

THE DISTRIBUTION OF FINANCIAL WEALTH IN THE UK:
EVIDENCE FROM 2000 BHPS DATA

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Executive Summary

This paper examines evidence from the British Household Panel Study on the distribution of financial wealth amongst benefit units in 2000. It also provides some analysis of the links between financial wealth, pensions and housing wealth. For part of the sample, the data also allow a comparison of holdings in some elements of the financial portfolio in 2000, and in 1995. Amongst other things, the paper shows that:

- Looking at financial wealth defined as savings plus investments minus debts, half of the population hold £600 or less.
- There is a large amount of variation in the amount of wealth held by the population – one quarter are £200 or more in debt but a further quarter have £9050 of assets or more. Inequality of this magnitude is much more than is found in the income distribution. This is to be expected given the dynamic nature of the process of wealth accumulation.
- The majority of the youngest members of our sample have zero or negative wealth, except within the highest income group. Older groups have higher wealth on average than younger groups. Half of sixty pluses in the top fifth of the income distribution have £48,000 or more, while for those in the same age-group and the bottom fifth of the income distribution half have £1,721 or less. Within income groups, much more inequality is found amongst the old compared to the young. These patterns are in accordance with predictions made by standard economic theory.
- Financial wealth is just one part of a family's portfolio of assets. When considering saving for retirement, pensions are extremely important and housing wealth should also be taken into account. There is no information on the value of pension wealth in the BHPS, but for those with a house, the value of housing wealth is, on average, far greater than the amount of financial wealth held.
- Among those observed in both 1995 and 2000, over half who started with zero financial wealth had accumulated some wealth by 2000, and 40 per cent of those with £1-£1000 of wealth in 1995 had increased their holdings by 2000.
- Three quarters of those who had no wealth in 1995 and 2000 did not own a house and hence had no increase in housing wealth either. Amongst the remaining quarter who did own a house, the average increase in the value of the house was £15,000.

The data we present represent the most comprehensive available information on the financial wealth of families in Britain. Even so, they do not allow us to provide conclusive evidence on the adequacy of saving by individuals and families, not least because of the limited information on pension saving in the British Household Panel Study. This suggests the need for a survey dedicated to measuring all dimensions of wealth in detail, so that we can gain a fuller understanding of saving behaviour that would more clearly inform debate about where further policy reforms could be useful.

I. Introduction

The adequacy of saving for retirement has become an important policy issue in recent years, particularly when set against the background of an ageing population and the movement towards individual provision in pensions that has occurred in the UK over the last twenty or so years. Yet very little is known about how much various groups of the population are saving, and the way in which these savings are held, and also how the distributions of financial wealth and financial debts are related. In this note we provide comprehensive evidence on these issues from the 2000 wave of the British Household Panel Study.

When studying the distribution of wealth it is vital to bear in mind that wealth accumulation is a dynamic process so a snapshot measure of a family's wealth needs to be seen in the context of their current and future circumstances, and in particular their age. This is a point that we spell out in some detail in section three but it is worth highlighting the key issues at the outset. Even within a population of people each with the same level of lifetime resources, one might expect some inequality in saving, and even higher inequality in stocks of wealth which reflect the history of past decisions about saving and borrowing. Some of these differences will simply be due to age. But expectations about the future and the timing of income receipts and consumption needs will also matter. Differences in these factors across the population will mean that there may well be groups for whom zero or low saving, or zero or low stocks of accumulated wealth, is the appropriate economic response to their circumstances.

Coupled with underlying inequality in lifetime incomes, this leads to considerable inequality in the distribution of saving and wealth. This has a number of implications. First, not all low saving, or wealth inequality, is necessarily a cause for policy concern. Second, aggregate statistics can be very misleading with regard to the majority of the population, since such statistics are dominated by the saving patterns and wealth holdings of the very richest.¹ Third, borrowing and saving should be analysed jointly since each can be used to facilitate the smoothing of consumption (relative to needs) over the life cycle, which, within the context of the economic model of behaviour, is the family's ultimate objective. If individuals are forced to increase their saving in a particular form (for example, through increased compulsory retirement saving), they might simply choose to borrow more or transfer savings from other forms, rather than reduce consumption.

¹ A further problem with the aggregate saving rate, in particular, as a measure of saving behaviour, is in the treatment of passive saving (i.e. accumulation through unrealised capital gains). For a discussion of this issue in the US context, see W. Gale and J. Sabelhaus, 'Perspectives on the household savings rate', *Brookings Papers on Economic Activity*, 1999:1, pp. 181–214, or A. Lusardi, J. Skinner and S. Venti, 'Saving puzzles and saving policies in the United States', *Oxford Review of Economic Policy*, 2001, vol. 17, no. 1, pp. 95–116.

II. Data

The British Household Panel Study is a survey of around 10,000 adults in around 5,000 households, designed to be representative of the British population². The same individuals are interviewed annually although as in any such study, some respondents drop out of the panel over time.³ Information on a wide range of topics is collected for households and individuals including detailed questions on income, employment, household composition, education and housing.

The BHPS contains data on financial wealth in two of the ten waves of available data – 1995 and 2000, when a brief module of questions on wealth and debt was fielded. This represents the most complete and up-to-date microdata that is available for studying the wealth of the British population. Alternative information is available in the Family Resources Survey (FRS), which collects some asset information annually.⁴ However, the FRS contains only a very coarse measure of total financial assets (with individuals self-reporting their total assets into one of five bands) and no measure of joint asset ownership. Although the FRS does collect information on the ownership of financial assets at a very disaggregated level of detail, it only collects information on the total amount of wealth in each asset held for a relatively small subset of the population, and also contains no information on debt. As a result the FRS, whilst it has the status of an official survey, and benefits from extremely good income measures, is not sufficiently general to derive a wealth measure for the whole population, and to break it into savings, investments and debt components.

In each of the 1995 and 2000 waves of the BHPS data, individuals were asked separately about their savings, investments and debt. Savings are defined as interest-bearing deposit accounts, investments are other savings products such as shares, unit trusts and PEPs but do not include pensions or housing. Debt includes a wide range of products such as loans, overdrafts and mail order. For a full list of which products are included as savings, investments and debt, see Annex B. Information is recorded on different types of assets held and also on the total amount of savings, total amount of investments and total amount of debt. Finally, there is some information on whether (and, in 2000, how much of) the savings, investments and debt are held jointly with someone else. The BHPS is unique amongst British surveys in providing, for a representative sample of the population, information on the amount of debt that people hold in addition to details of their wealth.⁵ This information is particularly useful because it allows us to consider wealth levels net of any liabilities, and not just the positive assets that people have. The

² Note that since 1997, there have been an number of non-representative booster samples added to the BHPS sample. We do not use these households in our analysis.

³ In total, 62% of respondents who gave a full interview at wave 1 (1991) were still present in wave 10 (2000).

⁴ Data from the FRS are used to describe some facts about the distribution of wealth in the U.K. in Government publications such as H.M.Treasury (2000), *Helping people to save: The modernisation of Britain's tax and benefit system, number 7* (see especially chapter 2). More up to date data from the FRS are used alongside other sources in Banks, J., R. Blundell, R. Disney and C. Emmerson (2002), *Retirement, pensions and the adequacy of saving: A guide to the debate*, IFS Briefing Note 29.

⁵ The latest data from the Families And Children Survey (FACS), formerly the Survey of Low Income Families (SOLIF), provide information on wealth and debt for a sample of families with children.

analysis of section three therefore focuses on total net financial wealth as well as its individual components.

In all of the analysis that follows, our unit of observation is the "benefit unit". A benefit unit is a family group that consists of either a single adult or a cohabiting or married couple, and any dependent children (aged under 16 or between 16 and 18 and in full-time education) that live with the adult(s) in the family. The tax-unit yields a more accurate picture of how much wealth people have access to than analysis at either the individual or household level. Considering wealth across individuals is unlikely to provide an accurate picture because of sharing. Consider for example a married couple, one of whom has £10,000 of savings and the other has none. It is unlikely that the person with zero wealth would not benefit at all from their partner's savings. The question arises of how much sharing takes place. For the purposes of constructing data, we could share out this wealth across all benefit units within the household but this may give a misleading picture, for example when a non-dependent child lives with their parents.⁶ The child is likely to leave home and probably not take any of their parents' wealth with them. Of course there may be cases in which wealth will be shared with people outside of the tax-unit, or in which wealth is not shared between members of a tax-unit, but it is not unreasonable to think that this may be the minority of cases. By analysing data at the benefit unit level we are implicitly assuming that people benefit from the wealth holdings of their near family and that such sharing does not extend to other members of the household.⁷ As well as taking into account any sharing that takes place within families, analysing wealth for benefit units is convenient since it is the benefit unit that is used for the purposes of assessing entitlements to means tested benefits. This becomes particularly relevant when assets are taken into account in the calculation of entitlement to such benefits.

Data on the amount of wealth is collected in two stages. In the first stage, respondents are asked to give a precise value for wealth in each category. Respondents who say that they do not know how much wealth they have are then taken to the second stage where they are asked to give a banded answer.⁸ At any stage, refusals and 'don't know' are accepted. This means that the data available are of variable types. We either have an exact amount, a banded answer (which can be a closed band (e.g. £1000 to £5000) or an open band (e.g. £10,000 or more)) or a missing value (which arises from a refusal or 'don't know' at both stages) depending on the answers given at each stage of the questions.⁹

⁶ This is true for any single adult benefit unit in a multiple benefit unit household. Young adults with no or low assets are an important group for policy, and the use of benefit units for the analysis means that this group does not get missed as a result of being counted as subsidiary adults in larger (and potentially richer and 'older' households).

⁷ The vast majority of households (82% in 2000) contain only a single benefit unit and so the distinction between household and benefit unit sharing assumptions is redundant

⁸ The questionnaire is structured so that the limits of these bands are deduced from a series of "unfolding brackets". That is, respondents are not asked "do you have savings of between £1,000 and £5,000?", but rather are asked whether they have savings worth £1,000 or more, and then depending on the answer to this whether or not these savings are £500 or more or £5,000 or more. The process continues until a satisfactorily tight band has been deduced or until the agent refuses or does not know the answer. The precise questions are listed in Annex C.

⁹ In the data for 2000, we have an exact amount of savings for 68 per cent of benefit units, an exact amount of investments for 75 per cent of benefit units and an exact amount of debt for 83 per cent of benefit units. These numbers include those benefit units that report zero which, by definition, report an exact amount.

In this analysis we impute a continuous value for those benefit units who report either a band or have missing information.¹⁰ We impute data values by dividing our sample into groups defined by the age of the head of the benefit unit,¹¹ whether either of the adults in the benefit unit have completed any higher education and according to whether the head is self-employed or not. Values are imputed for benefit units with missing information by choosing a random value from the set of benefit units in the same age, education and employment status group. In the case of benefit units with banded information, values are imputed from benefit units in the same age, education and employment status group and with wealth that is contained within the relevant band. This ‘conditional hot-deck’ imputation is used to impute values separately for savings, investments and debt. In our later analysis, when we study statistics concerning wealth as the sum of savings and investments, or of savings and investments minus debt, the summations are done on these separately imputed measures.

As well as imputing for missing values, we also have to deal with the issue of joint holdings of assets and debt. The data show that 40 per cent of couples who have savings report that these savings are held jointly. Joint holding of investments is less common, with 22 per cent reporting some joint holding and finally, 33 per cent of couples with debt report the debt being held jointly. Respondents who hold wealth jointly are not asked with whom the wealth is held, so we assume that all joint holding is within benefit units. Then we can assign an amount of wealth to each benefit unit using the information that we have. In some cases, respondents within a benefit unit report amounts and information on joint holding that are compatible with each other (e.g. both people have £1000 of wealth and all of it is joint) but in others the situation is less straightforward (e.g. one adult says they have no wealth and the other says that they have £1000 joint)¹². For each possible scenario we have to decide on the most appropriate way to assign wealth to the benefit unit. We deal with this in conjunction with the imputation procedure for banded and missing values by recalculating the minimum and maximum possible values that wealth could take to reflect any possible joint holdings prior to the imputation taking place.

¹⁰ Throughout this paper we use unweighted calculations and just describe the raw data, using just the original BHPS panel members (who were a representative sample of the population at large). A full imputation algorithm would presumably take into account sample weights although the correlation between question non response and factors affecting sample non-response would mean that this was not necessarily a straightforward exercise. Additionally a full analysis of changes between waves could use longitudinal weights in order to gross up to the national population of interest.

¹¹ Head is defined as being the male in opposite sex couples and the eldest in same sex couples

¹² For savings, these cases make up 8 per cent of benefit units, for investments they make up 3 per cent of benefit units and for debt they make up 5 per cent of benefit units.

III. Cross-sectional analysis of the distribution of wealth in 2000

In this section we look at some of the characteristics of the distribution of wealth in 2000. The tables in Annex A provide a complete and comprehensive breakdown of the distribution of net financial wealth and its components by age, income, education, pension status and housing tenure in the 2000 wave of the BHPS data. Given that the quantity of numbers involved in such a breakdown is substantial we choose to present only the key features of the results in this section.

Overall distribution

We begin by looking at the overall distribution of wealth in the BHPS sample in 2000. We look at the distribution of savings, investments and debt separately and then net financial wealth, which is measured as savings plus investments minus debt.¹³ Mean net wealth in the population is £12,363 but median net wealth is only £600. Similar difference can be observed in the distribution of savings, investment and debt components individually, reflecting the skewness in the distribution of wealth – the mean value is heavily influenced by a small number of individuals with very large holdings. As a result, the median is a more informative measure of the central tendency of the wealth distribution and we use medians, along with various percentiles of the distribution, throughout what follows.

Table III.1 The distribution of wealth in 2000

	<i>Savings</i>	<i>Investments</i>	<i>Debt</i>	<i>Net financial wealth</i>
10 th	0	0	0	-4248
25 th	1	0	0	-200
50 th	1,000	0	0	600
75 th	6,000	2,000	2,000	9,050
90 th	18,000	15,000	6,500	35,000
mean	7,005	7,445	2,087	12,363

Table III.1 shows that fifty per cent of families have £1000 or less of savings but 10 per cent have £18,000 or more. The distribution of investments tells a similar story where at least 50 per cent have no investments but ten per cent have £15,000 or over. While the distributions of the components of financial wealth are interesting, it is net financial wealth that is most important in revealing how wealthy families are. Inequality in net financial wealth is even more apparent. The table shows that 50 per cent of families have £600 or less of net wealth and 25 per cent are £200 or more in debt. At the other end of distribution, we see that 10 per cent of families hold £35,000 or more of net wealth and 25 per cent hold £9,050 or more. This inequality in the distribution of wealth is huge when compared to that which is typically found in income distributions. The ratio

¹³ Note that since we impute values for savings and investments and debts separately and then sum to get net financial wealth, mean net financial wealth is equal to mean savings plus mean investments minus mean debt. A similar relationship does not hold between medians (or at other percentile points) since it is not the same family that is at the median of each distribution (e.g. a family with median savings need not have median investments, debts or net financial wealth).

between the 90th percentile and the 50th percentile of the net financial wealth distribution for example is 58. In contrast, this ratio is around 2 for the income measure used in the calculation of official poverty statistics.¹⁴

As we mentioned in the introduction, given the different ages and circumstances of families across the population and the way that economic theory predicts that they will respond to these circumstances, this large amount of inequality is not unexpected. Theory makes it clear that wealth accumulation is a dynamic process and one cannot interpret a snapshot picture of the distribution of wealth without bearing this in mind. The simple textbook ‘consumption smoothing’ paradigm suggests that individuals should borrow when their income is relatively low and expected to rise and should save, in order to finance consumption in the future, when they expect their income to fall.¹⁵ Individuals with a typical income profile that peaks in middle-age would therefore be expected to borrow when young, accumulate assets through middle age and then decumulate these assets during retirement. This means that even if we look at a population of people who have equal lifetime incomes but who are of different ages, we would expect to see inequality in the amount that they are saving at a given point in time simply because we observe them at different stages of their lives. If the timing of income receipts is different across different people, this would be another reason for observed inequality in saving rates at a given point in time that would affect even people of the same age. In a population of ‘unequal’ people, there are many more reasons to expect differences in savings behaviour. Apart from being at different stages in their lives or having different paths of income receipts, people might choose to save at different rates because they have differing lifetime incomes to allocate to consumption at different times in their lives. The path of consumption needs at different ages might also differ between families, due, for example, to different family composition. There might also be differences in the amounts that people feel they need to save due to their differing expectations about factors such as health, demographic variables such as the number of children and the age to which they expect to work.

In this analysis we look not at savings rates but at the stock of financial wealth at a point in time. This stock is the result of past decisions on saving (plus any capital gains or interest). Inequality in wealth therefore will be the accumulation of all the past inequality in saving. In a population in which inequalities in saving persist across time, this will mean that we see bigger absolute differences between the wealthiest and least wealthy amongst older age groups who have not yet retired (and therefore not yet begun to run down their assets) than amongst younger groups, because older people have spent more time accumulating wealth. We would also expect to see inequalities of wealth that vary systematically with current income since differences in income will to some extent reflect differences in the total resources that families are able to consume over their lifetimes. We can control for these two characteristics separately by looking at wealth within age

¹⁴ A more common measure of inequality is the gini coefficient but this measure cannot be calculated for distributions that contain negative numbers. Similarly, the 90/10 ratio for the net wealth distribution would be negative which makes comparison with this ratio for the income distribution difficult.

¹⁵ See, for example: M. Friedman, *A Theory of the Consumption Function*, Princeton University Press, Princeton, NJ, 1957; R. E. Hall, ‘Stochastic implications of the permanent income hypothesis: theory and evidence’, *Journal of Political Economy*, 1978, vol. 96, pp. 339–57; or J. Campbell, ‘Does saving anticipate declining labor income? An alternative test of the permanent income hypothesis’, *Econometrica*, 1987, vol. 55, pp. 1249–73.

groups and within income groups. However, empirical evidence suggests that these two characteristics are closely related because the typical pattern of income across the lifetime is ‘hump shaped’. In order to begin to separate out the different effects on wealth of the different stages of life that people are at and the different lifetime resources that their current incomes lead them to expect, it will therefore be necessary to look at the distribution of wealth within groups defined by age and income level. This is exactly what this subsection does: after looking at how wealth varies with age and income separately, we also look at wealth levels within age-income groups, and within age-education groups. This latter grouping is often thought to provide a coarse proxy for differences in lifetime resources or broader economic status.

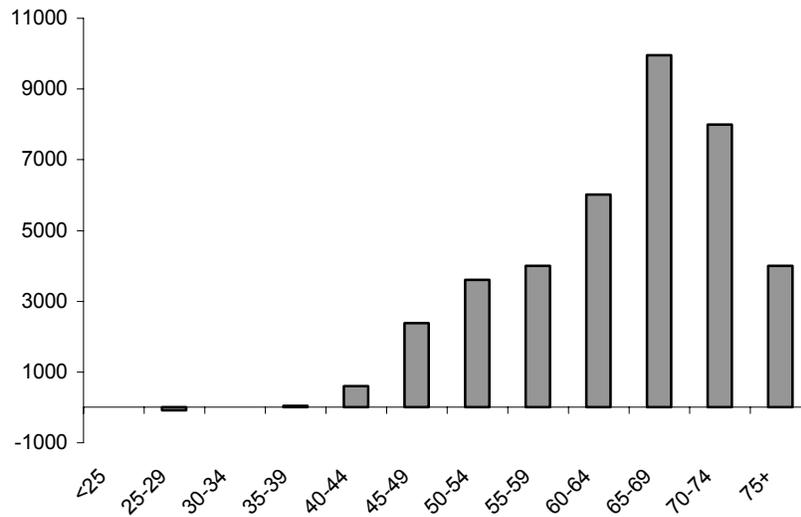
The distribution of financial wealth by age

Figure III.1 shows median financial wealth by age band in 2000 (the data for this graph, and for figures III.2 and III.3, is also displayed in Annex A, table A4). The distribution of wealth by age shows a pronounced hump-shape. Young families have very little net wealth and in very young ages age groups the median wealth level is zero or even negative. The medians then increase across middle-aged bands, reaching a peak at around the state pension age¹⁶, before dropping off in the oldest age-bands. This picture should not be interpreted as simply displaying the typical lifecycle pattern of wealth accumulation where families save during middle age when income is high, and decumulate their wealth in old age once they stop working. For one thing our data do not include pension and housing wealth, elements of the portfolio that we would expect to make a significant contribution to the lifecycle pattern of accumulation for many families. Also important is the fact that our cross-sectional data conflate any lifecycle pattern with the fact that the people in each age-band come from different date-of-birth cohorts. People who are currently in middle age might choose to save quite differently from the way that people who are now reaching retirement age saved when they were middle aged, because of the different economic environment that they face and the different savings products that are now available. For example, on average the group of people who have just retired will have received more generous provision from the State Earnings Related Pension Scheme (SERPS) than the current working population will receive from second tier state provision for retirement.¹⁷ Conversely, current generations of workers will have access to savings vehicles such as personal pensions and ISAs (previously TESSAs and PEPs) for a greater proportion of their working life than was the case for those already past retirement age.

¹⁶ Actually the peak is the median of almost £10,000 is reached just after state pension age in the 65-69 age-band. For some people financial wealth might increase at the time of retirement if they re-invest part or all of any lump-sum payment received from their private pension fund.

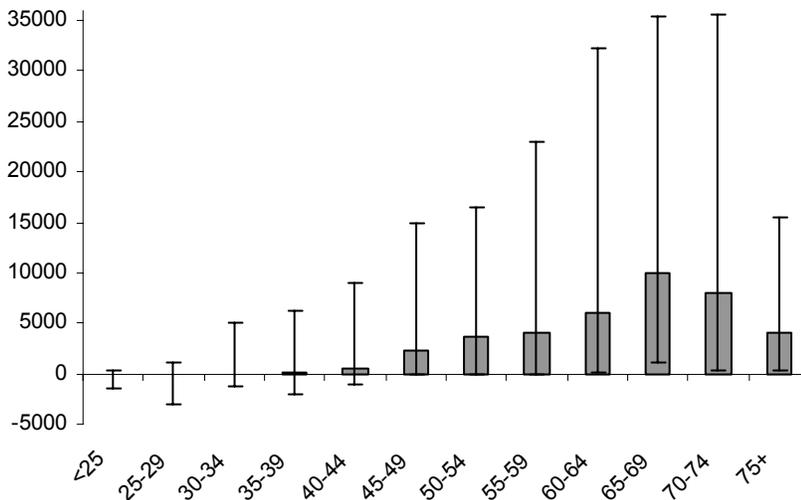
¹⁷ see figure 1.1 of Government Actuary’s Department (1999), National Insurance Fund Long Term Estimates, Cm. 4406

Figure III.1 Median financial wealth by age in 2000



What about the distribution of wealth around the median? Figure III.2 shows median wealth (as in figure III.1 but on a smaller scale) by age band in grey bars, with the 25th and 75th percentile points shown by the limits of the black lines. So, for example, 25 per cent of families in which the head is aged 40-44 are in debt by more than £1000 but another 25 per cent have more than £9,000 in net wealth. In all families where the head is younger than 50-54, at least 25 per cent of households are in debt. The length of the lines in figure III.2 gives us an idea of the amount of inequality in wealth in each age group. The amount of dispersion increases with age until families reach 75 years old. As we argued above, inequality increasing with age is consistent with what economic theory suggests because the stock of wealth is the result of past decisions about how much to save.

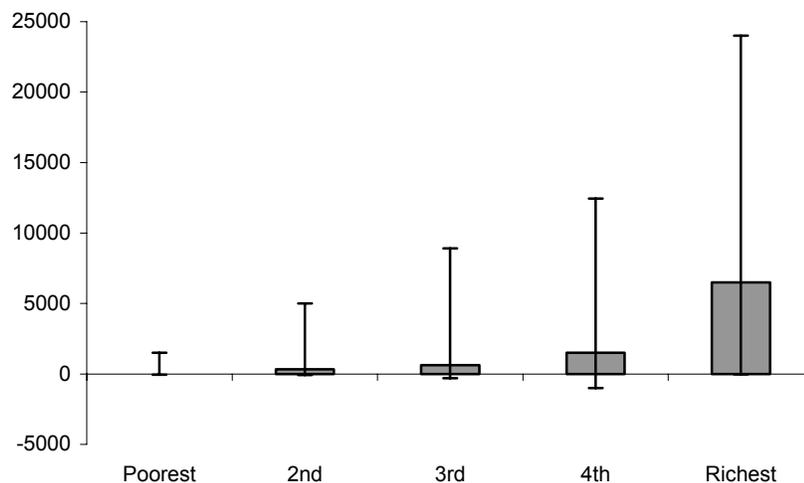
Figure III.2 Median financial wealth and 25th and 75th percentile of financial wealth, by age group



The distribution of financial wealth by income

Figure III.3 shows the distribution of financial wealth by income. Income is defined as annual income summed across the benefit unit but adjusted for family size.¹⁸ We divide our sample into income quintiles¹⁹ which means that the leftmost block shows the wealth level at the median, 25th and 75th percentile points of the distribution of wealth amongst the fifth of the population with the lowest measured incomes. The same statistics are shown for progressively richer (higher income) portions of the population until we see statistics for the fifth with the highest incomes in the rightmost block. The graph shows that higher income families have higher wealth on average than lower income households and that wealth is more unequal amongst higher income families.

Figure III.3 Median financial wealth and 25th and 75th percentile of financial wealth, by income quintile



Amongst the poorer people with little or no wealth there will be some who are young people who might expect to accumulate assets as they get older, especially if their income rises. There might also be some older people who have been poor throughout their working lives and have felt unable to afford to save and possibly, given the support that the state will provide in retirement or times of hardship, ill-advised to save. The data in figure III.3 cannot help us to distinguish between these two types of low-income non-saver. Similarly, the data in figure III.2 cannot inform us about whether older people with little or nothing in financial assets have had few resources to save from or whether they are choosing not to save in financial assets even from moderate incomes. In order to begin the process of untangling these issues we now consider wealth holdings in groups defined by age and income.

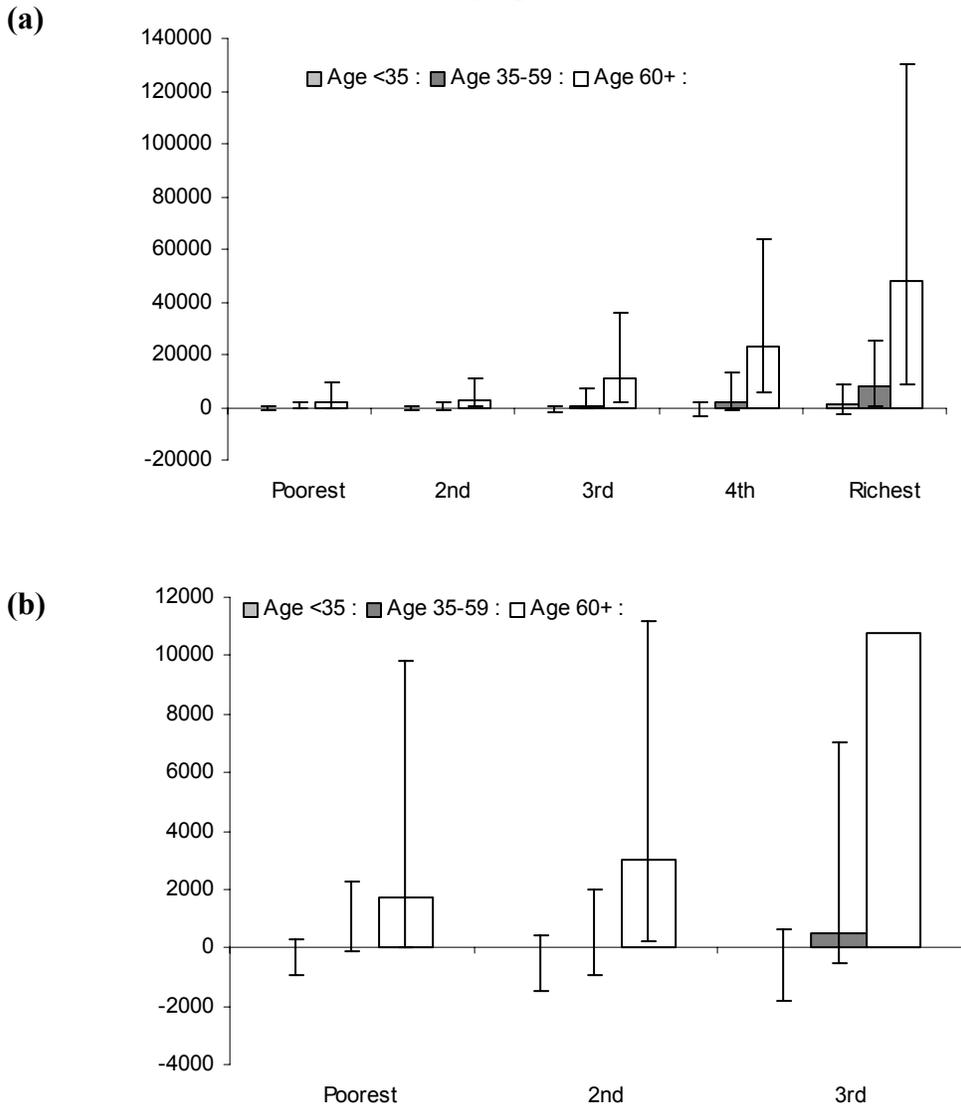
¹⁸ We use a simple equivalence scale which gives a weight of 0.6 to a second adult and 0.4 to any children in the benefit unit.

¹⁹ The amount of income that a childless couple would need to fall into each quintile is also reported in Figure III.3. and is: Quintile 1: <£8,730, quintile 2: <£13,845, quintile 3: <£20,070, quintile 4: <£29,632

The distribution of financial wealth by income and age

In panel (a) of figure III.4 the population is split in groups defined by age and income, and median wealth and wealth at the 25th and 75th percentile of the distribution for each group is displayed (the data is also displayed in annex A, table A8). Within each income group, the different shadings of the bars indicate the age-group in question. The age-groups are broader than in figures III.1 and III.2 to avoid small sample sizes. The income groupings are not age specific quintiles but are the same quintiles that were used in figure III.3. So, for example, the rightmost white bar displays the median financial wealth amongst those aged over sixty who also fall into the top twenty percent of the income distribution *measured across the whole population*. Because of the large scale needed in panel (a) to accommodate the wealth of the richest quintile, in panel (b) we magnify the figure for the poorest 3 quintiles (and do not include the 25th and 75th percentile points for the oldest families in quintile 3 which can be seen in panel (a)).

Figure III.4 Median, 75th percentile and 25th percentile of net financial wealth by age and income



Panel (a) of the figure again shows how much inequality there is in the distribution of wealth. The holdings of the youngest groups in each income quintile, and of people of all ages in the lower income groups, are dwarfed by holdings amongst the oldest people in the top fifth of the income distribution for whom median net financial wealth is some £48,000.²⁰ The inequality in wealth amongst this group is also striking: the lower quartile of the distribution is at less than £9,000 but the upper quartile is £130,000. The extent of this within group inequality is perhaps not surprising given the period of time over which people in this group might have accumulated their assets and given the large income differences between the eightieth percentile and the very top of the income distribution.

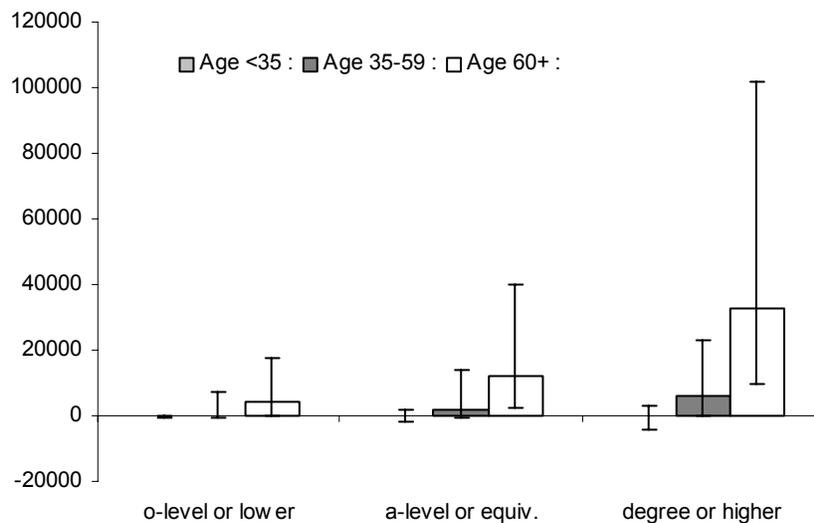
Panel (b) of the figure allows us to see the holdings of wealth amongst poorer groups more clearly. In the poorest income group, median wealth is less than £2,000 even amongst the oldest age-group which might contain people who were had moderately high incomes during their working lives. In each of the three income groupings the median holding of wealth is zero amongst the youngest age-group, but it is notable that holdings of debt at the 25th percentile tend to become larger with income. Three explanations could contribute to this difference. First, to the extent that those with low-incomes expect low income growth they might be expected to have relatively low demand for borrowing when young. Second, fluctuations in interest repayments associated with debts will represent a higher fraction of income for lower income families. Third, these families may face tighter borrowing constraints than their higher income counterparts.

The distribution of financial wealth by education and age

The previous subsection considered net financial wealth within groups defined by age and income. The distribution of current income might not be a good guide to the distribution of lifecycle resources within each age-band because different people might have different patterns of earnings across their working lives and income might fluctuate even in the very short-run. A more stable measure of economic status, that might be also be related to how much individuals are likely to earn during their working lives is educational achievement. Therefore figure III.5 shows data on the amount of net financial wealth held by people in different age-education groups.

²⁰ The holdings that we measure for older people, and especially richer older people, might have been boosted by the receipt of lump-sum payments from private pensions. Such payments represent a transfer of personal wealth which will not yet have happened for any of the people in younger age brackets

Figure III.5 Median, 25th and 75th percentiles of net financial wealth by age and education groups



Like the age-income breakdown, the figure once again shows the inequality in the distribution of wealth. It is also evident that amongst young people, debt tends to increase with education level, being greater than £4,000 at the twenty-fifth percentile of the wealth distribution for under thirty-fives with degrees. This may reflect the fact that people in this group expect large increases in income as they progress through their working lives, and have been prepared to borrow against this future income. It may also reflect the fact that credit constraints are perhaps weaker for this group than for their less highly educated contemporaries. For example, the increasing prevalence of student loans enables young educated people to borrow substantial amounts of money relatively easily.

Looking at broad differences across groups, the patterns shown in this graph, and those that preceded it, are those that economic theory would lead us to expect: financial wealth holdings tend to increase with age and income and with age and education. Such patterns are also quite consistent with the supposition that, on average, people across the population behave quite sensibly when making decisions about saving and borrowing.

IV. Correlations in broad asset types and wealth

So far we have looked at the distribution of financial wealth across the population as a whole, and at how wealth holdings vary with income and age. In an attempt to begin to isolate the effects of income and age on wealth accumulation, we have also considered wealth holdings within groups defined by income and age together and groups defined by education and age together. We acknowledge that this by no means gives a complete picture of the distribution of wealth between families in the UK. We have not considered what portfolio of assets and liabilities people hold, and nor have we been able to add amounts of wealth held in pension or housing assets into our analysis. In this section we address these issues as far as the data allows us by considering combinations of assets and liabilities people are likely to hold. We first consider whether or not people hold debts at the same time that they hold financial assets. We then consider how holdings of

liquid financial wealth vary with holdings of different types of pensions. Finally we consider how (gross) housing wealth varies across the distribution of financial wealth holdings

Assets and Debts

Our results show that many families, and in particular young families, are in debt but an interesting question is whether these families also have any assets. Similarly, do families who hold positive net wealth have any debt? In many cases, holding both debt and assets would not be ‘optimal’ because debt usually attracts a higher interest rate than the rate of return on savings and investment. However, this is not always the case. Student loans, for example, attract a zero real rate of interest and other arrangements can involve zero nominal interest for a limited period of time. In these cases, it would be optimal for people to accumulate wealth in a savings account such as an ISA, rather than paying off their debt first. Another reason why it may be optimal for families to hold some savings before paying off debt is to overcome short-term cash flow problems. It is probably easier to use savings in the event of a short-term cash flow problem than it is to arrange credit.

Figure IV.1 Proportion of families with savings, investments, debt and positive net financial wealth

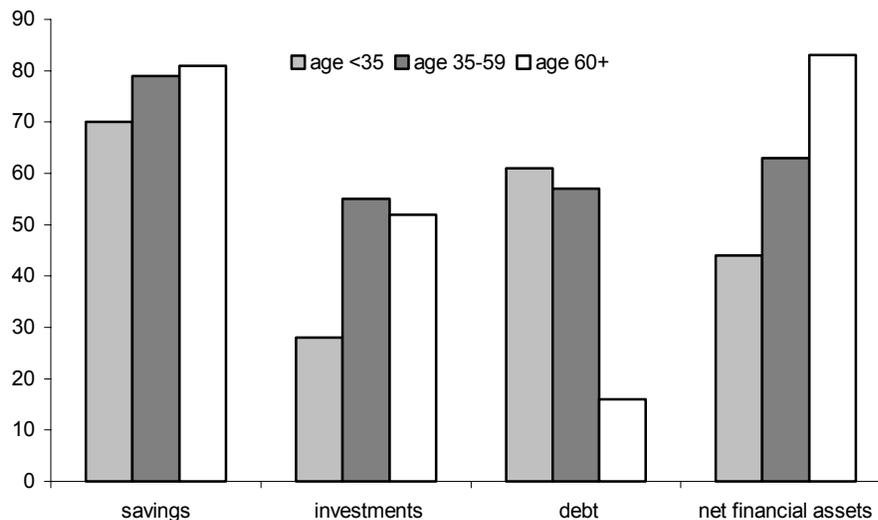


Figure IV.1 plots the proportions of people in different age-bands in the population who have each of the various types of asset, and also the proportion with positive net financial assets. Amongst younger and middle-aged people we see that more than half have assets and more than half have debts, so we can infer that there must be some overlap with people holding assets and debts simultaneously.

More detail on this is provided in table IV.1. Each number in this table tells us the proportion of people in our sample who have a given combination of assets (savings or investments) and debts. For example the second number in the second row of the table tells us that 39.4% of the sample have positive assets and positive debt. Since we also

know from the table that 81% of the sample have positive assets we can infer that approximately 49% $((39.4/81)*100)$ of those with positive assets also have debt. Similarly we can infer that approximately 82% of those with debts also have assets.

Table IV.1 Proportions of sample with various combinations of assets and liabilities

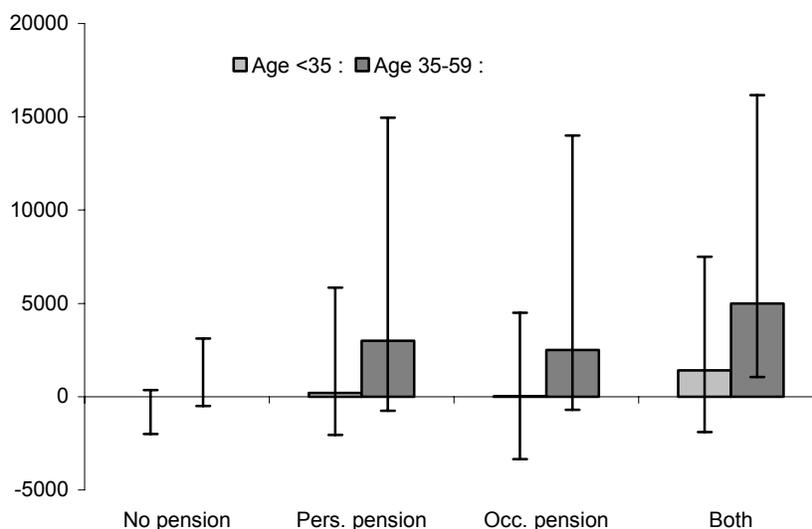
	<i>Debt = 0</i>	<i>Debt > 0</i>	<i>All</i>	<i>Debt > £1,000</i>	<i>Debt > £5,000</i>
<i>assets = 0</i>	10.2	8.7	19.0	5.0	2.2
<i>assets > 0</i>	41.6	39.4	81.0	25.7	10.7
<i>All</i>	51.8	48.2	100.0	30.7	12.9
<i>assets > £1,000</i>	30.5	24.6	55.1	16.6	6.8
<i>assets > £5,000</i>	16.7	9.3	26.1	5.9	2.4

Since those with any debts or assets might only have small balances in their assets or liabilities, it is also interesting to consider how holdings vary for people with larger amounts of assets or debts in their portfolio. The outer two rows and columns of the table provide some information on this issue and generally we see that as the amount of assets individuals have goes up, so the likelihood of having a particular level of debts decreases, and similarly for the likelihood of having a particular level of assets as the level of debts held increases.

Links between financial wealth, pensions and housing

Further important interactions in asset holding are between the financial assets we have covered so far and other asset types. In particular, pension assets and housing wealth may well be major components of retirement saving. Figure IV.2 shows financial wealth holding by pension status and age-group for employees. It is important to remember that the groupings in this table are not exclusive: people in the both category also appear as personal and occupational pension holders (see “note on pension status breakdown” in annex A). The most obvious feature of this graph is that those with private pensions generally also have higher financial wealth than those without any pension. One must be careful when interpreting this fact, because those with no private provision also tend to have low incomes.

Figure IV.2. Net financial wealth by pension status



One further interesting question is whether those who do not invest in liquid assets are instead investing in housing. The ‘asset’ component of housing wealth is not straightforward to measure because there are both consumption and investment components of housing wealth. Even if someone owns their home outright (i.e. they have paid off their mortgage in full) if they were to sell their house, they would have to pay for somewhere else to live (either by renting or owning). Notwithstanding this, there are still various ways that we could measure housing wealth with the most natural being to measure the value of the house net of the remaining mortgage. However, some work is needed before this is available in the BHPS due to the need to get a reliable measure of outstanding mortgage liabilities for those with an endowment mortgage. Instead in what follows we choose to look at the gross value of the house. If we assume that everyone will pay off their mortgage by retirement then (ignoring the consumption component of housing wealth) the value of the house will be a lower bound on the level of housing wealth by the time they retire for almost all benefit units, given historical medium and long run capital gains in the property market. In addition a number of benefit units, particularly those currently at younger ages, will also move further up the property ladder. Hence, gross house value may be more relevant than net house value for the understanding of future retirement wealth as opposed to current wealth.

The final row in table A9 (and A10) in the appendix summarises the distribution of housing wealth across all benefit units and across just those who are owners.²¹ Median housing wealth across all benefit units is £60,000 although if we look at just the 57 per cent of benefit units who own their home, median housing wealth is £150,000. The 25th and 75th percentile points amongst owners are £90,000 and £250,000 respectively. We can also look at how gross housing wealth varies with income - shown in table A11. This

²¹ Note that as with liquid assets we assign housing wealth to the benefit unit. This means that only the benefit unit containing the owner(s) is recorded as owning a house and not for example their non-dependent child who would be classed as a renter. As a result, owner occupation at 57% (see tables A9 and A10) is lower than the two-thirds we would expect to find in a household survey.

shows that as would be expected, gross housing wealth increases with income both amongst all benefit units and amongst just those that are owners.

Figure IV.3 depicts information on how housing wealth varies with net financial wealth. We see a u-shaped pattern in home ownership rates across the wealth distribution. Slightly more than half of the ten percent of the population with the lowest net financial wealth own their home. This rate drops to around thirty percent in deciles three and four, before rising to eight-seven percent in the upper fifth of the financial wealth distribution.

Figure IV.3 Home ownership rates (%) by net financial wealth decile

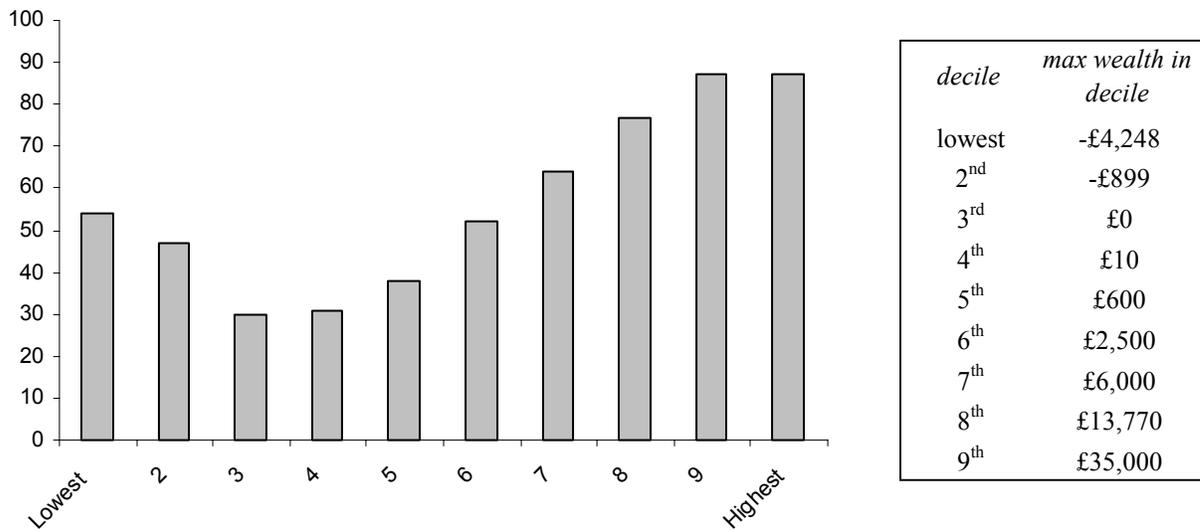
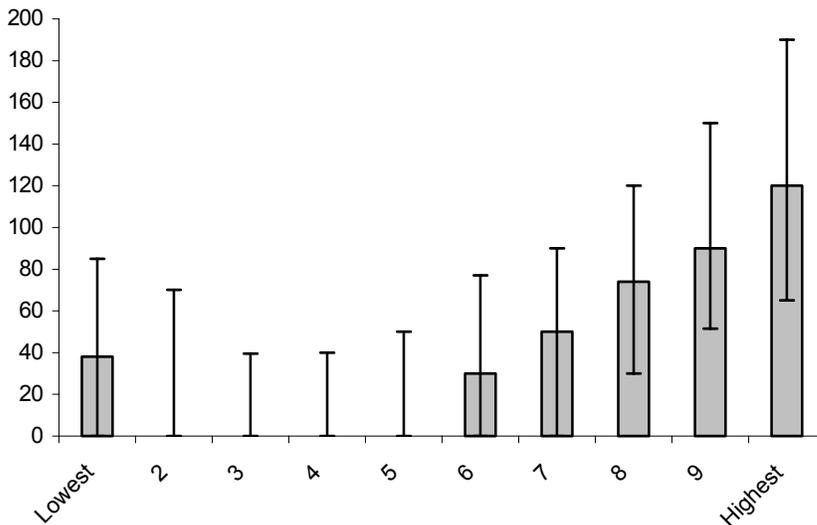


Figure IV.4. Gross housing wealth by net financial wealth decile



A similar u-shape is seen Figure IV.4 which shows (median) average amount of housing wealth amongst people in each decile of the financial wealth distribution. Median house value is £38,000 in the bottom decile (and £81,000 amongst those in that decile who own homes – see table A9) but drops to zero in the next four deciles (with a low amongst

owners of £62,000 in deciles 3 and 5), before climbing to £120,000 in the top decile (£130,000 amongst owners). Such a pattern is not surprising — near the bottom of the financial wealth distribution are some young people who have incurred financial debt, perhaps to fund their education and to furnish the homes that they have bought, but who will have high resources over their lifetimes and who we would expect to be homeowners. People with high wealth also tend to be people who have high lifetime resources and so it is no surprise that the vast majority of them are homeowners.

This analysis, along with the more detailed breakdowns in tables A9-A12, suggest that housing represents an important component of wealth, particularly when compared to financial wealth. The same is true for pensions, although there is much less information pertaining to the potential magnitude of pension wealth for BHPS respondents who have yet to retire.²² More research is clearly needed on these topics, building in an estimate of the value of housing wealth net of both mortgage debt commitments and any potential consumption value of housing. Such research would also need to address the issue of individuals' willingness or otherwise to use housing wealth to finance consumption in retirement. Finally, better individual data on pension wealth would be required in order to fully understand, at the individual level, the relative magnitudes of housing, pensions and other financial assets as sources of retirement saving.

V. Analysis of changes in wealth 1995-2000

Information on wealth is collected in 1995 as well as in 2000 in the BHPS. In principal, since the same individuals are followed across time we can analyse changes in wealth over time. Unfortunately, initial exploration of the data suggests that some further work is needed to make the data comparable across the two waves due to improvements to the structure of the questions on wealth between 1995 and 2000. In particular, it is not possible at this stage to analyse net wealth (savings + investments – debt) because debt in 1995 did not include student loans and overdrafts whereas in 2000 these items were included. For this reason, our measure of wealth in this analysis is the sum of savings plus investments. In addition, we believe that amounts of investments may not be comparable across waves, particularly for benefit units with larger amounts of wealth in 1995 and especially when this wealth is held in certain assets.

However, some analysis is possible and we are confident that the results that follow are not significantly affected by changes to the questionnaire.²³ One important point to note is that in analysing changes, we only use benefit units that have not changed in composition between 1995 and 2000 except for the addition or the leaving of children. This excludes therefore benefit units where partnerships have formed, broken down or changed. We do this since in cases in which partnerships between adults change it is difficult to decide whether there is any family unit that has continued, and also difficult to track whether the wealth that individuals have access to is changing due to saving or dissaving or due to changed family circumstances. It should be borne in mind that the

²² Table A12 also shows that around one third of those without private pensions have some grow housing wealth, with this group splitting roughly in half according to whether the house value is greater or less than £100,000, so the potential interactions between pensions and housing as sources of retirement saving may be also interesting to study.

²³ Although where appropriate we will point out any caveats that should be borne in mind.

probability of a benefit unit who is observed in 1995 also being observed (unchanged) in 2000 is not constant across age groups because younger people are more likely to either form or change partnerships than older people. However, in most of our analysis we split our sample by age group, which mitigates this problem. What is more important is whether the probability of a benefit unit remaining constant varies across different levels of wealth within an age group. It should be noted that for benefit units where the head is less than 60, less wealthy benefit units are more likely to change composition whereas in benefit units where the head is aged over 60, more wealthy benefit units are more likely to change composition.

We start by categorising benefit units according to the level of their wealth (savings plus investments) held in 1995. One group is defined as having no wealth in 1995 and the other as having “low to medium” wealth (defined as wealth being £1-£1000 in 2000 prices).²⁴ We ask what levels of wealth these two groups of benefit units had by the year 2000. This is shown in tables V.1 and V.2.

Table V.1 Changes in wealth 1995 to 2000

<i>Position in 1995</i>	<i>Age band in 1995</i>	<i>Position in 2000</i>			Total
		Zero	£1-£1000	>£1000	
Zero	<30	50.6	33.9	15.6	100.0
	30-45	42.7	36.5	20.8	100.0
	45-60	42.9	27.8	29.4	100.0
	60+	55.0	24.3	20.7	100.0
	Total	47.3	31.7	21.0	100.0
£1-£1000	<30	24.5	40.7	34.9	100.0
	30-45	20.9	36.9	42.2	100.0
	45-60	17.2	29.3	53.5	100.0
	60+	20.9	38.8	40.3	100.0
	Total	21.3	36.9	41.8	100.0

Table V.1 shows the movements in and out of the two groups (zero and £1-£1000) between 1995 and 2000 in total and within four age groups. The numbers show that 47.3% of all benefit units who had zero wealth in 2000 also had zero wealth in 2000 and 31.7% had moved into the £1-£1000 bracket. The final 21.02% moved into the greater than £1000 bracket. The youngest and oldest age groups are more likely to remain in the zero wealth group than middle aged groups (30-45 and 45-60) – 50.6% of those aged less than 30 and 54.3% of those aged 60+ did not move out of the zero wealth group whereas amongst the middle age groups around 43% of those who had zero wealth in 1995 also had zero wealth in 2000. However, the youngest age group who had zero wealth in 1995 were more likely than average to move into the £1-£1000 bracket of wealth (33.9% of them made this transition compared to 31.7% amongst all age groups) but very unlikely to move into the greater than £1000 bracket (15.6% compared to 21% across all age groups).

²⁴ Because of the problem of comparability, we do not consider benefit units who hold wealth of more than £1000 in 1995. It should be noted that because we believe investments could be overstated in 1995, there may be a small number of benefit units that we are not identifying as having low to medium wealth when in fact they do. However, analysis of the data suggests that the number of benefit units for whom this could be the case is very small so we are confident that this does not seriously affect our results.

Amongst all age groups, 36.9% of those with £1-£1000 of wealth were still in this bracket in 2000 and 21.3% ended up with zero wealth by 2000. 41.8% moved into the greater than £1000 bracket. The youngest age group was the most likely to remain in the low to medium bracket and also the most likely to move down into the zero wealth group.

Table V.2 Changes in wealth 1995 to 2000.

<i>Age band in 1995</i>	<i>Zero in 1995</i>				<i>£1-£1000 in 1995</i>			
	<i>25th</i>	<i>median</i>	<i>75th</i>	<i>mean</i>	<i>25th</i>	<i>median</i>	<i>75th</i>	<i>mean</i>
<i>a) Wealth in 2000</i>								
<i><30</i>	0	0	400	1,072	1	300	2,000	2,755
<i>30-44</i>	0	5	804	1,945	20	500	2,700	4,322
<i>45-59</i>	0	16	1,900	3,096	50	1,955	9,200	10,256
<i>60+</i>	0	0	700	4,414	20	550	3,000	3,679
<i>Total</i>	0	2	800	2,375	7	500	3,500	4,898
<i>b) Change in wealth 95-00</i>								
<i><30</i>	0	0	400	1,072	-114	115	1,762	2,471
<i>30-44</i>	0	5	804	1,945	-114	279	2,373	4,000
<i>45-59</i>	0	16	1,900	3,096	-12	1,331	8,855	9,947
<i>60+</i>	0	0	700	4,414	-123	343	2,336	3,303
<i>Total</i>	0	2	800	2,375	-80	286	2,930	4,582
<i>c) Change in wealth as % of income</i>								
<i><30</i>	0.0	0.0	1.0	6.3	-0.3	0.3	4.0	4.2
<i>30-44</i>	0.0	0.0	1.5	2.9	-0.2	0.6	3.7	6.1
<i>45-59</i>	0.0	0.1	3.3	6.1	0.0	2.0	12.5	15.3
<i>60+</i>	0.0	0.0	2.4	11.5	-0.4	0.8	6.3	9.2
<i>Total</i>	0.0	0.0	2.1	6.2	-0.2	0.6	5.3	7.9

Panel (a) in table V.2 shows the levels of wealth that the two groups (zero and low to medium wealth in 1995) had by 2000. Panels b) and c) show the change in wealth over the five-year period and the change as a percentage of total income summed across the five years. For each of the three measures shown, we report the 25th percentile point, the median, the 75th percentile point and the mean for everyone and by age group. So table V.2 shows that across all age groups, the median level of wealth in 2000 across benefit units that had zero wealth in 1995 was £2 and that at least 25% of benefit units still had zero wealth by 2000. The 75th percentile point was £800. These numbers vary across age-groups with the 45-59 year olds being the wealthiest by 2000 at the median, moving to £16 at the median and £1,900 at the 25th percentile. Table V.2 also shows similar numbers for the benefit units with low to medium wealth in 1995.

Panel (b) of table V.2 shows changes in wealth from 1995 to 2000 for the two groups. This number is by definition identical to the level of wealth in 2000 for the benefit units that started at zero. For the benefit units that began with low to medium wealth in 1995, the change in wealth can be positive or negative but table V.2 shows that the median

change (across all age groups) was positive at £286, meaning that at least half of the people in this group saw an increase in their wealth in the five-year period. (In fact, this number was 61%). At the 25th percentile, benefit units saw a decrease in their wealth of £80. Again, the benefit units with the head aged 45-59, saw the largest increase in wealth on average.

Finally, table V.2 shows this change expressed at a percentage of total income received across the five-year period from 1996 to 2000. In total and across all age groups, the median change in wealth as a percentage of total income received for those who had zero wealth in 1995 was zero or virtually zero. Even at the 75th percentile, this was 2.1% for everyone. This varied across age groups being at most 3.3% for those aged 45-59. A similar story is true of those who had low to medium wealth in 1995 – apart from the 45-59 year olds, the change in wealth was barely above zero at the median and was negative at the 25th percentile.

Table V.3 Changes in wealth by position in 1995 and position in 2000

<i>Position in 1995</i>		<i>Position in 2000</i>							
		<i>Zero</i>		<i>£1-£1000</i>		<i>>£1000</i>		<i>Total</i>	
		ΔW	$\Delta W/\Sigma Y$	ΔW	$\Delta W/\Sigma Y$	ΔW	$\Delta W/\Sigma Y$	ΔW	$\Delta W/\Sigma Y$
Zero	25 th	0	0.0	10	0.0	2,008	4.2	0	0.0
	median	0	0.0	140	0.3	4,808	9.0	2	0.0
	75 th	0	0.0	500	1.1	10,150	22.0	800	2.1
	mean	0	0.0	285	3.7	10,870	23.2	2,375	6.2
£1-£1000	25 th	-456	-1.1	-141	-0.3	1,772	3.1	-80	-0.2
	median	-148	-0.5	16	0.0	3,966	7.1	286	0.6
	75 th	-39	-0.1	258	0.5	9,886	17.6	2,930	5.3
	mean	-252	-0.8	49	0.1	11,040	18.9	4,582	7.9

Table V.3 shows changes in wealth and changes in wealth as a percentage of income for people in the two groups in 1995 but also split by the position they were in in 2000 (zero, low to medium or high (>£1000)). Again, we show the 25th percentile, the median, the 75th percentile and the mean. We saw in table V.2 (and we can see from the second to last column in table V.3) that those who began in 1995 with zero, had median wealth of £2 in 2000. However amongst those who did manage to increase their wealth to between £1-£1000, the median change in wealth was £140. For those who managed to increase their wealth to more than £1000, the median change was £4,808 and the 25th percentile was £2,008. The median change in wealth as a percentage of total income ($\Delta W/\Sigma Y$) for the benefit units that moved from zero to £1-£1000 was barely greater than zero in contrast to those whose wealth increased to more than £1000, for whom this was 9%.

We report similar numbers for those who had low to medium wealth in 1995. We know from table V.1 that 21.31% of benefit units with low to medium wealth in 1995 had zero wealth in 2000. However, from table V.3 we can see that many of these benefit units did not have much more than £1,000 of wealth to begin with as at the 25th percentile, the loss was £456. Those who were found in the £1-£1000 bracket in both years saw a modest increase in their wealth at the median of £16. The benefit units that began in the low to medium bracket and moved into the high bracket saw an average (according to the

median) increase in their wealth of just under £4000 which is lower than those who moved into this bracket from zero (£4,808).

Correlation between changes in gross housing wealth and changes in financial wealth

Table V.4 shows the percentage of benefit units owning a house in 2000 split by the wealth position in 1995 and in 2000. We look at this figure for everyone and for those aged more than 30. We look at benefit units where the head is aged over 30 because we know from previous results that those with the lowest wealth are more likely to be young, and because it will also turn out that young families are disproportionately unlikely to be homeowners. We are interested in whether people with low amounts of wealth are more likely to be investing in property and including young people in this may give a misleading picture of this since young people are less likely to own a property simply because of the stage of life that they are at. Table V.4 shows that overall (final column) of those who had zero wealth in 1995, 40.1% (of those over 30) owned a house in 2000. Amongst those with zero wealth, 64% of benefit units who moved from the zero to greater than £1000 bracket owned a house whereas only 31% of benefit units who still had zero assets in 2000 owned a house.

Table V.4 Percentage of benefit units owning a house in 2000

<i>Position in 1995</i>		<i>Position in 2000</i>			
		<i>Zero</i>	<i>£1-£1000</i>	<i>>£1000</i>	<i>All</i>
Zero	<i>All</i>	25.3	32.1	58.6	34.5
	<i>Age>30</i>	31.0	35.6	64.0	40.1
£1-£1000	<i>All</i>	36.0	48.0	66.0	53.0
	<i>Age>30</i>	50.4	58.4	75.2	64.4
All <= £1000	<i>All</i>	29.6	42.1	64.1	45.5
	<i>Age>30</i>	38.4	49.7	72.2	54.3

Table V.5 House value in 2000 for owners in 2000

<i>Position in 1995</i>		<i>Position in 2000</i>			<i>All</i>
		<i>Zero</i>	<i>£1-£1000</i>	<i>>£1000</i>	
Zero	<i>25th</i>	42,000	45,000	54,000	46,000
	<i>median</i>	50,000	65,000	80,000	64,000
	<i>75th</i>	75,000	100,000	125,000	100,000
	<i>mean</i>	67,021	85,032	97,280	83,145
£1-£1000	<i>25th</i>	43,000	45,000	50,000	48,000
	<i>median</i>	65,000	62,000	74,000	69,500
	<i>75th</i>	93,500	95,000	100,000	100,000
	<i>mean</i>	73,728	78,640	88,420	83,028
All <= £1000	<i>25th</i>	42,000	45,000	52,000	47,250
	<i>median</i>	55,000	65,000	75,000	67,750
	<i>75th</i>	80,000	95,000	106,000	100,000
	<i>mean</i>	70,255	80,450	90,497	83,064

Table V.5 shows the value of the house for those people who did own houses in 2000. The four numbers at the bottom right-hand corner of the table show the 25th percentile, the median, the 75th percentile and the mean house value, measured across our sample of families with low-wealth in 1995 and who are observed in 2000. The final right hand column shows the house value split by wealth position in 1995 (regardless of wealth position in 2000) and the bottom four rows show house value according to wealth position in 2000 (regardless of wealth position in 1995).

The table shows that the median house value amongst everyone in 2000 for those who did own a house was £67,750 (shown in bottom right hand block of numbers). Amongst those who had no wealth in 1995, the median house value was slightly lower at £64,000 and amongst those who had low to medium wealth, the median house value was £69,500 (the final column of numbers). Table V.5 also shows that house value is higher amongst those who saw larger increases in their wealth between 1995 and 2000. For example, for those who moved from zero to £1-£1000, the median house value is £65,000 whereas for those who remained at zero, the median house value is £50,000.

Table V.6 Change in house value 1995-2000 (families who are owners in 2000)

<i>Position in 1995</i>		<i>Position in 2000</i>			<i>Total</i>
		<i>Zero</i>	<i>£1-£1000</i>	<i>>£1000</i>	
<i>Zero</i>	<i>25th</i>	4,000	5,000	10,000	5,000
	<i>median</i>	16,000	21,000	33,000	23,000
	<i>75th</i>	45,000	60,000	60,000	55,000
	<i>mean</i>	27,599	37,153	42,007	35,565
<i>£1-£1000</i>	<i>25th</i>	5,500	5,000	7,000	5,000
	<i>median</i>	22,000	22,000	25,000	24,000
	<i>75th</i>	47,625	45,000	50,000	50,000
	<i>mean</i>	29,504	33,134	34,120	33,123
<i>Total</i>	<i>25th</i>	5,000	5,000	7,000	5,000
	<i>median</i>	19,500	22,000	26,000	23,000
	<i>75th</i>	47,000	52,000	53,500	50,000
	<i>mean</i>	28,518	34,272	35,968	33,877

Table V.6 is similar to table V.5 except that it shows the change in house value for benefit units who owned a house in 2000.²⁵ The median change in house value between 1995 and 2000 for everyone was £23,000 (the bottom right hand corner of numbers). Benefit units who began with zero wealth in 1995 saw a median increase of £23,000 and those who began with low to medium wealth saw an increase of £24,000. From a policy point of view we might be most concerned about those people who did not accumulate very much wealth between 1995 and 2000 – in particular those who had zero wealth in both years.

From table V.6, it appears that this may not be of concern since these people saw an increase of £16,000 at the median in the value of their house. However this table and

²⁵ Note that this include those who bought a house between the two years and those who bought different properties so not all of the amount shown in the table is capital gain.

table V.4 need to be interpreted together because table V.4 shows that only 25.3% of those in this group own their house. Table V.7 shows the median change in house value across owners and non-owners. Amongst those who had zero wealth in 1995 and 2000 the median and 75th percentile change in house value was zero. Even for those who moved from zero to £1-£1000, the median change in house value is zero although the 75th percentile point is £4,000. The median change is also zero for those who were in the £1-£1,000 bracket in 1995 and moved either down to zero in 2000 or stayed in the same bracket.

Table V.7 Change in house value 1995-2000 (all families)

<i>Position in 1995</i>		<i>Position in 2000</i>			<i>Total</i>
		<i>Zero</i>	<i>£1-£1000</i>	<i>>£1000</i>	
<i>Zero</i>	<i>25th</i>	0	0	0	0
	<i>median</i>	0	0	2,000	0
	<i>75th</i>	0	4,000	42,500	6,000
	<i>mean</i>	5,676	10,610	21,293	10,522
<i>£1-£1000</i>	<i>25th</i>	0	0	0	0
	<i>median</i>	0	0	6,000	0
	<i>75th</i>	7,000	20,000	35,000	28,000
	<i>mean</i>	8,708	14,743	21,374	16,231
<i>Total</i>	<i>25th</i>	0	0	0	0
	<i>median</i>	0	0	5,000	0
	<i>75th</i>	0	15,000	36,000	20,000
	<i>mean</i>	6,877	13,209	21,354	13,907

VI. Conclusions and lessons for policy

In this paper we have undertaken a detailed analysis of new data on (non-pension) financial wealth from the 2000 wave of the British Household Panel Study. Where possible we have also compared this data to that from the 1995 wave of the survey in order to see how families have changed their holdings of wealth over this five year period. Much of our analysis has focussed on net financial wealth, which is the sum of money held in savings and investments minus that held in debt. Median holding amongst families in the sample is £600, whilst the mean amount of wealth is some 20 times greater than this at £12,363. The quarter of the population of families with the lowest balances of net wealth are all £200 or more in debt, but the wealthiest quarter all have positive net balances exceeding £9,000 in value. These disparities indicate the inequality that exists in the distribution of wealth and also the skewed nature of the distribution.

In order to learn something about what might be driving these disparities in wealth our analysis considered how holdings of financial wealth vary with characteristics such as age and income. Median holdings of wealth have a hump-shaped profile across age-bands within the population, with holding being highest for families of around state pension age. Wealth also increases strongly with income. Since age and income tend to vary systematically, we also considered wealth holdings within groups defined by age and income together. The broad patterns persist: families with a head aged less than thirty-five tend to have low wealth even if they have high income, and families with low-incomes also tend to have low wealth even in older age-groups; the families with the highest wealth balances tend to be those in older, high-income groups.

As well as allowing us to look at the net financial wealth of families, our data also allow us to split that wealth into holdings of saving, investments and debts. We discuss some of the circumstances in which it might be sensible to accumulate assets even while debt is being paid off and observe that almost 40 per cent of families in the sample do in fact hold both (non-pension) financial assets and debts. We also find those with larger asset holdings have a slightly lower propensity to be in debt than is found across the whole sample, and similarly those with sizeable liabilities are less likely than average to hold any assets.

Just looking at holdings of financial wealth does not give a complete picture of how families are managing their finances in order to smooth consumption in the short-run and across their lifetimes. With relation to smoothing consumption across work and retirement, pension wealth is extremely important for many families. For homeowners, the physical asset of the house is also likely to represent a large part of the overall portfolio. Unfortunately our data do not allow us to consider how wealth levels in financial assets vary with wealth holdings in pensions. With regard to housing, we discuss briefly the conceptual issues that make it difficult to separate the ‘investment’ value of a house from its ‘consumption’ value.

We do, however, look at how non-pension wealth varies with the type of pension plan(s) held, and with the gross value of any housing wealth. Over one half of the least wealthy ten percent of the population (i.e. those with the lowest net financial wealth) owns a house, and the values of these houses can be substantial, particularly in comparison to the

value of accumulated financial assets. Interestingly, the level of housing wealth among this group is somewhat higher than that amongst families with slightly larger balances in net financial wealth. There are also important positive correlations between pension and non-pension financial saving, and those with pension wealth tend to have larger balances in financial wealth than those without. Better data would allow a more thorough investigation of what might explain these patterns.

We also find interesting patterns when we look at changes in wealth over the period 1995 to 2000. Our analysis has concentrated on looking at those who had zero or low holdings of financial assets (either savings or investments) in 1995 and tracked their assets over the following five years. Over half of those who started with no assets accumulated some over the five year period, and forty percent of those with £1-£1000 in 1995 had more than £1000 by the time they were interviewed in 2000. This in accordance with the cross-sectional data described earlier where many of the low wealth families are young and at a stage of the life-cycle where wealth accumulation is yet to begin. On the other hand, this evidence also shows that almost half of the low wealth population remain in the low wealth group after five years and, whilst the proportion staying in the same group is higher amongst young families as expected, there is certainly evidence of a substantial group of middle aged households who are not managing to accumulate financial assets over the period 1995-2000.

Once again, housing wealth should be considered alongside changes in financial assets, although again noting that increases in house values might represent increased living costs rather than increased ‘investment’ value. In the lower wealth subgroup we look at, increases in gross housing wealth over the period 1995 to 2000 have dwarfed increases in financial assets over the same period — one quarter of those with no financial assets in either 1995 or 2000 owned a house, and for this group the median increase in the house value was £16,000 and the mean increase was around £27,500. Even amongst those with zero or low financial wealth in 1995 the gains in house value could be substantial. However, since home-ownership is less prevalent amongst lower wealth groups than it is at or near the top of the financial wealth distribution, the impact of gains in the housing market will not tend to offset inequalities in financial wealth. For example, amongst the whole group with zero assets in 1995, over half did not accumulate any housing wealth over the period, and seventy five percent accumulated only £6,000 or less.

Our analysis has highlighted many interesting patterns in holdings of financial wealth in the 2000 BHPS sample. Many of these patterns are in accordance with the predictions of the standard economic theory of consumption smoothing, at the group level at least. Wealth is lower for younger, low income or low education groups, and as such many of those with low savings might be thought to come from groups of the population with (relatively) low life-time incomes. For people in such groups it is not clear that extensive private non-pension financial wealth accumulation is a ‘rational’ response to their current and expected future circumstances (for more on this see Banks, Blundell, Disney and Emmerson (2002)). This is not to say that there are no people in the population who are saving too little (or indeed too much) to provide the level of resources that they might want if faced with a ‘rainy day’ when needs are unexpectedly high relative to income, or to provide for their retirement. However, the nature of the data, coupled with the complexity of the underlying economic problem, means that it is hard to find *prima facie*

evidence that well-defined, easily identifiable, groups of the population are systematically saving too little.

Our analysis also highlighted that even within groups defined by specific characteristics, there are often large variations in the amount wealth that people hold. This reflects that savings behaviour should, according to economic theory, be sensitive to individual circumstances that can vary widely within the broad groups that we are able to analyse. The fact that what amounts to rational savings behaviour is sensitive to individual characteristics is another factor that makes it difficult to identify large groups across which there is a 'savings problem'. That it is difficult to do this suggests that it is also difficult to accurately target policies specifically intended to affect savings behaviour.

Whilst we can offer these tentative conclusions, we must also note where our analysis is, by necessity, incomplete. The aim of saving is to smooth consumption, both in short-run across comfortable times and 'rainy-days', and between the working life and retirement in the longer-term. Financial wealth will be an important element of the portfolio held to facilitate smoothing over both of these time horizons. However, pension and physical wealth will also be important elements, especially for funding consumption after retirement. We have seen interesting covariations between financial, housing and pension asset ownership at various different points of the wealth, income and age distributions but we have not been able to give a complete picture of the amount of wealth that people hold in each element of their portfolio.

Ultimately, our analysis has been limited by the coverage and level of detail of the data available in the BHPS. Despite being the best data available on the wealth of the British population, more detail for pensions, as well as for particular dimensions of housing and financial wealth, would be required in order to undertake a full characterisation of the nature and extent of saving by individuals and families in Britain. Such a characterisation could help to inform a debate about how many people are saving adequately to provide for 'rainy days' or for their retirement. The number and complexity of the questions required in a survey questionnaire to elicit such detailed information suggests that it could only feasibly be collected in a dedicated survey of assets and debts, specifically designed to measure components of wealth. The recent importance of savings and retirement income provision issues in the policy debate suggests that such a survey would be hugely beneficial to policy analysis as well as research.

ANNEX A: THE DISTRIBUTION OF FINANCIAL WEALTH, BHPS 2000 DATA

Tables A1-A4 describe how the level of savings, investments, debts and net financial assets (defined as Saving + Investments – Debts) varies by income, age, education, housing tenure and pension status. For subgroups defined by each of these latter variables we present the mean, median, 25th and 75th percentiles of the wealth distribution within the subgroup. Where appropriate we also present the fraction of the subgroup who report positive values, and then report the same four statistics (mean, median, 25th and 75th percentiles) for only those within the subgroup who report positive values.

Tables A5-A8 repeat the analysis of the earlier tables, but focusing on breakdowns by income, education, housing and pension status *within* broad age groups, to allow at least some degree of life-cycle behaviour to be controlled for.

Notes to tables

The following notes apply to all the tables in this annex:

* The boundary points of the income quintiles are specified in figure III.3.

** Three tax-units do not report educational attainment, and so when the population is split by education the sample size is 5,999.

*** *Note on pension status breakdown*

In order to split the population by pension status we need to focus on just those of working age. As a result we take the sample of employees aged 20-59 who are routed into the pension questions. This cuts the sample size from 6,002 to 2,811 benefit units. Of these, in 388 benefit units at least one adult says that they have at least one personal pension **and** at least one occupational pension. A further 297 families have at least one personal pension (so in total there are 685 families in the sample with personal pensions) and a further 1261 have at least one occupational pension (making a total of 1649 with occupational pensions). 771 families say that they have no private pensions. Summing these totals gives 2,717 benefit units: the information on the remaining 94 is missing (for couples this may mean information is missing for both partners, or that one partner says they have no pension and information on the second is missing). When we give statistics across all families with pensions, the sample is that with 2,717 families in it. Hence when we split the population by age groups there will be no breakdown by pension status for the oldest age group. In addition, the split by pension status within younger age groups will not come from the full set of benefit units in that age-range, since the sample is restricted to just employed benefit units who responded to the pensions questions in the survey. All other breakdowns are unaffected by this issue since they utilize the whole sample.

Figures in a pale typeface are measured for a sample of less than fifty families.

Table A1: The distribution of savings wealth

	Savings at percentiles & mean					Savings at percentiles & mean, among savers				
	No.Obs	25th	Med	75th	Mean	% with	25th	Med	75th	Mean
Income quintile*										
Poorest	1201	0	50	1,500	3,000	61	110	800	3,200	4,908
2 nd	1200	0	400	3,500	4,260	70	300	1,500	6,000	6,107
3 rd	1200	4	700	5,000	6,951	78	367	2,000	7,900	8,940
4 th	1200	100	2,000	7,000	7,929	84	600	3,000	10,000	9,495
Richest	1201	700	4,400	12,000	12,886	90	1,500	5,500	14,000	14,396
Age band										
<25	1005	0	50	800	930	65	80	500	1,849	1,440
25-29	562	0	300	2,000	1,956	74	150	775	3,000	2,636
30-34	542	1	627	3,500	3,895	76	270	1,400	5,500	5,136
35-39	579	3	700	4,300	4,069	78	300	1,800	6,000	5,212
40-44	519	5	1,000	5,500	7,054	77	500	2,015	7,700	9,152
45-49	456	10	2,000	9,000	7,769	77	800	4,500	12,000	10,151
50-54	445	150	3,000	9,000	8,343	84	1,000	4,200	12,000	9,981
55-59	386	47	3,000	11,000	11,445	82	800	5,000	15,000	14,024
60-64	297	88	3,750	15,000	16,339	79	1,500	6,500	21,000	20,650
65-69	296	447	5,000	12,500	16,125	83	2,000	7,200	16,000	19,323
70-74	305	150	4,000	15,000	13,591	80	2,000	6,500	20,000	16,920
75+	610	200	2,625	10,000	10,557	80	1,100	4,000	14,000	13,169
Education level**										
o-level or lower	3211	0	450	4,500	5,834	71	300	2,000	7,000	8,212
a-level or equiv.	1285	15	1,000	5,000	6,196	80	367	2,000	6,600	7,708
degree or higher	1503	160	2,500	10,000	10,214	84	1,000	4,000	12,000	12,116
Tenure										
Other	2601	0	100	1,500	2,751	64	140	800	3000	4283
have mortgage	2123	103	1,800	6,500	6,577	84	650	3,000	8,077	7,854
own outright	1278	900	6,000	16,100	16,373	89	2,000	7,005	20,000	18,485
Pension status***										
No pension	771	0	65	1,000	2,177	64	100	500	2,100	3,426
Pers. pension	685	200	2,000	7,000	6,434	86	700	3,000	8,500	7,508
Occ. pension	1649	150	1,800	6,300	6,045	84	600	2,500	8,000	7,166
Both	388	500	3,000	8,600	7,375	87	1,000	4,000	10,000	8,517
All: pens. sample	2717	9	800	4,500	4,855	78	400	2,000	6,005	6,188
All	6002	1	1,000	6,000	7,005	76	400	2,300	8,500	9,178

Table A2: The distribution of investment wealth

	Investments at percentiles & mean					Investments at percentiles & mean, if invest>0				
	No.Obs	25 th	Med	75 th	Mean	% with	25 th	Med	75 th	Mean
Income quintile										
Poorest	1201	0	0	0	1,984	21	50	1,000	6,000	9,568
2 nd	1200	0	0	100	3,958	34	70	1,400	9,500	11,527
3 rd	1200	0	0	1,500	5,148	43	250	2,500	12,000	12,089
4 th	1200	0	21	4,500	9,582	55	500	3,000	12,000	17,449
Richest	1201	0	1,200	11,000	16,551	72	1,000	5,000	18,000	23,140
Age band										
<25	1005	0	0	0	636	18	70	500	2,000	3,513
25-29	562	0	0	100	890	30	200	1,000	3,000	2,958
30-34	542	0	0	1,200	4,304	44	300	2,000	10,103	9,884
35-39	579	0	0	2,000	4,822	47	200	2,000	8,000	10,301
40-44	519	0	20	3,000	8,413	55	300	2,034	10,000	15,162
45-49	456	0	25	5,000	8,451	57	800	3,900	12,000	14,709
50-54	445	0	60	6,000	10,171	59	400	3,163	14,000	17,275
55-59	386	0	114	7,000	14,815	60	500	4,800	20,000	24,863
60-64	297	0	300	12,000	18,096	59	1,000	7,500	30,000	30,711
65-69	296	0	500	12,365	17,516	62	1,075	7,000	27,000	28,332
70-74	305	0	30	13,070	16,411	55	2,000	10,000	28,500	29,795
75+	610	0	0	1,500	7,200	43	200	3,500	15,000	16,636
Education level										
o-level or lower	3211	0	0	500	4,824	37	200	2,500	12,000	13,138
a-level or equiv.	1285	0	0	2,000	6,381	48	300	2,000	10,000	13,247
degree or higher	1503	0	170	6,000	13,969	59	800	4,000	20,000	23,537
Tenure										
Other	2601	0	0	0	1,799	22	100	1,000	4,500	8,123
have mortgage	2123	0	77	4,000	7,753	59	350	2,850	10,400	13,252
own outright	1278	0	1,250	15,000	18,425	68	1,000	7,000	27,000	27,003
Pension status										
No pension	771	0	0	0	1,483	23	150	1,000	6,000	6,461
Pers. pension	685	0	101	4,000	7,062	61	200	2,057	10,000	11,518
Occ. pension	1649	0	100	3,500	6,434	59	300	2,014	9,000	10,848
Both	388	0	900	6,000	7,433	69	500	2,750	9,750	10,762
All: pens. sample	2717	0	0	2,000	5,045	48	245	2,000	8,500	10,487
All	6002	0	0	2,000	7,445	45	300	3,000	14,000	16,611

Table A3: The distribution of debt

	Debts at percentiles & mean					Debts at percentiles & mean, among debtors				
	No.Obs	25th	Med	75th	Mean	% with	25th	Med	75th	Mean
Income quintile										
Poorest	1201	0	0	400	1,161	34	300	1,500	5,000	3,337
2 nd	1200	0	0	600	1,263	40	300	1,160	4,000	3,178
3 rd	1200	0	0	1,357	1,593	48	400	1,500	4,550	3,295
4 th	1200	0	445	3,925	2,735	60	900	3,000	6,200	4,565
Richest	1201	0	600	5,000	3,683	58	1,400	4,000	8,000	6,346
Age band										
<25	1005	0	50	3,000	1,872	51	500	2,725	5,000	3,639
25-29	562	0	1,125	4,400	3,177	69	1,000	3,000	6,000	4,578
30-34	542	0	700	4,200	3,687	70	600	2,500	6,600	5,301
35-39	579	0	1,000	5,000	3,773	66	1,000	3,500	8,000	5,674
40-44	519	0	600	4,000	2,984	64	800	2,434	6,000	4,693
45-49	456	0	200	2,759	2,536	58	560	2,000	5,600	4,380
50-54	445	0	0	2,000	1,959	47	700	2,000	5,000	4,170
55-59	386	0	0	1,000	1,636	46	320	1,500	5,000	3,568
60-64	297	0	0	170	721	36	100	500	2,500	1,982
65-69	296	0	0	0	445	21	200	900	3,500	2,123
70-74	305	0	0	0	176	11	200	1,000	2,500	1,628
75+	610	0	0	0	116	6	90	300	2,500	1,814
Education level										
o-level or lower	3211	0	0	550	1,222	39	300	1,200	4,000	3,118
a-level or equiv.	1285	0	400	3,150	2,398	60	800	2,540	5,000	4,018
degree or higher	1503	0	600	5,000	3,675	58	1,400	4,000	8,000	6,385
Tenure										
Other	2601	0	0	1,500	1,724	46	400	2,000	5,000	3,722
have mortgage	2123	0	900	4,900	3,389	66	1,000	3,000	7,000	5,118
own outright	1278	0	0	0	663	22	300	1,085	4,000	3,028
Pension status										
No pension	771	0	300	3,780	2,262	59	517	2,000	5,000	3,817
Pers. pension	685	0	1,000	4,400	3,354	68	900	3,000	6,450	4,909
Occ. pension	1649	0	1,000	5,000	3,318	66	1,000	3,060	7,000	5,052
Both	388	0	1,650	5,000	3,657	73	1,000	3,100	7,000	4,980
All: pens. sample	2717	0	600	4,000	2,979	63	900	3,000	6,000	4,698
All	6002	0	0	2,000	2,087	48	520	2,400	6,000	4,333

Table A4: The distribution of net financial wealth

	Net financial assets at percentiles & mean					% with net financial assets > 0
	No.Obs	25th	Med	75th	Mean	
Income quintile						
Poorest	1201	-50	1	1,500	3,822	51
2 nd	1200	-80	341	5,000	6,954	59
3 rd	1200	-300	620	8,925	10,506	63
4 th	1200	-1,000	1,513	12,445	14,776	63
Richest	1201	-19	6,500	24,000	25,753	72
Age band						
<25	1005	-1,500	0	400	-306	43
25-29	562	-3,000	-77	1,100	-331	40
30-34	542	-1,255	10	5,000	4,512	51
35-39	579	-2,015	41	6,200	5,117	51
40-44	519	-1,000	600	9,000	12,483	57
45-49	456	-160	2,375	15,000	13,685	65
50-54	445	0	3,610	16,500	16,556	74
55-59	386	0	4,000	23,000	24,623	73
60-64	297	200	6,020	32,300	33,714	78
65-69	296	1,200	9,956	35,435	33,196	84
70-74	305	400	8,000	35,600	29,826	84
75+	610	400	4,000	15,500	17,641	84
Education level						
o-level or lower	3211	0	400	6,700	9,436	61
a-level or equiv.	1285	-970	500	7,300	10,180	59
degree or higher	1503	-1,500	2,300	19,505	20,508	65
Tenure						
other	2601	-555	0	1,200	2,826	89
have mortgage	2123	-1,170	1,400	11,000	10,941	61
own outright	1278	2,010	10,500	39,215	34,135	48
Pension status						
No pension	771	-1,500	0	825	1,398	39
Pers. pension	685	-1,200	1,700	10,840	10,142	63
Occ. pension	1649	-1,670	1,200	10,000	9,160	62
Both	388	-1,400	3,073	13,500	11,151	65
All: pens. sample	2717	-1,500	250	6,500	6,291	55
All	6002	-200	600	9,050	12,363	61

Table A5: The distribution of savings wealth, by age band

	Savings at percentiles & mean					Savings at percentiles & mean, among savers				
	No.Obs	25 th	Med	75 th	Mean	% with	25 th	Med	75 th	Mean
Age <35										
<i>Income quintile</i>										
Poorest	652	0	10	500	827	60	50	350	1,500	1,390
2 nd	345	0	50	800	925	64	63	415	1,705	1,450
3 rd	394	0	110	1,000	1,151	69	100	500	2,000	1,674
4 th	384	15	500	2,500	2,414	82	200	1,000	3,000	2,952
Richest	334	200	2,000	6,000	5,707	85	950	3,000	7,000	6,711
<i>Education level</i>										
o-level or lower	869	0	10	500	773	60	50	370	1,200	1,285
a-level or equiv.	613	1	300	2,000	1,851	76	160	800	2,600	2,435
degree or higher	626	5	800	3,500	3,735	78	300	1,700	5,000	4,791
<i>Tenure</i>										
Other	1491	0	54	900	1,163	64	100	500	2,000	1,823
have mortgage	591	60	1,000	3,500	3,936	86	300	1,500	4,500	4,588
own outright	27	0	600	5,000	3,150	70	500	3,500	6,600	4,476
<i>Pension status</i>										
No pension	505	0	50	700	1,010	64	60	415	1,500	1,584
Pers. pension	240	100	1,000	4,250	4,794	84	350	2,000	6,000	5,696
Occ. pension	578	20	1,000	4,000	3,417	81	400	1,700	5,000	4,193
Both	112	200	2,000	6,000	5,786	88	800	2,900	7,000	6,613
All: pens. & <35	1211	0	350	2,100	2,467	74	200	1,000	3,400	3,331
All <35	2109	0	200	1,550	1,965	70	115	700	2,700	2,806
Age 35-59:										
<i>Income quintile</i>										
Poorest	236	0	19	1,500	2,923	57	150	850	5,000	5,149
2 nd	303	0	67	1,300	3,561	64	150	700	3,000	5,591
3 rd	464	4	600	4,812	4,900	78	366	1,888	6,750	6,316
4 th	630	150	2,000	7,000	6,460	82	1,000	3,300	10,000	7,872
Richest	752	818	5,100	13,000	12,736	91	1,900	6,000	15,000	14,002
<i>Education level</i>										
o-level or lower	1142	0	500	4,400	4,876	72	300	2,000	7,000	6,775
a-level or equiv.	555	100	2,000	8,000	8,483	83	685	3,300	10,000	10,213
degree or higher	687	700	4,000	12,000	10,791	88	1,800	5,500	14,000	12,253
<i>Tenure</i>										
Other	397	0	41	1,500	3,460	60	114	750	3,600	5,724
Have mortgage	1399	200	2,000	8,000	7,223	84	800	3,505	10,000	8,622
own outright	589	700	5,000	15,000	13,972	91	1,500	7,000	16,000	15,408
<i>Pension status</i>										
No pension	266	0	133	2,200	4,393	63	200	1,475	5,500	6,956
Pers. pension	445	400	2,500	8,000	7,318	87	900	4,000	10,000	8,459
Occ. pension	1071	300	2,000	8,500	7,436	86	805	3,500	10,000	8,688
Both	276	650	4,000	10,000	8,020	86	1,500	5,000	10,000	9,301
All: pens & 35-59	1506	100	1,626	7,000	6,776	82	650	3,000	9,000	8,263
All 35-59	2385	20	1,500	7,010	7,417	79	600	3,000	10,000	9,370

Age 60+ &:										
<i>Income quintile</i>										
Poorest	313	0	1,000	5,500	7,582	68	800	3,000	10,000	11,195
2 nd	552	20	2,000	7,700	6,728	77	1,000	4,000	10,000	8,759
3 rd	342	700	5,750	18,000	16,414	88	2,000	7,000	20,000	18,588
4 th	186	3,000	10,000	25,000	24,290	92	4,000	12,000	28,000	26,420
Richest	115	4,000	12,000	38,000	34,715	93	6,000	15,000	47,000	37,311
<i>Education level</i>										
o-level or lower	1200	54	2,500	9,000	10,409	78	1,000	4,650	12,750	13,345
a-level or equiv.	117	2,000	8,000	20,000	18,116	91	3,000	9,000	23,000	19,996
Degree or higher	190	3,500	12,000	30,000	29,475	92	6,000	14,000	33,000	32,185
<i>Tenure</i>										
Other	854	0	900	5,000	6,497	70	700	3,000	8,000	9,299
have mortgage	133	0	3,000	11,000	11,521	74	2,000	6,000	20,000	15,478
own outright	521	1,000	6,000	20,000	17,908	88	2,568	8,500	21,000	20,310
All 60+	1508	200	3,200	12,000	13,402	81	1,500	6,000	18,000	16,620
All	6002	1	1,000	6,000	7,005	76	400	2,300	8,500	9,178

Table A6: The distribution of investment wealth, by age band

	Investments at percentiles & mean					Investments at percentiles & mean, if invest>0				
	No.Obs	25 th	Med	75 th	Mean	% with	25th	Med	75th	Mean
Age <35:										
<i>Income quintile</i>										
Poorest	652	0	0	0	312	13	100	500	2,000	2,336
2 nd	345	0	0	0	833	22	60	300	2,000	3,831
3 rd	394	0	0	0	948	25	50	450	1,500	3,812
4 th	384	0	0	395	1,813	36	220	1,500	5,000	5,045
Richest	334	0	100	3,000	5,723	57	700	2,100	10,000	10,113
<i>Education level</i>										
o-level or lower	869	0	0	0	620	17	100	500	3,000	3,663
a-level or equiv. degree or higher	613	0	0	100	1,295	31	200	1,200	3,150	4,133
	626	0	0	800	3,418	40	233	1,500	6,300	8,628
<i>Tenure</i>										
other	1491	0	0	0	580	19	100	700	2,000	3,089
have mortgage	591	0	0	1,600	4,055	50	200	1,600	6,000	8,123
own outright	27	0	0	3000	7,796	44	625	3600	25,400	17,541
<i>Pension status</i>										
No pension	505	0	0	0	892	17	135	900	3,000	5,121
Pers. pension	240	0	3	1,500	3,268	51	200	1,500	5,500	6,377
Occ. pension	578	0	0	1,500	2,945	49	200	1,500	5,000	6,037
Both	112	0	150	2,150	4,184	60	390	2,000	5,000	6,994
All: pens & <35	1211	0	0	300	2,039	35	200	1,325	5,000	5,795
All <35	2109	0	0	20	1,646	28	200	1,000	4,500	5,914
Age 35-59:										
<i>Income quintile</i>										
Poorest	236	0	0	0	4,027	24	10	1,600	10,000	16,673
2 nd	303	0	0	40	3,634	33	40	1,500	8,500	11,123
3 rd	464	0	0	1,200	4,518	45	135	2,000	6,505	10,079
4 th	630	0	100	5,000	9,600	60	482	3,000	10,000	15,958
Richest	752	2	2,000	11,000	14,708	76	800	5,000	16,000	19,404
<i>Education level</i>										
o-level or lower	1142	0	0	1000	4397	42	200	2,000	10,000	10,375
a-level or equiv. degree or higher	555	0	100	5000	9627	61	350	3,000	10,100	15,668
	687	0	1202	10,000	15854	71	1,000	4,000	18,000	22,320
<i>Tenure</i>										
other	397	0	0	1	2827	25	40	1,000	6,000	11,101
have mortgage	1399	0	200	5,000	8846	62	400	3,000	11,000	14,209
own outright	589	0	1,600	14,000	18175	74	850	6,000	22,500	24,710
<i>Pension status</i>										
No pension	266	0	0	200	2,605	33	200	2,000	8,000	7,786
Pers. pension	445	0	200	6,000	9,108	67	200	3,000	14,000	13,646
Occ. pension	1071	0	300	5,800	8,317	65	400	3,000	10,750	12,798
Both	276	0	1,300	7,000	8,752	73	500	3,025	12,000	12,018
All: pens & 35-59	1506	0	60	4,000	7,462	58	300	2,500	10,400	12,755
All 35-59	2385	0	12	4,000	8,913	55	300	3,000	12,000	16,189

Age 60+ &:										
<i>Income quintile</i>										
Poorest	313	0	0	50	3,926	34	50	1,500	12,100	11,704
2 nd	552	0	0	1,000	6,088	43	100	2,600	12,500	14,120
3 rd	342	0	750	12,000	10,840	60	2,000	7,500	20,000	18,085
4 th	186	2	6,000	27,000	25,562	76	3,000	11,500	40,000	33,483
Richest	115	1,000	18,000	78,000	60,047	87	5,000	26,000	87,500	69,054
<i>Education level</i>										
o-level or lower	1200	0	0	3,575	8275	46	350	5,000	15,500	18,120
a-level or equiv.	117	0	1,500	15,000	17639	74	600	5,810	22,000	23,998
Degree or higher	190	200	8,520	50,000	41912	82	3,575	18,200	70,500	51,047
<i>Tenure</i>										
Other	854	0	0	5	4,124	28	30	1,850	8,020	14,717
have mortgage	133	0	100	8,020	12,684	57	550	6,250	15,000	22,198
own outright	521	0	1,250	15,000	18,887	67	1,300	8,260	30,000	28,382
All 60+	1508	0	5	7,000	13,234	52	700	6,000	22,000	25,262
All	6002	0	0	2,000	7,445	45	300	3,000	14,000	16,611

Table A7: The distribution of debt, by age band

	Debts at percentiles & mean					Debts at percentiles & mean, among debtors				
	No.Obs	25th	Med	75th	Mean	% with	25th	Med	75th	Mean
Age <35:										
<i>Income quintile</i>										
Poorest	652	0	0	1,900	1,596	46	447	2,700	5,000	3,503
2 nd	345	0	200	2,600	1,821	61	330	1,800	5,000	2,977
3 rd	394	0	425	3,000	2,275	66	450	2,000	4,100	3,434
4 th	384	0	1,800	5,000	3,692	70	1,200	3,500	7,000	5,251
Richest	334	0	2,000	6,500	5,037	73	1,700	4,000	8,000	6,867
<i>Education level</i>										
o-level or lower	869	0	50	1,500	1,585	53	300	1,300	4,000	2,987
a-level or equiv.	613	0	700	3,300	2,512	65	800	2,520	5,000	3,849
degree or higher	626	0	2,000	6,000	4,390	67	2,000	4,400	8,000	6,512
<i>Tenure</i>										
other	1491	0	135	3,000	2,216	55	500	2,500	5000	4,030
have mortgage	591	35	1,800	6,000	3,892	76	1,000	3,040	7150	5,123
own outright	27	0	75	3,287	2,221	56	550	2,500	4000	3,997
<i>Pension status</i>										
No pension	505	0	500	3,000	2,590	64	650	2,200	5,000	4,074
Pers. pension	240	0	1,000	5,000	3,583	75	700	3,000	6,000	4,803
Occ. pension	578	0	2,000	6,000	3,843	74	1,200	3,500	7,000	5,178
Both	112	300	2,000	4,850	3,562	84	1,000	3,000	7,000	4,244
All: pens & <35	1211	0	1,000	4,400	3,295	69	1,000	3,000	6,000	4,779
All <35	2109	0	400	3,500	2,686	61	650	2,850	6,000	4,412
Age 35-59:										
<i>Income quintile</i>										
Poorest	236	0	0	500	1,388	41	200	800	3,000	3,378
2 nd	303	0	200	2,000	2,512	59	470	1,250	4,500	4,253
3 rd	464	0	160	2,000	2,000	56	450	1,500	5,000	3,582
4 th	630	0	700	4,000	2,755	64	800	3,000	6,000	4,329
Richest	752	0	500	5,000	3,511	57	1,100	4,000	7,500	6,154
<i>Education level</i>										
o-level or lower	1142	0	100	2,000	1,993	55	400	1,400	5,000	3,641
a-level or equiv.	555	0	500	4,000	2,644	61	900	3,000	5,800	4,355
degree or higher	687	0	650	5,000	3,856	59	1,250	4,000	8,800	6,574
<i>Tenure</i>										
other	397	0	100	1,300	1,883	54	400	1,010	4,360	3,488
have mortgage	1399	0	800	4,900	3,409	65	900	3,000	7,000	5,270
own outright	589	0	0	700	1,295	36	400	2,000	5,000	3,621
<i>Pension status</i>										
No pension	266	0	30	1,200	1,641	51	350	1,150	3,900	3,209
Pers. pension	445	0	800	4,150	3,230	65	1,000	3,000	7,000	4,974
Occ. pension	1071	0	500	4,000	3,035	61	1,000	3,000	7,000	4,970
Both	276	0	1,500	5,000	3,697	69	1,350	3,500	8,000	5,342
All: pens & 35-59	1506	0	350	3,500	2,725	59	800	2,525	6,000	4,622
All 35-59	2385	0	200	3,000	2,680	57	650	2,500	6,000	4,683

Age 60+ :										
<i>Income quintile</i>										
Poorest	313	0	0	0	86	8	95	175	1,800	1,124
2 nd	552	0	0	0	229	16	120	500	2,045	1,456
3 rd	342	0	0	0	255	18	120	500	2,000	1,452
4 th	186	0	0	30	690	26	240	1,020	3,000	2,673
Richest	115	0	0	0	879	20	170	2,150	6,000	4,395
<i>Education level</i>										
o-level or lower	1200	0	0	0	225	14	100	500	2,098	1,570
a-level or equiv.	117	0	0	25	635	26	200	550	3,000	2,477
degree or higher	190	0	0	0	662	21	350	1,000	3,250	3,143
<i>Tenure</i>										
other	854	0	0	0	136	13	100	200	1,000	1,054
have mortgage	133	0	0	500	946	39	190	1,650	3,000	2,420
own outright	521	0	0	0	320	14	200	800	3,000	2,225
All 60+	1508	0	0	0	312	16	135	600	2,500	1,943
All	6002	0	0	2,000	2,087	48	520	2,400	6,000	4,333

Table A8: The distribution of net financial wealth, by age band

	Net financial assets at percentiles & mean					
	No.Obs	25th	Med	75th	Mean	% with net financial assets > 0
Age <35 :						
<i>Income quintile</i>						
Poorest	652	-950	0	300	-457	42
2 nd	345	-1,500	0	400	-63	39
3 rd	394	-1,800	0	660	-175	41
4 th	384	-3,500	0	2,051	535	46
Richest	334	-3,000	1,075	9,000	6,392	57
<i>Education level</i>						
o-level or lower	869	-900	0	250	-192	39
a-level or equiv.	613	-1,900	0	1,550	643	46
Degree or higher	626	-4,100	1	3,000	2,762	50
<i>Tenure</i>						
Other	1491	-1,600	0	445	-474	59
have mortgage	591	-2,920	11	5,100	4,099	51
own outright	27	-400	1,000	7,200	8,725	41
<i>Pension status</i>						
No pension	505	-2,000	0	350	-687	35
Pers. pension	240	-2,045	200	5,850	4,479	55
Occ. pension	578	-3,345	8	4,500	2,520	51
Both	112	-1,899	1,413	7,500	6,409	59
All: pens. & <35	1211	-2,800	0	2,000	1,211	44
All <35	2109	-1,900	0	1,000	925	44
Age 35-59 :						
<i>Income quintile</i>						
Poorest	236	-90	0	2,250	5,562	49
2 nd	303	-970	0	2,000	4,683	42
3 rd	464	-500	468	7,000	7,419	60
4 th	630	-800	2,005	13,000	13,304	65
Richest	752	88	8,000	25,001	23,934	76
<i>Education level</i>						
o-level or lower	1142	-400	300	7,300	7,281	57
a-level or equiv.	555	-400	2000	14,020	15,465	67
degree or higher	687	-300	5950	23,000	22,788	70
<i>Tenure</i>						
Other	397	-670	0	1,200	4,404	86
have mortgage	1399	-800	2,030	13,770	12,660	64
own outright	589	1,250	9,000	31,100	30,851	43
<i>Pension status</i>						
No pension	266	-500	0	3,125	5,357	48
Pers. pension	445	-750	3,000	14,950	13,196	67
Occ. pension	1071	-695	2,500	14,000	12,745	68
Both	276	1,050	5,000	16,165	13,075	68
All: pens & 35-59	1506	-555	1,500	11,950	11,513	64
All 35-59	2385	-397	1,500	12,050	13,649	63

Age 60+ :						
<i>Income quintile</i>						
Poorest	313	0	1,721	9,800	11,422	70
2 nd	552	200	3,010	11,182	12,586	80
3 rd	342	2,000	10,800	36,000	26,999	92
4 th	186	6,000	23,002	64,000	49,162	91
Richest	115	8,707	48,000	130,000	93,883	93
<i>Education level</i>						
o-level or lower	1200	200	4000	17461	18459	81
a-level or equiv.	117	2700	12350	40002	35120	91
degree or higher	190	9500	32500	102000	70725	94
<i>Tenure</i>						
other	854	0	1,005	7,000	10,486	91
have mortgage	133	0	4,000	20,000	23,259	74
own outright	521	3,000	12,000	41,500	36,464	71
All 60+	1508	412	6,000	25,140	26,324	83
All	6002	-200	600	9,050	12,363	61

Table A9: House value by net financial wealth decile

£ thousands, 2000 prices

		House value at percentiles & mean					House value at percentiles & mean, homeowners				
		No.Obs	25th	Med	75th	Mean	% with	25th	Med	75th	Mean
Net wealth decile	Max wealth in decile										
Lowest	-£4,248	601	0	38	85	54	54	55	81	120	100
2	-£899	600	0	0	70	39	47	48	70	100	84
3	£0	600	0	0	40	24	30	45	62	90	80
4	£10	600	0	0	40	25	31	42	65	99	79
5	£600	600	0	0	50	30	38	45	62	100	79
6	£2,500	600	0	30	77	50	52	54	75	110	96
7	£6,000	600	0	50	90	63	64	53	80	120	99
8	£13,770	600	30	74	120	87	77	60	92	135	114
9	£35,000	600	52	90	150	114	87	64	100	170	131
Highest	-	601	65	120	190	136	87	85	130	200	156
All		6002	0	40	94	62	57	55	85	135	110

Table A10: House value by gross financial wealth decile

£ thousands, 2000 prices

		House value at percentiles & mean					H. value at percentiles & mean, homeowners				
		No.Obs	25th	Med	75th	Mean	% with	25th	Med	75 th	Mean
Gross wealth dec.	Max wealth in decile										
Lowest	£0	601	0	0	0	15	22	40	50	90	71
2	£1	600	0	0	45	28	34	45	68	100	82
3	£150	600	0	0	47	27	35	45	64	90	77
4	£600	600	0	0	55	32	42	42	62	99	78
5	£1,900	600	0	35	80	52	55	52	75	110	94
6	£3,775	600	0	46	83	56	60	55	75	110	95
7	£7,500	600	0	60	100	69	68	58	85	130	102
8	£15,000	600	32	75	120	90	78	60	90	140	115
9	£36,750	600	54	94	150	114	87	65	100	170	131
highest	-	601	65	120	190	139	88	85	130	200	158
All		6002	0	40	94	62	57	55	85	135	110

Table A11: House value in 2000 by income quintile

<i>Income quintile</i>	<i>25th</i>	<i>median</i>	<i>75th</i>	<i>mean</i>	<i>% with</i>	<i>25th</i>	<i>median</i>	<i>75th</i>	<i>mean</i>
Poorest	0	0	29	23	27	42	68	100	87
2	0	0	60	38	44	45	69	100	85
3	0	40	80	54	56	50	75	120	96
4	0	62	105	76	73	55	80	125	104
Richest	55	100	160	120	83	80	120	180	145
Total	0	40	94	62	57	55	85	135	110

Table A12. Correlation between housing wealth and pension status in 2000

		<i>Percent of age group with each combination</i>			
		<i>Not an owner occupier</i>	<i>House value <£100,000</i>	<i>House value £100,000+</i>	<i>All</i>
Age<35	No private pension	35.4	6.7	1.4	43.5
	Has private pension	24.5	22.4	6.9	56.5
	<i>All</i>	<i>59.9</i>	<i>29.1</i>	<i>11.0</i>	<i>100.0</i>
Age 35-59	No private pension	9.4	7.4	3.8	20.6
	Has private pension	11.3	37.3	30.7	79.4
	<i>All</i>	<i>20.7</i>	<i>44.8</i>	<i>34.6</i>	<i>100.0</i>
All	No private pension	20.9	7.1	2.7	30.8
	Has private pension	17.2	30.7	21.3	69.2
	<i>All</i>	<i>38.1</i>	<i>37.8</i>	<i>24.1</i>	<i>100.0</i>

ANNEX B: What does the BHPS count as Savings, as Investments and as Debts?

Savings

Savings or deposit account, (with a bank, post office or building society)
National Savings Bank (Post Office)
TESSA or ISA

Note that there is no distinction between cash, stocks and shares and life insurance ISA's.

Investments

National Savings Certificates
Premium Bonds
Unit Trusts/Investment Trusts
PEP, Personal Equity Plan
Shares, (UK or foreign)
National Savings Bonds (Capital, Income or Deposit)
Other investments (government or company securities)

Debts

Hire purchase agreements
Personal loans (from bank, building society or other financial institution)
Credit cards (inc store cards)
Catalogue or mail order purchase agreements.
DSS Social Fund loan
Any other loans from a private individual
Overdrafts
Student loan
Other

ANNEX C: BHPS questions.

1995 Questionnaire

Savings

Regular savers

Do you save any amount of your income for example by putting something away now and then in a bank, building society, or Post Office account other than to meet regular bills? Please include share purchase schemes and Personal Equity Plan (PEP) schemes. INCLUDE TESSA SAVINGS ACCOUNTS

Irregular savers

If respondent does not save any income

Even though you don't save any amount of your income, do you have any savings in a bank, Post Office or Building Society account? INCLUDE TESSA SAVINGS ACCOUNTS

If Yes to either regular or irregular saving

About how much do you currently have in your savings account(s)? Please do not include money you have in share purchase schemes or Personal Equity Plans (PEP) schemes. INCLUDE TESSA SAVINGS ACCOUNTS

WRITE IN TO NEAREST £

If 'don't know', the following series of questions is asked to determine a band for savings

Would it amount to

- a) £1,000 or more? (if yes, ask (b), if no, ask (d))
- b) £5,000 or more? (if yes ask (c))
- c) £10,000 or more?
- d) £500 or more?

Are these savings in your name only, jointly held with someone else, or do you have both sole and jointly held accounts? (options are sole, joint or both sole and joint)

Investments

Do you currently have any money in any of the investments shown on this card?

National Savings Certificate

Premium Bonds

Unit Trusts

Personal Equity Plans

Shares (UK or foreign)

National Savings/Building Society/Insurance Bonds

Other investments, government or company securities

If yes

And which of your investments is your largest asset? That is, in which do you have the most money invested?

Thinking of all your investments, about how much do you have invested in total? IF RANGE GIVEN ENTER LOWER FIGURE. WRITE IN TO NEAREST £

If 'don't know', the following series of questions is asked to determine a band for investments

- a) £5,000 or more? (if yes, ask (b), if no, ask (d))
- b) £15,000 or more? (if yes ask (c))
- c) £50,000 or more?
- d) £1000 or more?

Is your/are any of your investments held jointly with someone else? (yes or no)

Debt

I would like to ask you now about any other financial commitments you may have apart from mortgages and housing related loans. Do you currently owe any money on the things listed on this card?

DO NOT INCLUDE CREDIT CARD AND OTHER BILLS BEING PAID OFF IN THE CURRENT MONTH

Hire purchase agreements

Personal loans (from bank, building society or other financial institution)

Credit cards (inc store cards)

Catalogue or mail order purchase agreements

DSS Social Fund loan

Any other loans from a private individual

Anything else?

If owes money

About how much in total do you owe? WRITE IN TO NEAREST £

If 'don't know', the following series of questions is asked to determine a band for debt

Would it amount to

- a) £500 or more? (if yes, ask (b), if no, ask (d))
- b) £1,500 or more? (if yes ask (c))
- c) £5,000 or more?
- d) £100 or more?

Is this (are any of these) a joint commitment with someone else? (yes or no)

2000 Questionnaire

Savings and Investments

Please look at this card and tell me which types of savings accounts or investments you have, if any. They can be in your name only or held jointly with someone else.

1. Savings or deposit account, (with a bank, post office or building society),
2. National Savings Bank (Post Office),
3. TESSA or ISA,
4. National Savings Certificates,
5. Premium Bonds,
6. Unit Trusts/Investment Trusts,
7. PEP, Personal Equity Plan,
8. Shares, (UK or foreign)
9. National Savings Bonds,(Capital, Income or Deposit)
10. Other investments, (government or company securities)

If respondent has products 1,2 or 3

Thinking first about your savings accounts, TESSA or ISA, about how much do you currently have in total in these accounts? WRITE IN TO NEAREST £

If 'don't know', the following series of questions is asked to determine a band for savings

Would it amount to

- a) £1,000 or more? (if yes, ask (b), if no, ask (d))
- b) £5,000 or more? (if yes ask (c))
- c) £10,000 or more?
- d) £500 or more?

Are these savings in your name sole only, jointly held with someone else, or do you have both sole and jointly held accounts? (options are sole only, joint only or both sole and joint)

If has both sole and joint savings

About how much of the amount you have in savings is held in your sole name?

If has both sole and joint savings but can't give a figure for the amount held in sole name

Can you tell me approximately what your personal share of the total amount you have in savings is?

If respondent has any of products 4 to 10

Thinking now about the investments you have, {NOT including the savings you have just told me about}, about how much is the total value of these investments? WRITE IN TO NEAREST £

If 'don't know', the following series of questions is asked to determine a band for investments

Would it amount to

- a) £5,000 or more? (if yes, ask (b), if no, ask (d))
- b) £15,000 or more? (if yes ask (c))
- c) £100,000 or more?
- d) £1,000 or more?

Are these investments in your sole name only, jointly held with someone else or do you have both sole and jointly held investments (options are sole only, joint only or both sole and joint)

If respondent holds both sole and joint investments

About how much of amount you have in investments is held in your sole name? WRITE IN TO NEAREST £

If has both sole and joint investments but can't give a figure for the amount held in sole name

Can you tell me approximately what your personal share of the total amount you have invested is?

Debt

I would like to ask you now about any other financial commitments you may have apart from mortgages and housing related loans. Do you currently owe any money on the things listed on this card? Please do not include credit card and other bills being fully paid off in the current month

Hire purchase agreements
Personal loans (from bank, building society or other financial institution)
Credit cards (inc store cards)
Catalogue or mail order purchase agreements
DSS Social Fund loan
Any other loans from a private individual
Overdrafts
Student loan
Anything else?

If owes money

About how much in total do you owe? WRITE IN TO NEAREST £

If 'don't know', the following series of questions is asked to determine a band for debt

Would it amount to

- a) £500 or more? (if yes, ask (b), if no, ask (d))
- b) £1500 or more? (if yes ask (c))
- c) £5000 or more?
- d) £100 or more?

Are these financial commitments in your sole name only, jointly held with someone else or do you have both sole and joint commitments? (options are sole only, joint only or both sole and joint)

If holds both sole and joint commitments

About how much of the amount outstanding is your sole commitment?

If holds both sole and joint commitments but can't give a figure for the amount held in sole name

Can you tell me approximately what your personal share of the total amount outstanding is?