**Table 3.4 Patterns of saving (1=saving, -=not saving)**

										<i>Five most common combinations</i>
Wave of survey (1991 .. 2000)										N/per cent
1	2	3	4	5	6	7	8	9	10	
-	-	-	-	-	-	-	-	-	-	17.7%
1	1	1	1	1	1	1	1	1	1	7.2%
1	-	-	-	-	-	-	-	-	-	2.0%
-	-	-	-	-	-	-	-	-	1	1.7%
-	1	-	-	-	-	-	-	-	-	1.3%
... many other combinations ...										70%
-	-	-	-	1	-	-	-	1	1	1 case

Base: full BHPS interviews 1991-2000, with wave-10 individual longitudinal weight.

There are various ways of attempting to extract typologies from such data. These include approaches based mostly on statistical grounds, such as use of various kinds of cluster, factor and sequence analysis. It is also possible to extract different patterns 'by eye', drawing on those categories most likely to be of practical or theoretical interest. Each approach would tend to isolate particular respondents who were saving in every wave (or nearly all), and those not saving in every wave (or nearly all). Thereafter the differences would relate to the number of subsidiary groups that would also be generated.

One possible typology is shown in Table 3.5, with the breakdown of groups also shown by age. Respondents are divided into those saving (or not saving) for every wave, or all but one, for 7-8 waves, or in the last three years. About one-third of people may be described as 'savers' throughout their ten years, whilst 53 per cent qualified as non-savers. A further 13 per cent had more mixed patterns of saving, not easily fitting into either group.

**Table 3.5 Ten-year saving patterns, by age group in first year**

									<i>Column percentages</i>
Saving pattern	Age in 1991 (first wave)							70+	All
	16-19	20-29	30-39	40-49	50-59	60-69			
Consistent savers									
Saved in 9 or 10 waves	12	15	18	19	10	10	7	14	
Saved in 7-8 waves	16	17	15	14	13	13	10	14	
Saved in each of last 3 years	9	6	5	5	5	3	4	5	
<i>Total: savers</i>	37	37	38	39	28	26	21	33	

Continued

Table 3.5 Continued

<i>Column percentages</i>								
Saving pattern	Age in 1991 (first wave)							All
	16-19	20-29	30-39	40-49	50-59	60-69	70+	
<b>Consistent non-savers</b>								
Non-saver in 9 or 10 waves	18	23	28	26	31	42	41	30
Non-saver in 7-8 waves	23	19	17	19	23	18	18	19
Not saved in each of last 3 years	5	5	3	3	6	4	4	4
<i>Total: non-savers</i>	47	47	49	49	60	64	64	53
<b>Sporadic savers</b>								
5+ changes	7	7	6	6	6	5	9	6
Other groups	9	9	8	7	6	5	6	7
<i>Unweighted base (=100%)</i>	291	1011	1108	1042	663	605	335	5055

There were, perhaps surprisingly, no strong age-based differences between the categories. Among those of working age, the average age within each group varied between 32 years (those with five+ changes) and 34 years (those saving for 9-10 waves, and those not saving for 9-10 waves). So the classification is not simply a reflection of age. There were much larger differences by income, and the variability of income, which are illustrated in Table 3.6. The table column labelled 'variability' provides one measure of the degree of income variation observed, using the 'coefficient of variation' or CV<sup>10</sup>. A larger value indicates more variability, whilst the lowest possible value (of zero) would indicate no income variation at all.

The highest average incomes – whether by person or household – were reported by those saving for 9 or 10 waves. These had individual average incomes of £1,325 per month, compared with an average of £634 for those not saving for 9 or 10 waves. Those who were non-savers for 9 or 10 waves, or who were non-savers for at least seven of the ten waves reported the lowest average incomes. These disparities were clearest when looking at individual incomes, but still sizeable when looking at household-level incomes.

Table 3.6 Ten-year saving patterns, by those of working age throughout

<i>Column percentages</i>				
Saving pattern	Person level		Household level	
	Av income (median <sup>a</sup> )	Variability (% C.V <sup>b</sup> )	Av income (median)	Variation (% C.V <sup>b</sup> )
<b>Consistent savers</b>				
Saved in 9 or 10 waves	£1,325	26	£2,693	26
Saved in 7-8 waves	£1,107	34	£2,416	29
Saved in each of last 3 years	£906	45	£2,221	38
<i>Total: savers</i>	£1,161	32	£2,497	28

Continued

<sup>10</sup> This is the standard deviation divided by the mean, converted to a percentage.

Table 3.6 Continued

Saving pattern	Column percentages			
	Person level		Household level	
	Av income (median <sup>a</sup> )	Variability (% C.V <sup>b</sup> )	Av income (median)	Variation (% C.V <sup>b</sup> )
<b>Consistent non-savers</b>				
Non-saver in 9 or 10 waves	£634	46	£1,565	38
Non-saver in 7-8 waves	£814	44	£2,031	38
Not saved in each of last 3 years	£969	40	£2,313	30
<i>Total: non-savers</i>	<i>£724</i>	<i>45</i>	<i>£1,818</i>	<i>37</i>
<b>Sporadic savers</b>				
5+ changes	£1,026	36	£2,350	31
Other groups	£934	41	£2,186	33

Base: men aged <=55 and women aged <=50 in first year.

<sup>a</sup> This is the median value of respondents' mean incomes observed 1991-2000. The CV column shows the median of the individually calculated CVs.

<sup>b</sup> The coefficient of variation = {standard deviation/mean} \* 100%.

Consistent savers had more stable incomes than consistent non-savers, as well as higher incomes. The measure of income variability used was 26 per cent for those saving in 9-10 waves, compared with 46 per cent for those not saving for 9-10 waves. The 'sporadic savers' – those with frequent changes of saving behaviour – had an intermediate level of variability of incomes.

The effects of various other characteristics on saving behaviour are shown in Table 3.7. This looks at past experience of various employment states; of housing tenures; and whether the person was in a household with dependent children. The effect of having certain social advantages (having been an employee or an owner occupier) was to increase the proportion that were 'consistent savers', but the effects were not particularly large. Conversely the effects of disadvantages (having been unemployed or a social tenant) were to reduce the proportion of consistent savers, and increase the proportion of consistent non-savers. Some 71 per cent of those who had been social tenants may be classified as non-savers, as could 65 per cent of those who had been unemployed. These compared with an overall 53 per cent classifiable as 'non-savers'.

Table 3.7 Ten-year saving patterns

Saving pattern	Column percentages						
	Has some experience of being:						
	Employee	Self-employed	Un-employed	Owner occupier	Social tenant	With kids	All
Consistent savers	39	33	22	37	18	32	33
Consistent non-savers	47	53	65	48	71	53	53
Sporadic savers	14	14	13	14	11	15	14
<i>Unweighted base (=100%)</i>	<i>3720</i>	<i>796</i>	<i>840</i>	<i>4251</i>	<i>1129</i>	<i>2531</i>	<i>5060</i>

## Annex to Chapter 3: Fixed-effects regression model of saving

Fixed-effects (within) regression	Number of obs	=	83380		
Group variable (i) : pid	Number of groups	=	18402		
R-sq: within	=	0.0605	Obs per group: min	=	1
between	=	0.2385	avg	=	4.5
overall	=	0.1663	max	=	10
			F(41,64937)	=	101.98
corr(u_i, Xb)	=	0.1814	Prob > F	=	0.0000

Variables	Coef.	Std. Err.	t	P> t
1991	0.031643	0.006867	4.61	0
1992	0.010531	0.00668	1.58	0.115
1993	0.025192	0.006632	3.8	0
1994	0.010654	0.006552	1.63	0.104
1995	0.010945	0.006528	1.68	0.094
1997	-0.0023	0.006306	-0.36	0.716
1998	0.003814	0.006399	0.6	0.551
1999	-0.02614	0.006317	-4.14	0
2000	0.008363	0.006463	1.29	0.196
Widowed	0.058277	0.028435	2.05	0.04
Divorced	0.063044	0.014472	4.36	0
Single	0.084573	0.011551	7.32	0
3+ children	-0.03088	0.00677	-4.56	0
4+ children	-0.03101	0.010745	-2.89	0.004
Self-employed	0.096393	0.010068	9.57	0
Employee	0.100506	0.005662	17.75	0
Occupational pension	0.063049	0.006041	10.44	0
Personal pension	0.015177	0.005823	2.61	0.009
Outright home owner	0.008693	0.008138	1.07	0.285
Renting furnished	-0.05372	0.010369	-5.18	0
Degree	-0.03938	0.016281	-2.42	0.016
Nursing quals	0.07234	0.032272	2.24	0.025
A levels	-0.01805	0.010832	-1.67	0.096
O levels	0.069302	0.010063	6.89	0
Other qualifications	-0.04424	0.018208	-2.43	0.015
Monthly individual income	0.016034	0.002186	7.34	0
Living comfortably	0.155273	0.00561	27.68	0
Doing all right	0.100593	0.00447	22.5	0
Finding it quite difficult	-0.06619	0.006662	-9.93	0
Finding it very difficult	-0.06649	0.009784	-6.8	0
Better off than last year	0.045623	0.003966	11.5	0
Worse off than last year	-0.0455	0.004238	-10.73	0
Expect to be better off next year	-0.01901	0.003836	-4.96	0
Expect to be worse off last year	0.01242	0.005331	2.33	0.02
hhtyp2	0.100723	0.013088	7.7	0
hhtyp3	0.080422	0.012682	6.34	0
hhtyp4	0.085535	0.012163	7.03	0
hhtyp5	0.018079	0.013876	1.3	0.193
hhtyp6	0.021783	0.014299	1.52	0.128
hhtyp7	0.020089	0.016136	1.24	0.213
hhtyp8	0.045829	0.019744	2.32	0.02
_cons	0.156806	0.015318	10.24	0

sigma\_u .35185828  
sigma\_e .37918575  
rho | .46267072 (fraction of variance due to u\_i)

F test that all u\_i=0: F(18401, 64937) = 2.76 Prob > F = 0.0000.



# 4 Life events and saving among those of working age

## 4.1 Introduction

In this chapter we examine the effects of various life events on savings behaviour. How do different life events – such as getting divorced, changing job, and reaching particular ages – affect whether people save, the amount they save, and their take-up of non-state pensions? In section 4.2, we outline the key savings/pensions concepts, and their average rates of change over time. Section 4.3 then analyses a lengthy list of different events, to investigate how far they were associated with changes in saving behaviour – whether people were saving, the amounts they saved, and whether they were making non-state pension arrangements.

Some previous research (Hedges 1998, Thomas, A., Pettigrew, N. and Tovey 1998) has found that people may start saving for retirement in response to different life events. These two research projects were qualitative in nature. They may indicate that people are more likely to *consider* their saving and pension situation at particular times; the analysis here investigates if this translates into people's actual behaviour. If there are changes in behaviour, but of smaller than expected magnitude, this may still mean that a strategy targeting such events may be successful. Private sector financial services companies currently apply such strategies.

In section 4.4 a multivariate analysis aims to identify the particular life events that were most associated with changes to saving behaviour. Section 4.5 explores whether some groups were more responsive than others to changes in life events.

A number of different outcomes are studied, these are:

- Whether saving, and the amount saved (as analysed in Chapters 2 and 3).
- Whether this 'liquid saving' is for old age.
- Whether making contributions to a personal pension.
- Whether a member of an occupational pension scheme.

Whereas most of the report thus far has related to all individuals, **in Chapter 4 the focus is on those people of working age**. However, some simple tables in the introductory section relate to individuals of all ages.

## 4.2 Studying life events and their apparent 'effects'

One motivation for exploring life events is to consider if there are opportunities where people may be encouraged to save further, or take out non-state pensions. For this reason, we study a number of life events that might be used for such a purpose. However we should beware of drawing simple causal connections from this analysis. Particular life events are associated with a wide range of changes in circumstances. Getting married, for instance, may mean two incomes rather than one, perhaps a change of home and possibly taking on a mortgage. Similarly, having children may lead to a reduction in income and a rise in spending. Reaching particular ages may be associated with starting work, a higher probability of moving home, starting families, and so on. So the analysis of a particular life event is not 'pure', but incorporates potentially a range of different changes all occurring at the same time.

Some life events may have significant effects on incomes, and we know that income is an important, if not decisive, influence on savings behaviour. The connection between the life event and savings behaviour, when there are such connections, may be mediated through such changes in income, or changes in other factors occurring at about the same time. In many cases it may well be the change in income that is most relevant and most directly associated with the change in saving behaviour.

The study of life transitions remains valuable, however, as the means to identify when saving behaviour may change. It is not possible for those associated with information provision concerning pensions or other financial products to directly observe changes to income or earnings, although it is sometimes possible to identify when people make transitions. We therefore believe that studying life events is potentially very useful, even if such life events have effects more connected with income changes than the particular event itself. Generally speaking, it is likely that the effect of divorce (say) on incomes, and perhaps windfalls, is more significant than any direct effect of relationship changes on saving.

Even so, as we have discussed in Chapters 2 and 3, income itself is by no means the dominant factor in whether people save. Instead a wide range of influences is associated with saving, and changes in saving behaviour. It remains possible that income changes are not the sole or main reason for changes in saving behaviour. Indeed, in this chapter we identify significant numbers beginning to save following events (such as having children) that are associated with reductions in income.

Later in this chapter we investigate whether the effects of particular life events differs by income level, and a limited range of other background factors.

## 4.3 Savings and pensions outcomes

There are several different outcomes of interest that relate to pensions and saving. In this section we discuss the main outcomes explored in this chapter. They comprise whether people were saving, how much they were saving, whether saving was for old age, and whether people had made any non-state pension arrangements. We briefly consider the overall proportions with each type of saving or pension, and the rate at which each of these changes.

### 4.3.1 Whether saving

Among those saving at a given interview, 31 per cent were not saving the following year. Conversely, 21 per cent of non-savers in a particular year were saving a year later. These two rates of change combine to keep the split between saving and non-saving at around 40:60 in each year.

**Table 4.1 Saving behaviour in consecutive years**

<i>Column percentages</i>			
	<b>Saving</b>	<b>At year t Not saving</b>	<b>Total</b>
<b>At year t+1</b>			
<b>Saving</b>	69	<b>21</b>	41
<b>Not saving</b>	<b>31</b>	79	59
<i>Unweighted base (=100 per cent)</i>	<i>33,108</i>	<i>47,811</i>	<i>80,919</i>

Base: BHPS respondents in consecutive years (pooled panel data).

An alternative interpretation may be reached using 'total percentages', as shown in Table 4.2. This shows that around 25 per cent of all individuals changed their saving behaviour year-on-year – with half this number starting to save and half ceasing to save. Conversely, the saving behaviour of 75 per cent of individuals was unchanged comparing year-on-year – with 46 per cent of people remaining as non-savers, and 29 per cent continuing to save. These figures are consistent with around four people in ten saving in each year, and six in ten not saving.

**Table 4.2 Saving behaviour in consecutive years**

<i>Total percentages</i>			
	<b>Saving</b>	<b>At year t Not saving</b>	<b>Total</b>
<b>At year t+1</b>			
<b>Saving</b>	29	<b>13</b>	41
<b>Not saving</b>	<b>13</b>	46	59
<b>Total</b>	41	59	100

Base: BHPS respondents in consecutive years (pooled panel data).

Since much of this chapter concerns saving for retirement, it is sensible to restrict attention to those of working age. The breakdown of savings behaviour for those of working age, shown in Table 4.3, is very similar to that for the whole population. However, the proportion of savers is rather higher, and the proportion remaining as non-savers slightly lower. Even so, the proportions changing status mirror those for the whole population, including those at or above state pension age.

**Table 4.3 Saving behaviour in consecutive years: working-age population**

<i>Total percentages</i>			
	Saving	At year <i>t</i> Not saving	Total
<b>At year <i>t</i>+1</b>			
<b>Saving</b>	31	<b>13</b>	44
<b>Not saving</b>	<b>13</b>	43	56
<b>Total</b>	44	56	100

Base: BHPS respondents in consecutive years (pooled panel data).

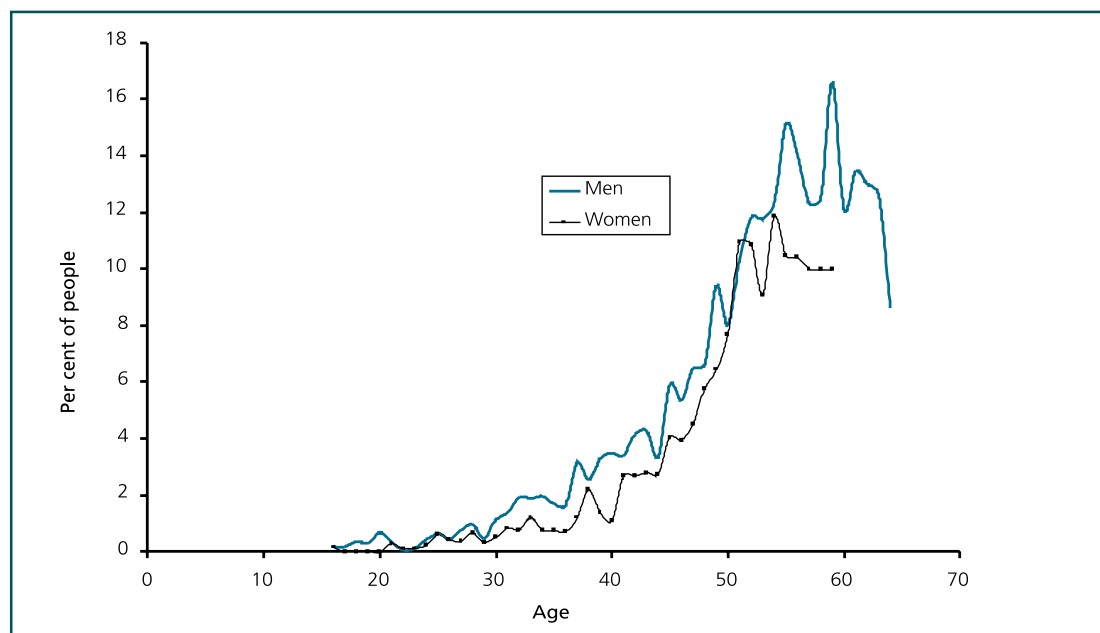
Among those of working age, 23 per cent of non-savers began saving in the following year (compared with 21 per cent for the whole sample), whilst 29 per cent of savers ceased saving the following year (compared with 31 per cent for the whole sample). It is possible for the proportion that save to vary relatively little, even though larger proportions are changing their saving behaviour each year. Our analysis includes changes in the level of saving, and reports on the proportions changing status.

### 4.3.2 Saving for old age

People may be regarded as saving for old age if they pay into a personal pension, join an occupational pension, or state that their saving is for old age. It is sensible to restrict attention to those of working age, for this particular analysis.

The proportion of people of different ages who were saving, and who said this was for their old age, is shown in Figure 4.1. The proportion saving for old age was trivially small for people below the age of 30. There was some increase in saving for old age at 30, and after 35, but it was the age of 45 that appeared most decisive in kick-starting saving for this purpose. The proportion of people who were saving for old age rose rapidly between the ages of 45 and 55, and then it reached something of a plateau.

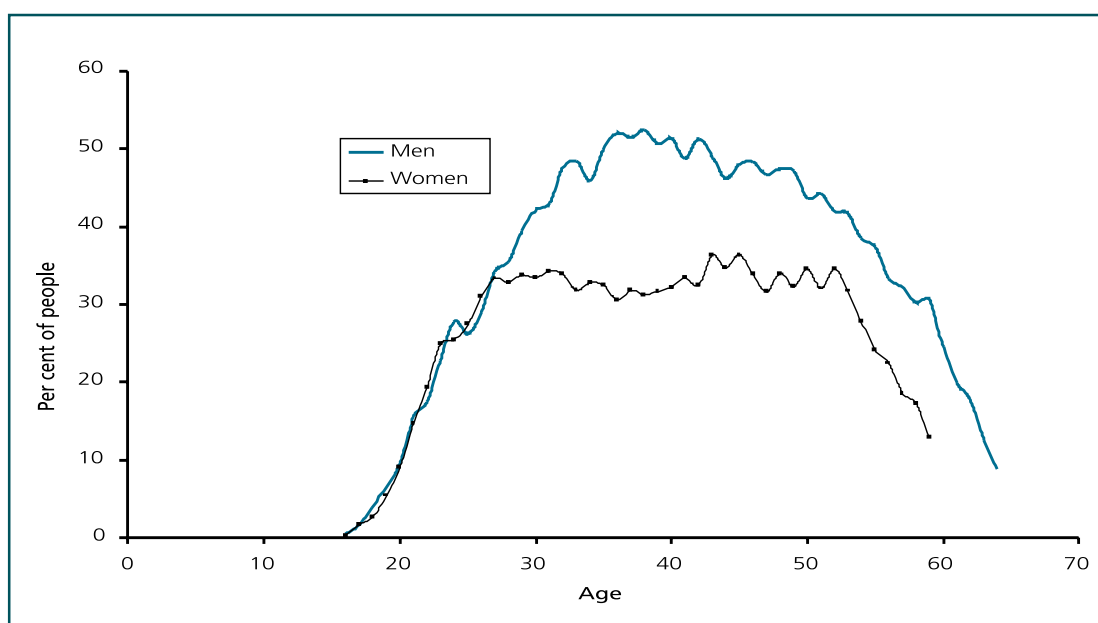
**Figure 4.1 Rate of liquid 'saving for old age' among people of working age**



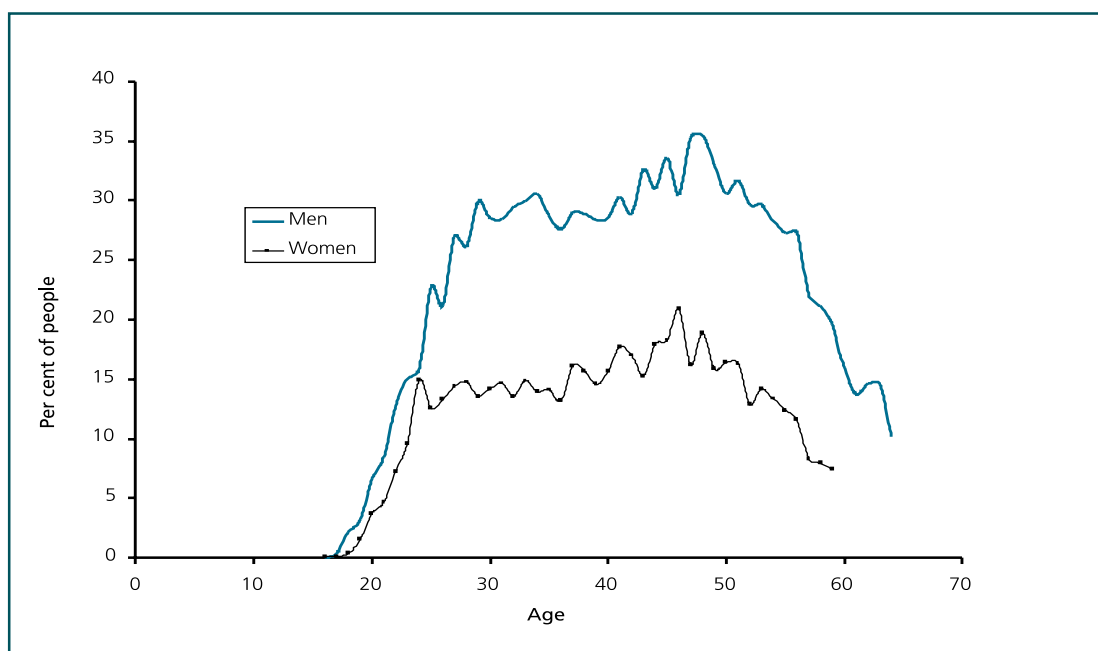
### 4.3.3 Non-state pension arrangements

Men were more likely than women to be members of occupational pension schemes, but only after the mid-20s. Figure 4.2 shows the number of members as a proportion of all people, not just those in work. By the late-20s, female membership of occupational pensions had somewhat 'peaked', at around one in three. For men, peak membership was higher at around half, and this was not reached until the mid-30s. Occupational pension scheme membership dropped quite rapidly after 50, reflecting higher exits from the labour force at that age.

**Figure 4.2** Rate of occupational pension scheme membership by age among people of working age



The picture for those making payments to personal pensions was similar to that for occupational pensions, though at a lower level. Men had higher rates of such pension arrangements than women. The rate for women of having a personal pension was fairly constant across the 30s and 40s, though with something of an increase in the late 40s. This is one of the peak age ranges for people being self-employed.

**Figure 4.3** Rate of paying into personal pensions (those of working age)

## 4.4 The effect of life events on saving

In this section we consider the effect of changes in particular key events, such as changes to marital status, family size and work, on people's behaviour regarding saving and pensions. In each case we show the relevant savings and pension situation recorded in the interview before the change in life event, and that after the change. This means behaviour recorded at two points, a year apart, is analysed for each event investigated. So, the event in question took place up to 12 months before the 'effect' on saving behaviour, or as close as in the previous month. Hence the analysis is identifying the more immediate effects of the life events on saving, and it is possible that the longer-term effect may be different. Looking at longer-term effects would, however, also increase the chances that other life events would occur and alter the effect of the particular life event in question.

### 4.4.1 Marital status

First, we consider the effect of changes in legal marital status. There is a wide range of information shown in Table 4.4, and this format is used extensively in this chapter. The table records the following information for the yearly interview before and after the life event:

- Whether people were saving at all.
- The average money amount being saved each month, including zero amounts for non-savers.
- The average money amount being saved each month, excluding zero amounts.
- Whether people were saving 'for old age'.
- Whether they were making payments into a personal pension.
- Whether they were members of an occupational pension scheme.

Two final rows then look at the rate of transition from non-saver to saver, and the converse. This provides more information than simply the change in the overall percentage saving. If the percentage saving remains more or less constant, this might mean that few people are starting to save, or ceasing to save. However, it may also mean that there are considerable changes going on among individual savers. Indeed, this possibility of considerable individual change, but little aggregate change, is illustrated by one of the first examples shown (bereavement).

In Table 4.4 we show what happened to saving when there were changes to marital status; becoming divorced or separated, experiencing bereavement, and getting married. Cohabiting individuals are treated as single, so they are included in the transition to marriage, but not in the transitions of marriage to separation or divorce.

**Table 4.4 Effect of marital status transitions on saving and pension behaviour**

<i>Cell percentages and monthly cash amounts</i>						
	<b>Divorce and separation<sup>a</sup></b>		<b>Bereavement</b>		<b>Marriage</b>	
	<b>Married</b>	<b>Split</b>	<b>Married</b>	<b>Widowed</b>	<b>Not married</b>	<b>Married</b>
Per cent saving	34	29	39	42	51	48
Average amount saved (all)	£26	£17	£28	£30	£55	£44
Average amount saved (savers only)	£117	£108	£105	£94	£135	£123
Saving for old age	1	2	6	-	2	2
Paying into personal pension	20	17	15	11	25	24
Member of occupational pension	30	30	26	19	35	36
<b>Transitions</b>						
Per cent of non-savers starting to save	15		41		25	
Per cent of savers ceasing to save	46		53		29	
<i>Unweighted base (events)</i>	<i>551</i>		<i>97</i>		<i>1473</i>	

Averages for money amounts are 5% trimmed means. – indicates there were no cases with this response.

Base: individuals of working age.

<sup>a</sup> Divorce and separation are amalgamated to increase the number undergoing this transition, and the likelihood that the difference between the two is mostly one of timing. In fact, fewer than 100 of these events were 'divorce', and most were 'separation'. The smaller number of divorce events had smaller effects than that of separation, perhaps indicating the greater time between break-up and the event.

When people became divorced or separated overall saving was reduced by five percentage points, down from 34 to 29 per cent. The average amounts saved also reduced, particularly overall (from £26 to £17 per month). Close to half (46 per cent) of the savers stopped saving. However there were few changes in pension arrangements.

Widowhood appeared to be associated with quite diverse impacts on the saving behaviour of those experiencing it. However, there were relatively few events of this kind (n=97) so not too much should be made of the particular figures. Bereavement was associated with 41 per cent of non-savers starting to save, and 53 per cent of savers stopping. Both were much higher than the average year-on-year levels of change (23 and 29 per cent respectively) and overall, the proportion saving actually increased

slightly – though this change was too small to be statistically significant. Saving for old age was effectively abandoned, whilst the incidence of non-state pension arrangements fell. Partly this may be reflecting labour market behaviour – leaving jobs – at the time of the bereavement.

People getting married slightly reduced their saving, though this was from a relatively high base of saving (perhaps including those saving up to get married). There were no effects on taking out non-state pensions.

#### 4.4.2 Family size

Next, we consider changes in the saving behaviour of parents when they have a first child, and when they have any subsequent children.

When families without children had their first child, the proportion saving dropped from 45 per cent to 39 per cent and four in ten (41 per cent) of those that were previously saving stopped saving. This could be reflecting an anticipation of the childbirth, previous saving being for child-related items, or simply the effect of a greater strain on family income. The average amounts being saved also fell.

When parents expanded their family size, the proportion of savers and amount of saving were already below average, and these reduced further. The proportion starting to save at this point was very low. Having children, whether a first or subsequent child, was not associated with any changes in pension behaviour.

**Table 4.5 Effect of child status transitions on saving and pension behaviour**

<i>Cell percentages and monthly cash amounts</i>				
	Having children		Increasing number of children	
	No children	1+ children	Has children	Larger family
Per cent saving	45	39	36	31
Average amount saved (all)	48	32	24	21
Average amount saved (savers only)	135	116	98	105
Saving for old age	1	1	1	1
Paying into personal pension	20	19	17	15
Member of occupational pension	37	35	30	29
<b>Transitions</b>				
Per cent of non-savers starting to save		23		14
Per cent of savers ceasing to save		41		38
<i>Unweighted base (events)</i>		1570		1502

Averages for money amounts are 5% trimmed means.

Base: individuals of working age.

#### 4.4.3 Key birthdays

Do certain birthdays – the ‘coming of age’ at 21, the ‘end of youth’, perhaps signalled at 30, the onset of ‘middle age’, and so on – trigger changes in people’s pension arrangements and saving behaviour? To some extent they did.

There appeared to be positive effects on savings and non-state pensions once people were 21. It was actually between the ages of 21 and 22 that the changes occurred. Over the course of their 22<sup>nd</sup> year, the proportion saving rose by three percentage points for men, and by four percentage points for women.

To put this into perspective, these birthdays had a similar or larger effect on savings than did changes to marital status, but a lesser effect than changes in family size. The average amounts people were saving also increased. Both men and women were more likely to make personal pension and occupational pension scheme arrangements at this age.

There was some effect, rather smaller in size, of having attained the age of 30. This provided some upward impetus to the proportion making savings, but enough people also reduced their amount of savings that the average amounts being saved did not increase.

**Table 4.6 Effects of key birthdays on pensions and saving behaviour**

	<i>Cell percentages and monthly money amounts</i>					
	<b>Saving</b>	<b>Saving for old age</b>	<b>Av. amount (all)</b>	<b>Av. amount (savers)</b>	<b>Personal pension</b>	<b>Occupational pension</b>
<b>Men (age)</b>						
20	39	1	£30	£113	7	10
21	38	*	£33	£120	8	16
<b>22</b>	42	*	£42	£129	13	18
29	47	*	£53	£147	30	39
<b>30</b>	50	1	£53	£138	29	42
31	46	1	£47	£131	28	43
<b>Women (age)</b>						
20	39	-	£23	£79	4	9
21	39	*	£25	£88	5	15
<b>22</b>	42	*	£31	£98	7	19
29	42	*	£35	£112	14	34
<b>30</b>	45	1	£35	£103	14	33
31	45	1	£37	£107	15	34

Averages for money amounts are 5% trimmed means.

There are other candidate birthdays for change – perhaps 35, 40, maybe others. In fact there were few discernible changes taking place at such ages. A partial exception is that the rate of saving for old age increased rapidly once people had reached the age of 45 (see Figure 4.1 earlier in this section.)

#### 4.4.4 Work status

We know that saving behaviour is strongly related to people's economic activity, and this was discussed in Chapter 2. It is unsurprising that changes in work status were strongly linked to changes in saving behaviour. Indeed, changes to people's work status had among the largest effects on saving and pension-building we have identified.

When workers lost their jobs, no fewer than 71 per cent of savers stopped saving afterwards (Table 4.7). Average amounts saved were not affected to the same degree, and may reflect incomes from others in the household. The reverse transition, from unemployment back into work, effectively reversed these negative effects on saving and pensions.

**Table 4.7** Effect of work status transitions on saving and pension behaviour

<i>Cell percentages and monthly cash amounts</i>				
	Work to unemployment		Unemployment to work	
	Before	After	Before	After
Per cent saving	38	15	18	35
Average amount saved (all)	£25	£23	£5	£26
Average amount saved (savers only)	£99	£99	£75	£121
Saving for old age	3	2	1	2
Paying into personal pension	17	15	10	10
Member of occupational pension	21	1	1	12
<b>Transitions</b>				
Per cent of non-savers starting to save		8		29
Per cent of savers ceasing to save		71		38
<i>Unweighted base (events)</i>		<i>1103</i>		<i>1365</i>

Averages for money amounts are 5% trimmed means.

Base: individuals of working age.

#### 4.4.5 Changes in labour market earnings

Rises in earnings, even quite significant increases, had a lesser impact on savings and pensions than changes in economic activity. An annual increase in earnings of one-quarter or more raised the proportion saving by five percentage points, from 46 to 51 per cent (Table 4.8). However, the impact on existing savers was proportionately rather larger, with average amounts saved rising by around one-quarter – in other words more in line with the increase in earnings.

A fall in earnings of as little as ten per cent had a large impact on saving behaviour. The proportion of people saving fell by nine percentage points in the year (from 48 to 39 per cent). It also induced 40 per cent of those saving, to cease saving. There was a large reduction in the proportion that were members of occupational pensions (30 per cent down to 21 per cent) following at least a ten per cent fall in earnings. This may indicate that the earnings drop was associated with people changing jobs. Among those experiencing an earnings drop of this size during 1999-2000, one in three (34 per cent) were changing jobs.

**Table 4.8** Effect of work status transitions on saving and pension behaviour

<i>Cell percentages and monthly cash amounts</i>				
	Earnings increase by 25% in last year		Earnings decrease by 10% or more in last years	
	Before	After	Before	After
Per cent saving	46	51	48	39
Average amount saved (all)	36	50	40	29
Average amount saved (savers only)	106	132	115	114
Saving for old age	3	4	5	4
Paying into personal pension	23	23	23	23
Member of occupational pension	25	29	30	21

Continued

Table 4.8 Continued

<i>Cell percentages and monthly cash amounts</i>				
	Earnings increase by 25% in last year		Earnings decrease by 10% or more in last years	
	Before	After	Before	After
<b>Transitions</b>				
Per cent of non-savers starting to save		31		20
Per cent of savers ceasing to save		26		40
<i>Unweighted base (events)</i>		10477		12271

Averages for money amounts are 5% trimmed means.

Base: individuals of working age.

#### 4.4.6 New spells of self-employment

The effect of becoming self-employed on savings and pensions depended a great deal on whether the previous activity was employment, or some other labour market state (unemployment or inactivity). People becoming self-employed, having previously been an employee, were slightly less likely to be saving – but those who did save went on to save rather more. Obviously, there was a sharp reduction in the opportunity to pay into an occupational pension, and some of this extra saving may be replacing such occupational provision.

Those becoming self-employed, having previously been unemployed or inactive tended to be more likely to save (from a low base), and to save considerably more each month. However, there was also a significant proportion of savers who stopped saving on moving into self-employed work. Surprisingly, we found little evidence of changes in the proportions with personal pensions.

Table 4.9 Effect of work status transitions on saving and pension behaviour

<i>Cell percentages and monthly cash amounts</i>				
	Employment to self-employment		Other routes into self-employment	
	Employee	SE	Other states	SE
Per cent saving	50	45	25	32
Average amount saved (all)	50	56	8	19
Average amount saved (savers only)	137	191	75	107
Saving for old age	5	6	1	2
Paying into personal pension	34	36	16	16
Member of occupational pension	24	5	1	-
<b>Transitions</b>				
Per cent of non-savers starting to save		23		24
Per cent of savers ceasing to save		32		44
<i>Unweighted base (events)</i>		727		363

Averages for money amounts are 5% trimmed means.

Base: individuals of working age.

#### 4.4.7 Caring for disabled people

There were relatively few changes in saving behaviour when people became carers.<sup>11</sup> The proportions saving, amounts saved, and the proportion paying into non-state pensions, saw little change (Table 4.10). Even becoming a carer for at least 20 hours a week made little difference, although a relatively small proportion (32 per cent) of this group were saving even before they became carers.

**Table 4.10 Effect of carer status transitions on saving and pension behaviour**

<i>Cell percentages and monthly cash amounts</i>				
	<b>Becoming a carer</b>		<b>Becoming a carer for at least 20 hours a week</b>	
	<b>Before</b>	<b>Carer</b>	<b>Before</b>	<b>Carer 20+ h</b>
Per cent saving	42	44	32	33
Average amount saved (all)	£32	£34	£16	£17
Average amount saved (savers only)	£108	£112	£85	£80
Saving for old age	5	5	4	5
Paying into personal pension	18	19	13	16
Member of occupational pension	29	29	22	20
<b>Transitions</b>				
Per cent of non-savers starting to save		23		18
Per cent of savers ceasing to save		27		33
<i>Unweighted base (events)</i>		3573		876

Averages for money amounts are 5% trimmed means.

Base: individuals of working age.

#### 4.4.8 Housing mobility

In this section we investigate the effect of buying a home, or moving house, on saving behaviour. These events overlap – you may move house without buying, or buy a house without moving (e.g. Right to Buy), but many will move to purchase – rather than being mutually exclusive.

Moving house was associated with somewhat lower amounts of saving, and fewer saving. But moving house did not adversely affect pension arrangements. Changes of tenure were analysed separately, generally with rather small effects.

People, who bought a house with a mortgage, having previously been tenants, did not increase their liquid savings. If anything, fewer saved and they saved less (Table 4.11), perhaps reflecting spending on their new home. However, a few more did pay into non-state pensions in the interview following the house purchase.

<sup>11</sup> Respondents are first asked: *Is there anyone living with you who is sick, handicapped or elderly whom you look after or give special help to (for example, a sick or handicapped (or elderly) relative/husband/wife/friend, etc)?* They were also asked, *Do you provide some regular service or help for any sick, handicapped or elderly person not living with you? EXCLUDE HELP PROVIDED IN COURSE OF EMPLOYMENT.* Last, *In total, how many hours do you spend each week looking after or helping (him/her/them)?*

**Table 4.11 Effect of housing mobility on saving and pension behaviour**

<i>Cell percentages and monthly cash amounts</i>				
	<b>Buying a house</b>		<b>Mover household</b>	
	<b>Tenant</b>	<b>With mortgage</b>	<b>Pre-move</b>	<b>Post-move</b>
Per cent saving	43	41	42	37
Average amount saved (all)	£36	£32	£38	£28
Average amount saved (savers only)	£117	£108	£124	£116
Saving for old age	1	1	2	2
Paying into personal pension	18	21	16	17
Member of occupational pension	31	35	26	28
<b>Transitions</b>				
Per cent of non-savers starting to save		26		20
Per cent of savers ceasing to save		39		40
<i>Unweighted base (events)</i>		1430		7433

Averages for money amounts are 5% trimmed means.

Base: individuals of working age.

#### 4.4.9 Windfalls

Receiving a windfall had a small positive effect on saving, and the average amounts saved overall (Table 4.12). There were no positive effects on non-state pensions, although windfalls were sometimes from pension lump sums, which explain part of the apparent reduction.

**Table 4.12 Effect of windfalls on saving and pension behaviour**

<i>Cell percentages and monthly cash amounts</i>		
	<b>Windfall</b>	
	<b>Year prior (with no windfall)</b>	<b>Year of windfall</b>
Per cent saving	48	51
Average amount saved (all)	£44	£53
Average amount saved (savers only)	£121	£121
Saving for old age	5	6
Paying into personal pension	20	19
Member of occupational pension	37	34
<b>Transitions</b>		
Per cent of non-savers starting to save		28
Per cent of savers ceasing to save		24
<i>Unweighted base (events)</i>		3138

Averages for money amounts are 5% trimmed means.

Base: individuals of working age.

Among each age group, non-savers receiving a windfall were rather more likely than those without this bonus to start saving (Table 4.13). Overall, 28 per cent of non-savers began saving following receipt of a windfall, compared with 21 per cent of those not receiving a lump sum. Of course these individuals may well have differed in other ways, too, so this association may not be a simple cause-and-effect relationship.

**Table 4.13** Proportion of non-savers starting to save, by age and windfalls

<i>Cell percentages</i>		
	<b>Had windfall in last year (and not in previous year)</b>	<b>No windfall in last two years</b>
Age group		
16-19	40	25
20-24	29	21
25-29	32	22
30-34	25	24
35-39	21	18
40-44	32	21
45-49	30	21
50-54	26	21
55-59	25	20
60-64	21	13
Total	28	21
<i>Unweighted base</i>	<i>3138</i>	<i>14434</i>

BHPS wave 10, 2000-01.

Base: individuals of working age.

## 4.5 Which events were the most likely to be associated with changes to saving behaviour?

The preceding sections looked in detail at different life events and their association with changes in saving and pension behaviour. They examined each event in turn, in isolation. Of course, many changes will coincide with each other: one might get married, start work, and have a higher income all in the same year. Conversely, a birth might also result in changes in income, employment status and financial outlook. A multivariate approach is needed to try to disentangle the effects of many different events all occurring in the same year, and overlapping with each other.

Some results for the main events that lead to a cessation of saving are shown in Table 4.14. In each case, the control or reference group is those not undergoing the particular transition shown. More technical details of the full model appear in the annex to this chapter.

Becoming unemployed had a very large effect, though divorce and widowhood were also strong precursors of stopping any saving. Changes to family size, starting a mortgage, drops in income, were also significant causes of people deciding (or perhaps being forced) to stop saving.

**Table 4.14** Main life events associated with stopping saving

<b>Event</b>	<b>Effects on odds of stopping saving</b>
Drop in earnings of 10% or more	1.2
Become a carer	1.2
Income drop of 10% or more	1.5
Take out a mortgage	1.6
Increase family size	1.6
Start a new family	1.7

Continued

**Table 4.14 Continued**

<b>Event</b>	<b>Effects on odds of stopping saving</b>
Become self-employed, from non-worker	1.8
Divorce	2.2
Bereavement	2.9
Become unemployed	4.2

Base: individuals of working age.

As elsewhere in this report, it seems that certain events are associated with quite strong effects on stopping saving, but it is harder to find the triggers for people to start saving. The main factors identified in the multivariate statistical analysis are shown in Table 4.15. As we found in the cross-tabulations, bereavement is (at least for some people) a trigger to start saving, as well as also being a strong cause of stopping saving. Certainly, widowhood led to important changes in saving behaviour, for the small proportion of working-age people who experienced it (around 100 events in this sample). Starting work, and having a significant uplift to earnings for those in work, provided a statistically significant impetus to start saving. Some other events (losing work, more children, marital splits) were associated with a reduced likelihood of starting to save.

**Table 4.15 Main life events associated with starting to save**

<b>Event</b>	<b>Effects on odds of stopping saving</b>
Become unemployed	0.3
Increase family size	0.5
Divorce or separate	0.7
Earnings increase by 25%+	1.5
Start work, from unemployment	1.8
Bereavement	2.6

Base: individuals of working age.

## 4.6 Are particular groups more susceptible to change?

Some groups of people may be more likely to undergo the events described in this chapter. Richer groups may be more likely to take out a mortgage, lower earners more likely to lose their jobs, men more likely to become self-employed. But are there also groups who are affected more greatly by these life events than others; who are more likely to change their behaviour in the presence of such events?

We investigated whether particular groups were more likely than average to respond to the changes in life events identified as important in the statistical models. This is a potentially rather complex task. A range of different groups was each investigated in turn.<sup>12</sup>

<sup>12</sup> Speaking more technically, this was achieved by including interaction terms in each model, with gender, income etc. interacted with the key transition effects of interest.

### 4.6.1 Men and women

Women were more likely than men to stop saving following many events, including having a first child, an increase in family size, divorce and (especially) widowhood. They were more likely than men to stop saving following a drop in income, but less likely than men to stop saving following a drop in earnings. The effect of becoming unemployed was to strongly reduce the proportion that saved, and this happened among both men and women to similar degrees. The same may be said of taking out a mortgage.

Overall, the factors associated with starting to save affected men and women in similar ways. However, one exception is that women were less likely than men to start saving following an increase in family size.

### 4.6.2 Income

Generally speaking, those in the top third, or bottom third, of the income distribution (in each year) reacted to different life events in the same way as everyone else. There were some exceptions. Becoming unemployed led to a higher proportion of the richer group ceasing to save, whilst they were less likely than average to stop saving following a ten per cent drop in income. Those in the bottom third of the income distribution were less likely than average to stop saving following a move to unemployment, but otherwise they were no different from the overall picture.

Richer groups (in the top third of the income distribution) were *more* likely to start saving than others, following an expansion in family size, and were much less affected in their decision to start saving by any changes in income. Those in the bottom third of income were no more or less likely to begin saving following different life events, with the exception that becoming a home-owner was more likely to be associated with starting to save than among other groups.

### 4.6.3 Non-state pensions

People with a non-state pension were more likely than average to stop saving following a reduction in earnings, though less likely to stop following a reduction in other income. Those paying into a personal or occupational pension were, generally speaking, less likely to begin saving than other groups when experiencing the same changes in life circumstances. For instance, changes in family size, increases in earnings and increases in total income, were less likely to prompt those with non-state pensions to start saving, than other groups.

## Annex to Chapter 4: Models of starting to save and stopping (among those of working age)

### Starting to save

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Events</b>						
Earnings increase	0.387	0.034	129.431	1	0.0000	1.5
Divorce	-0.407	0.156	6.773	1	0.0090	0.7
Widowed	0.96	0.273	12.313	1	0.0000	2.6
Work -> unemployed	-1.101	0.144	58.227	1	0.0000	0.3
Unemployed -> work	0.576	0.072	63.548	1	0.0000	1.8
More children	-0.649	0.103	40.009	1	0.0000	0.5
<b>Control variables</b>						
Financial situation			<b>745.956</b>	<b>6</b>	<b>0.0000</b>	
(missing)	-0.981	1.496	0.43	1	0.5120	0.4
(don't know)	-0.634	0.397	2.551	1	0.1100	0.5
Doing all right	-0.253	0.036	50.255	1	0.0000	0.8
Getting by	-0.721	0.037	372.904	1	0.0000	0.5
Quite difficult	-1.125	0.056	397.283	1	0.0000	0.3
Very difficult	-1.478	0.081	334.296	1	0.0000	0.2
Change in financial situation			<b>13.263</b>	<b>4</b>	<b>0.0100</b>	
(missing)	1.758	1.356	1.681	1	0.1950	5.8
(don't know)	-0.346	0.281	1.522	1	0.2170	0.7
Worse off	-0.03	0.038	0.621	1	0.4310	1.0
About the same	-0.099	0.033	9.117	1	0.0030	0.9
Age	-0.008	0.001	55.749	1	0.0000	1.0
Constant	-0.404	0.051	61.786	1	0.0000	0.7

Model chi-sq(17 df) = 1377, sig=.000.

### Stopping saving

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Events</b>						
Begin a mortgage	0.441	0.098	20.443	1	0.0000	1.6
Income drop	0.432	0.05	76.147	1	0.0000	1.5
Earnings drop	0.148	0.052	8.131	1	0.0040	1.2
Non-work-> self-employed	0.581	0.228	6.5	1	0.0110	1.8
Divorce	0.825	0.157	27.589	1	0.0000	2.3
Widowed	1.068	0.33	10.491	1	0.0010	2.9
Work to unemployed	1.425	0.112	162.944	1	0.0000	4.2
Become a carer	0.163	0.06	7.279	1	0.0070	1.2
Start a family	0.557	0.088	40.498	1	0.0000	1.7
More children	0.447	0.099	20.26	1	0.0000	1.6

Continued

### Stopping saving      Continued

	B	S.E.	Wald	df	Sig.	Exp(B)
<b>Controls</b>						
Financial situation			465.199	7	0.0000	
(missing)	0.206	0.981	0.044	1	0.8340	1.2
(refused)	-3.995	9.346	0.183	1	0.6690	0.0
(don't know)	-0.855	0.52	2.701	1	0.1000	0.4
Doing all right	-0.675	0.52	1.681	1	0.1950	0.5
Getting by	-0.153	0.521	0.087	1	0.7690	0.9
Quite difficult	0.076	0.526	0.021	1	0.8850	1.1
Very difficult	0.606	0.55	1.214	1	0.2700	1.8
Female	0.075	0.027	7.435	1	0.0060	1.1
Age	-0.082	0.006	160.468	1	0.0000	0.9
Age-squared	0.001	0	146.285	1	0.0000	1.0
Constant	0.967	0.53	3.33	1	0.0680	2.6

Model chi-sq(20 df) = 1399, sig=.000.

# 5 The effects of savings: is there an 'asset-effect'?

## 5.1 Introduction

One aim of this research project is to investigate how the level of savings affects people's later living standards and opportunities. Research using the 1958 birth cohort has identified certain positive effects of assets on future outcomes (such as greater education, less time unemployed, better health).<sup>13</sup> This was called the 'asset-effect' by the authors. We use the BHPS to consider how far this is true of a contemporary group of individuals and families, over the late 1990s. The main life events we investigate are those listed above, but particularly those relating to economic activity. Hence, one aim of this chapter is to attempt to replicate the Bynner/Paxton results, but on a different source of data.

Using the BHPS, rather than a birth cohort, means that the effects of a wider range of variables (especially age) must be taken into account. Analysis based on the BHPS, by definition, covers a rather more short-term horizon than analysis of the birth cohorts. The BHPS enables us to look five years on, whilst the National Child Development Study (NCDS) can look over a couple of decades. However, one advantage is that this shorter time frame also means that the measure of savings is taken for a more contemporary group. Using the BHPS, the information on holding savings is taken from 1995, and the analysis of the effects is based on the year 2000.

We begin by summarising some of the previous research results (section 5.2). We then consider how far the BHPS generates similar results (section 5.3), using both cross-tabular and multivariate approaches. In general terms, we were able to replicate the Bynner/Paxton findings.

However, when we controlled for a wider range of characteristics, we found no reliable effects of assets on life outcomes. This is discussed in sections 5.4 and 5.5.

When using the same methods as earlier work we also found effects of assets. We could 'replicate' the earlier findings, on data covering a shorter time horizon. However when a different approach was adopted – one that we argue is superior – we found no reliable effects of assets on life outcomes.

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<sup>13</sup> Bynner, J. and Paxton, W. (2001) *The asset effect* London: Institute for Public Policy Research.

Further work could usefully consider the causal processes that may be at work in any asset-effect. Using BHPS, it may be important to consider various different measures of assets and saving. The main savings variables selected here were similar to that in previous research, but alternatives are possible.

## 5.2 Previous research findings

Bynner and Paxton (2001), using the National Child Development Study (NCDS), found that holding assets (at age 23) had certain positive effects on future outcomes in a number of areas, including greater educational attainment, less time spent unemployed, and better health. Their basic approach or model may be expressed as:

$$\text{OUTCOMES}_{33} = a + b.\{\text{ASSETS}_{23}\} + c.\{\text{Background control variables}\} + \text{error}$$

That is, outcomes at age 33 ( $\text{OUTCOMES}_{33}$ ) were modelled as a function of assets held at age 23 ( $\text{ASSETS}_{23}$ ), plus a range of background control variables. The outcomes considered were in four domains, comprising:

- Labour market outcomes (e.g. years spent unemployed).
- Health (e.g. smoking, psychological malaise).
- Citizenship and values (e.g. voted in last election).
- Parenting (e.g. frequency of reading to children).

The control variables were based on family class at birth, various characteristics of the family of origin at age 11, educational outcomes at age 16, and a few post-16 variables. All the outcomes were modelled using an ordinary least squares (OLS) regression approach.

In a number of the models, holding assets was found to have a positive and statistically significant impact on the outcome of interest. This impact the authors termed the 'asset-effect'. The size of the asset-effect on particular outcomes tended to reduce, the wider the range of control variables included. A summary of their findings is shown in Table 5.1. It is clear that the effect of asset holding varied across the different outcomes of interest. Sometimes there were significant effects for both men and women, sometimes only for one or the other. Where the effect of savings did seem to be more important was on the labour market variables, particularly for men, on marital breakdown, and on certain health questions. So, for example, having savings had a negative effect on smoking (in other words, savings at 23 were associated with a lower rate of smoking at 37), but it had a positive effect on the years that men were in full-time employment between 23 and 33.

However, it is certainly not possible to talk of asset-effects across the board. There were no significant effects of assets on the parenting outcomes, or on most of the citizenship measures. For women, most of the labour market outcomes were not associated with holding assets.

**Table 5.1** Significance of savings on outcomes: analysis of NCDS

		<i>Whether significant, and direction of effect</i>	
<b>Domain</b>	<b>Outcome</b>	<b>Men</b>	<b>Women</b>
<i>Labour market</i>	Years of full-time education*	ns	-
	Years of full-time employment	+	ns
	Years unemployed	-	-
	Years 'at home'		ns
	Self-employed at 33*	-	ns
	– non-manual occupation*	-	ns
	– manual occupation*	ns	ns
<i>Marital status</i>	Marital breakdown	-	-
<i>Health</i>	Malaise	-	-
	General health	+	ns
	Smoking*	-	-
<i>Citizenship</i>	Voting	ns	ns
	Political interest	ns	ns
	Political cynicism	ns	-
	Work ethic	+	ns
<i>Parenting*</i>	Number of books child has	ns	ns
	How often child read to	ns	ns
	How often child reads for enjoyment	ns	ns

\* indicates based on a 10 per cent sample at age 37, not full sample at age 33.

Source: Bynner and Paxton (2001).

It is worth noting that with a large sample size a relatively small effect may be statistically significant, even if the magnitude of effect is not particularly great.<sup>14</sup> Statistical significance does not, of itself, imply policy or substantive significance. Conversely, a failure to identify a statistically significant effect does not prove beyond all doubt that there is no effect, though it does suggest the evidence for such an effect has not been established with 95 per cent confidence.

Further analysis of the NCDS implied that only a relatively low value of assets was required to show such effects – of between £300 and £600 in today's prices. It is notable that some 82 per cent of the NCDS sample had some assets when aged 23 (ibid, p 20). This strongly suggests that some of this group will have had quite low levels of savings, perhaps including money in current accounts, as well as any dedicated savings accounts.

### 5.3 Searching for asset-effects in the BHPS

This section attempts to replicate the NCDS-based analysis, using the rather different BHPS dataset. In order to abstract from factors specific to retirement, which might particularly affect some labour market variables, the analysis is based on those individuals aged 55 or younger in 1995, who also took part in interviews in 2000.

<sup>14</sup> Sometimes it is argued that NCDS is really a *population*, of those born in a particular week, and not a *sample*, so that significance tests are not required. We take the view that it is a sample from which we wish to generalise, and hence support Bynner's application of statistical significance standards.

### 5.3.1 Bivariate analysis

The NCDS analysis identified some outcomes as appearing particularly sensitive to the possession of savings, and some outcomes where no asset-effect was statistically significant. We focus on similar areas, looking at economic activity, marital breakdown, smoking and voting. However whilst most of the NCDS-based analysis was based on modelled outcomes, we prefer to begin with simpler cross-tabulations to suggest the size of effects that may require further explanation and statistical modelling.

This initial analysis is based on characteristics – and holding assets – in 1995 (wave 5 of the BHPS), and particular outcomes measured over 1996-2000 (waves 6-10 of the BHPS). Some results for the simple association between saving behaviour in 1995, and measures of key labour market outcomes are shown in Table 5.2. A number of results in other domains are then shown in Table 5.3.

Most of the results were statistically significant. Having savings, or investments, or saying you were putting money away (in 1995) were all associated with positive outcomes over the next five years, or in year 2000. The measure of 'investments' includes having shares, unit trusts, PEPs, premium bonds and other non-property assets.

Among men who said they were saving in 1995, only seven per cent were unemployed when interviewed during 1996-2000 compared with 17 per cent of those who were not saving in 1995. This measure of unemployment is based on reported survey status at each wave, so it is not a complete measure of unemployment, but it is measured consistently for savers and non-savers. Among people working in 2000, those who were saving in 1995 had somewhat higher labour market earnings (from both employment and self-employment).

It was found that those people who had savings in 1995 had higher earnings when working in 2000 than those without savings in 1995. Those who were saving money in 1995 were found to be earning £1,750 per month in 2000, compared with £1,490 for those not saving money in 2000.

**Table 5.2 Bi-variate analysis of the potential asset-effect: labour market outcomes**

	<i>Cell percentages</i>		
	<b>Ever unemployed at w6-w10</b>	<b>In paid work in 2000</b>	<b>Median (non-zero) monthly labour market income</b>
<b>Men</b>			
Saving at w5	7	86	£1,750
Not saving	17	80	£1,490
Has some savings at w5	10	86	£1,670
No savings	15	80	£1,500
Has money in investments	7	86	£1,800
No investments	16	80	£1,470
<b>Women</b>			
Saving at w5	9	73	£1,040
Not saving	12	63	£830
Has some savings at w5	9	72	£1,000
No savings	12	62	£850
Has money in investments	7	72	£980
No investments	12	62	£890

Base: aged 16-55 in 1995.

There were similar effects of savings on the labour market outcomes for women. Among women who were saving in 1995, some 73 per cent were in paid work in 2000. This compared with 63 per cent among those not saving in 1995.

Table 5.3 shows results for marital breakdown, smoking (an important health measure) and voting behaviour. The results for smoking were quite robust. Among men, 24 per cent of those with savings were smoking in 2000, compared to 33 per cent among men without savings in 1995. The results for women were very similar.

Some of the results for marital breakdown and smoking were not statistically significant, whilst some of the statistically significant effects on voting behaviour and marital breakdown were not particularly large.

**Table 5.3 Bi-variate analysis of the potential asset-effect: other outcomes**

	<i>Cell percentages</i>		
	<b>Separation or divorce at w6-w10 (base: married in w5)</b>	<b>Smoker at w10</b>	<b>Voted in last election (asked at w10)</b>
<b>Men</b>			
Saving at w5	[5]	22	78
Not saving	[7]	34	74
Has some savings at w5	5	24	78
No savings	8	33	73
Has money in investments	4	18	83
No investments	8	36	70
<b>Women</b>			
Saving at w5	6	23	79
Not saving	9	33	73
Has some savings at w5	[7]	24	[77]
No savings	[9]	33	[75]
Has money in investments	5	20	85
No investments	9	33	70

Base: aged 16-55 in 1995.

Figure in [ ] were **not** statistically significant at the five per cent level.

For most of the outcomes the effect of holding investments was larger than that of having savings, or being a saver.

The effect of having money in investments is potentially interesting, but tends to run counter to the causal pictures sometimes associated with asset-effects. In these, it is the process and act of saving that is important. Possession of investments one might expect to come later, once a saving habit had been established, and a reasonable 'buffer' of liquid assets established. The effect of investments is also based on a smaller group than for savings – fewer people had investments than had savings.

Taken together, these simple cross-tabulations seem to indicate that asset holding may have an effect on life outcomes. However the apparent effect of having assets may be simply related to other background factors. Those with savings may be older, more likely to be in employment, more likely to be 'middle class', etc., which might be the key factors for the outcomes of interest rather than saving. This issue is more important for analysts using the BHPS compared with birth cohort studies. In the NCDS all (main) respondents are the same age, so the variation found by age in BHPS is not present. Any factors related to age will also be at least partially controlled-for in the NCDS.

In order to investigate these possibilities it is necessary to adopt a multivariate approach, attempting to disentangle these other factors from those of assets. In particular, if older people are more likely to hold savings and investments, and if the outcomes are age-related, then it is important to control for age. The next section explores the effect of taking into account these background variables. The aim is to replicate the models to Bynner and Paxton, before we set out our own approach to the analysis.

### 5.3.2 Taking background information into account

The results for holding savings on various outcomes are shown in Table 5.4. These results are based on logistic regression models of the outcome, with a simple dichotomous variable for holding savings in 1995.<sup>15</sup> Monthly earnings are modelled using a simpler linear regression approach. For comparison, the results for a model *only* including savings are shown below the main results. This provides an indication of the difference made by the inclusion of the control variables.

Where results for savings were statistically significant, we indicate the 'odds ratio' for the event occurring for holding savings, and the effect on monthly earnings, for those with savings in 1995. So, holding savings made being unemployed and smoking less likely for men, working and voting more likely. The statistically significant results for women were to raise the odds of working, and reduce the odds of being a smoker, and increase monthly earnings by around £140. Generally speaking, the size of the asset-effect was smaller for women than for men. Including a range of control variables always reduced the size of the asset-effect.

**Table 5.4 Multi-variate analysis of the asset-effect**

*Odds ratios, where statistically significant, and linear effect for earnings*

	Ever un-employed at w6-w10	Working in 2000	Monthly (non-zero) labour market income	Separation or divorce at w6-w10 (married in w5)	Smoker at w10	Voted in last election (asked at w10)
<b>Men</b>						
Has some savings	0.66	1.39	+£160	ns=1	0.74	1.26
(bivariate)	0.62	1.50	+£197	0.62	0.63	1.36
<b>Women</b>						
Has some savings	ns=1	1.27	+£140	ns=1	0.79	ns=1
(bivariate)	0.72	1.54	+£230	ns=1	0.64	ns=1

Base: aged 16-55 in 1995.

ns indicates not statistically significant.

These results from the BHPS represent a mostly successful "replication" of the NCDS results of Bynner and Paxton. Replication does not mean a simple repeat. These models have been applied to new data, covering a different time span. So they are not simply a copy of earlier empirical research. This initial replication results confirm that there is something to investigate regarding the effect of savings on later outcomes. The effects on health (smoking) and on labour market outcomes were among those that were statistically significant. They also confirmed that asset-effects may be more important for men than women. This set of estimation results is important, since it has been conducted on a different dataset, for a more recent time period, trying to identify a shorter-term effect of saving.

<sup>15</sup> The set of control variables were age, age-squared, housing tenure, highest qualification, region, job status of spouse or single, job status (except in the labour market equations) and marital status (except in the separation/divorce equation).

Unlike the earlier analysis, however, we did not identify an effect of savings on marital breakdown after controlling for a relatively small but important set of control variables. We also identified a positive effect of savings on voting in the 1997 general election, albeit only for men. This was not found in the NCDS analysis, which recorded information at a time (1983) when voter turn-out rates were higher than today.

## 5.4 Discussion

Government documents, and other sources, have cited the existence of an 'asset-effect' to support the expansion of 'asset-based welfare' (e.g. Paxton 2002). The key statistical problem with analysis of this kind is whether savings may be treated as just another variable, like, say, gender or age. It is, instead, possible that the possession of assets is correlated with some other factors, which are also correlated with the outcome of interest. Do 'savings' have a direct causal effect on the outcomes, or are they simply acting as a proxy for some other variable that is positively correlated both with savings, and the outcome?

As an example, perhaps being from an ethnic minority background was associated with labour market discrimination. As a result, ethnic minority respondents may have been less likely to have accumulated assets by age 23 (through having a lower income), and also less likely to have worked between 23 and 33 (through discrimination). If this is true, then it is important that the model includes a variable for ethnic group (the Bynner/Paxton model did not). Otherwise what is really an effect of 'race' discrimination would instead be attributed to a lack of assets. Granting assets to such disadvantaged groups would not remove the main causal factor, and hence could have a more limited effect than the model predicted.

One could also build a case that getting married or having children early – perhaps as a teenager – would both be associated with lower assets at age 23, and also with many of the poorer labour market outcomes, and higher chances of marital disruption. The Bynner/Paxton model did not include these variables either.

In each case, it is argued that the fact that people have savings is giving us information about their background that is not captured in the other variables in the model. If so, in the model the effect that is being attributed to having savings might instead be the result of those unmeasured or omitted factors.

One means of dealing with this is to include a large range of control variables (as suggested by Bynner and Paxton 2001). A number of seemingly important control variables were included in their models – the same set of control for each outcome of interest. However, this still leaves open the possibility that additional control variables – perhaps a set of variables tailored towards each specific outcome of interest – would have altered the estimated effect of holding assets. It is clear that the effect of savings is reduced, as more control variables are added. There is also the possibility that *unmeasured* characteristics may have been responsible both for higher savings, and better outcomes such as less time unemployed. This would, again, lead to a spurious association between savings and those outcomes.

A slightly more technical account of statistical ways to deal with these problems appears in the annex to this chapter. The next section attempts to use the longitudinal data available as another control on the outcomes being measured.

## 5.5 Did assets change outcomes?

So far, our findings mirror those of the NCDS analysis, and have used similar methods. People with savings had a range of more favourable outcomes, considered five years later. The positive effect of savings persists, in certain life areas, even after controlling for a range of background variables. The greatest effects were found in the labour market arena, and in terms of smoking behaviour (here taken to be an important measure of health).

The multivariate analysis controlled for a range of different background variables. However they did not take into account the particular outcome being measured, as it appeared in 2000. For instance, smoking five years ago is going to be a very strong predictor of whether people smoke now – should such a variable be included in models of smoking? Similarly, those unemployed five years ago are more likely than other groups to experience unemployment later.

Rather than model these outcomes again, we begin with some simple tabulations of the outcomes of interest, measured in both 1995 and 2000, measured alongside whether people had savings in 1995. This is shown for men in Table 5.5, for women in Table 5.6. The focus is on those outcomes found to be statistically significant in the earlier multivariate analysis.

Among those with savings in 1995: 79 per cent of smokers in 1995 were still smoking in 2000. This compared with 83 per cent continuity of smoking among those without savings in 1995; this is too small a difference to be statistically significant. Conversely, there was no difference at all in the rates of starting to smoke among those with and without savings in 1995.

However, among men, there was some statistically significant effect of holding savings on the likelihood of future unemployment (among workers), and employment status in 2000 (again, among workers). The rates of earnings growth during 1995-2000 were very similar among men with and without savings in 1995.

**Table 5.5 Assets and changes of status/earnings 1995-2000: men**

	<i>Cell percentages</i>		
	<b>Those without savings in 1995</b>	<b>Those with savings in 1995</b>	<b>Statistical significance</b>
<b>Whether smoking in 2000</b>			
Smoker in 1995	83%	79%	-
Non-smoker in 1995	7%	7%	-
<b>Whether unemployed 1996-2000</b>			
Employee in 1995	9	6	*
Unemployed in 1994	67	52	-
<b>Whether in work in 2000</b>			
Worker in 1995	88	91	*
Non-worker in 1995	50	57	-
Average earnings in 1995	£1345	£1510	
Average earnings in 2000	£1731	£1929	
Difference	£386	£419	-
Ratio	+29%	+28%	-

Base: aged 16-55 in 1995.

\* indicates significant at 5% level.

Among women with savings in 1995: 81 per cent of smokers in 1995 were still smoking in 2000. This compared with 84 per cent continuity of smoking among those without savings in 1995.

For women, there was a statistically significant effect of savings on later chances of being in work (among non-workers in 1995), and on rates of earnings growth for workers.

**Table 5.6 Assets and changes of status/earnings 1995-2000: women**

	<i>Cell percentages</i>		
	<b>Those without savings in 1995</b>	<b>Those with savings in 1995</b>	<b>Statistical significance</b>
<b>Whether smoking in 2000</b>			
Smoker in 1995	84%	81%	-
Non-smoker in 1995	6%	5%	-
<b>Whether unemployed 1996-2000</b>			
Employee in 1995	8	6	-
Unemployed in 1994	43	53	-
<b>Whether in work in 2000</b>			
Worker in 1995	79	81	-
Non-worker in 1995	36	47	**
Average earnings in 1995	£767	£864	
Average earnings in 2000	£982	£1210	
Difference	£215	£346	**
Ratio	+28%	+40%	**

Base: aged 16-55 in 1995.

\*\* indicates significant at 1% level.

*Controlling for other factors as described in the annex, however, tended to weaken this evidence in favour of asset-effects.* The above two tables are based on all respondents, not controlling for a range of background factors. In the modelling of the effect of savings, using a differences-based approach, we found only insignificant results of having savings.

It has been argued (in Chapters 3 and 4), there is a large part of individual savings behaviour that cannot be explained with standard observable variables, but reflects persisting unmeasured factors at the individual level. It is important that such differences are taken into account, where possible, in any modelling of the effects of having savings on later life outcomes.

The analysis in this section finds that, with appropriate statistical methodology, there is no evidence that having savings affects later life outcomes. In any event, even simple table-based results shows that the potential size of effects is quite small.

It is possible that statistically significant results would be found with alternative approaches, perhaps looking at those with more than a certain level of savings, or perhaps drawing the savings variable from more than one wave of data, given the rate of turnover of savings behaviour for particular years. It is worth remembering that only a five-year span is considered in this chapter, whilst analysis of the NCDS covered a decade, and further analysis is extending this time horizon still further.

A larger sample may also find results that do reach statistical significance. It remains important also to consider the size of any effects, and the extent to which differences between those with and without assets have been adequately catered for.



## Annex to Chapter 5: Controlling for the endogeneity of savings in the modelling of outcomes of interest

In principle there are a number of statistical approaches available to address the problem of how to treat the savings variable. These are alternative ways of attempting to deal with the effects of measured and unmeasured differences between respondents with and without assets.

Most of the econometric literature in this area relates to the effects of labour market programmes, such as training or advice that is taken-up by a self-selecting group. It is possible to apply the same methods, instead looking at savings rather than a training programme. However, it is clear that a single one-off programme intervention is very different from whether people have savings. As we have seen in this report, there is considerable variation in people's saving behaviour analysed year-on-year. And there is also a large individual-specific component to saving behaviour that is not reducible to changes in easily observed circumstances. Hence caution is advised.

Drawing on the labour market evaluation literature, we may identify four distinct approaches that might be tried:

- Attempt to model selection first, and include a variable indicating the propensity to have savings in models of the outcomes of interest [selection models, adapting earlier work by Heckman].<sup>16</sup>
- An alternative would be to use 'propensity score matching' to model the likelihood of having savings [matching].
- Look at differences over time in the outcome variables comparing those with and without savings [differences-in-differences, DiD].
- Find variables that are strongly correlated with savings, but not with the outcome of interest, as a replacement variable for savings [instrumental variables].

The differences-in-differences approach is the closest to the analytical approach taken in section 5.5. The DiD estimator takes into account the level of the outcome variable before and after the programme. In effect, this estimator uses the change in the outcome variable for non-participants (those without savings) as an estimate of the change that would have occurred for those with savings. In principle this approach should identify the additional effect of having savings, after controlling for biases caused by unobserved individual differences.

The differences-in-differences estimator is derived using a model of the form:

$$Y_{it} = a + b.X_{it} + c.PROGRAM + d.WAVE + e.\{WAVE*PROGRAM\} + \text{error}$$

$Y_{it}$  is the outcome of interest, analysed for each person  $i$  both before and after the programme being evaluated (time  $t=0$  before the programme, 1 afterwards). For the other variables  $X_{it}$  represents 'control' variables; PROGRAM = 1 if in the treated group (on this occasion, has savings) and 0 otherwise; WAVE=1 if wave-10, 0 if wave-5. The coefficient on the interaction term ( $e$ ) then represents the program effect – the asset-effect in our case.

Models of labour market outcomes in 2000, based on the DiD model, did not find statistically significant effects of having savings (in 1995) for either men or women. They had small effects in the simpler analysis shown in section 5.5; their lack of significance in the models may mean either that some of the control variables account for the apparent differences, or the DiD estimator is picking up some unmeasured differences between those with and without savings.

<sup>16</sup> We understand that further work using this approach is being undertaken by IPPR and the Centre for the Analysis of Social Exclusion (CASE).



# 6 Conclusions and main findings

## 6.1 Introduction

At any one time, only a minority of people are saving. Just over one in four are putting money into a savings account of some kind and a similar proportion are putting money by for their old age – either as a private (or non-state) pension or as liquid savings set aside for old age. These relatively low levels of saving have been the focus of much debate, with a number of important Government and private sector initiatives designed to encourage more people to save more money.

An important aspect of the debate has been the claim that saving and asset-holding has important and positive effects on people's lives. For example, it has been reported that both men and women who have savings at age 23 are less likely to become unemployed, to suffer a relationship breakdown or to suffer general malaise by the time they are 33. But when we refined these models we found that having savings had only insignificant effects on such outcomes (Chapter 5).

That does not, however, undermine the case for promoting higher levels of saving and encouraging saving among those likely to experience low incomes. Most people, whether they save or not, aspire to having some money put by for a 'rainy day' or their old age simply because it makes their lives more comfortable. It is an understanding of the mismatch between aspiration and reality that is the key to the debate on savings and pensions.

In previous chapters we have sought to understand the range of influences on saving behaviour, with each chapter looking at things from a slightly different standpoint. This final chapter attempts to bring all this analysis together to provide an overview of the factors that seem to be most important and, in doing so, to assess the implications for policy that flow from them.

## 6.2 Overview of saving

In 2000, 43 per cent of adults said that they saved money from their current income, with 30 per cent doing so regularly. On average they put away £154 a month.

A similar proportion (36 per cent) were putting money away for their old age – either as liquid savings or in a private pension. Most of these (31 per cent) were saving £25 or more a month and the majority (25 per cent) were putting money into an occupational pension.

In fact, the proportion of people saving for either purpose varied very little over the ten years from 1991 to 2000, despite the fact that this included years of deep depression as well as ones of greater prosperity. Very optimistically, the figures on general saving could be described as being on an upward trend – a regression of year on year saving showed that each year generated a modest increase in saving, but this was statistically significant only for pensioners. The cash amount saved increased over the same period by more than the growth in RPI – but again this was largely because pensioners were saving more.

### 6.2.1 Stability of general saving

The picture of overall stability was not, however, matched by the stability of general saving among individuals. Three in ten of those saving at any given interview were not doing so the following year; while two in ten of non-savers in a particular year were saving a year later. Moreover, the majority of people who continued to save had changed the amount they were saving a year later.

Indeed, of those who were interviewed at all ten BHPS surveys, less than one in ten said that they were saving every year from 1991 to 2000; while only one in six said they had not saved over this period. That means that three-quarters of the people interviewed had saved in some years but not in others. This accords with earlier qualitative research which showed that the most common pattern of saving by far was 'instrumental', involving cycles of save and spend, and that very few people never saved at all (Whyley and Kempson, 2000a).

Altogether, a third of people were classified as consistent savers, either having saved for at least seven of the ten waves or saving for each of the most recent three waves. Conversely just over half (53 per cent) of people were classified as consistent non-savers either not having saved for at least seven of the ten waves or not saving for each of the most recent three waves. That left 15 per cent of people whose pattern of saving was more sporadic.

## 6.3 Influences on the pattern of general saving

It is common in surveys for people to say that they do not save because they have insufficient income to do so. Our analysis tends to support that view – but it was only part of the picture as there were people on low incomes who saved regularly and much better off people who did not. Indeed, qualitative research has shown that there is a group of people who will try to save however little they have to live on, and others who will always spend up to their income (and often beyond) (Whyley and Kempson, 2000a).

That said, economic factors had by far the largest impact on saving, including the likelihood of someone saving regularly (Chapter 2) and the odds of them stopping or starting to save (Chapter 4). Family circumstances did play a part, but to a lesser extent once income was taken into account. Age, however, was relatively unimportant – in strict contrast to saving for retirement, as we shall see later.

### 6.3.1 Employment status

Being in paid employment (particularly as an employee) was clearly one of the most important determinants of saving behaviour. It increased the level of regular saving (Chapter 2) and the likelihood of someone continuing to save over a number of years (Chapter 3). A move into paid employment also greatly increased the odds of someone starting to save (Chapter 4). The effects of unemployment and self-employment were particularly interesting.

### 6.3.2 Unemployment

Compared with employees, people who were not in employment had significantly reduced odds of being a regular saver – and especially so if they were unemployed (odds 0.4) (Chapter 2). Moreover, people who had experienced a spell of unemployment were far more likely than the average to have been non-savers for at least seven of the past ten years (Chapter 3). This would be consistent with research showing that some people alternate between periods of unemployment and low-waged work.

By pooling all the data across the ten waves, we were able to run a regression model that controlled for the non-varying characteristics of people and looked at the factors that did change over time. When workers lost their jobs there was a 23 per cent decline in the proportion saving. In fact, seven in ten savers stopped, although the average amount saved by those continuing to do so was unchanged – almost certainly reflecting incomes from others in the household (Chapter 3).

Unemployment increased the odds of a saver stopping saving by 4.2. It also reduced the odds of a non-saver starting to save to 0.3. On the whole, better-off savers were more likely to stop saving when they became unemployed; poorer ones were less likely to do so. The explanation for this almost certainly lies in their incomes before they lost their jobs. Put simply, richer people would have experienced a much bigger drop in income, which would have left many of them with outgoings that exceeded their income. Conversely, those who had been in low-paid work would have experienced rather less of a drop and there were, in any case, far fewer savers among them. There was, however, no difference in the effect of unemployment on saving behaviour of men and women (Chapter 4).

People moving into work, following a spell of unemployment had large increases in saving, although at a slightly lower level than the decline associated with becoming unemployed (Chapter 3). The odds of starting to save were increased to 1.8. At the same time, the amounts saved by people who remained a saver during a move into work also increased markedly – from £75 to £121 a month (Chapter 4).

### 6.3.3 Self-employment

The effects of self-employment were also interesting. Compared with employees, people who were self-employed had reduced odds of saving regularly (0.8) (Chapter 2). Overall, employees moving into self-employment had a small drop in saving – of five percentage points – although this masks a more complex picture where a third of savers stopped saving and quarter of non-savers started. Employees who continued to save when they became self-employed greatly increased the amount they put by from £137 to £191 (Chapter 4).

Moves into self-employment from either unemployment or economic activity, however, were associated with a net increase in the proportion of people saving – of seven percentage points. The amounts saved by existing savers also increased markedly from £75 to £107. However, becoming self-employed both raised the odds of an out of work saver ceasing to put money away to 1.8 but it also increased the odds of a non-saver starting to save to 1.8. In other words, some people seem to have been saving up to set up their own business and then invested any spare cash into it; while others became able to start saving when they became self-employed (Chapter 4).

### 6.3.4 Income

In general, income levels had less of an effect on saving behaviour than those noted for employment status. Even so, higher incomes meant that people were more likely to save regularly from their income and to do so consistently over a number of years. Moreover, compared with others, the saving behaviour of better-off people was less susceptible to changes in income.

Having an above-average household income, allowing for family size,<sup>17</sup> increased the odds of someone saving regularly by 1.3. Conversely people with below average incomes had reduced odds of regular saving (Chapter 2). Consistent savers, who had been putting money by for seven or more of the past ten years, had the highest incomes and the lowest level of income variability. In contrast, consistent non-savers not only had the lowest incomes but also the greatest degree of income instability (Chapter 3).

Changes in household income – even quite large ones – had less of an effect on savings than changes in economic activity. Although a fall in income was associated with reduced levels of saving and a rise with increased savings levels, regression analysis showed that the level of income someone has plays far more of a part than the fact that it has changed (Chapter 4).

An *earned* income drop of 10 per cent or more increased the odds of people who had been savers stopping to save by 1.5; while an income increase of at least 25 per cent was needed to raise the odds of a non-saver starting to save by a similar amount (Chapter 4).

As noted above, the saving behaviour of richer people was less susceptible to these income changes than the average. This is not entirely unexpected, as they would have had more spare income to act as a cushion.

Women were more likely than men to stop saving following a fall in household income, but less likely to do so if they had a fall in their own earnings. This would be consistent with the fact that women are often the second earner in households with young children.

### 6.3.5 Subjective assessments of financial situation

People's own assessment of their financial situation was by far the most significant factor in the regression models of regular saving. Being 'comfortable' financially increased the odds by 2.6 compared with people who said that they were 'just getting by', even when income, employment status and family size were taken into account. On the other hand, people who said that they were finding things difficult financially had reduced odds of 0.4 or less (Chapter 2).

This effect persisted when we pooled the data across all ten annual waves of the BHPS and ran models that controlled for the non-varying characteristics of people and looked at the factors that did change over time. Where people were living comfortably, independently of their income level or economic activity their likelihood of saving was 15 percentage points higher than for those 'just getting by'. Conversely, there were strong negative effects of finding things difficult (Chapter 3).

It is clear from the analysis that people's subjective assessments of their financial situation were only determined in part by their incomes, as there were poor people who described their situation as comfortable and rich ones in financial difficulty. Saving behaviour was strongly associated with subjective assessments at all income levels – but especially so for those on low incomes (Chapter 2).

Although we were able to control for family size and housing tenure (and hence also for housing costs to some degree), it is likely that people's subjective assessments were, at least in part, standing as a proxy for disposable income in our models. That said, we know from qualitative research that some people place a higher priority on saving than others and that these people tend to spend less on discretionary items and are more content with their lot (Whyley and Kempson, 2000a). This too, may have been reflected in their subjective assessment of their own finances. Finally, it may well be that the influence runs in the opposite direction and having money in savings increases people's feelings of financial well being. In practice, it is likely that each of these explanations holds to some degree.

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<sup>17</sup> Equalised income before housing costs.

### 6.3.6 Windfalls

Although we found that assets did not have a significant effect on key outcomes in people's lives, we did find evidence that the receipt of a windfall could influence general saving behaviour. A windfall increased the odds of someone being a regular saver by 1.2 (Chapter 2). Indeed, among people who had received one in the past year the proportion saving increased by three percentage points. Existing savers did not, however, increase the amounts they put by from their current income (Chapter 4). As can be seen, these effects were not large, compared with others that we identified. This is because a windfall seemed to have quite diverse effects. Just under one in three non-savers (28 per cent) began to save following the receipt of a windfall, but most did not. At the same time, a quarter (24 per cent) of savers ceased to save in the year after they had received their windfall (Chapter 4). This is consistent with earlier qualitative research (Rowlingson et al 1999; Whyley and Kempson, 2000a).

With the introduction of the Child Trust Fund in mind, we investigated the effects of windfalls on people of different ages. This showed that younger windfall recipients, and especially those still in their teens, were much more likely to be saving than their peers who had not been so lucky. Moreover, the average size of the windfalls received by teenagers was really quite small (median amount £57; five per cent trimmed mean £303) (Chapter 2).

### 6.3.7 Age

Age had surprisingly little effect on general saving behaviour. Although people in their twenties saved more than those in their teens and those in their thirties more again, these effects were not significant when we ran a regression analysis which included (among other things) employment status, income and family circumstances (Chapter 2). A cohort analysis also indicated common patterns of saving across different birth cohorts (Chapter 3).

The transition analysis showed that the level of saving increased at two key birthdays. At age 21 the proportion of savers increased for both men and women and the amounts saved also increased. This was of a similar order of magnitude to receiving a 25 per cent increase in earnings. Indeed, it may well be explained by the fact that a significant minority of this age group would have been leaving higher education and starting work. There was a similar, but slightly smaller, effect at age 30 (Chapter 3). In both cases, the effect is consistent with earlier qualitative research which shows that young people often defer saving until they have had a period of spending before settling down (Collard, Kempson and Dominy, 2003; Whyley and Kempson, 2000a). It is also interesting to note in this context that the windfall effects discussed above were greatest for people in their late teens or late twenties, suggesting that they may have been reinforcing these patterns of saving.

Looking at ten-year patterns of saving, the proportion of people who had saved for at least seven of the ten years was highest among those aged under 50. Even so a fifth of people aged over 70 had saved this consistently (Chapter 3).

### 6.3.8 Gender

Men appeared to save regularly more often than women – but only because they tended to live in better-off households. In fact, when we allowed for income and family circumstances in a regression analysis, women had slightly higher odds of being a regular saver.

Women savers were, however, more likely than men to stop saving in the face of many events, including an increase in family size, first birth, divorce, and (especially) widowhood. This is almost certainly because these events have a far bigger impact on women's incomes. As discussed above,

women were also more likely to stop saving following a 10 per cent drop in household income, but were less likely to stop following a 10 per cent drop in their earnings. Unemployment had much the same effect on both men and women (Chapter 4).

Women non-savers were also less likely than men to start saving following an increase in family size – otherwise the same factors influenced men and women to start saving (Chapter 4).

### 6.3.9 Marital status

People living with a partner were more likely to be saving regularly than singles. But this effect disappeared in the regression analysis when we controlled for income and other factors (Chapter 2). Changes in marital status did, however, affect the propensity to save.

#### Getting married

In the transition analysis we found that, overall, people getting married saved less than when they were single (fewer saved and those that did save put slightly less money by). It should, however, be noted that this decline was from a very high base as more than half of people had been saving when they got married. Moreover, while 29 per cent of savers stopped saving after getting married; 25 per cent of non-savers started to do so. In other words, marriage can act as a stimulus to either stop or to start saving. Marriage did not, however, increase the odds of either a saver ceasing to save or a non-saver starting to do so (Chapter 4).

#### Separation or divorce

The effect of separating or getting divorced was to reduce the proportion of people saving by five percentage points. In fact, close to half of savers stopped saving following a divorce or separation; while only 15 per cent of non-savers started to save. The average amounts put away by people who continued to save also reduced, although by only a relatively small amount (Chapter 4).

In contrast to getting married, separation or divorce greatly increased the odds of a saver ceasing to save (by 2.2); it also decreased the odds of a non-saver starting to save by 0.7. Women were more likely to stop saving than men – which is almost certainly because they tend to experience much bigger falls in incomes as a consequence of separating (Chapter 4).

#### Widowhood

Widowhood had quite diverse but rather large impacts. It led to 41 per cent of non-savers starting to save, but 53 per cent of savers ceasing to save. It also led to a drop in the amounts put by by people who continued to save – from £105 to £94 a month (Chapter 4).

Among savers, widowhood increased the odds of them stopping saving by 2.9; but at the same time it increased odds of non-savers starting to save by 2.6. These effects are rather hard to explain, but must reflect the fact that some people were cushioned by income they have received from insurance policies or pension provision following the death of their partner, while others were not (Chapter 4).

Again, women savers were more susceptible to the effects on stopping saving than men and this, too, is likely to be explained by the larger falls in income they experienced (Chapter 4).

### 6.3.10 Children

Parents often say that children are the main focus for their saving (or aspirations to save) but that they also put a strain on their budget that reduces their capacity to put money by (Kempson, 1998; Whyley and Kempson, 2000a).

Having children did affect the proportion of parents saving regularly – but only if they had three or more. But this was entirely due to the effect children had on the household income, as the presence of children in a household was not significant in regressions of regular saving that included equivalised income (BHC) and subjective assessment of well being. So while children may become the focus for saving they certainly reduce parents' ability to put money by (Chapter 2).

When families had their first child, the proportion saving dropped by six percentage points. This was about the same impact as getting divorced – although the proportion of people saving (45 per cent) was a lot higher than among the divorcees prior to their divorce (34 per cent). Four in ten of those who had been savers stopped. Overall, having a first child increased the odds of a saver ceasing to save by 1.7 and had a greater effect on women than on men. The amounts saved by people who continued to save also fell from £135 to £116. Again this fall was from a relatively high base.

When families expanded further, both the proportion of savers and the amount saved fell further from a level that was already below average. Again four in ten savers stopped, while very few non-savers started to save. So that having further children increased odds of savers ceasing to save by 1.6; and decreased odds of non-savers starting to save to 0.5. In both cases the effect was greater for women than for men.

## 6.4 Influences on saving for retirement

In contrast to general saving, age had a very big impact on saving for retirement. The effects of changes in work status were also even larger than they were on general saving. Other factors played less of a role on saving for retirement than they did on general saving.

### 6.4.1 Age

Age had a very large effect on saving for retirement that was not explained by either income or financial strain. In general, people in their forties had the highest levels of retirement saving and odds fell to 0.8 among people in their thirties and to just 0.3 for those in their twenties (Chapter 2).

In fact, the proportion of people saving for retirement was very small among people aged under 30. There was some increase in retirement saving at 30, but it was when people reached the age of 45 that the increased propensity to save was most pronounced. After that age it began to fall – presumably as a result of people taking early retirement (Chapters 2 and 4).

### 6.4.2 Employment

Being out of work dramatically decreased the odds of saving for retirement to 0.1, regardless of the reason why people did not work (Chapter 2). It is not, therefore, surprising that changes in work status were strongly linked to saving behaviour. Indeed they had among the largest effects of all.

When workers lost their jobs there was a dramatic decline in saving for retirement (from 41 to 18 per cent) – and almost the entire decline was accounted for by a fall in the proportion of people with occupational pensions. Conversely, when unemployed people went into work there was an increase in retirement saving. It should, however, be noted that this increase was a good deal lower than the decline following unemployment (from 12 to 24 per cent) and that people who had recently been unemployed were much less likely to save than others in employment.

There were, however, also some important differences in saving for retirement between people working as employees and those who were self-employed. All other things being equal, self-employed people had only half the odds of saving for retirement compared with someone who was an employee (Chapter 2). Employees moving into self-employment had a very large drop in saving for retirement – by 16 percentage points. This was almost all due to a dramatic drop in the proportion paying into an occupational pension (a 19 per cent fall) that was nowhere near matched by the modest increase in saving in personal pensions (two per cent) or a savings account (one per cent). Moves into self-employment from either unemployment or economic activity did not have the same effect (Chapter 4).

The overriding importance of being in work – and especially of being an employee – will be of considerable importance in tackling the financial under-provision many people face as they enter retirement. Moreover the relatively high take-up of occupational pension schemes (76 per cent) shows the important role that employers play in encouraging people to make financial provision for their old age. This is consistent with early research on the take-up of stakeholder pensions (ABI 2002).

### 6.4.3 Incomes

Household income had a slightly bigger effect on saving for retirement than it did on general saving. People in the top two quintiles had increased odds of saving for retirement (1.4 or more) compared with those in the middle quintile; those in the bottom two quintiles had reduced odds (0.7 or less) (Chapter 2).

Changes in earnings – even quite significant ones – had less of an effect on saving for retirement than changes in economic activity. An annual increase in earnings of one quarter raised the proportion saving for retirement by six percentage points. Most of this increase was due to an increase in the proportion contributing to an occupational pension (quite possibly as a result of changing jobs and moving to an employer offering an occupational pension) (Chapter 4).

A decrease of 10 per cent in earnings however, led to a fall of 10 per cent in the proportion saving for old age – almost all of it due to a decline in the proportion contributing to an occupational pension (again this may well have resulted from a job move to an employer who did not offer an occupational pension) (Chapter 4).

### 6.4.4 Subjective assessments of financial situation

Compared with general saving, people's own assessment of their financial situation had much less of an impact on saving for retirement. Even so, people who said they were comfortable financially had 1.5 times the odds of retirement saving than those just getting by; while those in financial difficulty had reduced odds (0.6).

### 6.4.5 Gender

The under-provision for retirement by women has been of some concern to policy makers for some time. In fact, until their mid twenties men and women had an equal likelihood of membership of both an occupational pension scheme and of a personal pension. But by their late twenties women's membership had peaked at around one in three and remained more or less at that level until age 50, when it fell steeply. For men, peak membership was higher, at a half and this was not reached until their mid-thirties. Again there was a steep decline at age 50 (Chapter 4).

In fact, the odds of someone making their own provision for their retirement was greatly reduced if they were not a head of household (0.6). This is particularly interesting, as gender did not have a significant effect in these models. In other words, it would seem that women are less likely than men

to save for their retirement for one of two reasons. First, women who live with a partner are more likely to rely on their husbands to make the financial provision for their old age. Secondly, female heads of household are more often lone parents or elderly people living alone whose under-provision can be explained by their age and employment status.

#### 6.4.6 Marital status

Marital status, and changes to it, had little impact on saving for retirement – in contrast to general saving.

Compared with people who cohabited, those who were married had 1.3 times the odds of saving for retirement; being separated did not affect the odds at all (Chapter 2). Moreover, in the transition analysis we found that neither getting married nor divorce/separation affected saving for retirement – quite possibly because women would have experienced the greatest income drops and many of these had already ceased saving when they became divorced. The death of a partner, however, reduced the proportion of people saving for retirement – a fact that is more difficult to explain other than by labour market changes (Chapter 4).

#### 6.4.7 Children

Not having dependent children increased the odds of saving for retirement relative to people with just one child (1.4) (Chapter 2). On the other hand, the birth of a child (either the first one or subsequent children) had little effect (Chapter 4). These findings are almost certainly explained by the fact that people start putting money by for retirement when their children are no longer dependent on them.

### 6.5 Policy implications

The Government is committed to increasing levels of saving and, in the past five years, has taken a number of important steps that are designed to bring this about.

In 1998, it published a Green Paper, which, among other things, replaced SERPS with the State Second Pension and reformed the regulatory framework for saving, setting up a single regulator for savings and investments - the Financial Services Authority. It also introduced Stakeholder Pensions, which have been available since April 2001. These are designed to be simple, flexible and have low charges in order to encourage people on moderate incomes to save for their retirement.

Following this, the Government commissioned two independent reviews of pensions and saving. Both reports were published in 2002. *A simpler way to better pensions*, by Alan Pickering, put forward suggestions for simplifying the occupational pensions system (Pickering, 2002). Ron Sandler's report, *Medium and long-term retail savings in the UK*, addressed the market for personal pensions and other personal investments and recommended 'a suite of simple, price-controlled and regulated products that can be sold through a simplified sales process', modelled on the principles underlying Stakeholder Pensions (HM Treasury, 2002).

A second Green Paper, *Simplicity, security and choice: working and saving for retirement*, in turn, followed these, and was published in December 2002. This proposes a number of reforms, including ones intended to extend access to good work-place pensions that offer better protection for members. It also announces the Government's intention to establish an independent Pensions Commission, to 'assess trends in occupational and private pensions and long-term saving and to advise whether there is a case for moving beyond the current voluntarist approach'.

Policy initiatives and consultations on general saving have run in parallel with these developments on pensions. Individual Savings Accounts (ISAs) were introduced in 1999 to encourage saving among lower and moderate-income groups. Then, in November 2000, HM Treasury published a consultation paper, *Helping People to Save*, as part of its Pre-Budget Report (HM Treasury, 2000). This highlighted the importance of savings in providing people with independence throughout their lives; security if things go wrong; and comfort in old age. It set out the Government's strategy for saving, which identified the importance of creating the right environment to encourage saving as well as the need for incentives to encourage saving, especially among people on lower incomes (See figure 6.1).

**Figure 6.1      The Government's strategy for saving**

***Creating the right environment for saving***, through:

- a stable macro-economy with low inflation;
- employment opportunities for all;
- a well-regulated and efficient market in financial services;
- flexible and accessible savings products; and
- an integrated and coherent approach to saving.

***Creating the right incentives for people to save***, through:

- a tax system with greater incentives to save, particularly for low-income savers;
- a tax and benefit system that does not unfairly penalise savers; and
- lower charges on financial products to enhance rewards to saving.

***Providing information and education to help people make the right saving choices***, through:

- clear, impartial information; and
- greater financial literacy.

Two subsequent papers have developed these ideas further: a consultation paper (HM Treasury 2001a) and a paper setting out the results of this consultation (HM Treasury 2001b). These set out the Government's plans for the Saving Gateway and the Child Trust Fund.

The Saving Gateway is a savings scheme for people of working age who are in receipt of state benefits or in-work tax credits, which offers matched funding for every pound saved, up to a limit. It is currently being piloted in five localities across the country, with the pilot running from 2002 to late 2004. During this pilot phase, the matched funding is pound-for-pound up to a limit of £375 over 18 months. If the scheme is rolled out nationally, the consultation paper indicates that this could be increased to £1,000 over three to five years.

The Chancellor announced the introduction of the Child Trust Fund in the 2003 budget. All children born after September 2002 will receive a lump sum of at least £250 at birth, whilst a second rate of £500 will be paid for the poorest one-third of families (those qualifying for full Child Tax Credit). However, it is not expected that the scheme will be established until 2005. During children's lives parents, family members and friends may make extra contributions of up to £1,000 per year. Further

details of the Child Trust Fund are expected in Summer 2003, but Gordon Brown announced that: *'we will report shortly on the proposal that during primary and secondary school years each child receive additional payments into their Child Trust Fund'*.<sup>18</sup>

Underlying all these initiatives has been a Government commitment to develop an integrated and coherent approach to saving that incentivises more people to save more money.

It is beyond the scope of this report to provide a detailed critique of the various initiatives outlined above. On the other hand, the analysis we have undertaken does offer important insights on the overall strategy being adopted.

First, it is clear that there is a real need for the integrated and coherent approach that is being advocated by Government. People are inclined to save for different purposes at different stages in their life. Pulling our analysis together, it seems that young people increase their propensity to save when they leave their teens and pass the age of 21. Both the proportion of people saving and the amounts they save reach high levels just before marriage and then fall. There is a further decline with the first child and also with each subsequent one. Throughout, economic factors play an important part.

Saving for retirement begins rather later in life and peaks at 45. The peak is, however, far earlier for women than for men – presumably because women are more likely either to work part-time or to give up work altogether when they are bringing up a family.

Initiatives to promote higher levels of saving will almost certainly have the greatest impact, therefore, if they reinforce these normal patterns of saving. Younger people will be far more susceptible to initiatives designed to encourage general saving, while the promotion of saving for retirement will be much more effective among those aged over 40. The challenge is to encourage life-long saving through products that are flexible enough to accommodate people's changing aspirations over their lifetime.

Previous research has shown that matched contributions could, potentially, offer a greater incentive than tax relief for people on lower incomes to save money in a pension (National Consumer Council, 2003; Vidler, 2002). At the same time, unpublished monitoring of the Saving Gateway indicates that pound-for-pound matching of savings is encouraging many low-income non-savers to start to put money by. An integrated, life-long, and simple savings/pension product with matched contributions could, therefore, act as a stimulus to saving among people on low incomes. A suite of 'stakeholder' products, as proposed by Ron Sandler, has attractions, although the range of products suggested would almost certainly be too complex for most people on low incomes. A single flexible product, useable for a limited range of purposes, such as education, house purchase or retirement, might be more appropriate.

At the same time, our analysis shows the importance of finding ways of minimising the effects of the life events that are associated with a cessation of saving, while building on those that are linked to it starting.

The biggest effects are related to unemployment and separation or divorce, both of which can have a large impact on people's incomes and ability to save. Conversely, finding a job and re-partnering will act as a stimulus to saving. In contrast to general saving, changes to employment status have a much

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<sup>18</sup> In earlier discussions it had been suggested that Government would make further contributions of £50 (£100 for poorer families) at the ages of five, 11, and 16 (DfES press release 26 April 2001).

greater impact on saving for retirement than changes in family circumstances. Indeed, being in employment – and especially working for an employer with an occupational pension scheme – greatly increases the likelihood of someone saving for their retirement.

This lends weight to the Government view that maximising the opportunities for people to work is the first step in encouraging people to save. It also shows the very important role that employers play in encouraging saving – both generally as well as for retirement. At the same time, the analysis shows the importance of providing continuity when people change employers or are out of work. The National Consumer Council, in its response to the recent Pensions Green Paper, has recommended that the Department for Work and Pensions ‘should pursue measures to facilitate the development of multi-employer occupational schemes’. This has been tried with some success in the construction industry.

Finally, there is the debate on asset-based welfare. When we refined the models that, previously, had shown a link between asset-holding and favourable life outcomes we found that the apparent link could be explained by other factors. But that is not to deny the importance of people having assets as they, without doubt, make life more comfortable when people experience shocks to their income or enter retirement.

Our analysis also shows that receipt of a windfall can also act as a stimulus for some people to start saving and that the Child Trust Fund, as announced in the 2003 budget, may well have this additional benefit.

In short, the influences on saving behaviour are complex and we have only begun the process of unravelling them in this analysis. Already, though, they show the broad direction that needs to be taken to encourage higher levels of saving. The fine detail will, however, require further investigation.