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The living standards of families with children reporting low incomes

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Glossary

BHC	Before Housing Costs (a definition of disposable income which does not deduct the cost of housing).
BHPS	British Household Panel Survey.
Child	This is almost always used in the sense of 'dependent child'.
EFS	Expenditure and Food Survey.
Equivalised	Adjusted for household size and composition, usually using the Modified OECD scale.
FACS	Families and Children Study.
Family	This is almost always used in the sense of benefit unit or tax unit, i.e. an adult, their spouse or partner with whom they are living as husband and wife, and any dependent children for which they are responsible. A woman aged 45 living with her children aged 21 and 14 would therefore count as two families, one of which contained dependent children.
FES	Family Expenditure Survey.
FRS	Family Resources Survey.
Hardship	This is almost always used as a shorthand for 'living in a household with a level of living standards below a given threshold', but the threshold used will depend on the measure of living standards.

HBAI	Households Below Average Income.
HMRC	Her Majesty's Revenue and Customs.
Household	This is usually used in the sense used by survey designers, which defines a household as a single person or a group of people who have the address as their only or main residence and who either share one meal a day or share the living accommodation.
Living standards	The level of material comfort a household can achieve. It is also used in this report to refer to a measure of something other than income which is a proxy for, or correlated with, the level of living that a household can achieve.
Logit regression	A variant of a regression model in which a binary outcome (a variable which can take the value of zero or one only) is related to a range of explanatory variables.
Modified OECD scale	A method of adjusting the income or spending of households of different sizes and composition so that they are more comparable: see Appendix A of DWP, 2008.
Poor	This is used as a general description of having a low income or having a low living standard with no precise definition in mind.
Poverty	This is almost always used as a shorthand for 'living in a household with less than 60 per cent median equivalised income'.
Tobit regression	A variant of an Ordinary Least Squares regression which allows the dependent variable to be censored.

Summary

The Government has high-profile child poverty targets which are assessed using a measure of income, as recorded in the Household Below Average Income series (HBAI). However, income is an imperfect measure of living standards. Previous analysis suggests that some children in households with low income do not have commensurately low living standards. This report aims to document the extent to which this is true, focusing on whether children in low-income households have different living standards depending on whether their parents are employed, self-employed, or workless.

There are several reasons why income as measured in the HBAI series may give a different impression from another survey-based measure of living standards:

1 The concept of 'income' that is intended to be captured by the household survey may be conceptually wrong or measured incorrectly.

2 The concept of 'standard of living' that is intended to be captured by the household survey may be conceptually wrong or measured incorrectly.

3 The income recorded in the HBAI series is simply a 'snap-shot' measure – reflecting actual, or in some cases 'usual', income around the time of the survey. Over an individual's lifetime, income (correctly measured) and spending (correctly measured) must equal each other, but the fact that individuals can shift their resources over time mean that this need not be the case at any one part of an individual's life-time.

However, 'disposable income' and 'material living standards' are fundamentally different concepts. Even if measured perfectly and over very long periods of time, they may give different impressions of which households are the poorest.

Data

Four large-scale household surveys are used in this report: the Family Resources Survey (FRS), the Family Expenditure Survey and Expenditure and Food Survey (treated as a single survey) (FES/EFS), the Family and Children Study (FACS), and the British Household Panel Survey (BHPS).

The use of four surveys provides three advantages:

- First, they allow the construction of a variety of different measures of living standards. By looking at many different measures, this report aims to build up as complete a picture as is possible of the living standards of low-income households.
- Second, each survey has advantages that the others do not have. Data from FRS is used to construct the HBAI series and thus is important in linking our results to those used to assess progress towards the Government's child poverty targets. EFS has detailed expenditure data allowing us to analyse the spending of low-income households, and FACS and BHPS are longitudinal surveys (i.e. they follow the same households over time) allowing the examination of some of the dynamics associated with hardship.
- Finally, each survey acts as a check on the findings of the other so that it can be shown that the results presented in the report are not sensitive to any particular survey, nor are the general findings unique to any particular measure of hardship defined. The income distributions in each of the surveys are broadly similar, indicating that the results presented are broadly comparable across surveys.

Methodology

A number of measures of living standards were constructed from the four household surveys. These were as follows (the survey from which they were derived is listed in brackets):

- Spending (excluding that on housing and durable goods) (FES/EFS).
- Share of spending devoted to food (food's budget share) (FES/EFS).
- Level of financial assets (FRS).
- Material deprivation (as defined by the Government for one of its indicators of child poverty) (FRS).
- 'Daily living' deprivation (such as an inability to afford items of food, clothing, leisure) (FACS and BHPS, although the measures are different).
- Lack of, or inability to afford, consumer durables, such as personal computers, white goods or electronic items (FACS and BHPS, although the measures are different).
- Housing conditions (FACS and BHPS, although the measures are different).
- Problem debts (FACS).
- Degree of financial difficulties (FACS and BHPS, although the measures are different).

These measures differ in a number of different ways. Some are positively related to well-being (e.g. level of financial assets), whereas some are negatively related to well-being (e.g. the degree of financial difficulties). Some are continuous (for example, household spending) while some are discrete (i.e. a household is considered either to have problem debts or not to have them: there is no in-between). Finally, some are objective measures (e.g. household spending), while some relate to a respondent's subjective impression of their well-being (e.g. whether they are experiencing financial difficulties).

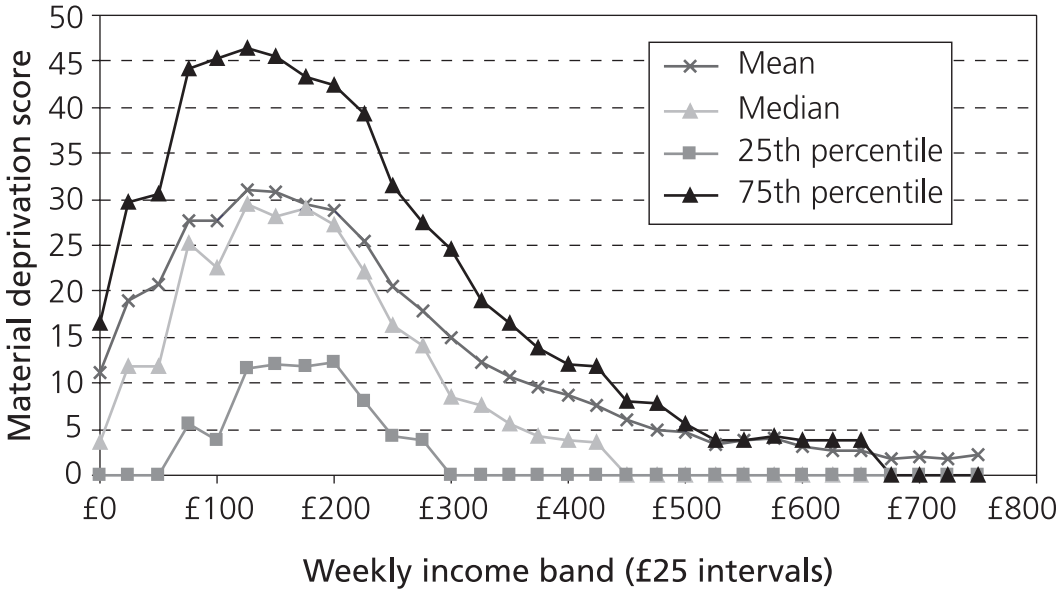
Findings

Do children from households with the lowest incomes have the lowest living standards?

The simplest form of analysis examines how living standards of households with children are related to income. This report confirms other findings that, without taking account of any other factors, children from households with the lowest incomes do not have the lowest average living standards. Instead, in general, average living standards first fall as income rises, and then rise creating a 'U-shaped' profile between income and other measures of living standards. Equally, levels of deprivation rise then fall as income rises, creating a 'hump-shaped' profile.

To be precise, the roughly one per cent of children living in households with incomes below £50 a week have average living standards comparable to those with incomes of £250 to £500 a week. The lowest average living standards are to be found amongst children living in households with equivalised incomes of £100 to £200 a week, which represents about 11 per cent of all children, and corresponds to roughly 30 per cent to 50 per cent of median income. An example is shown in Figure 1.

Figure 1 Distribution of material deprivation by £25 income bands, 2004/05 to 2006/07



Base: All children in the UK. Sample size: 25,249 families.
Source: FRS, 2004/05 to 2006/07.

There is more variation in living standards within income bands for households with incomes less than £300 a week, showing that the poorest households contain high proportions of households who have living standards which are either well below or far above the average for their income level.

There is little difference in average hardship rates and living standards between children with household incomes below 50 per cent of median income and those with household income between 50 per cent and 60 per cent median income.

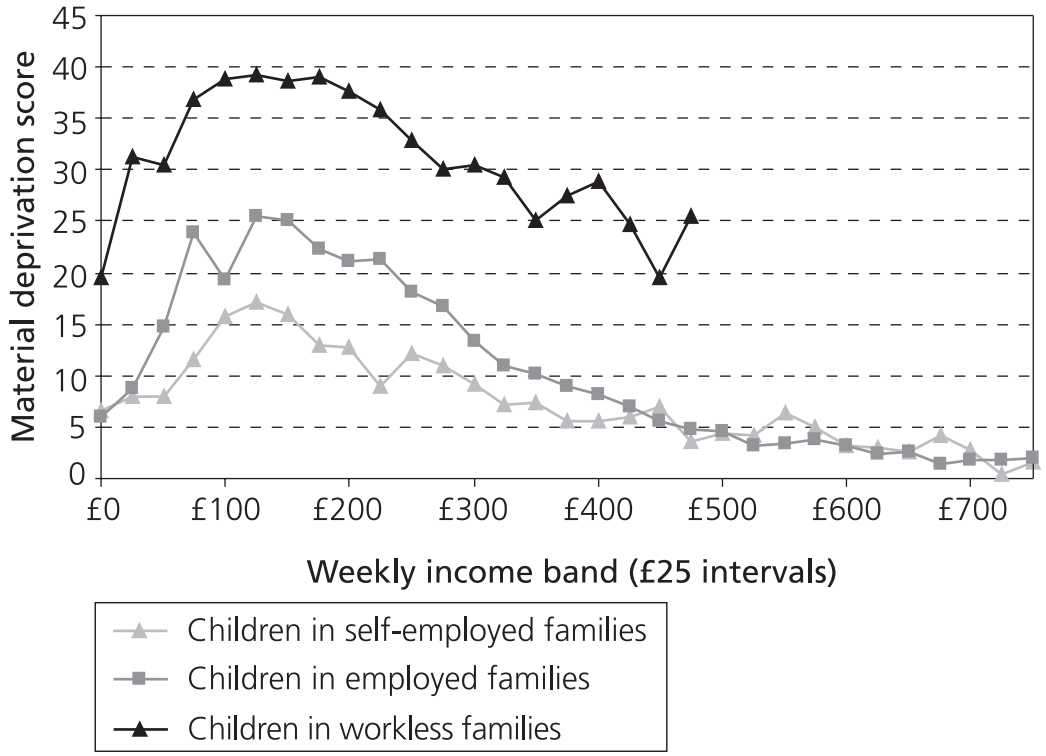
Are living standards different for children in self-employed families from other families?

Among households with similar incomes, there are clear differences in living standards, on average, depending on the work status of the household.

In general, self-employed families with children have higher living standards than employed families with children with similar incomes, who in turn have higher living standards than workless families with children with similar incomes. An example is shown in Figure 2. This pattern is remarkably consistent across measures of living standards and the four datasets examined, although in some cases the gap between self-employed and employed families is small. The difference in the living standards between self-employed and employed families is usually greatest at the bottom of the income distribution: it is not evident, for example, for children in households with incomes of £400 a week or more.

It is also the case that, for all work types, families with the lowest incomes do not have the lowest living standards, on average.

Figure 2 Average level of material deprivation by £25 income bands and family work status, 2004/05 to 2006/07



Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in the UK. Sample size: 25,249 families.
Source: FRS, 2004/05 to 2006/07.

The findings that self-employed families with children have higher living standards than employed families with children with similar incomes, and that, for all work types, families with the lowest incomes do not have the lowest living standards, on average, are both mostly true even after taking account of other characteristics of the household.

Dynamics of work, poverty and living standards

The proportion of children in any type of long-term hardship is greater than the proportion in long-term poverty (where long-term is defined as three consecutive annual interviews). However, very few children are both in long-term poverty and in any type of long-term hardship.

Just under one in five children who are in poverty are experiencing transitory poverty (defined here as not being in poverty at the previous and future interviews). Poverty is slightly more transient for children in employed families

than self-employed families, but is considerably less transient for children in workless families than children in families from either working group. Daily living and consumer durable hardship exhibit a similar degree of transiency to poverty, but most other hardship measures are more transient than poverty. Hardship for children in workless families is considerably less transient than for the working groups. But, in contrast to the poverty picture, hardship is more transient for self-employed families than employed families for FACS hardship measures; although some of the BHPS measures suggest a much lower degree of transiency for the self-employed than the employed.

The proportion of children in hardship rises with poverty duration for most of the hardship measures, but not to a substantial degree: a considerable proportion of families remain out of any type of hardship even during prolonged periods of poverty.

The difference in the living standards of families with different work states can be seen in a dynamic analysis: for a given experience of poverty, those with time out of work are much more likely than those always in work to experience hardship, and those always in self-employment are less likely than those always in employment to experience hardship. And, even allowing for differences in poverty duration, the likelihood of hardship differs across the work groups for most of the hardship measures, suggesting that the differences between the work types are not all due to differences in the length of time in poverty across the work groups.

Which children are more likely to live in a household with a relative low income, and which children are more likely to live in a household with a low living standard?

As poverty and hardship give different impressions of who has the lowest living standards, it is vital to know whether these differences are systematic. These could be impacts which are of opposite signs, e.g. if a characteristic increases the risk of poverty, but reduces the risk of hardship. These could also be characteristics with differences in the size of the impact on the risk, e.g. if having young children doubled the risk of poverty, but tripled the risk of hardship.

An analysis of the composition of children in poverty and hardship reveals that the following types of children are over-represented both amongst children in poverty and amongst children in hardship:

- Children in a lone parent or workless or self-employed family.
- Children from a large family.
- Children from a family with young children.
- Children from a family with poorly-educated parents.
- Children from a non-white family.

The same is true when comparing children in hardship with all children. However, compared with children in poverty, children in hardship are more likely to come from:

- A lone parent family.
- A workless family.
- A large family.
- A family with young children.

An analysis of the characteristics which contribute to the risk of poverty and hardship, taking account of the impact of other household characteristics, reveals that the following characteristics increase the risk of poverty:

- Being a couple family rather than a lone parent (conditional on work status).
- Having more children in the family.
- Having a youngest child aged over ten.
- Having adults who are self-employed (rather than employed).
- Having no working adults in the family.
- For couples; having one worker (rather than two).
- Having parents with low levels of education.
- Being from a non-white ethnic group.
- Not having a health problem.

Some of these characteristics are also associated with a higher risk of hardship:

- Having no working adults in the family.
- Having one worker rather than two for couples.
- Having parents with low levels of education.
- Being from a non-white ethnic group.

But other characteristics have opposite impacts on the risk of hardship and the risk of poverty:

- Being a lone parent family, rather than a couple (conditional on work status).
- Having three or more children.
- Having a youngest child aged over ten.
- Having adults who are self-employed (rather than employed).
- Having a health problem.

For these characteristics, it matters whether policy seeks to target those on a low income or those with low living standards.

What might cause the differences between income and other measures of living standards for some types of households?

It should not be surprising that income and the other measures of living standards often give differing impressions of the relative position of a particular household as 'disposable income' and 'material living standards' are fundamentally different concepts, so households with low disposable incomes need not be the same as those households with low material living standards, even if both were measured perfectly.

The report did not – and could not, given the limitations of household survey data – explore the reasons for the discrepancies between income and other measures of living standards. But the findings are consistent with the following possible explanations:

- The Modified OECD income equivalence scale, which is used to adjust the incomes of households of different sizes to enable direct comparisons, gives lone parents too low a weight relative to couples with children, and children aged 10 or more too low a weight relative to younger children.
- The HBAI measure of disposable income does not value non-purchased resources through so-called home production (goods or services not obtained from the formal economy).
- The fact that Modified OECD income equivalence scale takes no account of the additional costs incurred by households because of long-term health problems or disabilities.
- There is greater mis-measurement (in particular, under-recording) of income amongst the self-employed than other groups (although it must be stressed that it is not possible for studies such as this one to determine whether income or another measure of living standard is actually being mis-measured).
- The measures of living standards that are analysed might be conceptually or practically flawed. The report cannot provide evidence that this is not the case, but it has shown that the pattern of findings are reasonably robust across a range of different measures of living standards.
- The income that is recorded in a single cross-section of a household survey may be a poor reflection of income assessed over a long period. Although income (correctly measured) over an individual's lifecycle has to be equal to spending (correctly measured) over their lifecycle, the fact that individuals can shift resources over time mean that this may not be the case at any given point in time. This report has shown that the risk of hardship rises with the duration of poverty, but this does not explain away the mismatch between income and living standards, nor does it fully account for the differences in average living standards between families of different work statuses.

The report has also shown that, of all children in poverty in a given year, children in employed families are less likely to be experiencing persistent poverty than children in self-employed families. This suggests that recent volatility in the rate of

poverty for children from self-employed families does not reflect volatility at the level of individual families, but instead reflects the sort of volatility that would be expected given that the rate of poverty for children from self-employed families is based on a relatively small sample of households in the underlying FRS (children from self-employed families are less than a fifth of all children). And it means that the difference in the average living standard of children from employed or self-employed families cannot be ascribed to a higher volatility of income amongst the latter group.

Recommendations for future policy and research

The relatively high living standards enjoyed by those with the very lowest incomes (i.e. £0 to £50 a week) means that there is very little sense in monitoring trends in the number of children in such households, or in assuming that the characteristics of such children are informative about the children who have the lowest living standards.

However, looking at a larger group of children at the bottom of the income distribution need not solve this problem. Although the lowest living standards are to be found amongst households with children with incomes between £100 and £200 a week, or roughly 30 to 50 per cent of median income, the high living standards of the poorest one per cent of children mean that there is little difference in the average hardship rates or living standards between children with household incomes below 50 per cent of median income and those with household income between 50 per cent and 60 per cent median income.

One solution to this would be to exclude all households with children who report a very low income (such as below £50 a week or below £100 a week). This would remove households for whom income and other measures of living standards are very weakly related. But it would also remove some households who genuinely have a very low income and very low level living standards. It is also unclear how to interpret changes over time in a measure such as 'children with incomes less than 60 per cent median but over £50 a week', and beyond the scope of this study to discuss the political acceptability of a measure of child poverty which excludes – albeit for well-founded statistical reasons – those households with children reporting the lowest incomes of all.

A more attractive alternative would be to use those households who had both a low income and a low living standard to identify the number and characteristics of those children who are the worst off in society, like one of the measures of child poverty currently tracked by the Government. On a practical note, it would aid understanding if the Government reported separately the number of children in relative low income and with a material deprivation score exceeding 25, so the extent of the overlap and how it changes over time can easily be seen.

While the research presented in this report was being undertaken, the Government proposed how it would measure progress towards eradication of child poverty (Child Poverty Unit, 2009). This research was not about identifying an appropriate

measure of child poverty, but the results in this report may help inform the debate about whether it is sensible or feasible to seek to lower a relative income measure of child poverty to very low levels.

If there is a strong desire to continue to use income-based measures of child poverty, then it would be sensible to review the use of the Modified OECD equivalence scale. It would also be helpful to understand why some families with children who appear to have a very low income manage to avoid hardship, perhaps by commissioning qualitative research to follow-up particular families in FRS or FACS. Wealth is poorly measured in most household surveys, and it would therefore be very useful to use the forthcoming Wealth and Assets survey to explore whether the living standards of those with apparently low income are being maintained through high levels of wealth.

1 Introduction, motivation, policy background

The Government has a high-profile target for child poverty in 2010/11 to be half its 1998/99 level, and aims to eradicate child poverty by 2020. At the time of writing, the Government was consulting about how to track progress towards its 2020 targets, but the 2010/11 targets are measured using the Households Below Average Income (HBAI) series, which uses the Family Resources Survey (FRS) as its data source Department for Work and Pensions (DWP) (2008).

Underpinning these targets is a concern over the low living standards experienced by some children. The Government's targets are expressed in terms of disposable income, reflecting that there is a genuine concern for the levels of income amongst families with children. But, as is set out more in Chapter 2, it has long been documented that the disposable income of some of the poorest households may not reflect their actual living standards or access to resources, and that this particularly applies to households with the lowest incomes and low-income self-employed households.

Given this, at the heart of this report is an examination of the relationship between disposable income and living standards for children (or households or families with children), and how that relationship varies by the work status of the household and other characteristics.

There have been two particular motivations for this project:

- First, a desire to understand better how many children in low-income households also have low living standards.
- Second, a desire to understand better the recent volatility of poverty for children in self-employed families.

1.1 Measuring child poverty

The current Government has set a target for the level of child poverty in 2010/11. Progress is measured using three indicators (described in HMT (2007)), the most prominent of which measure is the number of children in households with income below 60 per cent of the contemporary median, measured before housing costs, where income is adjusted (or equivalised) for household size and age of dependents (the 'headline' relative poverty measure). The indicators are updated annually by the HBAI series, which uses the FRS as its data source.

When the research reported in this document began, the Government had not said how it would measure progress towards its target for child poverty to be eradicated by 2020/21. It had suggested, though, that:

> *'Success in eradicating child poverty could, then, be interpreted as having a material deprivation child poverty rate that approached zero, and being amongst the best in Europe on relative low incomes'.*
>
> (Paragraph 71 of DWP (2003))

A footnote clarified that the latter probably meant '*having a poverty rate between that of Sweden and Denmark*'. That the Government was not seeking to reduce the relative measure of child poverty to zero was justified on the basis that:

> *'It is not feasible to reach a level of zero on any survey-based income measure – the `snapshots' recorded will always classify as poor some with high living standards but transitory low incomes.'*
>
> (Paragraph 70 of DWP (2003))

While the research reported in this document was being undertaken, the Government suggested (and at the time of writing is consulting on) how it might measure child poverty as it tracks progress towards its desired eradication by 2020. In particular, it proposed that:

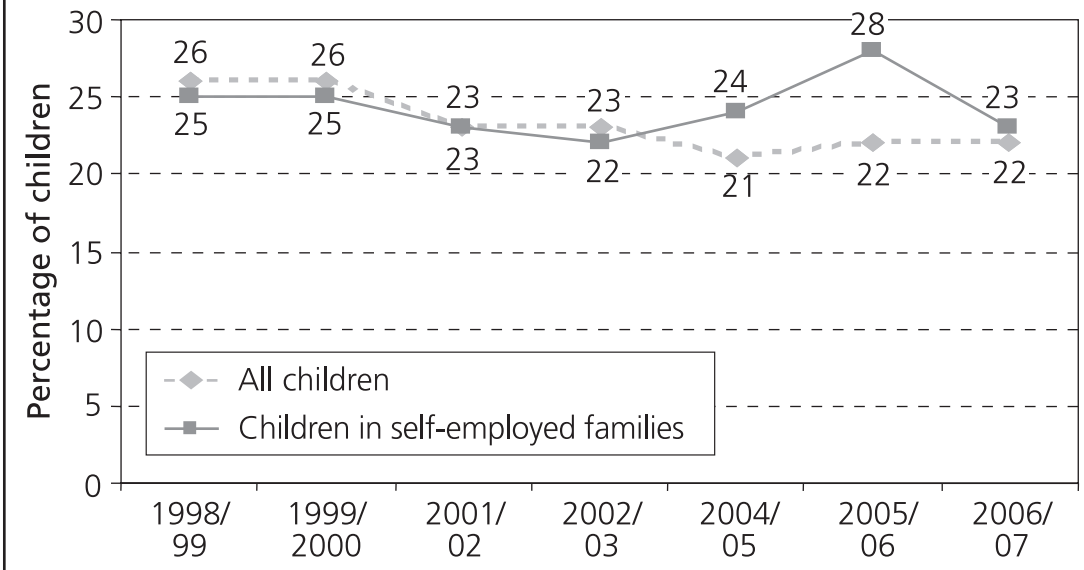
> *'Legislation set a target that by 2020 the percentage of children in relative low income should be between 5-10 per cent and that this should be sustained for the long-term'.*
>
> (Paragraph 54 of CPU (2009))

Alongside this, the Government has proposed to track the combined relative low income and material deprivation measure of child poverty, persistent child poverty, and perhaps absolute child poverty, but the details of these have yet to be decided. This research is not about identifying an appropriate measure of child poverty, but the results in this report may help inform the debate about whether it is sensible or feasible to seek to reduce a relative income measure of child poverty to very low levels.

1.2 Children in self-employed families

The risk of poverty for children from self-employed families has fluctuated since 1998/99, and has not mirrored the general downward trend in the risk of poverty for all children. It is not known how far this is attributable to income measurement problems, or a genuine increase in the risk of poverty amongst these children, or a combination of the two.

Figure 1.1 Risk of poverty for all children and children in self-employed families



Source: DWP (1998/99-2006/07) HBAI series.

It is argued that a survey-based measure of child poverty for children in self-employed families poses particular problems, because it is difficult to collect accurate information about incomes from self-employment in surveys, and this information is generally considered less reliable information than on the earnings of employees. The unreliability could be due to any of the following reasons:

- defining self-employment;
- under-reporting of income;
- low response rates to questions on income;
- inconsistent concepts of 'earnings' and 'profit';
- variations in accounting techniques used to calculate 'profit';
- fluctuations in income; and
- time lags between earnings and survey fieldwork, which increase the uncertainty that the information given reflects the respondent's current financial position.

1.3 Why might income and other measures of living standards give different impressions of a household's well-being?

It is useful to think of several (not necessarily exhaustive or mutually exclusive) situations that may explain why the measure of disposable income recorded in household surveys, such as FRS, might not always match the impression given by other measures of living standards[1]:

1 The concept of 'income' that is intended to be captured by the household survey may be conceptually wrong

The measure of 'income' analysed in HBAI – and which is used in all the analysis in this report – corresponds to 'equivalised disposable household income'. Using this as a proxy for well-being or living standards involves a number of assumptions. For example:

- That it is sensible to measure income over a relatively short period, rather than over the past year, or longer periods.
- That the precise definition of 'disposable income' is related to a household's access to resources. Although the basic principle behind the concept of disposable income is sensible – to record all income from all sources flowing into the household – there is room for debate over which outgoings should be deducted from a measure of income after taxes and benefits to form disposable income. For example, it has been argued that childcare costs are an unavoidable cost of work, and therefore should be deducted from disposable income, and that poor health-related costs should be deducted, and that income should be measured having deducted housing costs.
- That it is sensible to adjust (or equivalise) disposable income using the Modified OECD scale to allow the disposable income of households of different sizes and compositions to be compared.
- That all individuals in the household enjoy equal access to the household's disposable income.
- That so-called 'home production' has no value. Home production is the term given to goods and services that are produced by the household, and not purchased from the market; in principle, these could be valued and added to a measure of income.
- That so-called 'benefits-in-kind' have no value. 'Benefits-in-kind' is the term given to public services which provide a service to individuals which would otherwise have been bought by them. In principle, 'benefits-in-kind' could be valued and added to a measure of income. In practice, only a few benefits-in-kind – free school meals or free welfare milk tokens for families with children;

[1] There is an excellent discussion of these issues in Perry (2002), see especially Figure 1. See also Gordon *et al*. (2000) and Berthoud *et al*. (2004).

free television licences for those aged 75 or over – are included in the HBAI definition of income. The entitlement to childcare or early education for parents of three and four year-olds, for example, is not included.

2 The income that is recorded in the household survey may be an inaccurate measure of the income that is supposed to be recorded in the household survey

This situation can be thought of as measurement or survey error: for whatever reason, households did not report the income that was intended to be collected by the survey designer. It may arise because households do not reveal all sources of income to the survey interviewers. It might be suspected that households would be more likely to do this if they were also not admitting various sources of income to DWP, Her Majesty's Revenue and Customs (HMRC), or their local authority, or because they failed to understand the questionnaire, or for some other reason.

3 The standard of living measure that is intended to be captured by the household survey may be conceptually wrong

As Chapters 2 and 3 set out, this report uses a number of measures of living standards, including household spending (on non-durables) and several indices of living standards or indicators of hardship. But there is no perfect measure of living standards, and these particular ones may be flawed. For example, one approach frequently taken is to use spending. But a household's material living standards in any period will depend not only on its spending, but also on resources which are not purchased. For example, families may raise their living standards through home production of some items, or by having access to free informal childcare, or by living rent-free with relatives. For these reasons, a measure based on total expenditure may understate the level of living standards for some families. In addition, there is a literature suggesting that some types of households have access to lower priced goods, which may mean that spending may not accurately reflect the amount or quality of goods or services being purchased.[2]

For measures of well-being or material deprivation that are not based on total expenditure, living standards are defined on a particular set of goods, and choices made by each household will affect how well consumption patterns match the implicit priorities in the living standards measures.

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[2] Much of the research in this area has focused on low income countries, but studies for the U.S. include Kaufman *et al*. (1997), Hausman and Sidak (2004) and Aguiar and Hurst (2007). Kaufman *et al*. provide evidence that the availability of local stores influences the prices paid for food items; Hausman & Sidak document how older and less-educated consumers pay more for long-distance telephone calls; and Aguiar and Hurst show that lower prices are paid for a range of goods by those who spend more time shopping. Indeed, Aguiar and Hurst conclude that '*the life-cycle allocation implies a consumption series that differs markedly from expenditure*' (final line of abstract).

Brewer *et al*. (2008) put forward an argument as follows:

> *'…imagine that two otherwise-identical, hypothetical families have exactly the same disposable income in a particular month and have spent all but their remaining £5 in exactly the same way. Assume that these two families are then faced with the following choice: "Should we spend this remaining £5 a week on household contents insurance (on the list of survey questions) or should we spend it on more nutritious food (not on the list of survey questions)?". The family that, on balance, preferred the more nutritious food is likely to have said that it wanted, but could not afford, household contents insurance …* [and will therefore] *be classed as more deprived than the family that bought household contents insurance, simply because of its preference for nutritious food over household contents insurance…. It then seems certain that some families are classed as materially deprived simply because of the way they choose to spend their money.'*
>
> (p65 of Brewer *et al*. (2008))

Other research has shown differences by age and social class in whether individuals count certain items as 'necessities' or 'luxuries': see McKay (2004) and Myck (2005).

4 The standard of living measure that is recorded in the household survey may be an inaccurate measure of the standard of living measure that is supposed to be recorded in the household survey

Clearly, just as income can be mismeasured by household surveys, so can other measure of living standards: recording household spending using a diary is onerous, and other measures may rely too much on subjective and thereby inherently volatile responses.

5 The income that is recorded in household surveys may be a poor reflection of income assessed over a long period.

Although income (correctly measured) over an individual's lifecycle has to be equal to spending (correctly measured) over their lifecycle, the fact that individuals can shift resources over time means that this need not be the case at every point in time.

This shifting of resources can most easily be thought of as saving and borrowing. For example, individuals tend to save over their working life in order to fund consumption expenditure during their retirement. Over a shorter time period, an unforeseen but temporary period out of work might lead a household to borrow or run down savings. But this shifting of resources can also occur through the accumulation (and depreciation) of other stocks of resources (or 'wealth'), such as consumer durables or housing assets. For example, current living standards will depend on past spending decisions on durable goods, investment decisions, and even the inheritance of wealth.

Fundamentally, though, 'disposable income' and 'material living standards' are different concepts, and will always be different from each other, even if measured perfectly and over very long periods of time. For example, Perry (2002) suggests that the following factors other than current income will affect actual living standards:

- unreported income;
- gifts in kind and cash;
- inheritances;
- support networks;
- household production abilities;
- preferences and priorities, including attitudes to risk and perceptions of the future;
- non-cash income;
- luck;
- extra 'costs' like those arising from poor health, rural location, commitments to others;
- history of income, employment and partnership.

This means that households with low disposable incomes need not be the same as those households with low material living standards, and it should not be a surprise to discover this in the data.

1.4 How does this study relate to the existing literature?

This project builds on many other studies in various areas. Chapter 2 and Appendix C summarise the most relevant papers (without attempting to be exhaustive) in the following areas:

- using consumption, rather than income, to measure living standards;
- using food's budget share (or Engel curves) to measure living standards, and to estimate income under-reporting by the self-employed;
- using material deprivation indices to measure well-being.

This study builds on that existing literature by providing:

- a consistent analysis across several datasets and measures of living standards;
- a disaggregation by work status, to allow a focus on the self-employed;
- a specific focus on children in households reporting the lowest disposable incomes;
- an examination of poverty dynamics and the relationships with the dynamics of low living standards by work status.

But there are a number of things that this study does not do:

- Although the questions relating to self-employment income from the four surveys used in our empirical analysis are documented in Appendix B, this report does not address why income might be measured less accurately for self-employed families than other families, nor do we suggest improvements that could be made to household surveys in the UK to record self-employment income more accurately.
- The report does not argue that the measures analysed in Chapters 4–8 are genuinely informative about household living standards (although Chapter 2 discusses existing studies which have argued that they are meaningful, or used them as if they were meaningful).

1.5 The rest of the report

The rest of this report is organised as follows:

Chapter 2 discusses the previous literature in this area. Chapter 3 provides an overview of the data used throughout this report, including the definitions of the other measures of living standards and some basic descriptive analysis of the four datasets. Chapter 4 explicitly compares the distribution of income, and the risk of having a low income, across the four datasets and between children in families with different work states. Chapter 5 examines the underlying relationship between income and other measures of living standards for all families with children. Chapter 6 expands on this by investigating to what extent these relationships vary with the work status of the household, and whether these variations remain after accounting for other household characteristics in a multivariate regression framework.

Chapter 7 examines the dynamics of poverty and hardship. Chapter 8 examines the characteristics of children in households with a low income and those in households in hardship, and discusses the important differences. Chapter 9 uses multivariate regressions to examine the risk factors of having a low income and being in hardship, and how they differ, and the risk factors of hardship with and without accounting for income differences, and how they differ. Both Chapters 8 and 9 are motivated by the idea that a different impression might be gained of who is worst off if one used other measures of hardship than poverty. Conclusions and implications for policy are offered in Chapter 10.

It should be noted that many of the tables and figures for each chapter are presented together at the end of each chapter in order to improve readability and aid comparisons.

2 Previous literature

The core of this project is an examination of the relationship between disposable income and living standards for children (or households with children), and how the relationship varies by the work status of the household and other characteristics. This builds on many other studies in various areas including:

1 Using consumption, rather than income, to measure living standards.

2 Using food's budget share (sometimes known as Engel curve analysis) to measure living standards, and to estimate the underreporting of income amongst self-employed families.

3 Using material deprivation indices to measure well-being.

This chapter summarises the most relevant papers in these areas.

2.1 Using consumption or food's budget share to measure living standards

Blundell and Preston (1996) state that: '*standard economic arguments suggest that consumption expenditure will better reflect expected lifetime resources* [than income]', while forceful statements in favour of using consumption rather than income to measure lifetime resources or household welfare have been made by Cutler and Katz (1992), Slesnick (1993) and Poterba (1989). The basic argument is that, if households can borrow or save, then the amount of consumption in any period is not necessarily constrained by income in that period. Furthermore, because households should prefer to smooth their consumption over time, current consumption should be a better guide to long-term resources than current income.[3]

[3] Blundell and Preston (1996) highlight some difficulties with using comparisons of consumption levels to infer differences in lifetime resources, such as when comparing households at different stages of their lifecycle or when comparing individuals who are born many years apart.

Research analysing United Kingdom (UK) household data – usually the Family Expenditure Survey (FES) – have for many years noted that households with the lowest reported incomes do not seem to have the lowest standards of living. For example, see DSS (1991), Saunders *et al*. (2002), Attanasio *et al*. (2006) and Brewer *et al.* (2006). But the same is not true in reverse: using FES/Expenditure and Food Survey (EFS) data, Brewer *et al.* (2006) show that households with the lowest levels of spending do have, on average, lower levels of income than households with higher spending, leading the study to conclude that '*a more reliable picture of who is genuinely poor may therefore be obtained from an examination of the bottom of the spending distribution than the income distribution*'.

Many papers have examined changes in household resources or living standards over time, or the differences in household resources or living standards between different types of households at a point in time, using data on both spending and income. For example, Attanasio *et al.* (2006) and Brewer *et al.* (2006) directly compare poverty measures based on consumption and income (in Great Britain (GB)), while Blundell and Etheridge (2008) and Goodman and Oldfield (2004) directly compare inequality in consumption and income (in GB/UK)[4]. These papers have tended to find that:

- The risk of poverty using income is higher than the risk of poverty using spending for groups such as the self-employed and the unemployed. And the risk of poverty using income is lower than the risk of poverty using spending for groups such as pensioners (although this result is sensitive to whether and how an imputation is made for consumption of housing services).
- Inequality in spending has changed less over time than inequality in income and also seems to be following a different cycle. In particular, inequality in spending rose much less than inequality in income during the late 1980s, but has continued to slowly rise during the period since income inequality peaked (in the mid 1990s) and since when it has generally fallen or remained constant. Trends in relative poverty rates using income and spending are very similar to those of overall inequality using income and spending: the fall between the late 1990s and 2004/05 in relative poverty measured using income was not seen in relative poverty measured using spending.

As well as using consumption as a measure of resources, economists have also used the proportion of spending devoted to food (hereafter referred to as food's budget share) as a measure of well-being. The argument for using food's budget share as a measure of well-being is that food, being the most basic necessity,

[4] Other relevant papers with data only from the United States (US) include Attanasio *et al.* (2005) and Meyer and Sullivan (2003, 2007, 2008) and Cutler and Katz (2002). The link between consumption and income trends and what it tells us about permanent and transitory shocks is discussed in Blundell and Preston (1998). Gregg *et al.* (2006) showed that increases in disposable income for low income families with children led to increases in spending on items particularly associated with children.

is absolutely necessary for survival. The claim is that the greater the share of income a household spends on food, the less they have for other discretionary expenditure, making them less well off. Appendix C discusses this in more detail, and reviews some studies which have used food's budget share to estimate the extent of income underreporting amongst the self-employed.

2.2 Constructing and using material deprivation indices to measure well-being

Several UK studies have used some form of deprivation or hardship index, or used such an index to construct a discrete indicator of deprivation or hardship.[5] However, there has not necessarily been any consistency between the studies and the items used to construct an index in one report may be entirely different to those in another. As well as this difference in empirical implementation between the studies, Berthoud *et al*. (2004) also draw attention to the important conceptual distinction between viewing such indices as proxy measures for poverty, and viewing them as representing a definition of poverty.

One strand of the literature has sought to construct a measure of poverty based on the idea that being poor is characterised by an enforced lack of socially-perceived necessities. Examples of this work include Townsend (1979), Mack and Lansley (1985), Gordon and Pantazis (1997) and the more recent Poverty and Social Exclusion survey, reported on in Gordon *et al.* (2000) and Pantazis *et al*. (2006). The official material deprivation measure is similar to this, in that it attempts to measure the degree to which families experience an enforced lack of goods, services or activities. The Government did not commission its own research to test whether the selected items are indeed socially-perceived necessities, but many of the items were shown to be socially-perceived necessities in earlier work (see McKay and Collard (2004)). The official measure of material deprivation is defined in HMT (2007), and analysed in DWP (2008) and Brewer *et al.* (2008). See also Willits (2006) for more background information on how the precise definition was determined.

A series of reports from researchers at the Policy Studies Institute and National Centre for Social Research (NATCEN) analyse a deprivation or hardship index constructed from the Families and Children Study (FACS) (see, for example, Marsh *et al*. (2001), Vegeris and McKay (2002), Barnes *et al.* (2008)). The index used in these studies measured more than just an enforced lack of goods and services, as it also included adequacy of accommodation and the state of the family finances. As Chapter 3 discusses, the approach taken with the FACS dataset in this study was to use a very similar set of questions as those used to construct the single index in Marsh *et al*. (2001) but to construct several measures of living standards, rather than just one. In particular, this report has constructed a measure of deprivation that corresponds to the 'enforced lack' of goods, services and activities.

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5 International experience of measuring material deprivation is surveyed in Boarini and Mira d'Ecole (2006) and is not discussed further in this report.

Since wave 6, the British Household Panel Survey (BHPS) has included information on:

- items that the family would like but cannot afford;
- savings and debt;
- financial strain;
- durables;
- problems with housing and local area.

These have been analysed in Berthoud *et al.* (2004) and Magadi and Middleton (2005): Magadi and Middleton examine many of these factors individually, and Berthoud *et al.* use a deprivation index comparable to that constructed for FACS data. Neither study defines a discrete threshold for hardship.

As with consumption and income, several studies have examined whether income and material deprivation or hardship indices give the same impression about the level, composition and trends of who is poor.[6] For example, Bradshaw and Finch (2003) showed the extent of the lack of overlap between those who were income poor and those who were poor on other definitions, using data from the Poverty and Social Exclusion Survey. Calandrino (2003) found that the incidence of deprivation (measured using FACS) was lower in the bottom income decile group than the second income decile group. Brewer *et al.* (2008) present the relationship between disposable income and material deprivation using the official indicator of material deprivation used for assessing progress towards the Government's 2010 child poverty target. They show that many of the children living in households with the very lowest incomes (first or second percentile of the overall income distribution) have lower levels of material deprivation than most other children in the bottom half of the income distribution.

McKay and Collard (2004) show suggestive evidence (Chapter 8.2.2, based on FACS) that families with a low income at a point in time but who are not deprived are more likely to have a transitory low income than those who have a low income and are deprived. Berthoud *et al.* (2004) discuss the dynamics of material deprivation and disposable income over time. They show that the rate of decline in material deprivation observed in the BHPS is considerably faster than would be expected, given the changes in disposable income over the same period. They also show that the relationship between disposable income changes and material deprivation changes for individual families is much weaker than the relationship between disposable income and material deprivation for the population. Barnes *et al.* (2008) find a similar phenomenon, showing that, amongst families with children, a material deprivation index changes more slowly than income when parents move into work.

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[6] This report limits itself to UK evidence: Perry (2002) summarises some international evidence on the overlap between income poverty and other measures of poverty. See Halleröd *et al*. (2006) for more recent work.

3 Data and methods

The core of this project is an examination of the relationship between disposable income and living standards for children (or households with children), and how that varies by the work status of the household.

This chapter therefore discusses the datasets used to do this, and definitions of the following terms which are used in this study:

- The measurement of disposable income.
- The way that families are classified according to their work status.
- The other measures of living standards.

Throughout this chapter, and the rest of the report, 'children' is used as a shorthand for dependent children, and 'income' is used as shorthand for equivalised disposable household income in 2006/07 prices.

3.1 The datasets

The empirical analysis for this report uses four datasets: the Family Resources Survey (FRS), the Family Expenditure Survey (FES)/Expenditure and Food Survey (EFS), the Families and Children Study (FACS) and the British Household Panel Survey (BHPS). Appendix A sets out in full the years or waves of data used, the sample size of families with children, and the information they contain which might be informative about material living standards (other than disposable income). Some of the analysis is for Great Britain (GB), and some for the United Kingdom (UK): in this report, analysis of FES and EFS includes Northern Ireland, as does any analysis of the FRS which does not use data from before 2002/03; analysis of FACS, BHPS and any analysis of the FRS which does use data from before 2002/03 does not include Northern Ireland.

The samples of households with children from FRS, FACS and EFS are broadly comparable with each other.

However, BHPS is noticeably different from the other datasets in three respects:

- It has the smallest sample size in any one year, and therefore many of the results based on BHPS make use of data that is pooled across more years than other surveys.
- Because it covers a long period, this leads to a broader (more dispersed) income distribution (see Figure 4.4 and how it compares with Figures 4.1 to 4.3).
- BHPS differs in its composition by having fewer lone parents than the other surveys: 17 per cent of children are in lone parent families, whereas 26 per cent of children are in lone parent families in FACS.[7] Possibly as a consequence of this, several other factors, including employment status, income and poverty levels, differ between BHPS and the other surveys (see Section A.2 in Appendix A for more details).

Most statistics in this report are weighted by the cross-section survey weights provided in FRS, FES/EFS and BHPS. These weights are provided by the data owners for two reasons: to correct for non-random sampling and non-response, and to allow the data-set to be grossed up to the population level. Unweighted results are presented for FACS because the survey weights provided in FACS, as far as the authors are aware, have not been used in previous publications and, in any case, make little difference to results. The regressions reported in Chapters 6 and 9 used unweighted data for all datasets, and so, technically speaking the results are true only of the sample of families with children in the four underlying datasets.

3.2 Measuring disposable income

We use the Households Below Average Income (HBAI) definition of disposable income throughout, which is both before housing costs (BHC) and equivalised for household structure.[8] This income measure is constructed directly from the survey data for FRS, FES/EFS and FACS, but we use the net income variables constructed by Institute for Social and Economic Research researchers and deposited at the UK Data Archive for BHPS. This means that the income measure for BHPS used here is not the same as that which is used by the Department for Work and Pensions (DWP) in the analysis of persistent poverty in the annual HBAI publication. The equivalised income measure is that for the household in FRS, FES/EFS and BHPS, but is for the family in FACS because income is only recorded for the respondent and partner and no other household members in FACS.

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7 It should be noted that this statistic is weighted using the survey cross-section weights and is for comparable years, and therefore differs from Tables 8.3 and 8.4.

8 The precise definition of disposable income and details of the Modified OECD equivalence scale are described in Appendices to the annual HBAI report: see DWP (2008).

In FACS, the earnings measure is missing in a substantial number of cases for partners (usually fathers). This was addressed by interpolating earnings within a work spell. That is, if an individual were missing an earnings amount at an interview, the reported amount for that individual at the closest subsequent or past interview (or the average, if there are both past and subsequent interviews, weighted by the time since and before the nearest interviews) would be used. If the hours are reported, only the hourly earnings would be interpolated and applied to the hours to generate total earnings. In cases with no earnings observation within the same work spell, earnings information from another work spell for the same individual would be interpolated instead. In a small number of cases where the earnings amount remained missing but the work hours were known, the hourly earnings was imputed as the median of observed earnings for groups of workers determined by gender, age group (five groups of 16-24, 25-34, 35-44, 45-54 and 55+), education group (six categories described used in Table 8.21) and financial year. Browne and Paull (forthcoming) show that this method generates a poverty rate for FACS which is very similar to the official statistics. It is also the case that FACS uses an entirely different way of measuring the income of self-employed from other households surveys (see Appendix B), which does not allow for negative self-employment income (which would correspond to losses).

When incomes are expressed as fractions of median income (including for the poverty measures), we use common cash values taken from the official HBAI document and adjusted to reflect the month in which the household was interviewed (see Table 3.1 for example medians). All financial values are expressed in the same prices as the average for 2006/07, the most recent year of data used here.

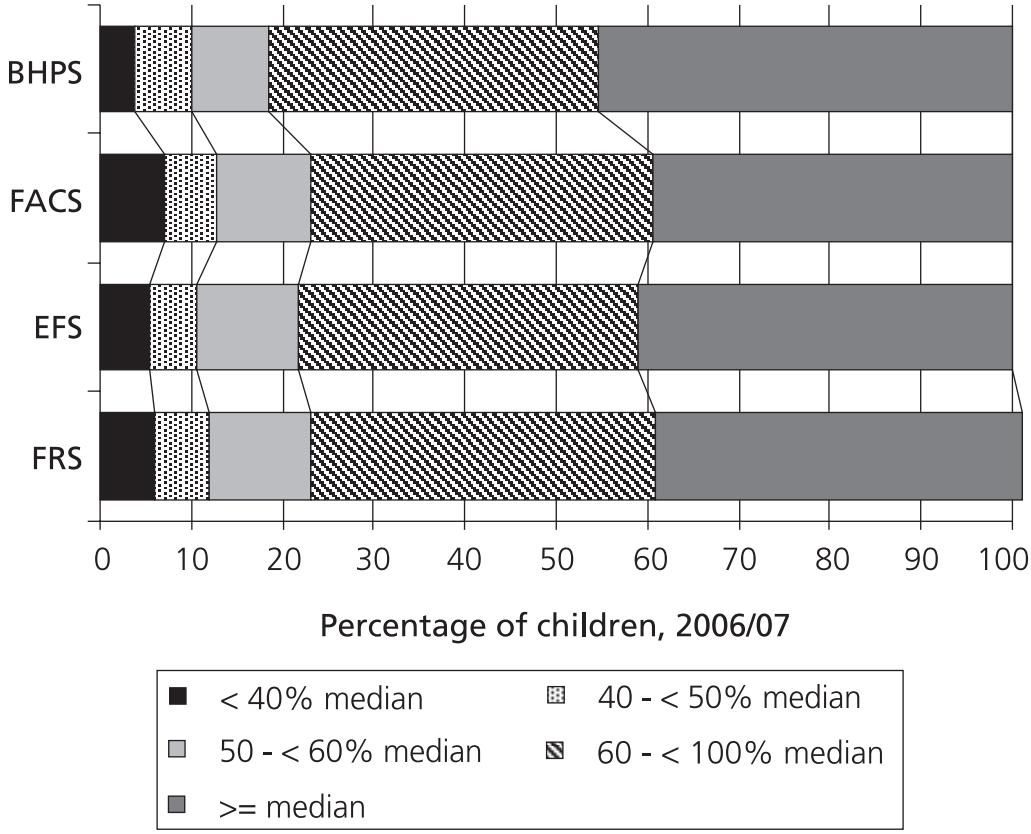
Table 3.1 Median income and poverty thresholds measured in unequivalised income for various family types, 2006/07

	Median £	60 per cent of median income £	50 per cent of median income £	40 per cent of median income £
Childless couple (poverty line in equivalised income)	377	226	188	151
Amounts for other family types in unequivalised income:				
Couple with child aged 8	452	271	226	181
Couple with two children aged 8 and 15	576	346	288	231
Lone parent with one child aged 8	328	197	164	131
Lone parent with two children aged 8 and 15	452	271	226	181

Notes and sources: Authors calculations using FRS 2006/07. Actual poverty lines are based on unrounded figures, so poverty lines presented may not tally due to rounding.

It is clearly important that the surveys used in the analysis have comparable income distributions for children, and Figure 3.1 gives an overview for the latest year of data. This shows that the proportion of children below 60 per cent median income is similar in FACS and FRS and is a little lower in EFS, but is considerably lower in BHPS (see Section 3.1).

Figure 3.1 Comparing the income distribution for children across surveys, 2006/07



Notes: All surveys used the value of median income reported in HBAI to define the thresholds. EFS data does not include the first three months of 2007.
Base: All children in the UK for EFS and FRS and in GB for FACS and BHPS.
Sample sizes: FRS, 7,937 families; EFS, 1,564 families; FACS, 6,821 families; and BHPS, 1,372 families.
Sources: FRS, 2006/07; EFS, 2006; FACS, 2006; BHPS 2006.

3.3 Defining the work status of the family

Much of the empirical work distinguishes between families on the basis of the employment status of the adults (the precise definition of 'family' is detailed in the Glossary).

The three categories used are defined as follows:

- Employed: no adults in the family are self-employed and at least one adult is employed.
- Self-employed: at least one adult in the family is self-employed.
- Workless: no adults in the family are in work.

It should be noted that this definition is based only on the adults in the family, and ignores the work status of other adults in the household.

Figures 3.2 to 3.5 show the proportion of children in families in these work categories by year and dataset. The figures show that:

- around two-thirds of children are in employed families, with the remainder split roughly equally between self-employed and workless families;
- in the most recent years, there are slightly more children in employed families in FRS and BHPS than in FACS and EFS, fewer children in workless families in BHPS than the other surveys, and fewer children in self-employed families in FRS than in the other surveys;
- results from all surveys show that the proportion of children in workless families has fallen over time and that the proportion of children in self-employed families has shown little trend.

Although not shown here, self-employed families are more likely than families in other work states to be couples (rather than lone parents).

3.4 Other measures of living standards

The other measures of living standards analysed in this report are as follows:

(a) Spending on non-durables.

(b) Share of spending devoted to food (food's budget share).

(c) Material deprivation or 'daily living' deprivation (food, clothes, leisure).

(d) Level of financial assets.

(e) Consumer durable deprivation or lack of consumer durables.

(f) Housing conditions.

(g) Problem debts.

(h) Degree of financial difficulties.

Clearly, some of these are positively related to living standards (e.g. spending, assets), and some are inversely related (e.g. material deprivation, problem debts). And some measures distinguish between those who have very low living standards and the rest of the population, whereas others (such as spending, food's budget

share and financial assets) vary continuously over the whole distribution of living standards. Other measures were considered but rejected, including car ownership, whether an owner-occupier and council tax band.

For most of the measures of living standards, the analysis considers both a continuous index of living standards (used in Chapters 5 and 6 and in the regressions for Chapter 6) and a binary indicator of 'hardship' for those with unusually low levels of living standards, analogous to poverty for income (used in Chapters 6, 7 and 8 and in the regressions in Chapter 9). In some places, the hardship measure is divided into two or more categories indicating various degrees of hardship.

3.4.1 Material deprivation and financial assets (FRS)

A material deprivation measure was constructed from FRS data which is identical to the official one (see HM Treasury (2007) for further details). Households were classified as being in material deprivation hardship if they had a score of 25 or more, as in the official category. In the analysis presented in Section 6.3, the hardship category was divided into two with those with a score between 25 and 35 being defined as simply in hardship and those with a score of 35 or more as being in severe hardship.

A measure of financial assets was also constructed from the questions on financial assets in FRS. Where respondents indicated only a band that the value of their financial assets fell into, rather than an exact amount, the analysis has imputed the mid-point. Only a continuous measure of financial assets has been analysed: because the majority of households with children report that they have financial assets less than £1,500, a binary measure would be uninformative as a measure of deprivation.

Table 3.2 gives some basic descriptive statistics of the material deprivation and financial assets measures derived from FRS. Table 3.3 analyses the incidence of material deprivation since 2004/05, indicating a slight downward trend, although the data period is very short.

3.4.2 Non-durables spending and food's budget share (FES/EFS)

Data from FES/EFS was used to construct a measure of non-durables spending. This construction is common and straightforward, so no further details are provided: Table 3.4 shows the distribution of non-durables spending. Households were classified as being in spending hardship if their equivalised spending was less than 60 per cent of the median equivalised spending (analogous to the headline poverty definition). Table 3.5 shows changes in this hardship measure over time, but there is no discernable trend. In the analysis presented in Section 6.3, a four-category variable is used, with households divided into those with spending less than 50 per cent of the median, those with spending between 50 per cent and 60 per cent of the median, those with spending between 60 per cent of the median and the median, and those with spending at the median or above.

Data from FES/EFS was also used to construct a measure of food's budget share, the construction of which is, again, common and straightforward, so no further details are provided. Only a continuous index has been analysed for this measure.

3.4.3 Indices of living standards (FACS, BHPS)

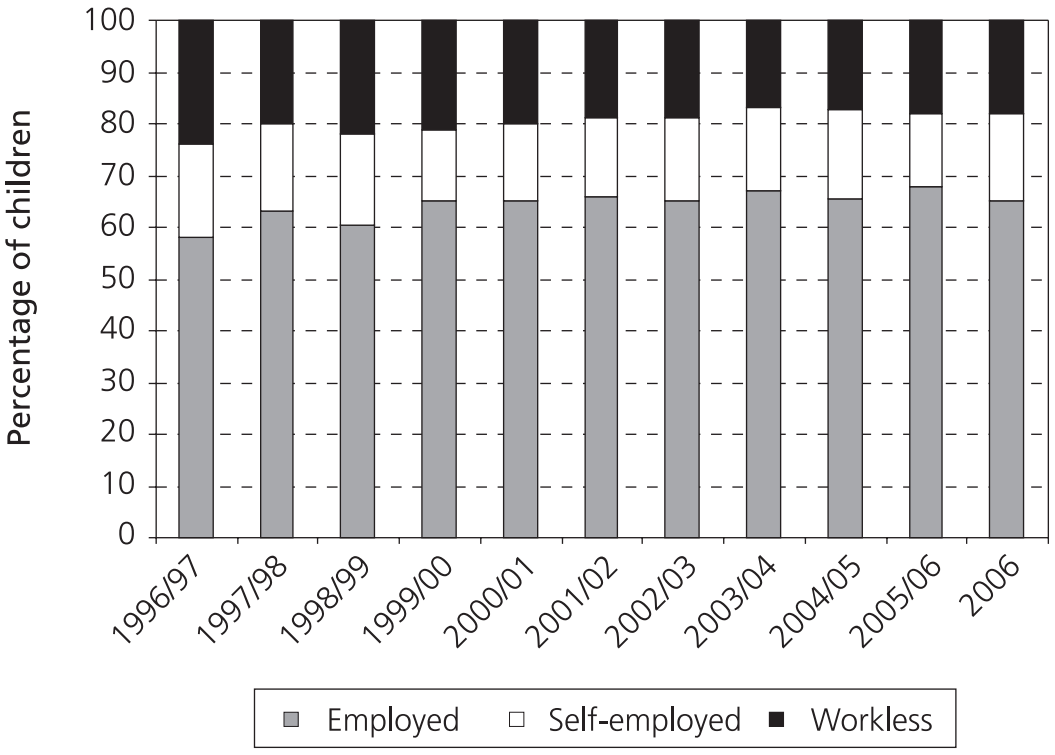
Data from FACS and BHPS were used to construct living standards measures for daily living deprivation, consumer durables, housing conditions and degree of financial difficulties. FACS data was also used to construct a measure for problem debts. Tables 3.6 and 3.7 provide an overview of the measures of living standards constructed from FACS and BHPS, including some details of how they were constructed from the underlying questions in the surveys (see Section A.3 in Appendix A for further details, but it should be noted in particular that while the FACS consumer durable measure is deprivation (items would like but cannot afford), the BHPS measure is lack of consumer durables (simple non-ownership)).

Tables 3.8 and 3.9 present the incidence of hardship for each measure over time. It shows that the fraction of children in hardship has fallen over time, except for (poor) housing conditions (where the incidence is very low) and the extent of financial difficulties, which has risen since 2003 in BHPS.

Figure 3.2 Trends in the proportions of children living in families of different work status (FRS), 1996/97 to 2006/07

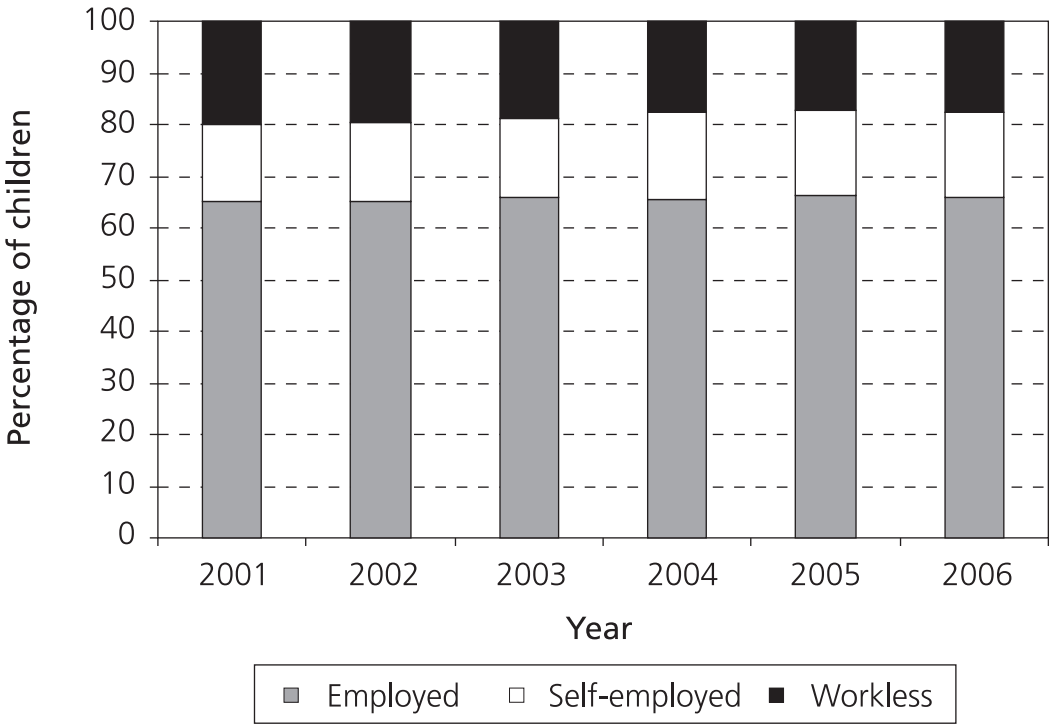
Base: All children in GB for 1996/97 to 2001/02 and in the UK for 2002/03 to 2006/07. Sample size: 90,138 families.
Source: FRS, 1996/97 to 2006/07.

Figure 3.3 Trends in the proportions of children living in families of different work status (FES/EFS), 1996/97 to 2006



Base: All children in the UK. Sample size: 24,139 families.
Source: FES, 1996/97 to 2000/01; EFS, 2001/02 to 2006.

Figure 3.4 Trends in the proportions of children living in families of different work status (FACS), 2001 to 2006



Base: All children in GB. Sample size: 42,556 families.
Source: FACS, 2001 to 2006.

Figure 3.5 Trends in the proportions of children living in families of different work status (BHPS), 1996 to 2006

Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Table 3.2 Living standards and hardship measures (FRS), 2004/05 to 2006/07

	Percentage of children or average for children in FRS
Material deprivation	
Percentage with material deprivation score of:	
Zero	36.9
0-5	8.3
5-10	10.7
10-15	7
15-20	6.4
20-25	6
25-30	5.1
30-35	4.4
35-40	3.4
40-45	3
45 plus	8.8
Percentage in hardship (more than 25)	24.7
Percentage in severe hardship (more than 35)	15.2
Mean score	15.0
Gross financial assets	
Percentage with gross financial assets (cash terms):	
Up to £1,500	56.4
£1,501-£3,000	8.8
£3,001-£8,000	9.8
£8,001-£20,000	7.9
£20,001-£25,000	2.8
£25,001-£30,000	1.6
£30,001-£35,000	1.1
£35,001-£40,000	0.9
Over £40,000	7.3
Does not wish to say	3.5
Mean (2006/07 prices)	£7,355

Base: All children in the UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 3.3 Trends in the proportions of children in hardship (FRS), 2004/05 to 2006/07

Year	Percentage of children in hardship (hardship score >= 25)	Percentage of children in severe hardship (hardship score >= 35)
2004/05	25.4	16.0
2005/06	24.6	15.1
2006/07	24.2	14.5

Base: All children in the UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 3.4 Distribution of non-durables spending amongst children (FES/EFS), 1996/97 to 2006

Non-durables spending	Percentage of children within expenditure bands
£0-£49	0.1
£50-£99	1.1
£100-£149	7.4
£150-£199	14.9
£200-£249	17.8
£250-£299	16.4
£300-£349	11.8
£350-£399	8.7
£400-£449	6.0
£450-£499	4.8
£500-£549	3.5
£550-£599	2.4
£600-£649	1.8
£650-£699	1.3
£700-£749	0.9
£750-£799	0.7
£800+	0.5

Base: All children in the UK. Sample size: 24,139 families.

Sources: FES, 1996/97 to 2000/01; EFS, 2001/02 to 2006.

Table 3.5 Trends in the proportions of children in spending hardship (FES/EFS), 1996/97 to 2006

Year	Percentage of children in spending hardship (less than 60 per cent of median)
1996/97	15.9
1997/98	18.2
1998/99	17.2
1999/2000	20.0
2000/01	16.5
2001/02	15.9
2002/03	18.2
2003/04	13.7
2004/05	15.0
2005/06	17.4
2006	16.0

Base: All children in the UK. Sample size: 24,139 families.

Sources: FES, 1996/97 to 2000/01; EFS, 2001/02 to 2006.

Table 3.6 Living standards and hardship measures (FACS), 2001 to 2006

Measure	Underlying variables		Derived living standards and hardship measures	
Daily living	Percentage of children with number of items would like but cannot afford (from 20 items):		Prevalence-weighted average percentage of items would like but cannot afford	8.9
	0	55.7		
	1	11.5	Percentage of children in hardship (4+ items)	19.8
	2	7.8		
	3	5.3		
	4	3.9		
	5	3.1		
	6+	12.7		
Consumer durables	Percentage of children with number of items would like but cannot afford (from 14 items):		Prevalence-weighted average percentage of items would like but cannot afford	4.8
	0	63.3		
	1	16.0	Percentage of children in hardship (2+ items)	20.7
	2	9.0		
	3	5.5		
	4	3.0		
	5	1.7		
	6+	1.5		
Housing conditions	Percentage of children with:		Average number of poor housing conditions	0.2
	Insufficient number of bedrooms	9.7		
	House not adequately warm	6.4		
	3+ types of repairs needed	6.3	Percentage of children in hardship (2+ poor housing conditions)	3.2
	Percentage of children with number of poor conditions:			
	0	81.3		
	1	15.5		
	2	2.8		
	3	0.4		
Problem debt	Percentage of children with number of types of problem debt:		Average number of types of problem debt	0.4
	0	81.3		
	1	9.2	Percentage of children in hardship (2+ type of problem debt)	9.5
	2+	9.5		

Continued

Table 3.6 Continued

Measure	Underlying variables			Derived living standards and hardship measures	
Financial difficulties	Percentage of children with financial difficulty (score):			Average financial difficulties score	0.6
	Worry about money almost all the time (1)		16.2	Percentage in hardship (score of 2+)	17.1
	How often run out of money before week/ month end	– often (1)	14.0		
		– always (2)	10.6		
	Managing financially	– some difficulties (1)	6.3		
		– deep trouble (2)	1.5		
	Percentage of children with total score:				
	0		68.4		
	1		14.5		
	2		9.0		
	3		5.0		
	4		2.1		
	5		0.9		

Note: The questions underpinning the daily living and consumer durables measures of hardship were not asked in the 2006 survey.

Base: All children in GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 3.7 Living standards and hardship measures (BHPS), 1996 to 2006

Measure	Underlying variables		Derived living standards and hardship measures	
Daily living	Percentage of children with number of items would like but cannot afford (from 5 items):		Prevalence-weighted average percentage of items would like but cannot afford	9.7
	0	70.8		
	1	15.7	Percentage of children in hardship (1+ items)	29.2
	2	8.0		
	3	3.6		
	4	1.4		
	5	0.5		
Consumer durables	Percentage of children without number of items (from 13 items):		Prevalence-weighted average percentage of items lacked	14.3
	0	1.1		
	1	17.0	Percentage of children in hardship (5+ items)	17.3
	2	25.2		
	3	22.8		
	4	16.6		
	5	9.0		
	6+	8.3		
Housing conditions	Percentage of children with:		Average number of poor housing conditions	0.3
	Insufficient number of bedrooms	8.4		
	House not adequately warm	1.3	Percentage of children in hardship (2+ poor housing conditions)	4.0
	3+ types of repairs needed	20.3		
	Percentage of children with number of poor conditions:			
	0	74.0		
	1	22.0		
	2	3.8		
	3	0.2		
Financial difficulties	Percentage of children with financial difficulty (score):		Average financial difficulties score	0.3
	Loan repayments are heavy burden (1)	4.7	Percentage in hardship (score of 1+)	18.9
	Difficulties paying for accommodation (1)	10.1		
	Managing financially			
	– finding it difficult (1)	7.7		
	– finding it very difficult (2)	3.5		
	Percentage of children with total score:			
	0	81.1		
	1	11.2		
	2	4.6		
	3	2.3		
	4	0.8		

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

Table 3.8 Trends in the proportions of children in hardship (FACS), 2001 to 2006

	Hardship measure				
Percentage of children in hardship	Daily living	Consumer durables	Housing conditions	Debt	Financial situation
Year:					
2001	24.8	25.6	3.6	10.8	20.7
2002	22.2	23.1	3.7	10.6	17.9
2003	18.1	19.8	2.8	9.4	15.6
2004	17.1	17.6	2.9	9.1	15.9
2005	16.1	16.6	3.0	8.7	16.0
2006	n/a	n/a	3.3	8.4	15.9

Note: The questions underpinning the daily living and consumer durables measures of hardship were not asked in the 2006 survey.

Base: All children in the GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 3.9 Trends in the proportions of children in hardship (BHPS), 1996 to 2006

	Hardship measure			
Percentage of children in hardship	Daily living	Consumer durables	Housing conditions	Financial situation
Year:				
1996	39.0	17.8	5.4	22.5
1997	35.3	18.7	5.0	21.8
1998	33.6	17.2	3.4	19.0
1999	34.1	16.0	3.5	20.1
2000	29.8	14.2	3.1	21.3
2001	26.9	13.4	2.5	16.8
2002	25.3	12.6	4.5	16.3
2003	24.0	11.7	4.0	15.5
2004	23.7	11.1	5.2	16.1
2005	23.2	10.9	3.5	17.7
2006	22.7	11.2	3.1	19.1

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

4 The income distribution and the risk of low income for children in families of different work states

This chapter looks at the income distribution and poverty risk for children according to their family work status. The conclusions are:

- Children in self-employed families are more likely to be in poverty than children in employed families, but less likely to be in poverty than those in workless families.
- In the Family Resources Survey (FRS) and the Family Expenditure Survey (FES)/Expenditure and Food Survey (EFS), children in self-employed families are much more likely to have very low incomes than children in employed families. But this is less apparent in the Families and Children Survey (FACS), perhaps because FACS does not allow self-employed respondents to report a negative income.
- FRS has higher numbers of children in households with very low incomes than the other surveys, but there is no noticeable trend.
- The surveys broadly agree on trends in relative poverty for children in employed and workless families, and broadly agree that the trend for children in self-employed families is volatile.
- The British Household Panel Survey (BHPS) gives a different impression of the incidence of poverty from the other surveys. This may be due to a different sample composition from the other surveys.

4.1 The income distribution for children according to their work status

Figures 4.1 to 4.4 compare the income distribution for children in families of different work states and across the four surveys using pooled data from 2001/02 to 2006/07 (the pooling was needed to increase the sample sizes in BHPS and EFS).

Although formal statistical tests have not been carried out to compare the income distributions between work types or between surveys, a visual inspection suggests the following:

- Unsurprisingly, children in workless families are concentrated towards the bottom of the income distribution.
- There is a noticeable difference between the surveys in the position of children in self-employed families: FRS records a substantial number of children in self-employed families with zero income, but this is not present in the other surveys (a value of zero for Before Housing Costs (BHC) income usually arises when total BHC income has been calculated to be negative, but negative BHC incomes are all set to zero. See Appendix B for a description of the recording of self-employment income in each survey).
- Other than the point above, there are few noticeable differences in the income distribution of children in employed and self-employed families.

4.2 The poverty risk for children according to their work status

The risk of falling below particular poverty thresholds for all children, and how this has changed over time, is shown in Figures 4.5 to 4.8. This shows that:

- As Figure 3.1 showed, the impression given of the risk of falling below various poverty thresholds in the most recent years is similar in FRS and FACS, and similar in EFS and BHPS, but EFS and BHPS suggest fewer children are in households with less than 60 per cent median income than FRS and FACS.[9]
- All surveys show that the risk of falling below 60 per cent of median income generally declined until 2004, and has been rising since.

This analysis is then broken down further in Figures 4.9 to 4.20, by repeating the analysis for children according to the work status of their families. This shows that:

- In three of the datasets, children in employed families are less likely to be in relative poverty than those in self-employed families, who themselves are less likely to be in poverty than those in workless families. The exception is FACS, where there is little or no difference between the risk of poverty for children in employed and self-employed families.

[9] Recall that the income thresholds used are constant across the surveys.

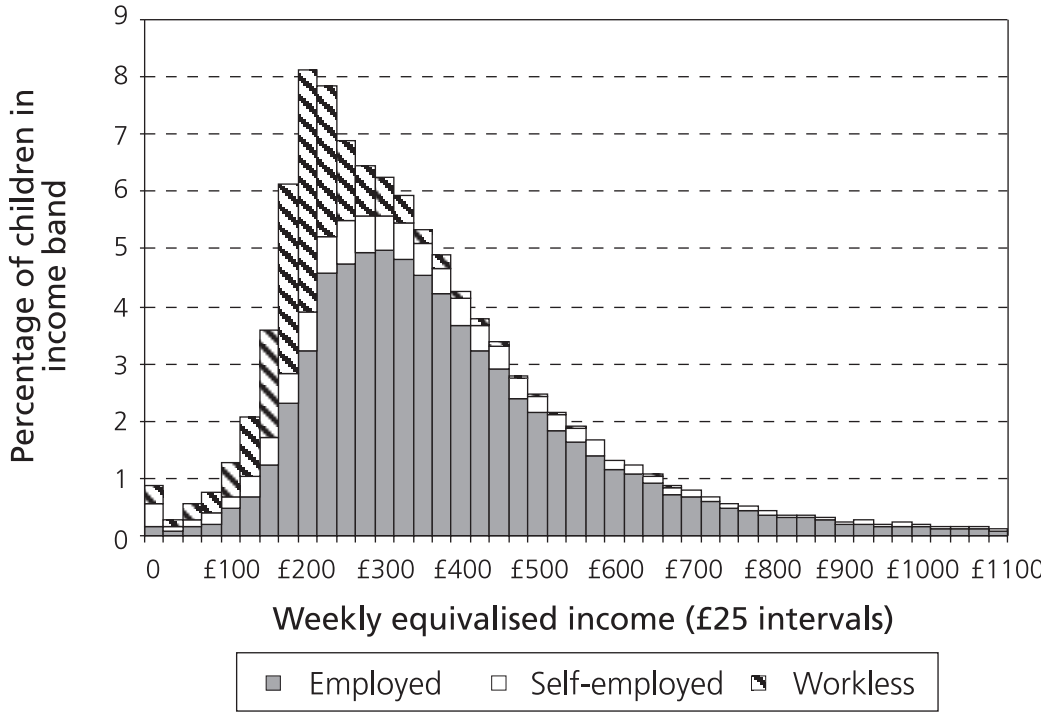
- For children in employed and workless families, the risk of poverty appears to have declined over time, before rising since 2003 or 2004 (depending on the dataset; one exception is workless families in BHPS, although these results are based on a small sample in any one year). But the risk of poverty has been more volatile for children in self-employed families.
- The risk of poverty for children in self-employed families in FRS and BHPS is higher than the equivalent families in FES/EFS and FACS. The risk of poverty for children in employed families is lower in BHPS than the other datasets.

4.3 Children in households with extremely low incomes

Figures 4.1 to 4.4 highlight differences between the surveys in the number of children in households with zero incomes BHC, particularly for the self-employed, and Figures 4.13 to 4.16 show that there are differences between the surveys in the risk of poverty for children in self-employed families.

Table 4.1 shows the number of families with children with an equivalised income of less than £50 a week in 2006/07 prices since 2001/02. The number of households with children with this very low income is generally higher in the FRS sample than the FACS sample (in spite of similar overall sample sizes) and the numbers of such households in EFS and BHPS are very low indeed (reflecting the smaller overall sample sizes). In FRS, EFS and BHPS, the self-employed are over-represented amongst those households with very low incomes and the figures indicate little trend since 2001/02 in the number of children in households with very low incomes. However, with such small sample sizes, it would not be wise to make firm inferences from this analysis.

Figure 4.1 Income distribution of children in families of different work status (FRS), 2001/02 to 2006/07

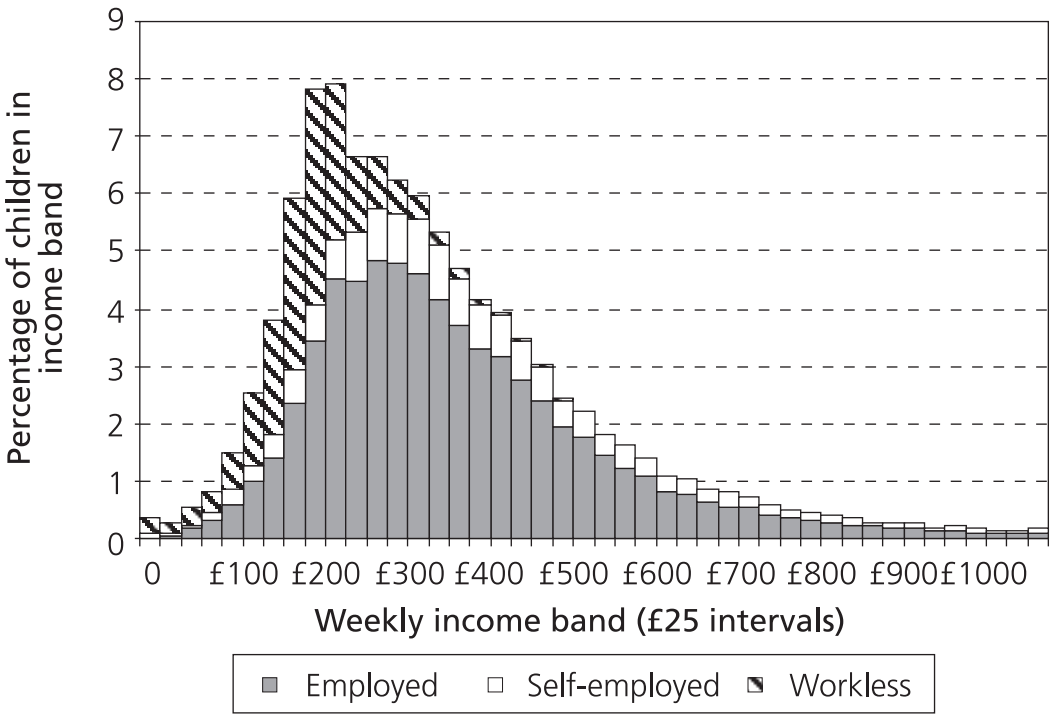


Base: All children in GB for 2001/02 and in the UK for 2002/03 to 2006/07.
Sample size: 48,107 families.
Source: FRS, 2001/02 to 2006/07.

Figure 4.2 Income distribution of children in families of different work status (EFS), 2001/02 to 2006

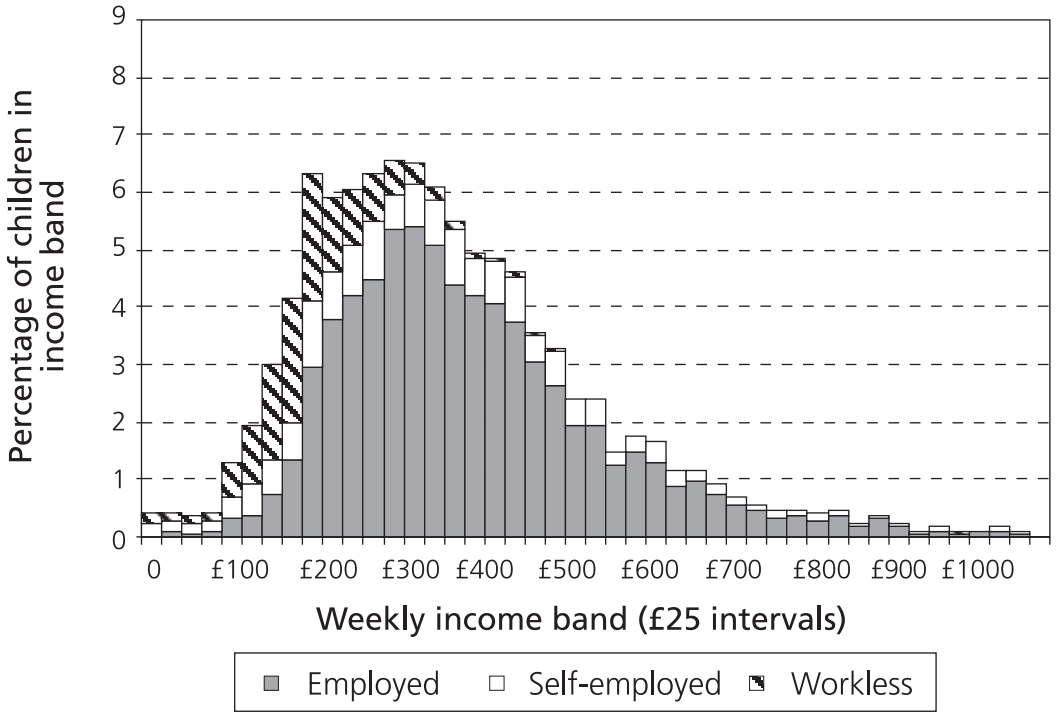
Base: All children in the UK. Sample size: 12,918 families.
Source: EFS, 2001/02 to 2006.

Figure 4.3 Income distribution of children in families of different work status (FACS), 2001 to 2006



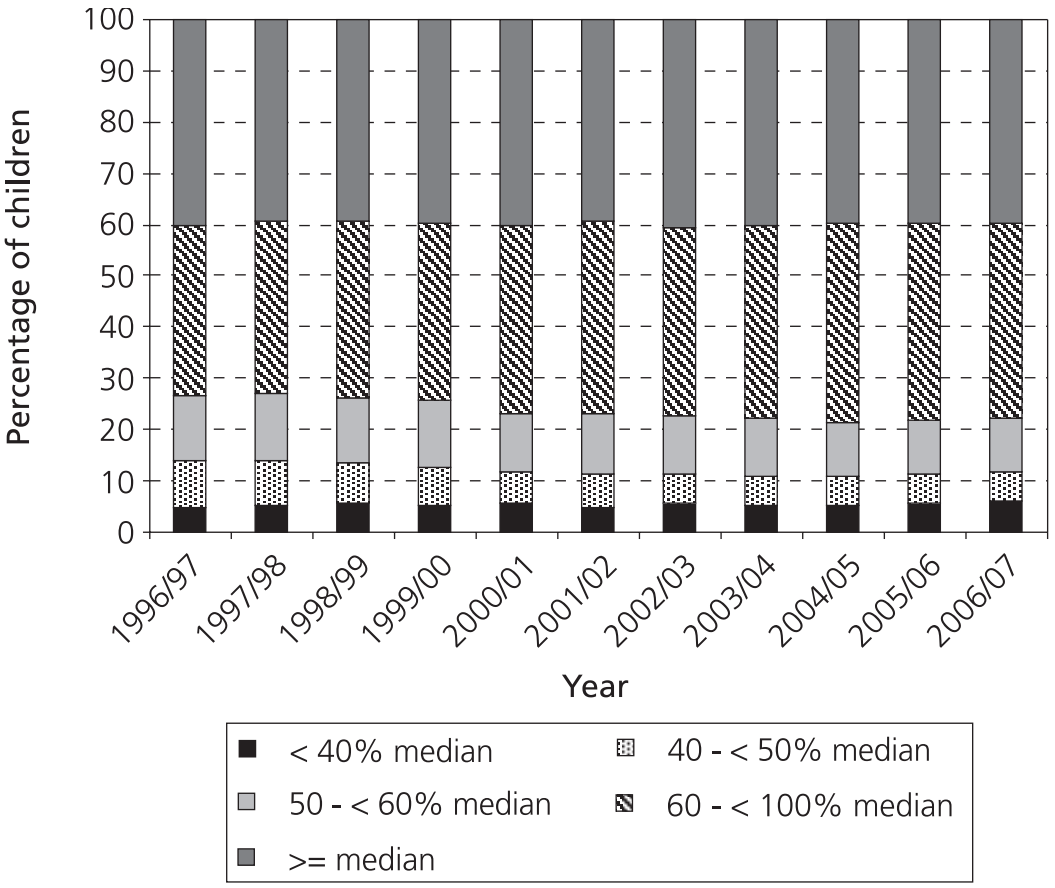
Base: All children in GB. Sample size: 42,556 families.
Source: FACS, 2001 to 2006.

Figure 4.4 Income distribution of children in families of different work status (BHPS), 2001 to 2006



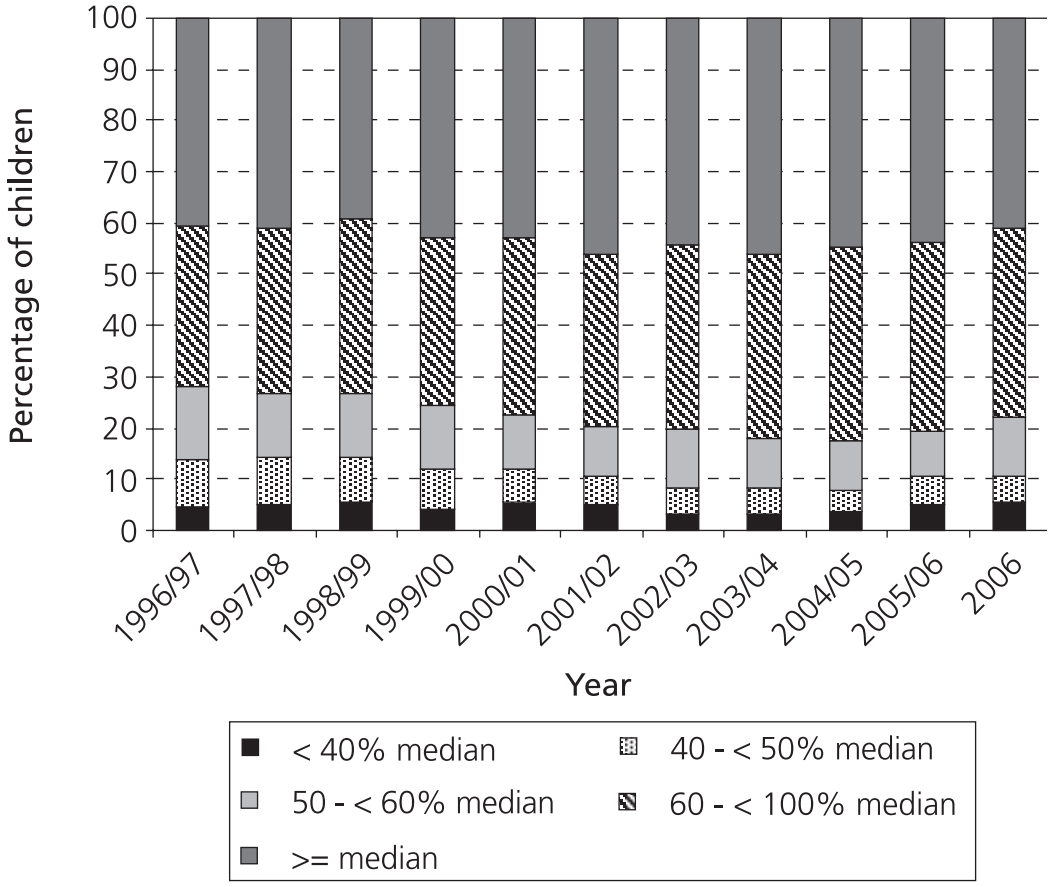
Base: All children in GB. Sample size: 8,749 families.
Source: BHPS, 2001 to 2006.

Figure 4.5 Trends in the proportions of all children with different categories of incomes (FRS), 1996/97 to 2006/07



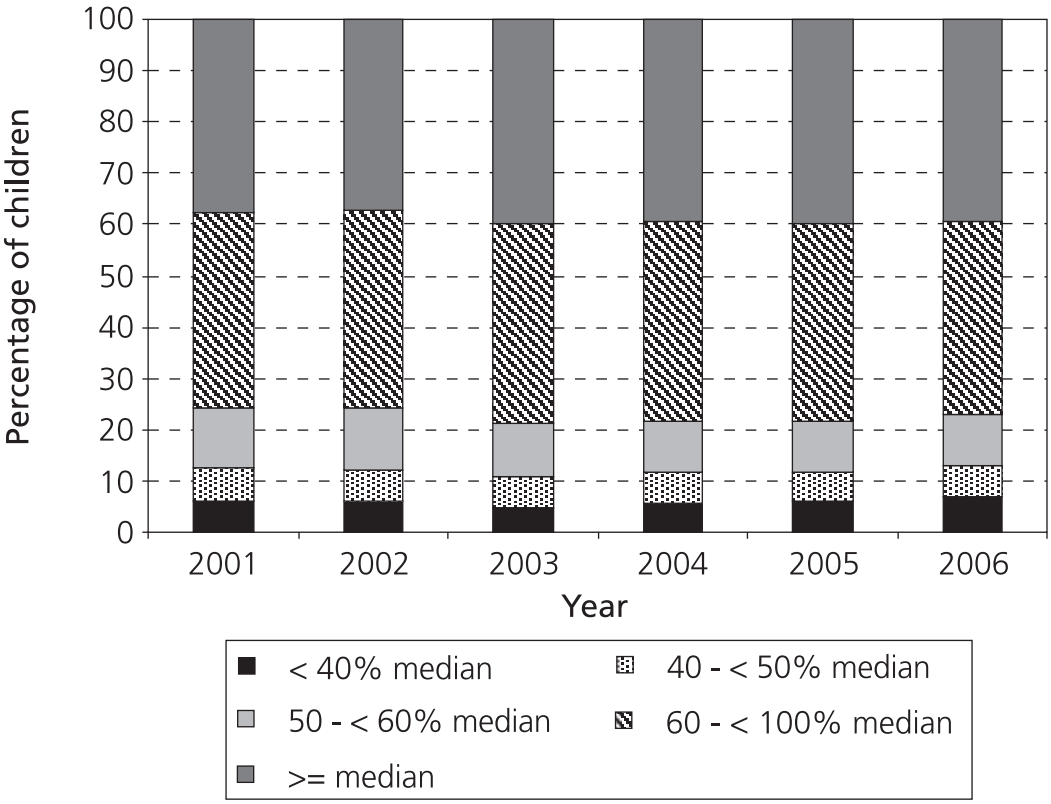
Base: All children in GB for 1996/97 to 2001/02 and in the UK for 2002/03 to 2006/07. Sample size: 90,138 families.
Source: FRS, 1996/97 to 2006/07.

Figure 4.6 Trends in the proportions of all children with different categories of incomes, (FES/EFS), 1996/97 to 2006



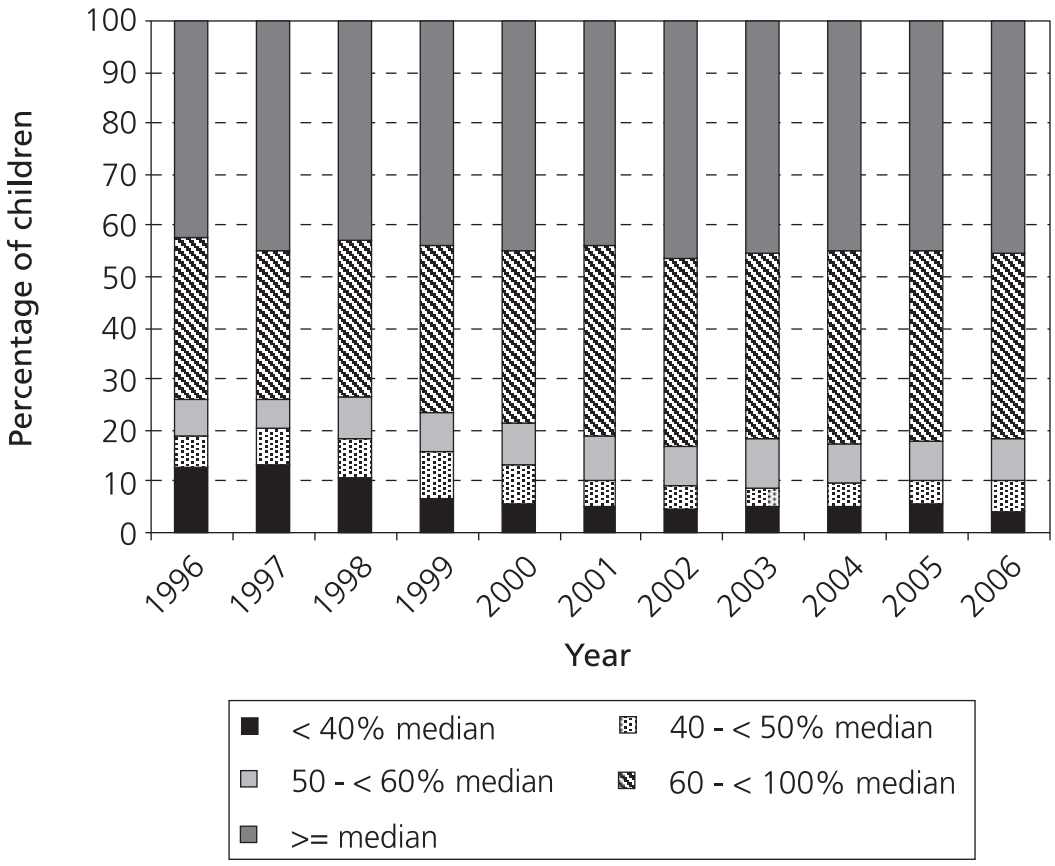
Base: All children in the UK. Sample size: 24,139 families.
Source: FES, 1996/97 to 2000/01; EFS, 2001/02 to 2006.

Figure 4.7 Trends in the proportions of all children with different categories of incomes (FACS), 2001 to 2006



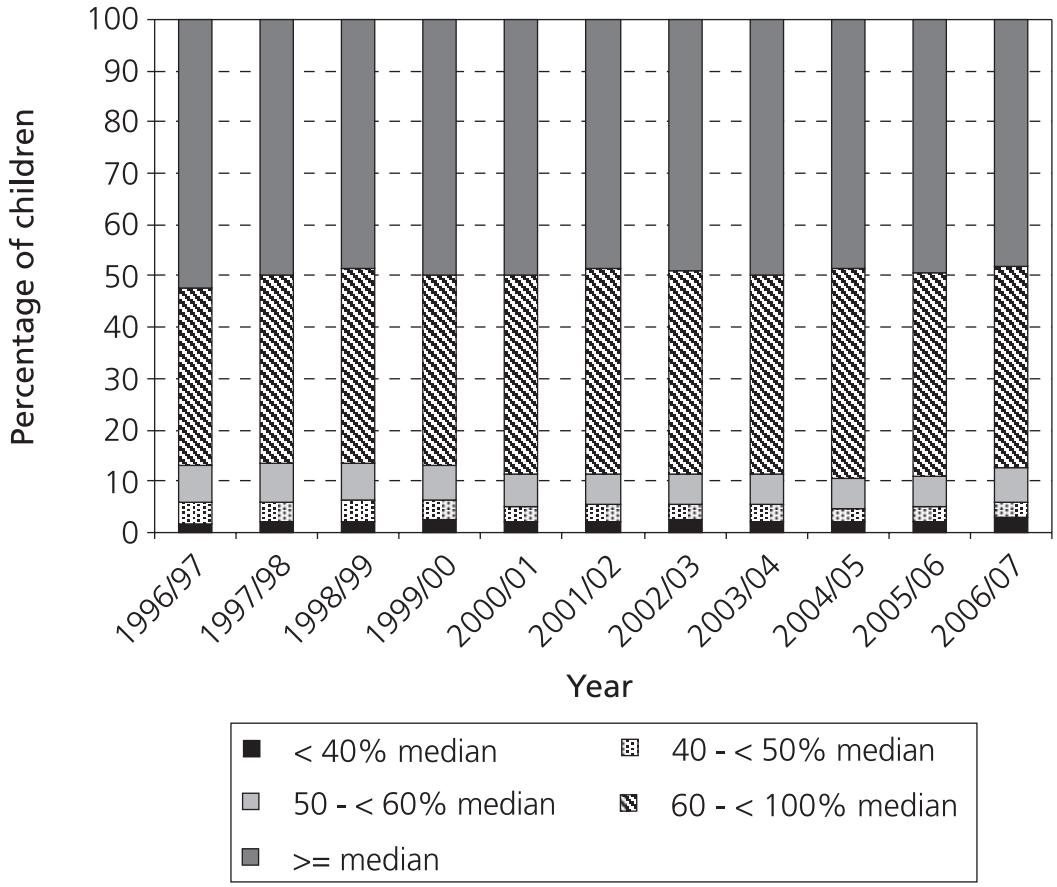
Base: All children in GB. Sample size: 42,556 families.
Source: FACS, 2001 to 2006.

Figure 4.8 Trends in the proportions of all children with different categories of incomes (BHPS), 1996 to 2006



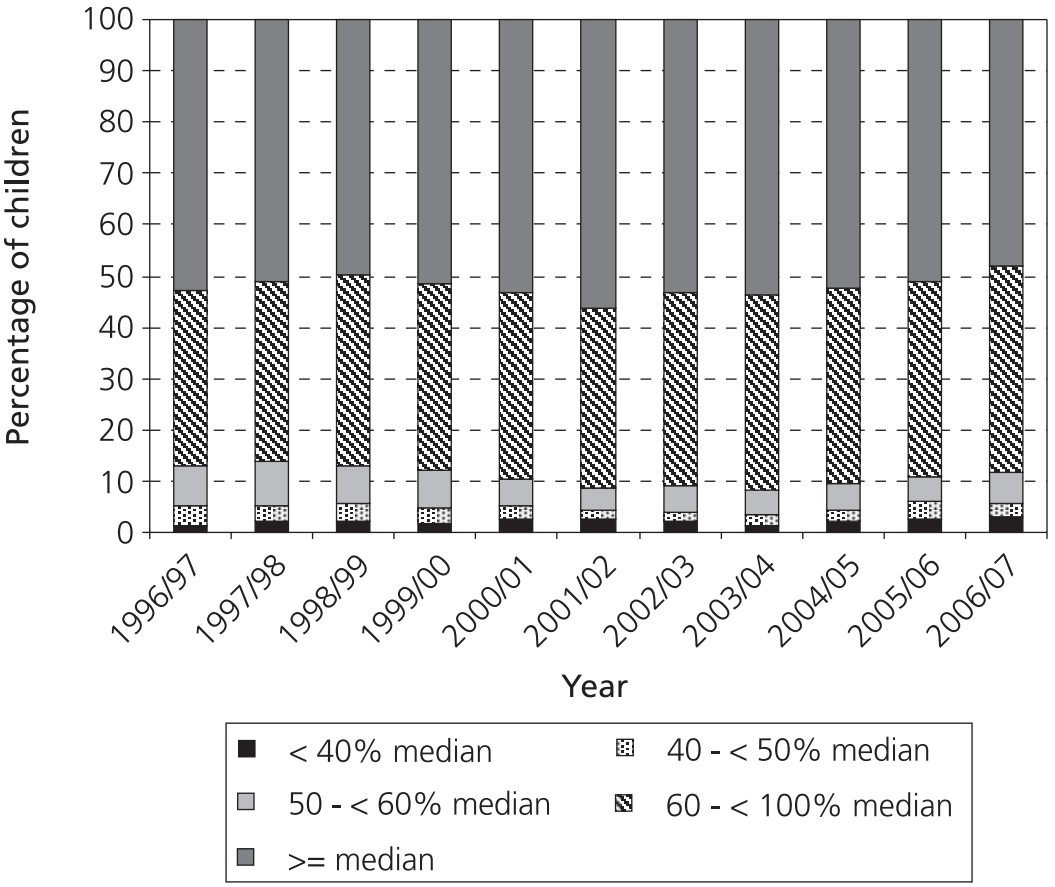
Base: All children in GB. Sample size: 16,596 families.
Source: BHPS. 1996 to 2006.

Figure 4.9 Proportions of children in employed families with different categories of incomes (FRS), 1996/97 to 2006/07



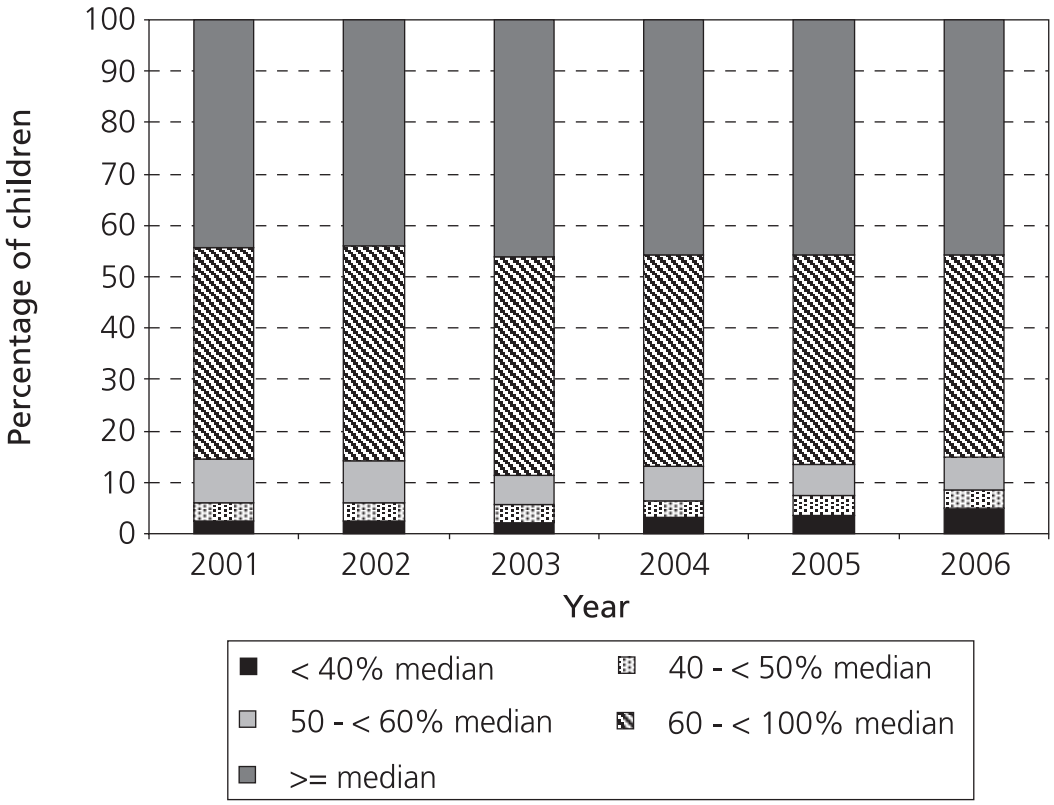
Base: All children in employed families in GB for 1996/97 to 2001/02 and in the UK for 2002/03 to 2006/07. Sample size: 61,771 families.
Source: FRS, 1996/97 to 2006/07.

Figure 4.10 Proportions of children in employed families with different categories of incomes (FES/EFS), 1996/97 to 2006



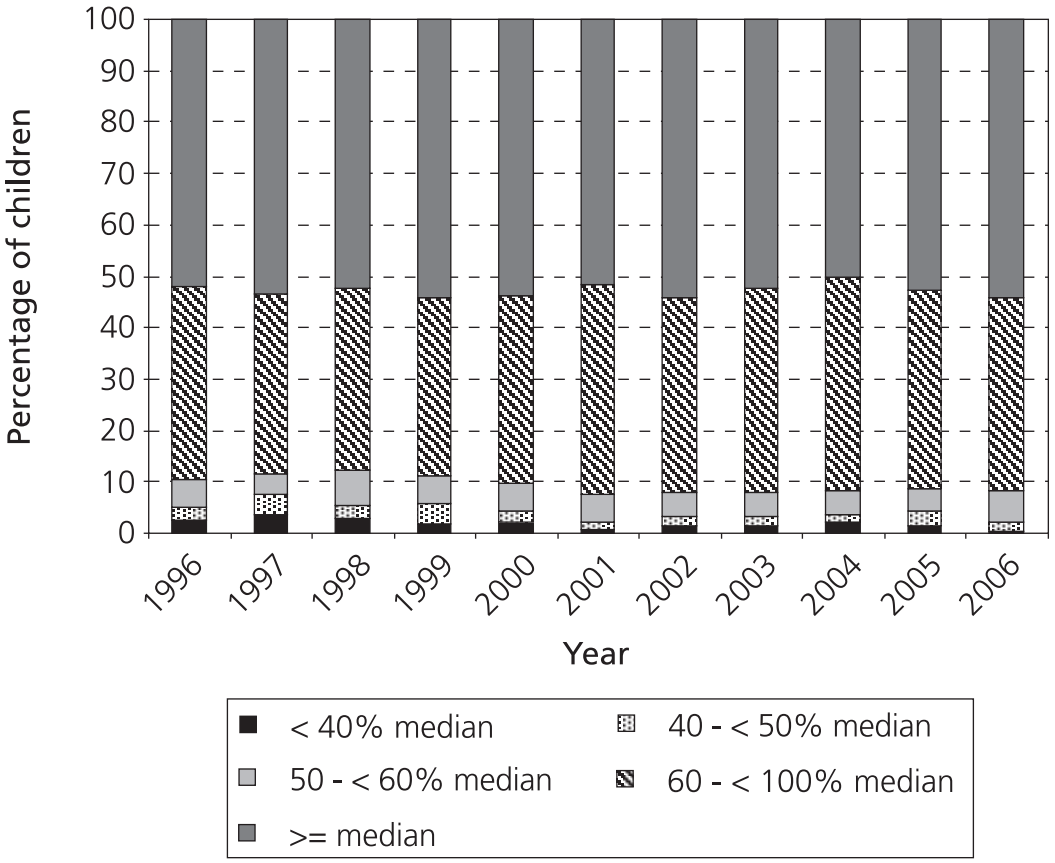
Base: All children employed families in the UK. Sample size: 15,784
Source: FES, 1996/07 to 2000/01; EFS 2001/02 to 2006.

Figure 4.11 Proportions of children in employed families with different categories of incomes (FACS), 2001 to 2006



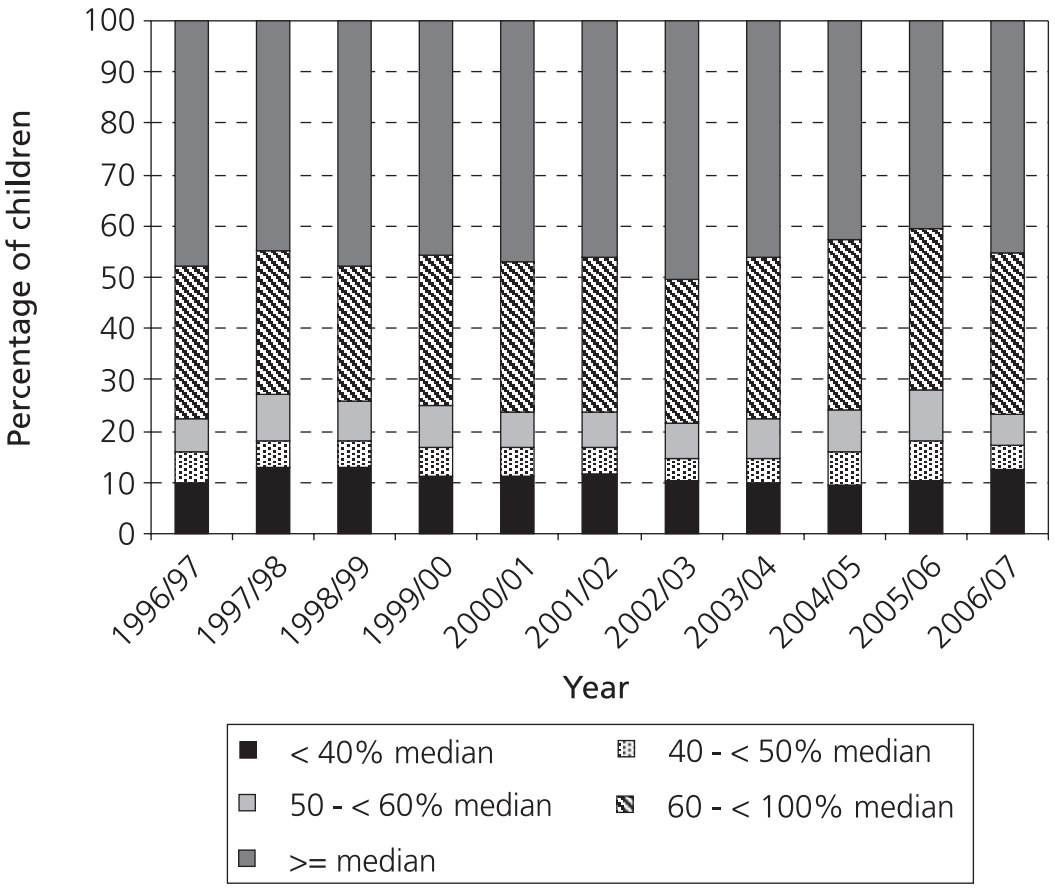
Base: All children employed families in GB. Sample size: 28,793 families.
Source: FACS, 2001 to 2006.

Figure 4.12 Proportions of children in employed families with different categories of incomes (BHPS), 1996 to 2006



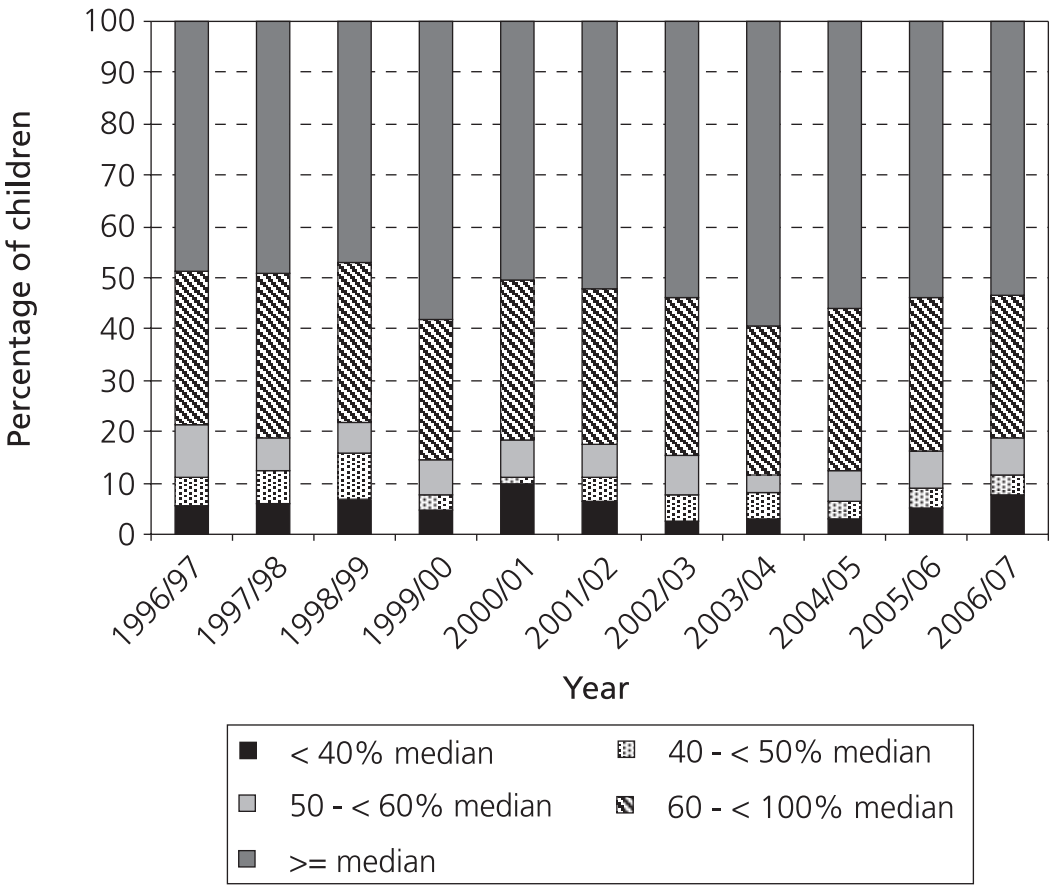
Base: All children employed families in GB. Sample size: 11,583 families.
Source: BHPS, 1996 to 2006.

Figure 4.13 Proportions of children in self-employed families with different categories of incomes (FRS), 1996/97 to 2006/07



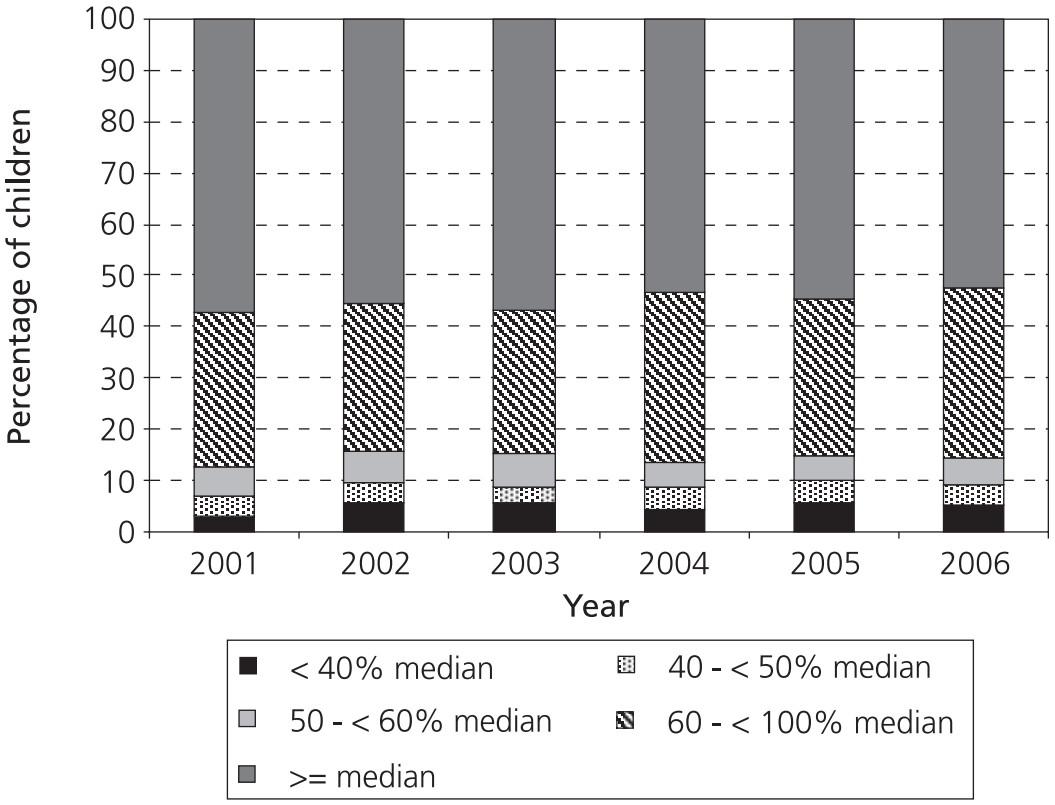
Base: All children in self-employed families in GB for 1996/97 to 2001/02 and in the UK for 2002/03 to 2006/07. Sample size: 10,256 families.
Source: FRS, 1996/97 to 2006/07.

Figure 4.14 Proportions of children in self-employed families with different categories of incomes (FES/EFS), 1996/97 to 2006



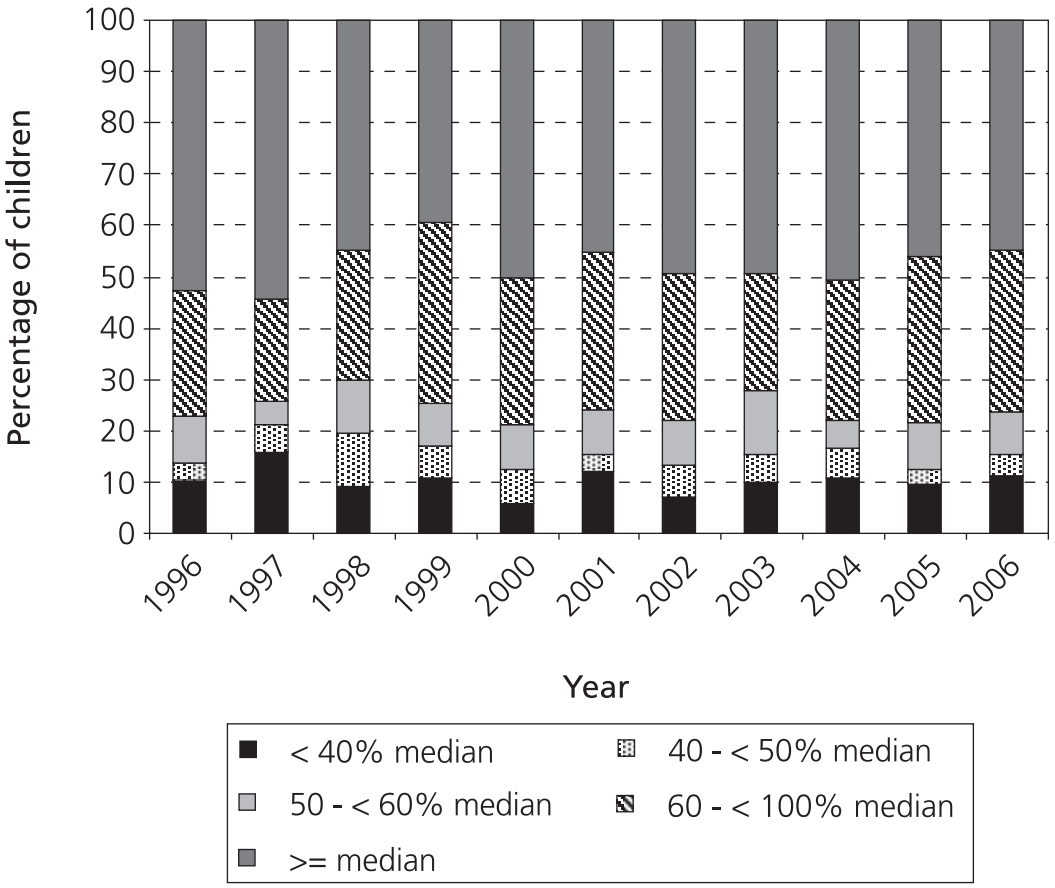
Base: All children self-employed families in the UK. Sample size: 3,765.
Source: FES, 1996/97 to 2000/01; EFS, 2001/02 to 2006.

Figure 4.15 Proportions of children in self-employed families with different categories of incomes (FACS), 2001 to 2006



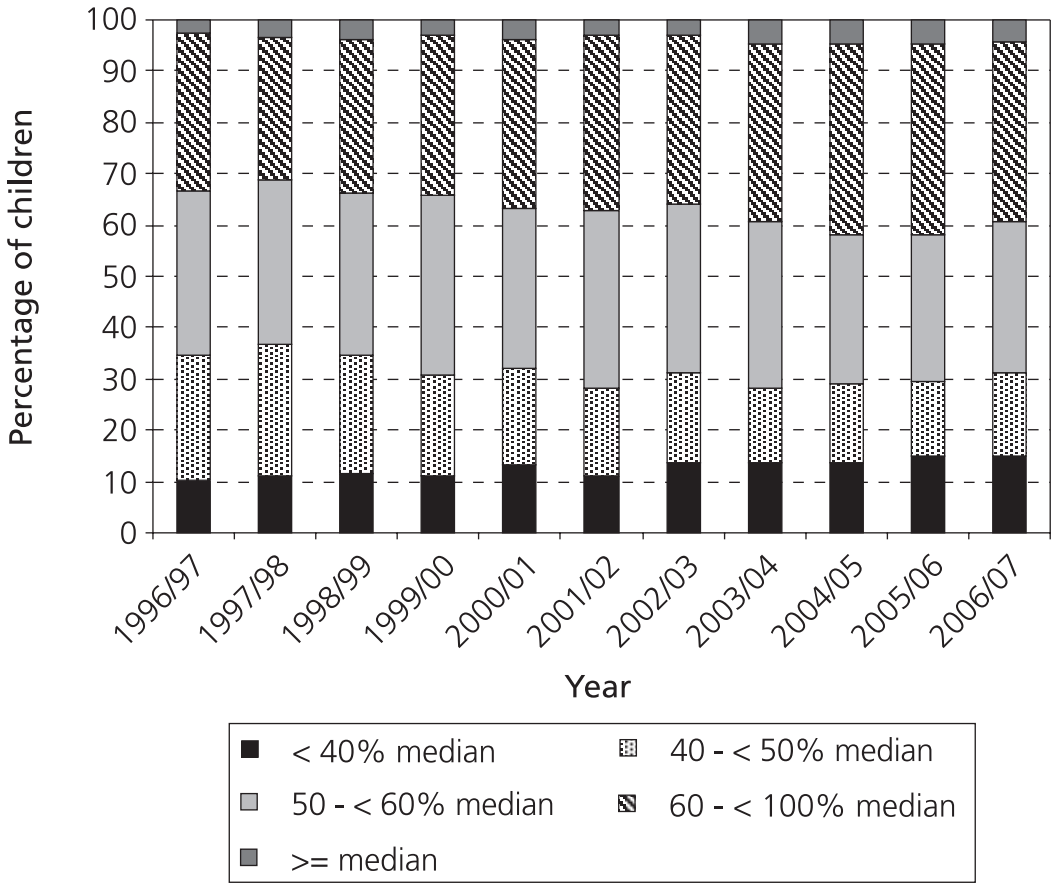
Base: All children in self-employed families in GB. Sample size: 6,341 families.
Source: FACS, 2001 to 2006.

Figure 4.16 Proportions of children in self-employed families with different categories of incomes (BHPS), 1996 to 2006



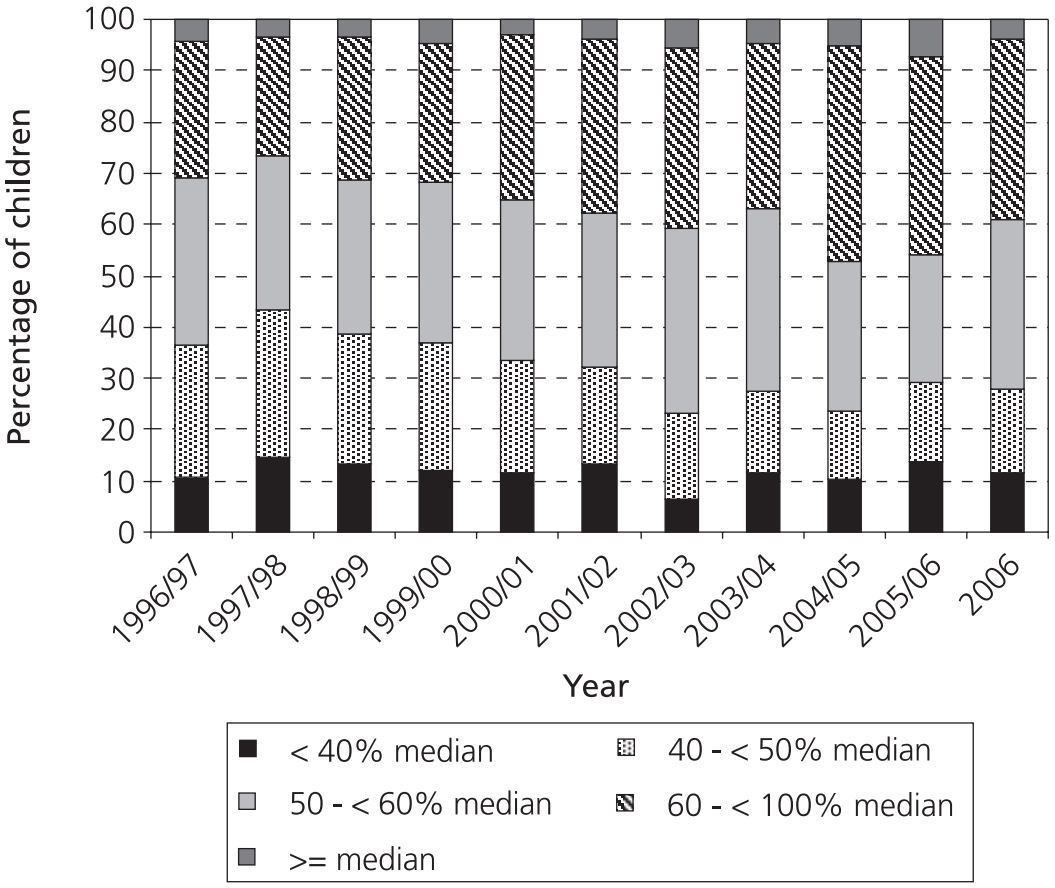
Base: All children in self-employed families in GB. Sample size: 2,488 families.
Source: BHPS, 1996 to 2006.

Figure 4.17 Proportions of children in workless families with different categories of incomes (FRS), 1996/97 to 2006/07



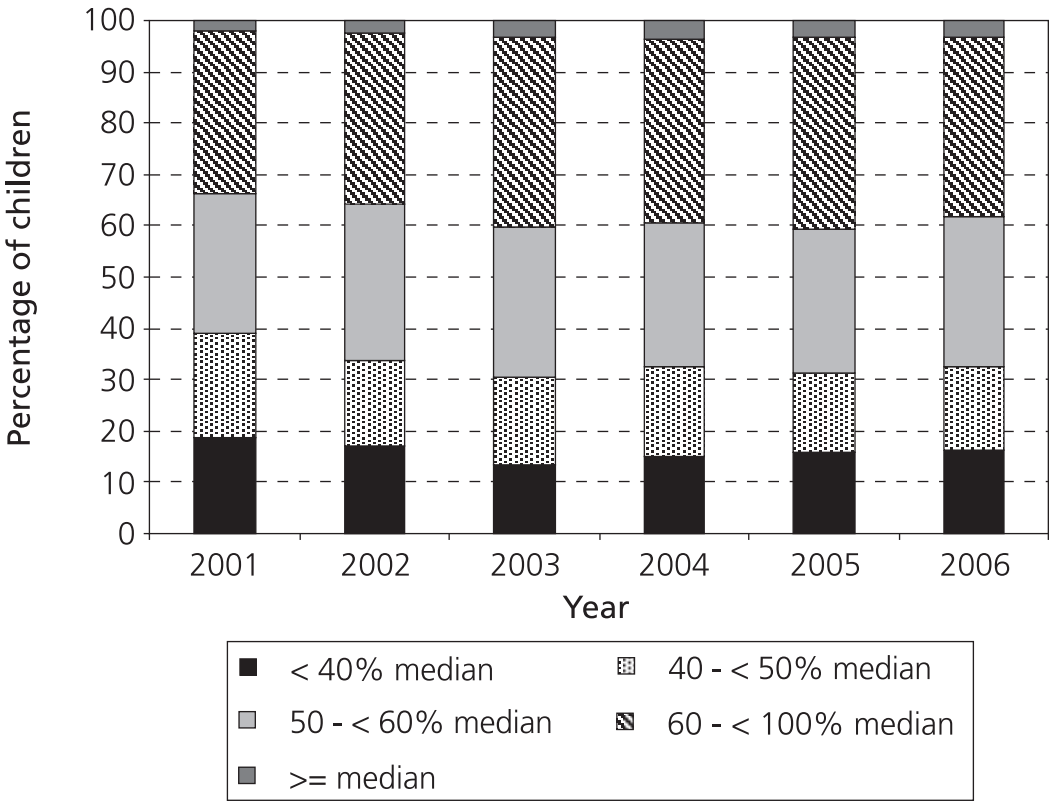
Base: All children in workless families in GB for 1996/97 to 2001/02 and in the UK for 2002/03 to 2006/07. Sample size: 18,111 families.
Source: FRS, 1996/97 to 2006/07.

Figure 4.18 Proportions of children in workless families with different categories of incomes (FES/EFS), 1996/97 to 2006



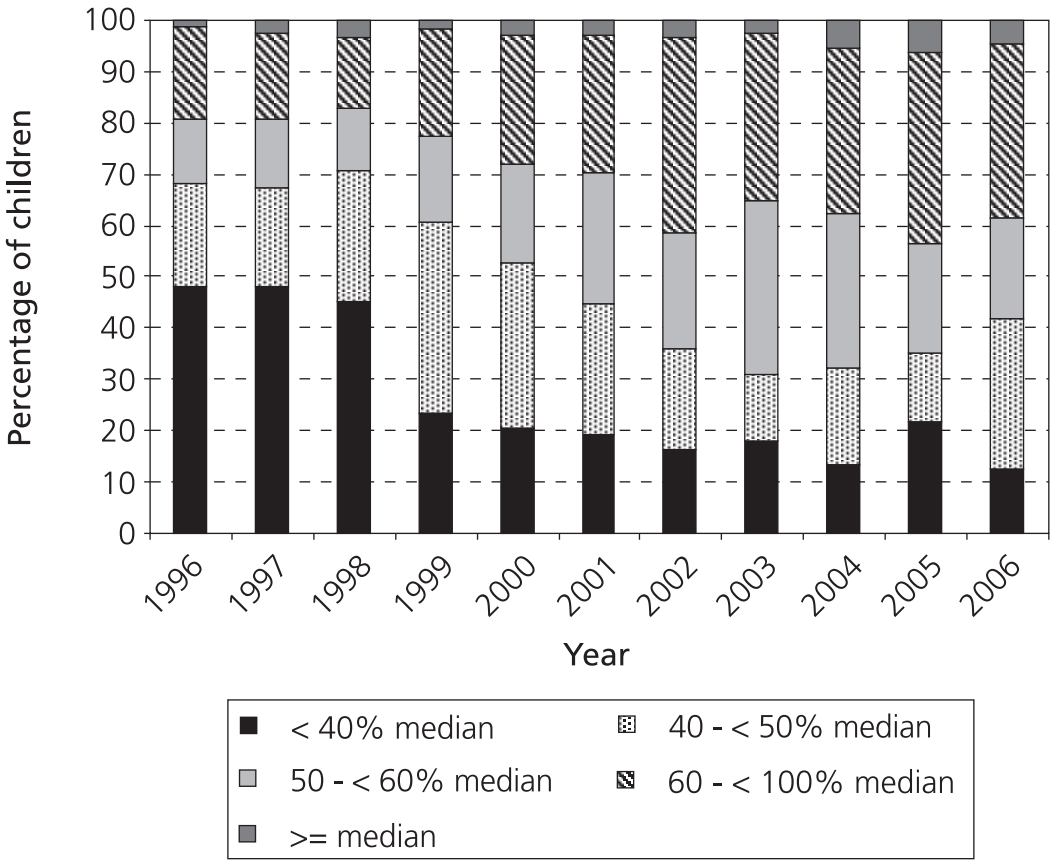
Base: All children workless families in the UK. Sample size: 4,590.
Source: FES, 1996/07 to 2000/01; EFS, 2001/02 to 2006.

Figure 4.19 Proportions of children in workless families with different categories of incomes (FACS), 2001 to 2006



Base: All children in workless families in GB. Sample size: 7,421 families.
Source: FACS, 2001 to 2006.

Figure 4.20 Proportions of children in workless families with different categories of incomes (BHPS), 1996 to 2006



Base: All children in workless families in GB. Sample size: 1,979 families.
Source: BHPS, 1996 to 2006.

Table 4.1 Sample size and family work status of families with children with weekly income less than £50 (all surveys)

	Survey			
Year	**FRS**	**EFS**	**FACS**	**BHPS**
2001	98	20	58	11
2002	89	11	73	10
2003	93	14	46	15
2004	83	12	31	11
2005	85	10	41	7
2006	96	12	39	9
Of whom, as a per cent				
Employed	23	17	11	13
Self-employed	38	38	13	43
Workless	39	45	76	45

Base: All children in families with weekly income less than £50 a week in cash terms in the UK for FRS 2002/03 to 2006/07 and for EFS, and in GB for FRS 2001/02, FACS and BHPS.

Sources: FRS, 2001/02 to 2006/07; EFS, 2001/02 to 2006; FACS, 2001 to 2006; BHPS, 2001 to 2006.

5 Living standards and income: do children from households with the lowest income have the lowest living standards?

This chapter looks at the relationship between income and other measures of living standards.

The conclusions are:

- Households with children with the lowest incomes do not have the lowest living standards, on average. Instead, loosely speaking, average living standards first fall as income rises, and then rise, creating a 'U-shaped' profile between income and other measures of living standards.
- Children from households with the lowest incomes have living standards which are greater, on average, than households with slightly higher incomes. To be precise, the one per cent of children living in households with incomes below £50 a week have average living standards comparable to those with incomes of £250 to £500 a week, depending on the type of living standards measure.
- The lowest average living standards are to be found amongst children living in households with incomes of £100 to £200 a week, depending on the measure. These values currently represent around 30 to 50 per cent of median income.

Continued

- There is more variation in living standards within income bands for households with incomes less than £300 a week, showing that the poorest households contain high proportions of households who have living standards which are either well below or far above the average for their income level.
- The relationships between current living standards and income averaged over two years suggests that the 'U-shaped' profile between living standards and current income is not explained by temporary falls in income for those with the lowest current income.
- There is little difference in the hardship rates and levels of living standards between children with household incomes below 50 per cent of median income and those with household income between 50 per cent and 60 per cent median income.

This chapter considers the relationship between income and the other measures of living standards which are described in detail in Chapter 3.

5.1 An overview of the relationship between income and living standards

Figures 5.1 to 5.22 show the relationship between income and the other measures of living standards. For the measures which are continuous, the figures show the average (mean) measure of living standards, and the median and inter-quartile range amongst children in households with income in a particular band. For the measures which are categorical, the figures show the mean value of the index and the value of the binary hardship indicator, see Section 3.4 for a description of the constructions of the hardship measures. The figures from the Family Resources Survey (FRS), British Household Panel Survey (BHPS), and Families and Children Study (FACS) are derived by dividing families into bands of income with a width of £25, while wider bands of £50 are used for the Expenditure and Food Survey (EFS) because it has a smaller sample size. Box 5.1 provides some background information to help interpret the income values shown on the horizontal axes.

Box 5.1 Interpreting values of weekly equivalised income

Table 5.1 shows, for selected income levels, what these values represent as a fraction of median income, and what fraction of children live in households with incomes less than these hypothetical values (both according to FRS 2006/07). It also reports the conventional poverty thresholds so that one can also observe the money values of these poverty thresholds.

Table 5.1 Value of household incomes as a proportion of median income and proportion of children living in households with incomes less than these values

Income (£)	As a percentage of median income	Children with incomes less than this value (%)
£0	n/a	0.6
£50	13.3	1.2
£100	26.5	2.7
£150	39.8	5.9
£151	**40.0**	**6.2**
£188	**50.0**	**11.8**
£200	53.1	13.6
£226	**60.0**	**22.3**
£250	66.3	29.0
£264	**70.0**	**33.4**
£300	79.6	43.0
£350	92.9	54.9
£400	106.2	65.3
£450	119.4	74.2
£500	132.7	80.6

Note: The actual poverty lines are based on unrounded figures, so the poverty lines presented may not tally due to rounding. Median income in 2006/07 was £377.

Base: All households in the United Kingdom (UK). Sample size 30,131 families (with and without children).

Source: FRS, 2006/07.

The table shows, for instance, that:

- An equivalised disposable income of £200 a week (Before Housing Costs (BHC)) represents 53 per cent of median income, and nearly 14 per cent of children live in households with incomes less than this.
- Nearly 12 per cent of children live in households with incomes less than 50 per cent of the median, which represented £188 in 2006/07.

This table can therefore be used as a guide to what the incomes shown on the horizontal axes of Figures 5.1 to 5.22 represent as a proportion of the median, where the conventional poverty thresholds lie on the horizontal axes, and what proportion of children live in households with incomes less than these values.

For each of the measures of living standards derived from FACS and BHPS, two figures are shown: one shows the relationship between living standards and current income, and one shows the relationship between living standards and past income. For FACS, past income is average weekly income from the past 24 months leading up to and including the month of interview under analysis, where data on income in each month had been created using information from the work histories (see Browne and Paull, forthcoming). Past income for the BHPS is average income for the three consecutive interviews leading up to and including the interview under analysis.

Figures 5.1 to 5.22 give a remarkably consistent picture across the range of measure of living standards. For figures where the living standards measure corresponds to a higher living standard (financial assets in Figure 5.2 and non-durables spending in Figure 5.3), there is a 'U-shaped' profile, where average living standards first fall as income increases before rising with income. For the figures showing deprivation or other hardship rates, there is generally a 'hump-shaped' profile, where deprivation first rises as income increases before falling as income rises further. Hence, households with children with the very lowest incomes tend not to have the lowest living standards or the highest rates of deprivation or hardship.[10]

In detail, the figures show that:

- Households with children with incomes below £50 a week have average living standards comparable to those with incomes of between £250 to £500 a week depending on the type of living standard measure. These households represent about one per cent of children, see Box 5.1.
- For most living standards measures, the lowest average living standards and highest deprivation or hardship rates are to be found amongst households with children with incomes of £100 a week to £200 a week, depending upon the particular living standards measure. This corresponds to between 30 per cent to 50 per cent of median income, see Box 5.1.
- For the continuous measures of living standards, the inter-quartile range shows the degree of variation in living standards amongst children in households in the same income band. In general, there is greater variation in living standards for households with incomes below around £300 a week, showing that the poorest households with children contain higher proportions of households who have living standards which are either well below or far above the average for their income level.

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[10] The analysis is at the child-level, but, because it is not clear how well the measures of living standards relate to the children, this report uses the formulation 'households with children' when discussing the results. In other words, it should not be assumed that all the children in households with low living standards themselves have low living standards, although it is likely that there is a close relationship between the two.

The figures that show how hardship rates vary with past income give a similar picture to those for current income: the highest hardship rates are to be found amongst households with children with past incomes of between £100 a week to £200 a week depending on the measure of living standard used. But hardship rates are considerably lower for the households with average past incomes below £50 a week than those with current income below £50 a week. This strongly suggests that the relatively high living standards experienced by this group are not accounted for by a temporary drop in income: indeed, the figures indicate that it is those households with longer-term very low income who have the higher living standards rather than those temporarily at the very bottom of the income distribution. In addition, the fact that the 'hump-shaped' profiles for income above £50 a week are very similar for current income and average past income also indicates that the lower hardship rates among those households with income below the peak points of £100 to £200 a week are also not explained by a temporary fall in income. Hence, the evidence suggests that measuring income over the longer period of two years may not substantially improve the matching between low income and low living standards.

5.2 An overview of the relationship between poverty and hardship

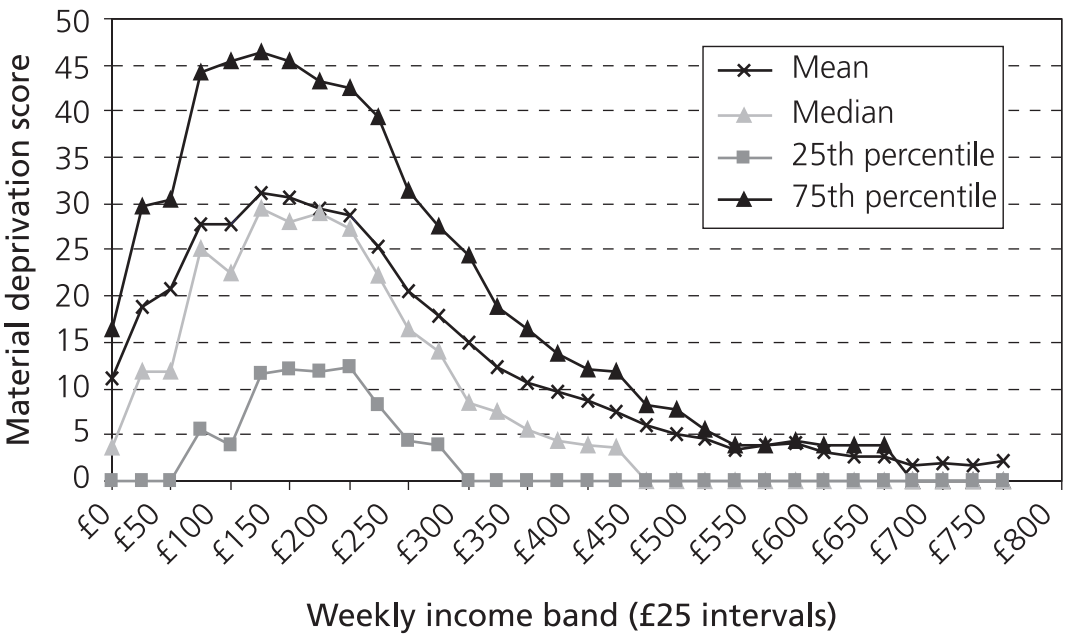
Table 5.2 summarises the proportions of children who are in poverty and in hardship (separately), and the overlap between the two. The proportion of children who are both in poverty and in hardship (second column) is considerably lower than the simple proportion in poverty or hardship (first column), showing that children in poverty are not all in hardship and children in hardship are not all in poverty. For example, according to FRS, 22 per cent of children were in poverty in the years 2004/05 to 2006/07, and 25 per cent were in material deprivation hardship, but only 11 per cent were both in poverty and hardship.

The table also shows the extent to which the various hardship measures recorded in FACS and BHPS are correlated within households. The correlation across categories is not high, with the largest proportions of children in hardship for only one or two of the categories and very few in hardship for three or more categories. This highlights the importance of analysing the hardship measures independently rather than as a single index because the particular families in hardship differ by the hardship type and there may, therefore, be different relationships with income and between work status groups across the hardship measures.

Tables 5.3 to 5.6 present the relationships between poverty status and discrete measures of living standards or hardship. For the first three surveys, there is surprisingly little difference in average living standards between the group below 50 per cent median income and the group between 50 and 60 per cent median income. There are more notable differences between the two groups for BHPS, but, nevertheless, the lowest two income groups are much closer than either to the

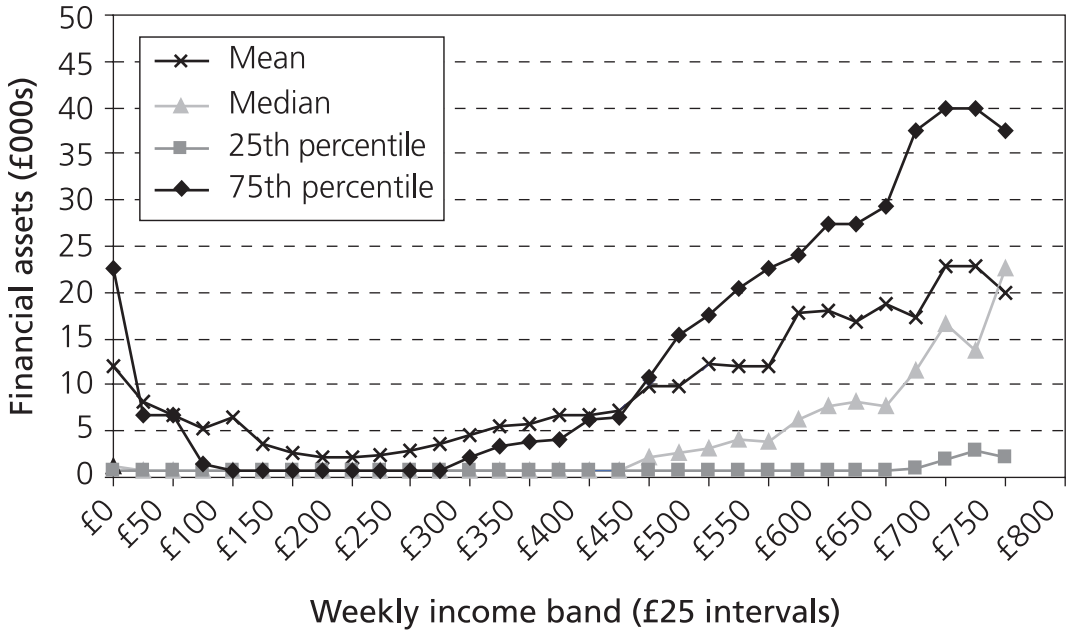
group between 60 per cent of median income and median income. The average living standards for the group below 50 per cent of median income is related to the findings in Section 5.1: the group contains both the poorest one per cent of children (who have high average living standards) as well as those with incomes between 30 and 50 per cent of median income (who have the lowest average living standards) and the combination generates, on average, living standards similar to those just below the usual poverty line.

Figure 5.1 Distribution of material deprivation by £25 income bands (FRS), 2004/05 to 2006/07



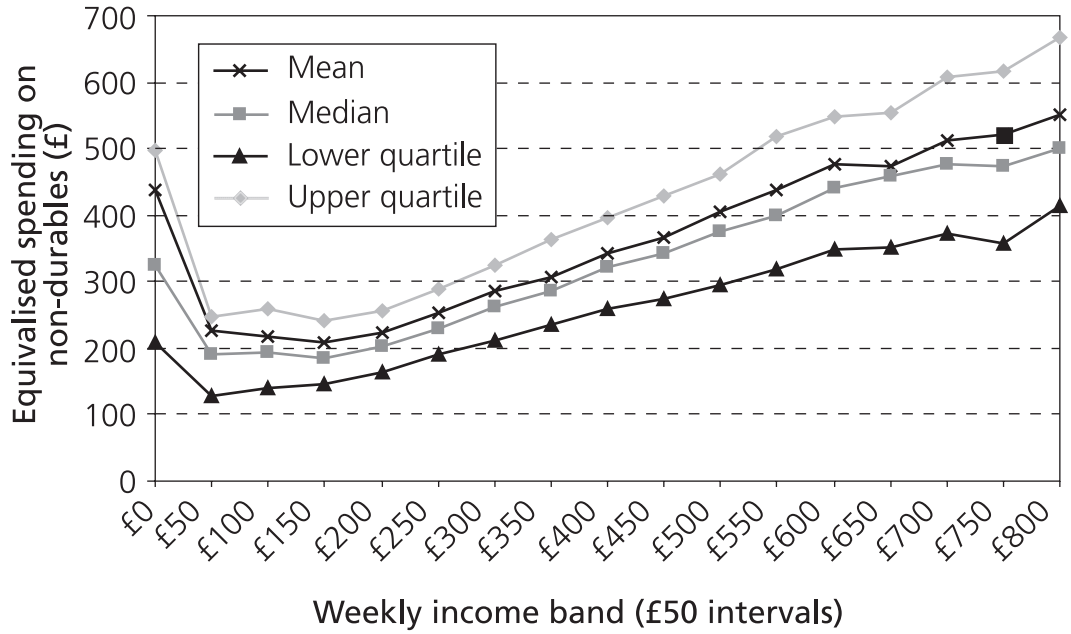
Base: All children in the UK. Sample size: 25,249 families.
Source: FRS, 2004/05 to 2006/07.

Figure 5.2 Distribution of financial assets by £25 income bands (FRS), 2004/05 to 2006/07



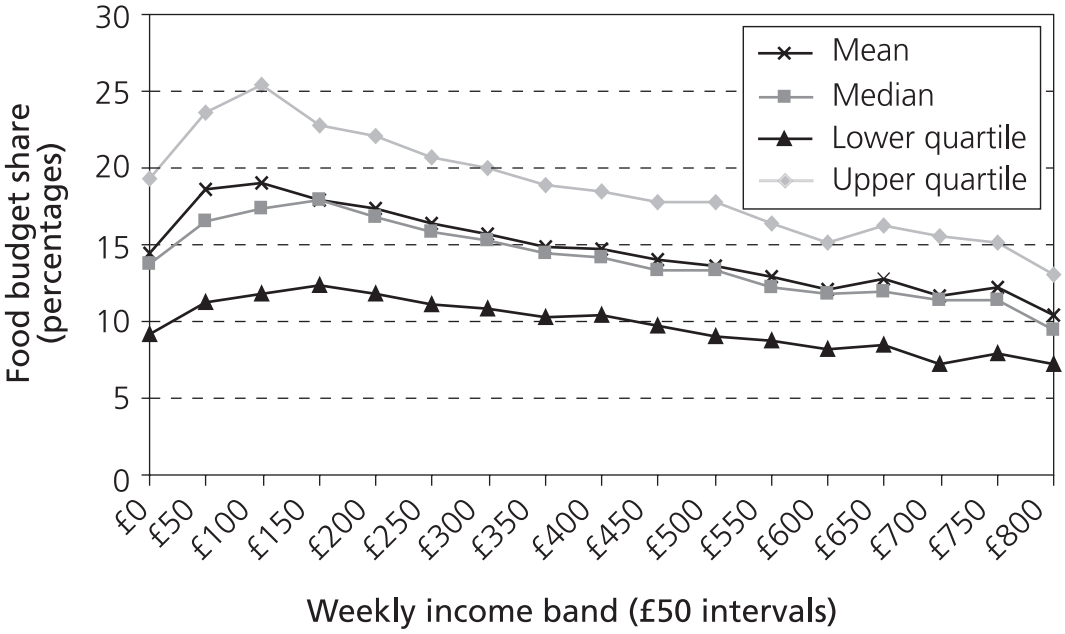
Base: All children in the UK. Sample size: 25,249 families.
Source: FRS, 2004/05 to 2006/07.

Figure 5.3 Distribution of non-durables spending by £50 income bands (EFS), 2001/02 to 2006



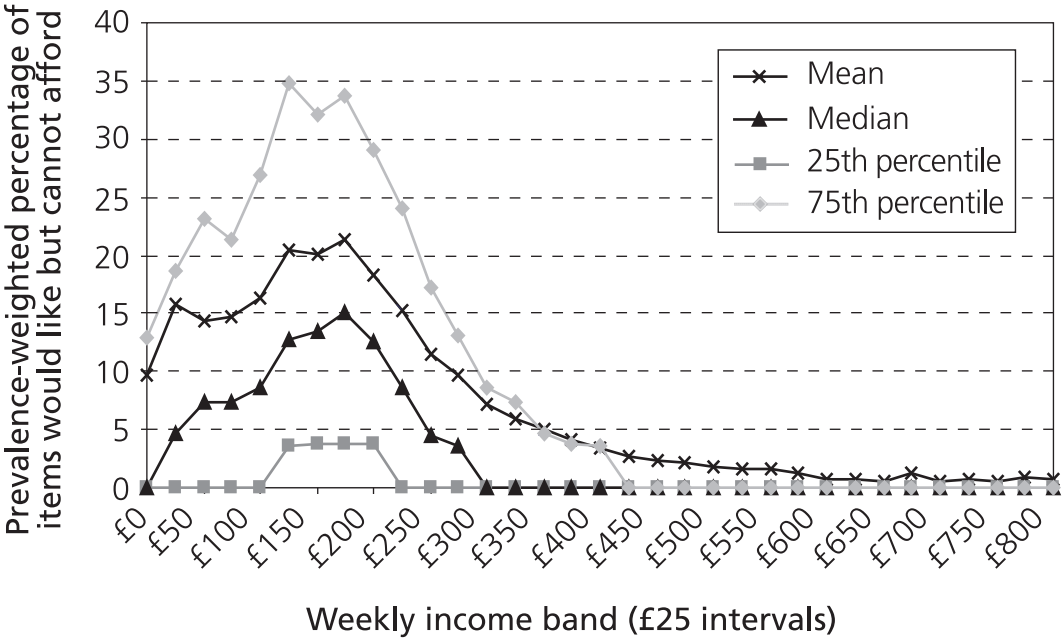
Base: All children in the UK. Sample size: 12,918 families.
Source: EFS, 2001/02 to 2006.

Figure 5.4 Distribution of food's budget share by £50 income bands (EFS), 2001/02 to 2006



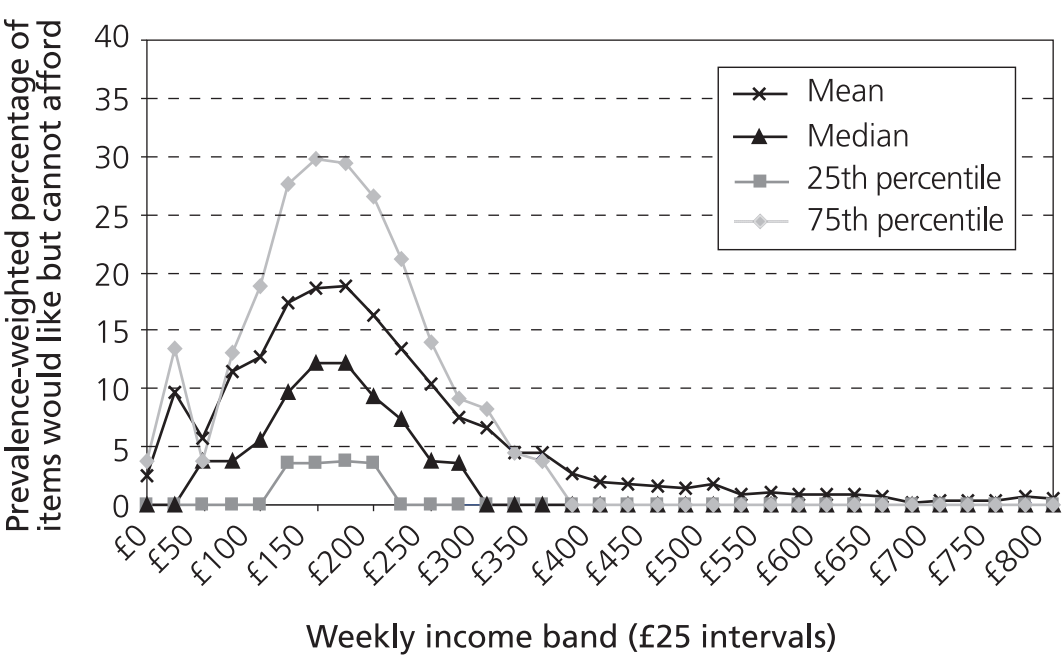
Base: All children in the UK. Sample size: 12,918 families.
Source: EFS, 2001/02 to 2006.

Figure 5.5 Distribution of daily living deprivation by £25 income bands (FACS), 2001 to 2005



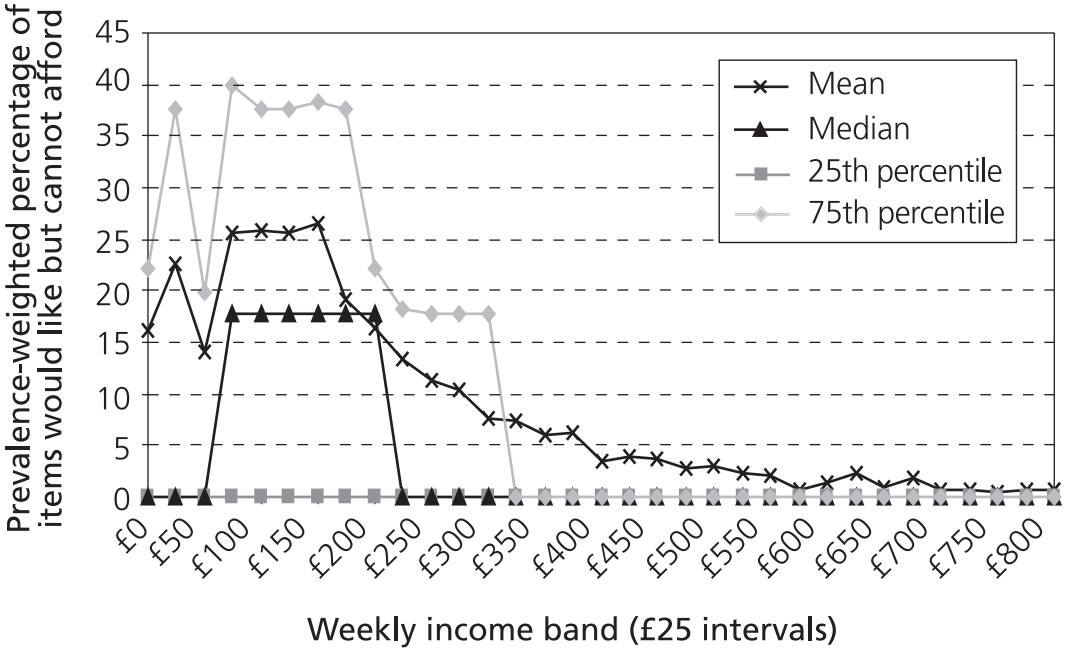
Base: All children in GB. Sample size: 35,735 families.
Source: FACS, 2001 to 2005.

Figure 5.6 Distribution of daily living deprivation by £25 past income bands (FACS), 2003 to 2005



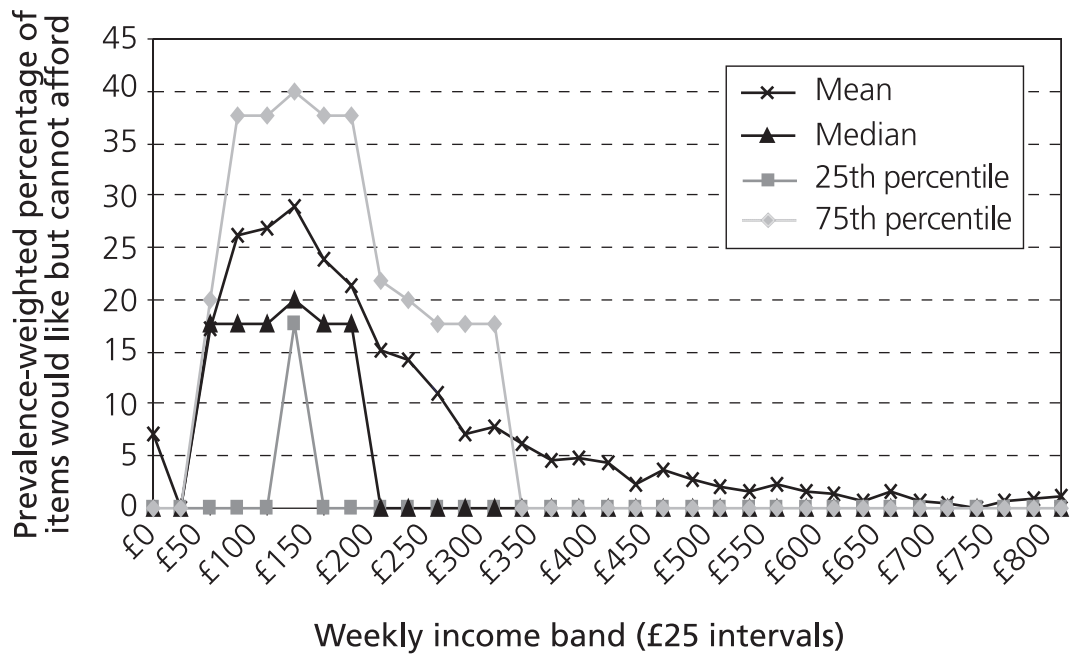
Base: All children in GB in 2003 to 2005. Sample size: 15,243 families.
Source: FACS, 2001 to 2005.

Figure 5.7 Distribution of daily living deprivation by £25 income bands (BHPS), 1996 to 2006



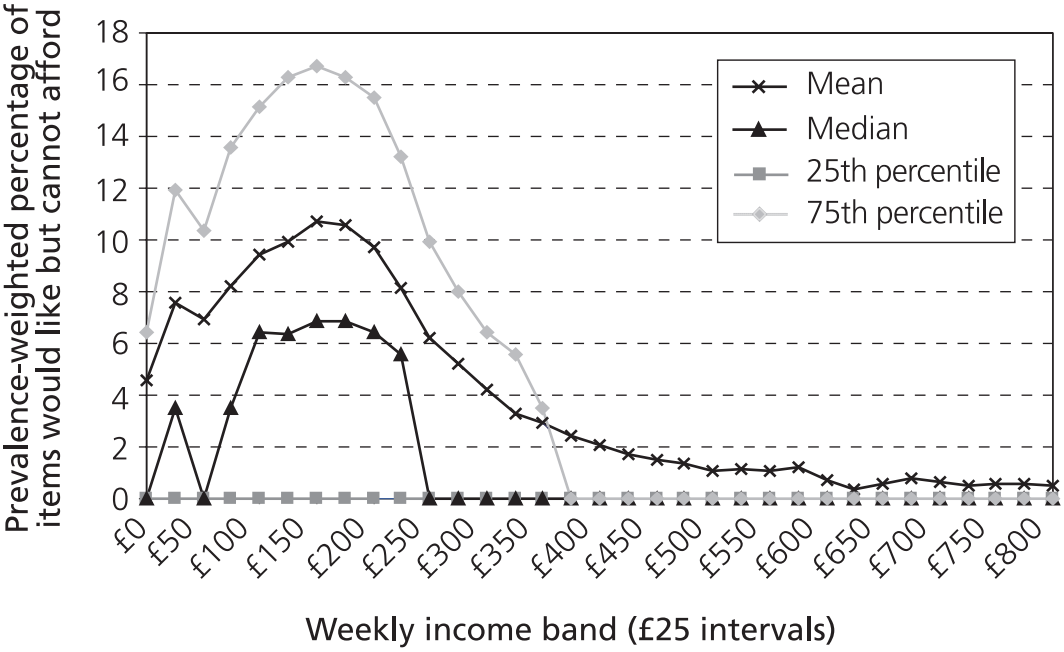
Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Figure 5.8 Distribution of daily living deprivation by £25 past income bands (BHPS), 1998 to 2006



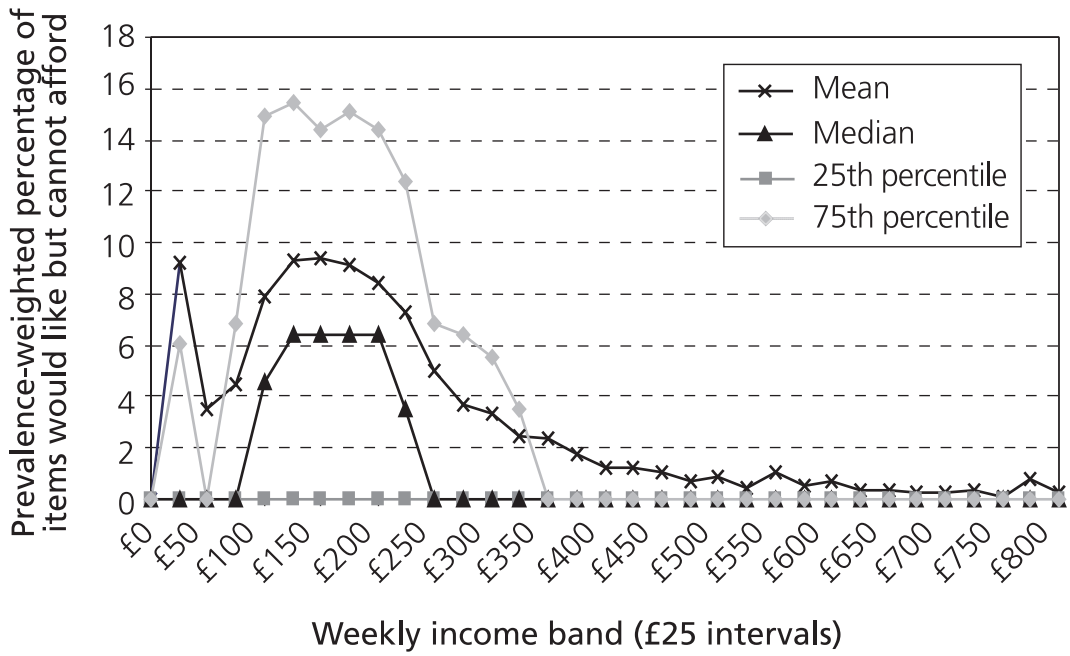
Base: All children in GB in 1998 to 2006. Sample size: 11,266.
Source: BHPS, 1996 to 2006.

Figure 5.9 Distribution of consumer durable deprivation by £25 income bands (FACS), 2001 to 2005



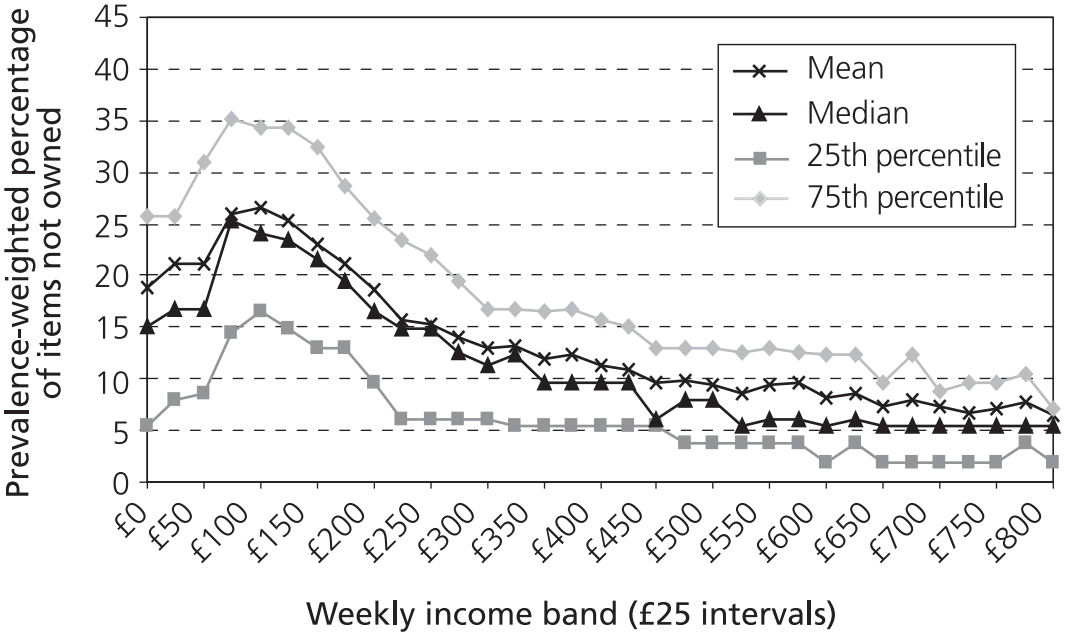
Base: All children in GB. Sample size: 35,735.
Source: FACS, 2001 to 2005.

Figure 5.10 Distribution of consumer durable deprivation by £25 past income bands (FACS), 2003 to 2005



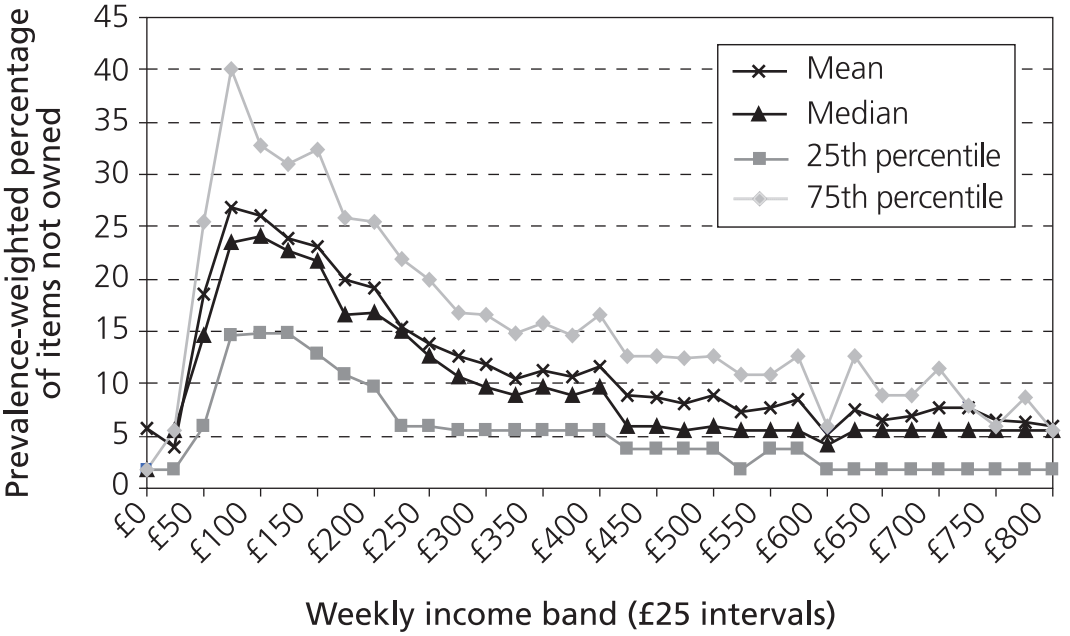
Base: All children in GB in 2003 to 2005. Sample size: 15,243 families.
Source: FACS, 2001 to 2005.

Figure 5.11 Distribution of lack of consumer durables by £25 income bands (BHPS), 1996 to 2006



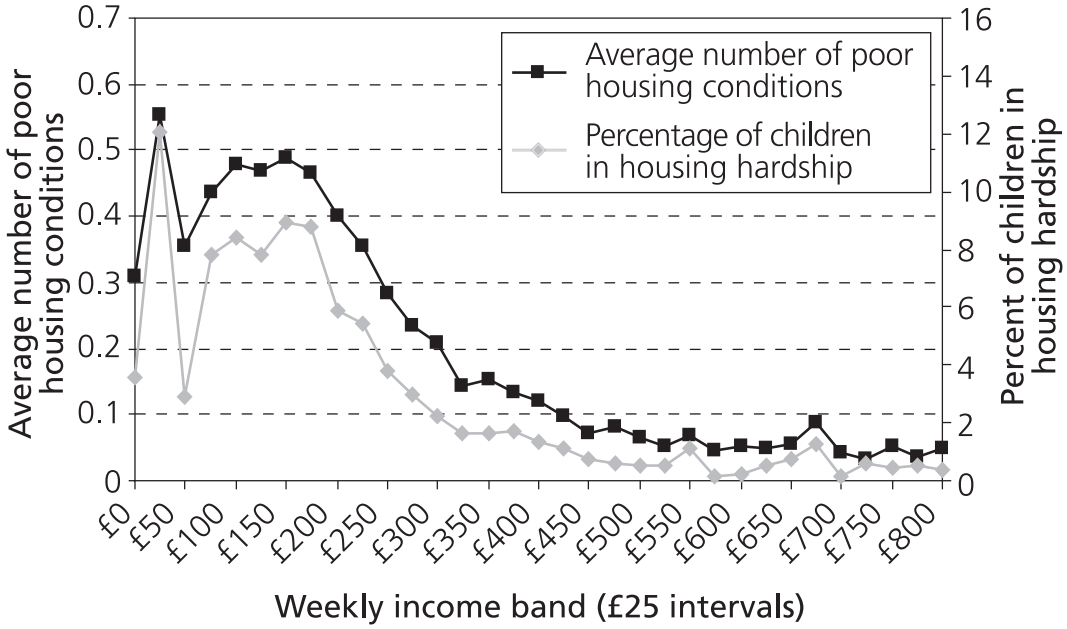
Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Figure 5.12 Distribution of lack of consumer durables by £25 past income bands (BHPS), 1998 to 2006



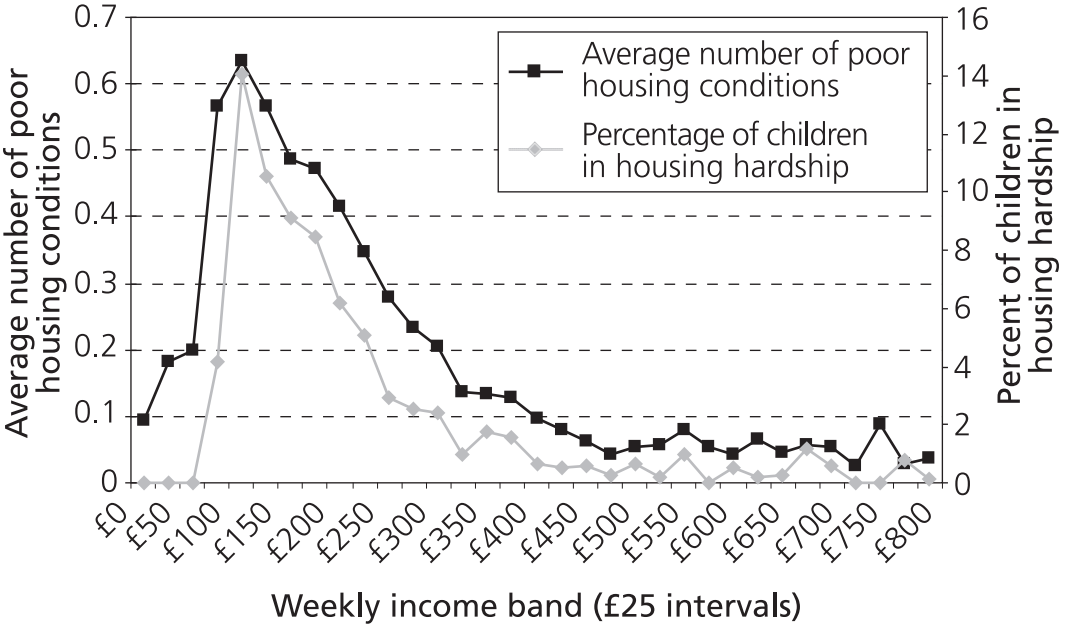
Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Figure 5.13 Average incidence of poor housing conditions by £25 income bands (FACS), 2001 to 2006



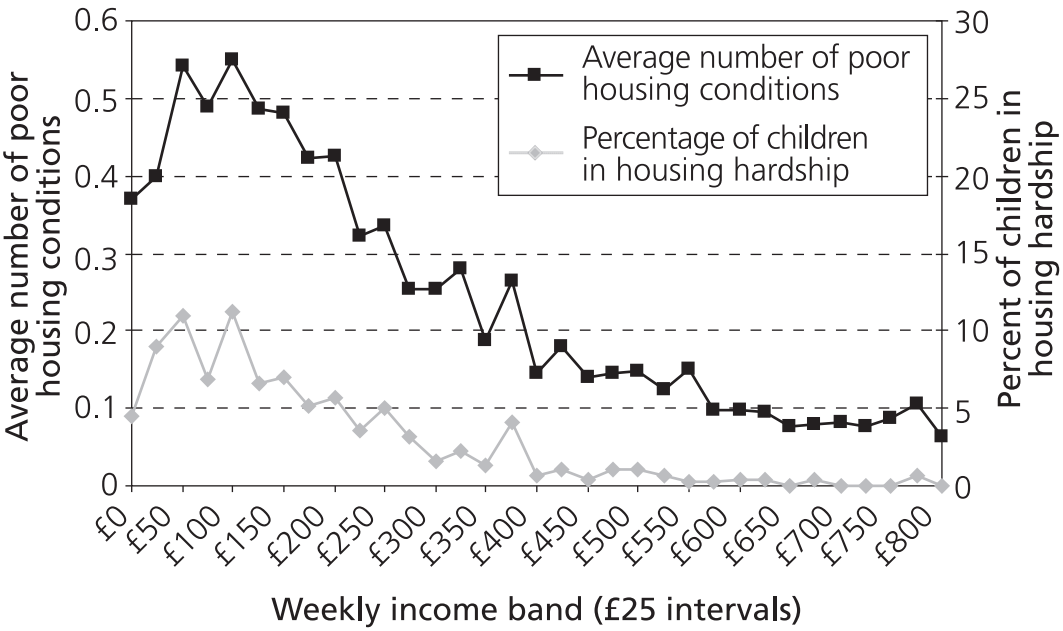
Base: All children in GB. Sample size: 42,556 families.
Source: FACS, 2001 to 2006.

Figure 5.14 Average incidence of poor housing conditions by £25 past income bands (FACS), 2003 to 2006



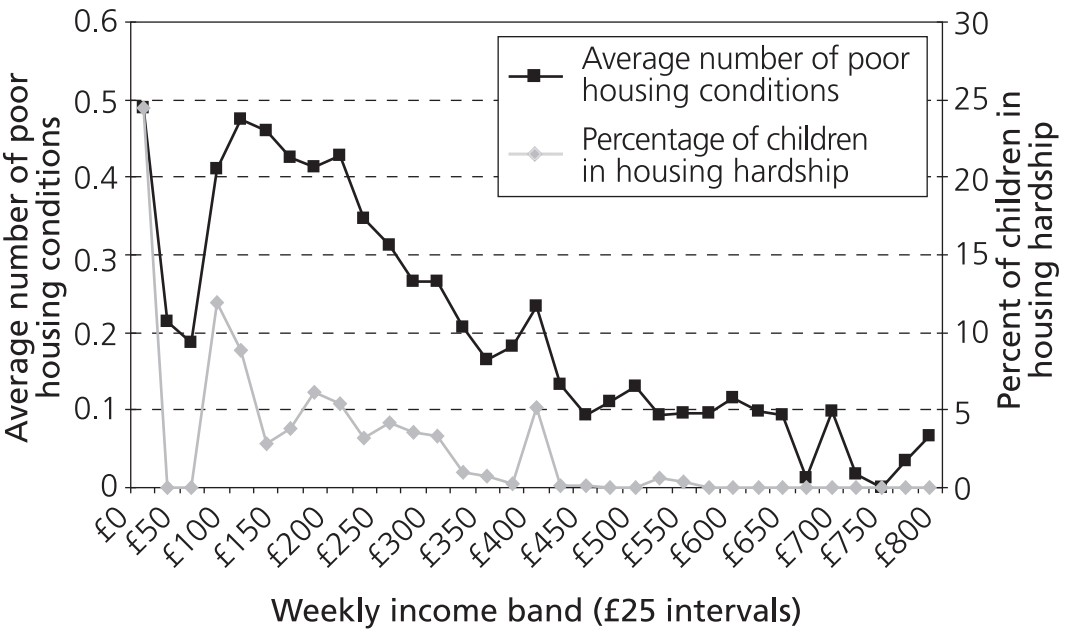
Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 5.15 Average incidence of poor housing conditions by £25 income bands (BHPS), 1996 to 2006



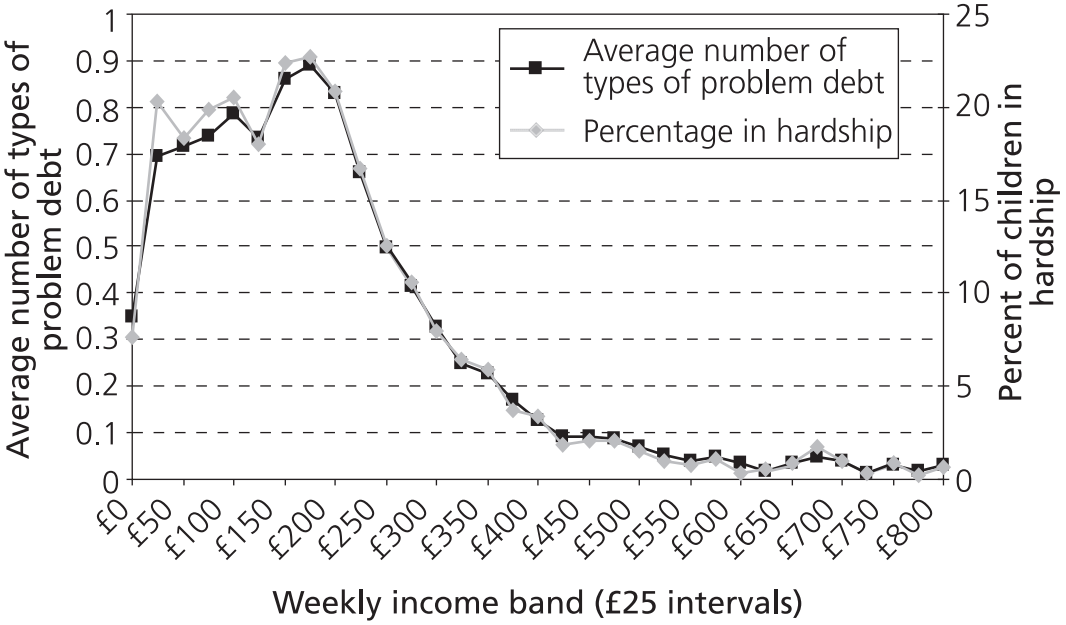
Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Figure 5.16 Average incidence of poor housing conditions by £25 past income bands (BHPS), 1998 to 2006



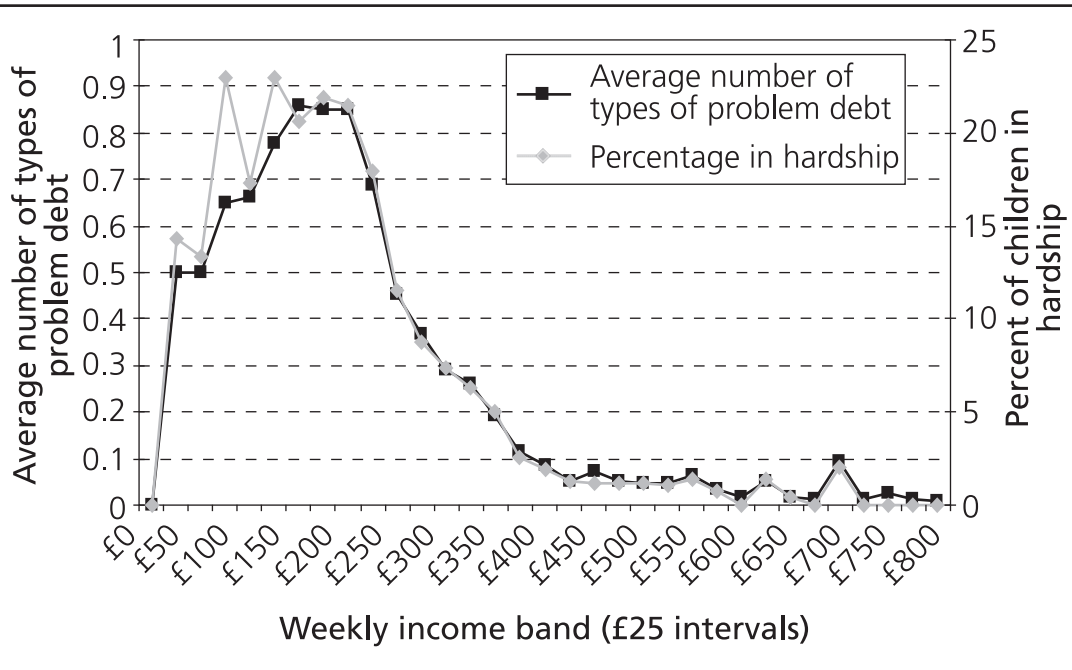
Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Figure 5.17 Average incidence of problem debts by £25 income bands (FACS), 2001 to 2006



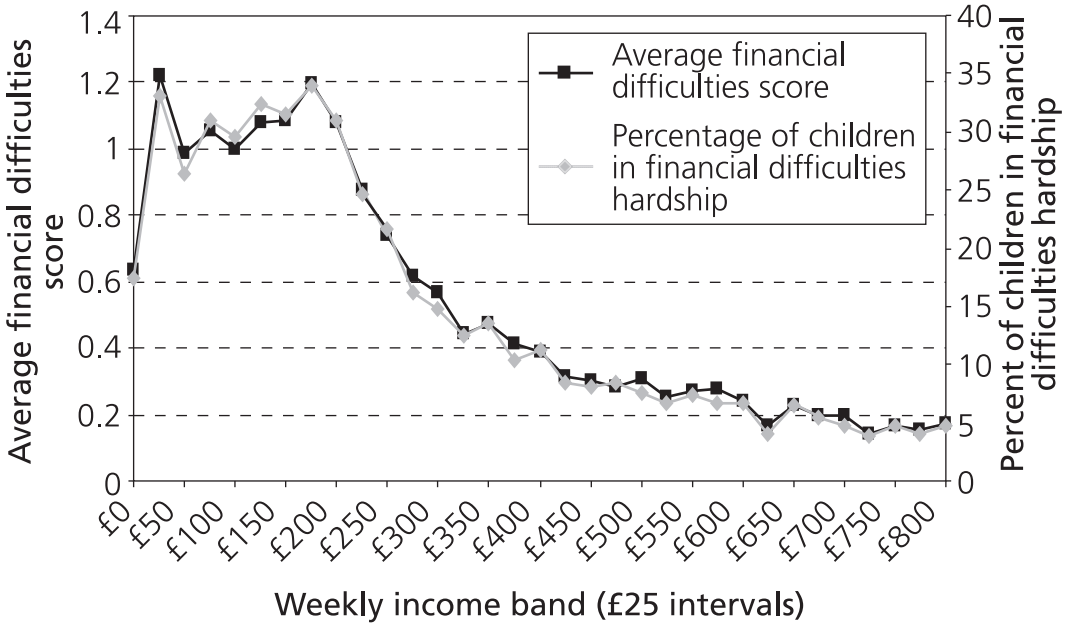
Base: All children in GB. Sample size: 42,556 families.
Source: FACS, 2001 to 2006.

Figure 5.18 Average incidence of problem debts by £25 past income bands (FACS), 2003 to 2006



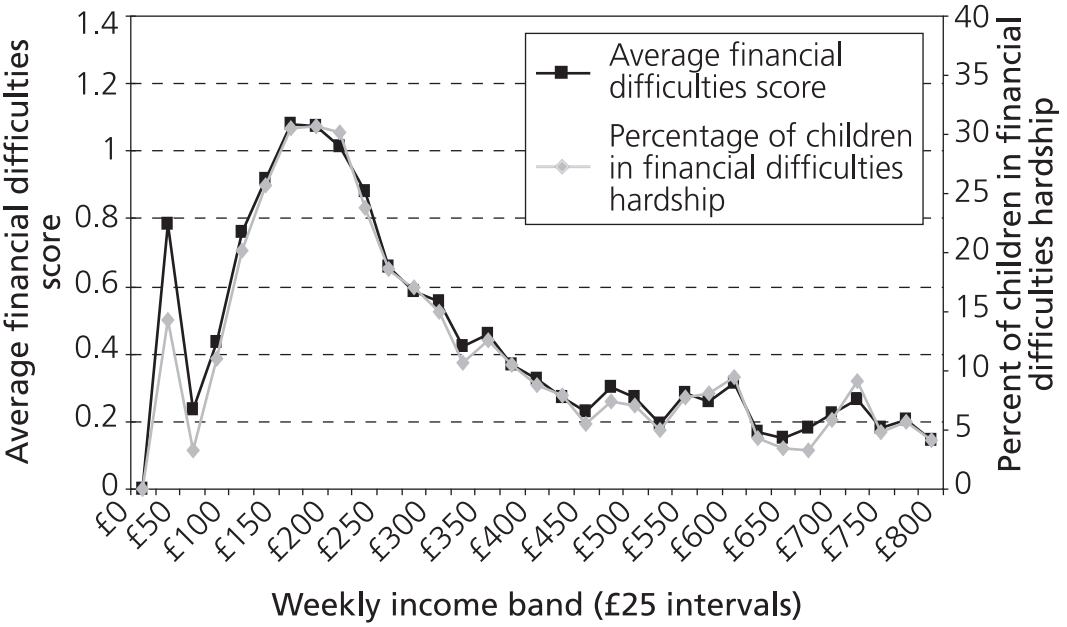
Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 5.19 Average incidence of financial difficulties by £25 income bands (FACS), 2001 to 2006



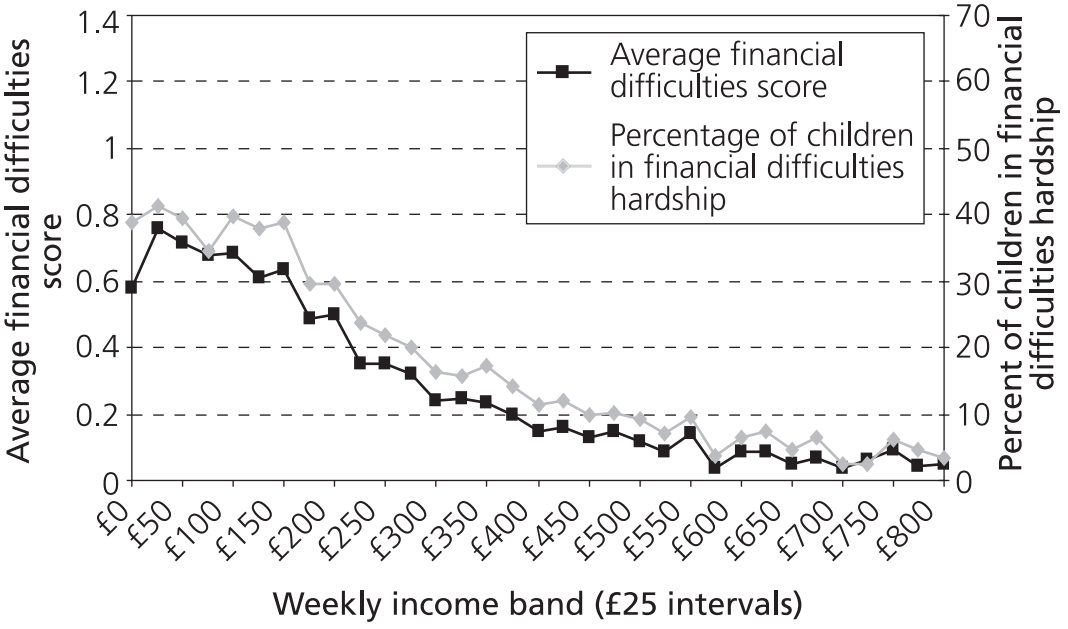
Base: All children in GB. Sample size: 42,556 families.
Source: FACS, 2001 to 2006.

Figure 5.20 Average incidence of financial difficulties by £25 past income bands (FACS), 2003 to 2006



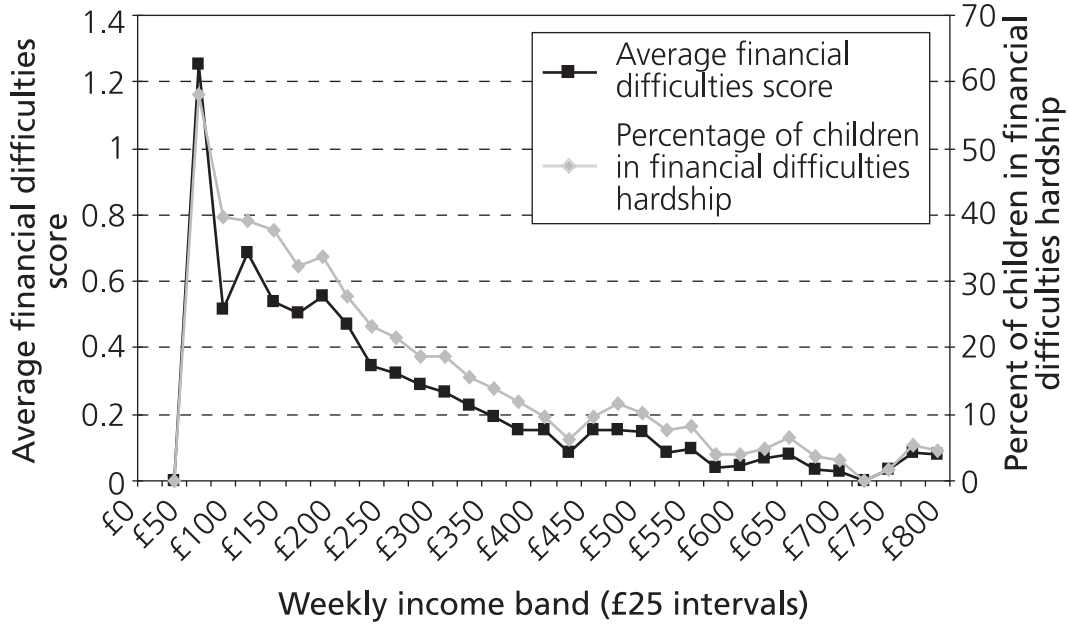
Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 5.21 Average incidence of financial difficulties by £25 income bands (BHPS), 1996 to 2006



Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Figure 5.22 Average incidence of financial difficulties by £25 past income bands (BHPS), 1998 to 2006



Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Table 5.2 Proportions of children in poverty and hardship (all surveys)

	Percentage of children	Percentage of children in both poverty and hardship
FRS (2004/05 to 2006/07)		
Poverty (<60 per cent median)	21.9	n/a
Hardship (more than 25)	24.7	11.4
Poverty (<70 per cent median)	33.2	n/a
Hardship (more than 25)	24.7	16.3
EFS (2001/02 to 2006)		
Poverty (<60 per cent median)	19.3	n/a
Spending hardship (<60 per cent median)	16.0	8.5
FACS (2001 to 2006)		
Poverty (<60 per cent median)	22.8	n/a
Hardship measure:		
Daily living	19.8	9.9
Consumer durables	20.7	9.6
Housing conditions	3.2	1.7
Problem debt	9.5	4.8
Financial difficulties	17.1	7.2
Number of hardship categories:		
1+ categories	35.5	14.5
2+ categories	19.8	10.0
3+ categories	10.1	5.5
4+ categories	4.0	2.4
5 categories	0.6	0.3
BHPS (2001 to 2006)		
Poverty (<60 per cent median)	18.0	n/a
Hardship measure:		
Daily living	24.3	9.0
Consumer durables	11.4	5.1
Housing conditions	3.8	1.4
Financial difficulties	16.9	5.6
Number of hardship categories:		
1+ categories	36.3	11.5
2+ categories	15.1	6.3
3+ categories	4.4	2.3
4 categories	0.9	0.7

Note: The variables underpinning daily living and consumer durable hardship in FACS were not available in 2006.

Base: All children in the UK for FRS and EFS and in GB for FACS and BHPS. Sample sizes: FRS, 25,249 families; EFS, 12,918 families; FACS, 42,556 families; and BHPS, 8,749 families.

Sources: FRS, 2004/05 to 2006/07; EFS, 2001/02 to 2006; FACS, 2001 to 2006; BHPS, 2001 to 2006.

Table 5.3 Material deprivation, by income group (FRS), 2004/05 to 2006/07

Income group	Percentage of all children	Percentage of children in severe hardship	Percentage of children in hardship but not severe hardship	Percentage of children not in hardship	Total
<50 per cent of median	11.2	35.8	14.1	50.1	100
>=50 per cent and <60 per cent median	10.6	37.3	17.7	45.1	100
>=60 per cent and <median	38.3	16.8	12.5	70.8	100

Base: All children in the UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 5.4 Relative spending by income group (EFS), 2001/02 to 2006

Income group	Percentage of all children	Percentage of children spending < 50 per cent median	Percentage of children spending >=50 and <60 per cent median	Percentage of children spending >=60 and <100 per cent median	Percentage of children spending >= median	Total
<50 per cent of median	9.3	28.1	16.7	37.6	17.6	100.0
>=50 per cent and <60 per cent median	10.1	22.2	21.1	44.9	11.8	100.0
>=60 per cent and <median	36.2	8.2	9.5	55.1	27.2	100.0

Base: All children in the UK. Sample size: 12,918 families.

Source: EFS, 2001/02 to 2006.

Table 5.5 Hardship, by income group (FACS), 2001 to 2006

Income group	Percentage of all children	Percentage of children in hardship: Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties
<50 per cent of median	12.0	42.5	41.2	8.3	20.6	31.5
>=50 per cent and <60 per cent median	10.8	44.9	43.1	6.7	21.5	31.6
>=60 per cent and <median	38.3	21.7	23.7	3.1	10.6	17.9

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 5.6 Hardship by income group (BHPS), 1996 to 2006

Income group	Percentage of all children	Percentage of children in hardship: Daily living	Consumer durables	Housing conditions	Financial difficulties
<50 per cent of median	13.4	63.8	44.0	8.0	39.2
>=50 per cent and <60 per cent median	7.9	54.2	32.0	6.4	29.5
>=60 per cent and <median	34.1	33.2	17.0	3.1	20.5

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

6 Living standards, income and work status: are living standards different for children in self-employed families?

This chapter looks at the relationship between income and other measures of living standards separately for children in families of different work states. The conclusions are:

- In general, self-employed families with children have higher living standards than employed families with children with similar incomes, who in turn have higher living standards than workless families with children with similar incomes. This pattern is remarkably consistent across measures of living standards and datasets, although in some cases the gap between self-employed and employed families is small.
- For most measures of living standards, and for families of all three work states, households with children with the lowest incomes do not have the lowest average living standards. As in the figures in Chapter 5, the broad pattern is for average living standards first to fall as income rises, and then to rise.

Continued

- These two findings are mostly true even if other characteristics of the household are accounted for in a multivariate regression analysis. The differences in living standard between families of different work states remains, with self-employed families tending to have higher living standards than employed families, who tend to have higher living standards than workless families. And the fact that households with children with the lowest incomes do not have the lowest living standards, on average, remains, with the lowest average living standards found amongst households with incomes of between £100 and £200 a week, depending on the measure (these values currently represent roughly 30 to 50 per cent of median income).
- There is little difference in the hardship rates and the level of average living standards between children with household incomes below 50 per cent of median income, and those with household income between 50 per cent and 60 per cent median income, for families of all three work states.

Chapter 5 showed the relationship between income and other measures of living standards for all children without accounting for any other characteristics of the household. This chapter expands on that by showing the relationship between income and other measures of living standards separately for children in families of different work states.

Section 6.1 considers the raw relationships between income and living standards for each work status. Section 6.2 uses regression techniques to consider whether the differences between the work states are merely due to other characteristics of the households, rather than the work status itself. Section 6.3 presents the relationships between discrete measures of low income and other measures of living standards across the work states, highlighting differences across the work groups.

6.1 Living standards by income and work status

Figures 6.1 to 6.13 are similar to Figures 5.1 to 5.22 (except that no figures are included that use past income, as Chapter 5 showed it gave much the same impression as current income), but they show the average (mean) living standard for children in families with similar incomes separately for the three work states: employed, self-employed and workless (the lines for workless families are not shown for incomes above £500 a week). Box 5.1 showed what fractions of median income these income values represent, and what proportion of children have incomes below these values.

As in Chapter 5, the impression given by the figures is reasonably consistent across the measures of living standards (noting that Figures 6.2 and 6.3 show an inverse relationship from the other figures because a higher value means a higher living standard for these measures).

The main findings are as follows:

- In three of the datasets and all but one of the measures of living standards, self-employed families have higher living standards than employed families, which in turn have higher living standards than workless families when comparing families with similar income.[11]
  - The dataset which shows a different pattern is the Families and Children Study (FACS), where there is less consistent difference in the living standards of self-employed and employed families with similar incomes (but the considerable difference between these two family types and workless families remains).
  - The measure of living standard that is an exception is food's budget share, where there are no discernable differences between the employed and self-employed except at low incomes (below £150 a week or around 40 per cent of median income), although small differences are apparent between workless families and the other two family types.
- For most measures of living standards, and for all families of all three work statuses, households with children with the lowest incomes do not have the lowest living standards. As in the figures in Chapter 5, the broad pattern is for average living standards to first fall as income rises, and then rise (or, for the measures of living standards, like deprivation, which fall as the standard of living rises, the figures show a 'hump-shaped' profile, where deprivation first rises as income rises, and then falls). In particular:
  - For the analysis based on the Family Resources Survey (FRS), and for all three types of families, children in households with very low incomes have living standards (measured both by financial assets, and material deprivation score) similar to those on around £300 to £500 a week, and the lowest average living standards are found in households with incomes of around £100 to £200 a week, which represent roughly 30 per cent to 50 per cent of the median, see Box 5.1.
  - For the analysis based on the Expenditure and Food Survey (EFS), the hump-shaped pattern for food's budget share is hardly visible for employed families, and the lowest living standards for workless families seem to be found at incomes of between £50 and £150 a week, which is a little lower than that for the other two types of families.
  - For the analysis based on FACS, the relationship between income and the measures of living standards is consistently hump- or U-shaped for employed families, and evident for most measures for workless families, but evident in fewer measures for self-employed families, partly due to a great deal of variation in the living standards of self-employed families with incomes below £150 a week. The lowest average living standards of self-employed families tends to be found amongst families with incomes around £150 to £200 a week, slightly higher than is the case for workless and employed families.

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[11] The analysis is at the child-level, but, because it is not clear how well the measures of living standards relate to the children, this report uses the formulation 'households with children' when discussing the results. In other words, it should not be assumed that all the children in households with low living standards themselves have low living standards, although it is likely that there is a close relationship between the two.

– Patterns are less clear in the analysis based on the British Household Panel Survey (BHPS), probably because of the smaller sample size than the other datasets.

6.2 Predicted living standards given income by work status

This chapter analyses the relationship between living standards, income and work status accounting for other characteristics of the households. There are three reasons why this should be of interest:

- to show the link between income and living standards having accounted for other household characteristics;
- to show the difference in living standards between families of different work statuses having accounted not just for income but also other household characteristics;
- to show the underlying relationships between income and living standards for each work status having smoothed out some of the volatility described in Section 6.1.

The method used is explained in Box 6.1, and the resulting profiles are shown in Figures 6.14 to 6.24 (there is no analysis of financial assets, given that the majority of households with children have very low financial assets).

Box 6.1: The relationship between living standards, income and work status accounting for other characteristics of the households

The aim of this chapter is to examine the relationship between income and living standards for children in families of different work states, taking account of other characteristics of the households.

A linear regression or Tobit regression was run for each measure of living standard (Halleröd *et al*. (2006) also used a Tobit to analyse material deprivation.) A Tobit regression is similar to an Ordinary Least Squares (OLS) regression, but is used when the dependent (or left-hand-side) variable can only take certain values, or where it is censored above or below a certain value, and where this restriction affects more than a handful of observations. For example, the material deprivation score in FRS cannot be lower than 0 or higher than 100, and 37 per cent of families with children have a value of zero. By using a Tobit regression, rather than an OLS regression, it is recognised that these 37 per cent of families do not all have the same standard of living, but instead that the material deprivation indicator is uninformative about their (presumably high) standard of living.

Continued

In order to avoid specifying too precisely the underlying relationship between living standards and income, the independent (or explanatory, or right-hand-side) variables included a fifth-order polynomial of income (that is, income, income squared, income cubed, income raised to the fourth power and income raised to the fifth power) separately for each of the three work statuses. As described in Chapter 3, the regressions were estimated at the family level using unweighted data. In order to focus on those with low incomes, the sample comprised only families with equivalised incomes below £500 a week, which represents about 80 per cent of all families with children (Table 5.2).

The other characteristics included in the regressions were indicators for family being a couple, number of children (in three categories: one, two or three or more children), age of youngest child (in bands), whether a couple family has two workers, whether the household has more than one family, age of parent (or average age in the case of a couple), the education level of the most highly educated parent, region, ethnicity, and year of survey. Indicators for whether any parent has a health problem were also included in the FRS, FACS and BHPS regressions. To reduce the number of independent variables, the impact of these characteristics other than income on living standards was constrained to be the same across all work types.

This report does not show the estimated coefficients (these will be made available on the Department for Work and Pensions (DWP) website at http://www.dwp.gov.uk/asd/asd5/rrs-index.asp). Instead, the regressions have been used to show predicted levels of living standards given income in Figures 6.14 to 6.24. These profiles were drawn for a family that was a couple with the following characteristics: one worker and one non-worker, a mean age of 35, the most educated adult left school between the ages of 16 and 19, one child aged under five, lives in London, and appeared in the 2004/5 dataset. In most cases, these are the most common characteristics. Note that the general shape of the profiles shown in the figures would be no different had different choices been made, but the level of the living standard would have been different (i.e. the shape would be identical to the ones shown, but shifted up or down by some amount).

As in Section 6.1, the impression given by the profiles based on FRS, EFS and FACS is reasonably consistent across the measures of living standards. In particular:

- The profiles based on FRS, EFS and FACS suggest that self-employed families have higher living standards than employed families, who in turn have higher living standards than workless families when comparing families with similar income. However, the difference between the living standards of self-employed families and employed families is, in most cases, smaller – and sometimes almost non-existent – than that between workless and employed families with a similar income.

- The profiles based on FRS, EFS and FACS suggest that, for all three work statuses, households with children with the lowest incomes do not have the lowest living standards, and the broad pattern is for average living standards to first fall as income rises, and then rise. The lowest living standards are to be found at incomes of between £100 and £200 a week, depending on the measure of living standard and the work status of the family (these values currently represent roughly 30 to 50 per cent of median income).
- The profiles based on BHPS are not very informative, probably because of the smaller sample size than the other datasets.

6.3 Tables of low living standards by poverty status and work status

Section 6.1 analysed graphically the relationship between income and the other continuous measures of living standards; this section explores the relationship between a categorical measure of low income (i.e. the risk of falling below various low income thresholds) and other categorical or discrete measures of living standards. Hence, it focuses on the differences in living standards across the work groups for those in poverty.

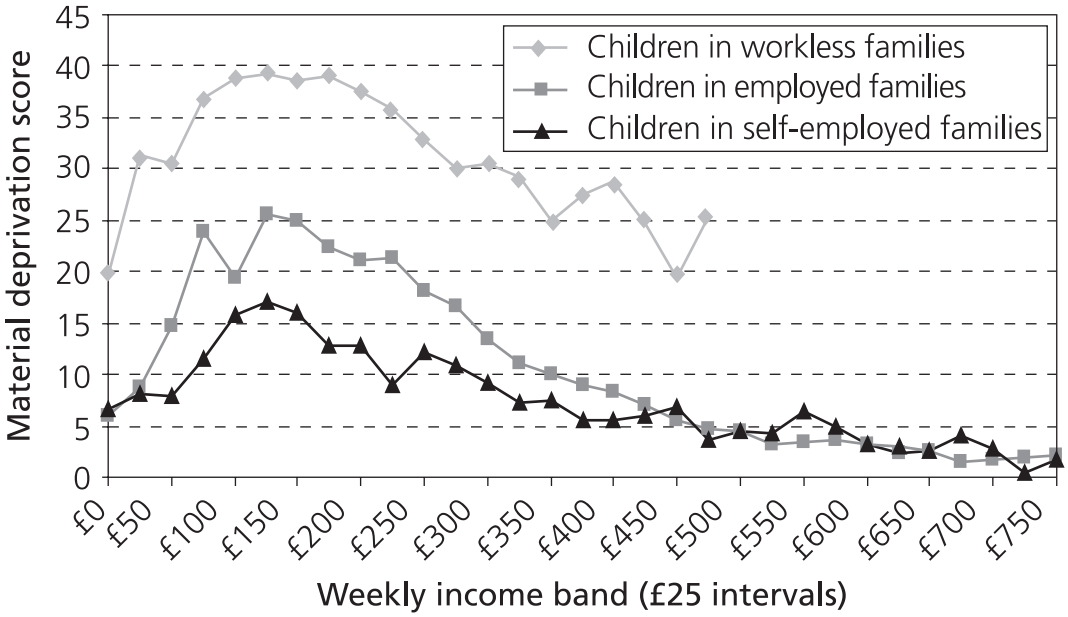
Households were placed into one of four income categories: income above the median (these households are not shown in the tables), income between 60 per cent and 100 per cent of the median, income between 50 per cent and 60 per cent of the median, and income below 50 per cent of the median. Box 5.1 showed that, in 2006/07, these cut-offs correspond to weekly incomes of £188 (50 per cent), £226 (60 per cent) and £377 (100 per cent), and that, in 2006-7, 12 per cent of children had income below 50 per cent of the median, 11 per cent of children had income between 50 and 60 per cent of the median, and 38 per cent of children had income between 60 and 100 per cent of the median. This means that the group of children commonly referred to as in poverty – those with a household income below 60 per cent of the median – have been almost split in two at 50 per cent of the median.

For spending on non-durables, households were classified into groups according to whether they spent less than 50 per cent, between 50 per cent and 60 per cent, between 60 per cent and the median, or above the median (this is intended to mirror the classification used for income). For material deprivation in FRS, households were classified into three groups: not in hardship (a score of less than 25, following the official definition), in hardship (a score between 25 and 35) and in severe hardship (a score of 35 or more). For the measures of hardship in FACS and BHPS, households were put into one of two categories, corresponding to in hardship or not in hardship, as described in Tables 3.6 and 3.7.

The results are shown in Tables 6.1 to 6.4. In general, the pattern of results is similar to those in Section 6.1. In particular:

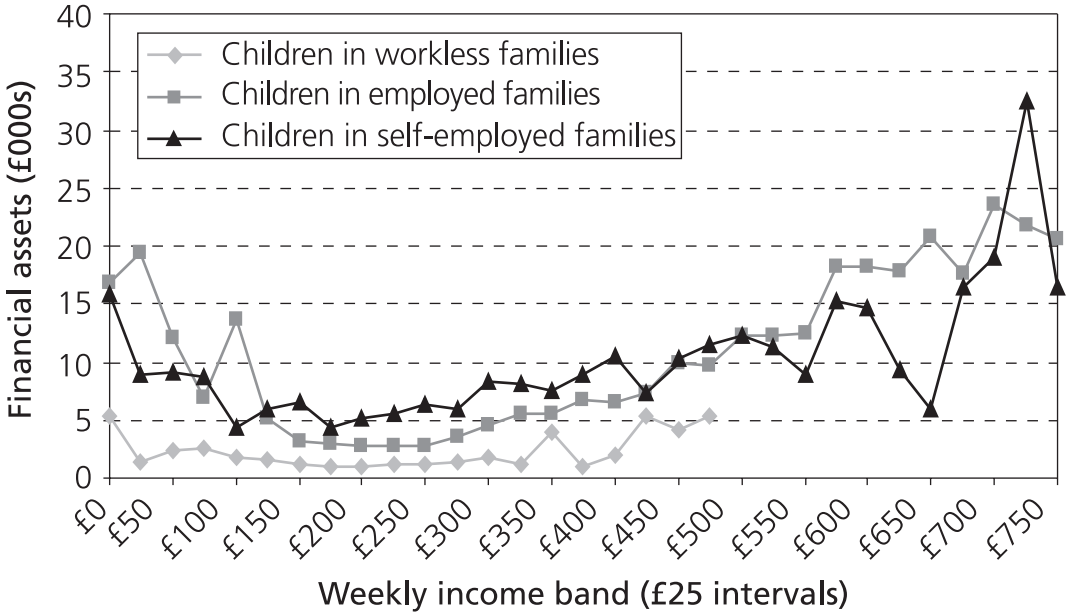
- For almost all the measures of living standards and categories of income, self-employed families are less likely to have a low category of living standard than employed families, who in turn are less likely to have a low category of living standard than workless families. For example, amongst children with household income less than 50 per cent of median income, Table 6.2 (using FRS) shows that 30 per cent of children in workless families who have such low income are not in hardship, but 62 per cent of those in employed households are not in hardship, and a very large proportion (82 per cent) of the self-employed are not in hardship.
- The main exception to this is for housing conditions hardship in FACS and BHPS. As with the other living standards measures, workless families are more likely to be in housing conditions hardship than the other groups, but there is little difference in the likelihood of housing conditions hardship between employed and self-employed families.
- In most cases, the gap in living standards and hardship rates between workless families and employed families is greater than that between employed and self-employed families. Hence, the likelihood that a family in poverty is in hardship depends to a greater degree on whether there is a working parent than whether the working parent is employed or self-employed.
- There is little difference in the hardship rates and low living standards between children with household incomes below 50 per cent of median income and those with household income between 50 per cent and 60 per cent of median income. This is a direct result of the U-shaped or hump-shaped relationships between living standards and income at the lower end of the income distribution documented in Chapter 5.
- The differences between those in poverty and those above the poverty threshold (between 60 per cent and 100 per cent of median income) are greater (although not in every case), reflecting the more steady change in living standards as income rises towards the middle of the income distribution.

Figure 6.1 Average level of material deprivation by £25 income bands and family work status (FRS), 2004/05 to 2006/07



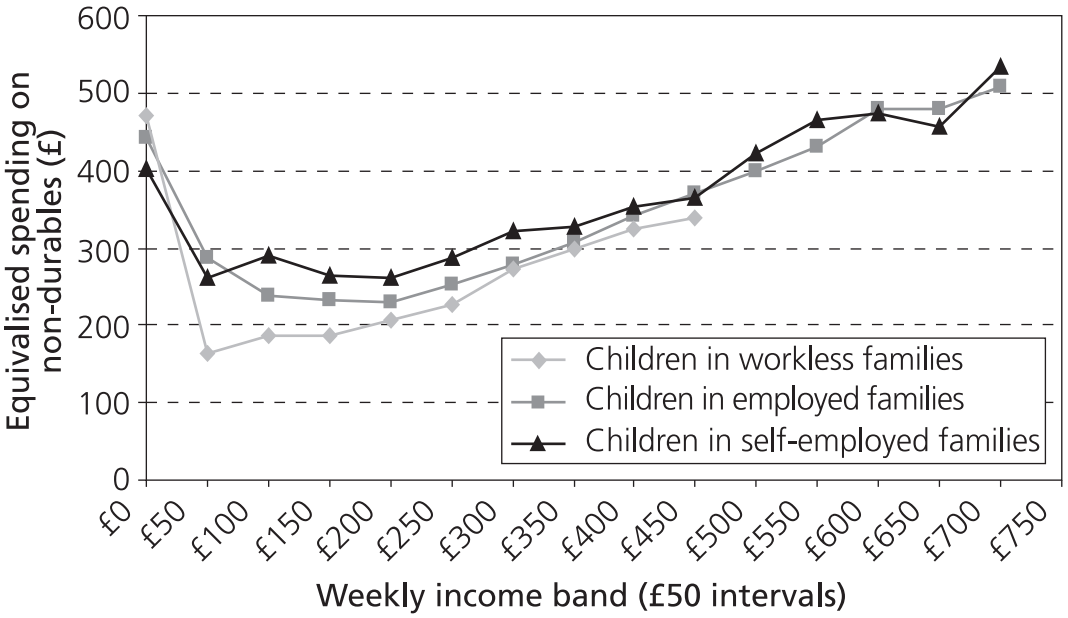
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in the UK. Sample size: 25,249 families.
Source: FRS, 2004/05 to 2006/07.

Figure 6.2 Average level of financial assets by £25 income bands and family work status (FRS), 2004/05 to 2006/07



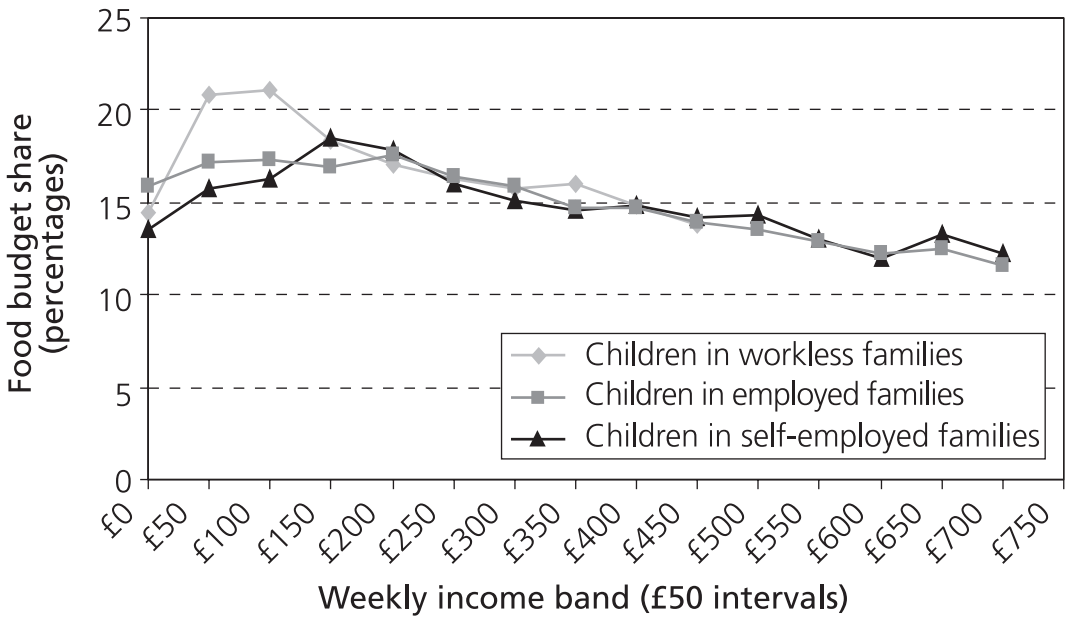
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in the UK. Sample size: 25,249 families.
Source: FRS, 2004/05 to 2006/07.

Figure 6.3 Average level of non-durables spending by £50 income bands and family work status (EFS), 2001/02 to 2006



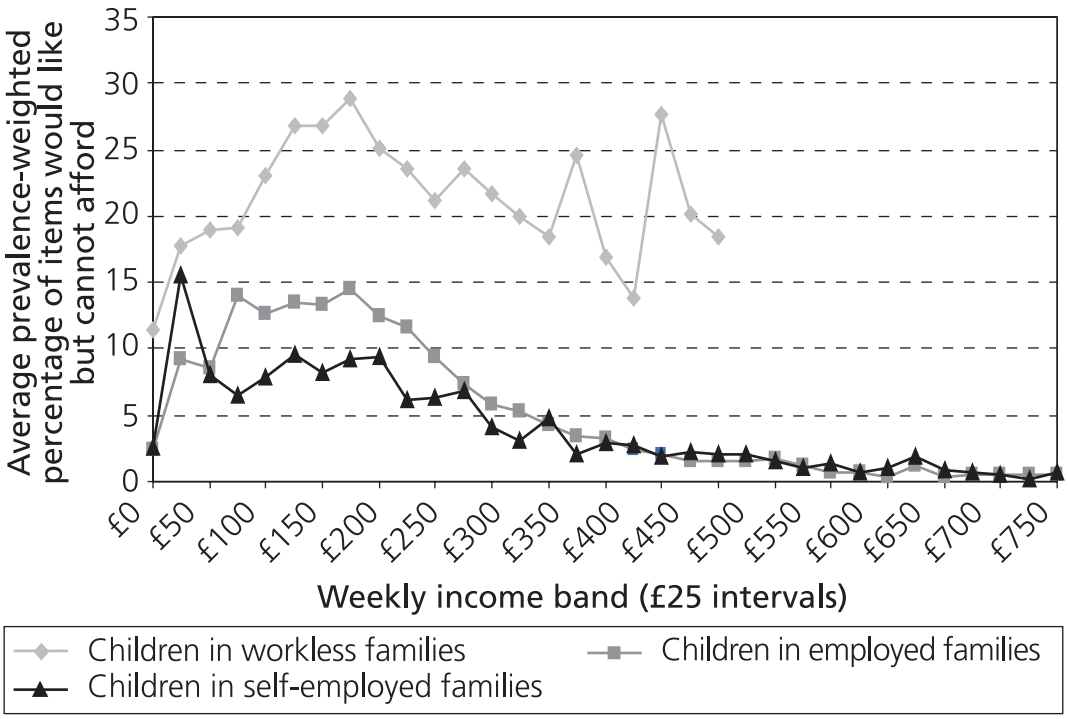
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in the UK. Sample size: 12,918 families.
Source: EFS, 2001/02 to 2006.

Figure 6.4 Average level of food budget share by £50 income bands and family work status (EFS), 2001/02 to 2006



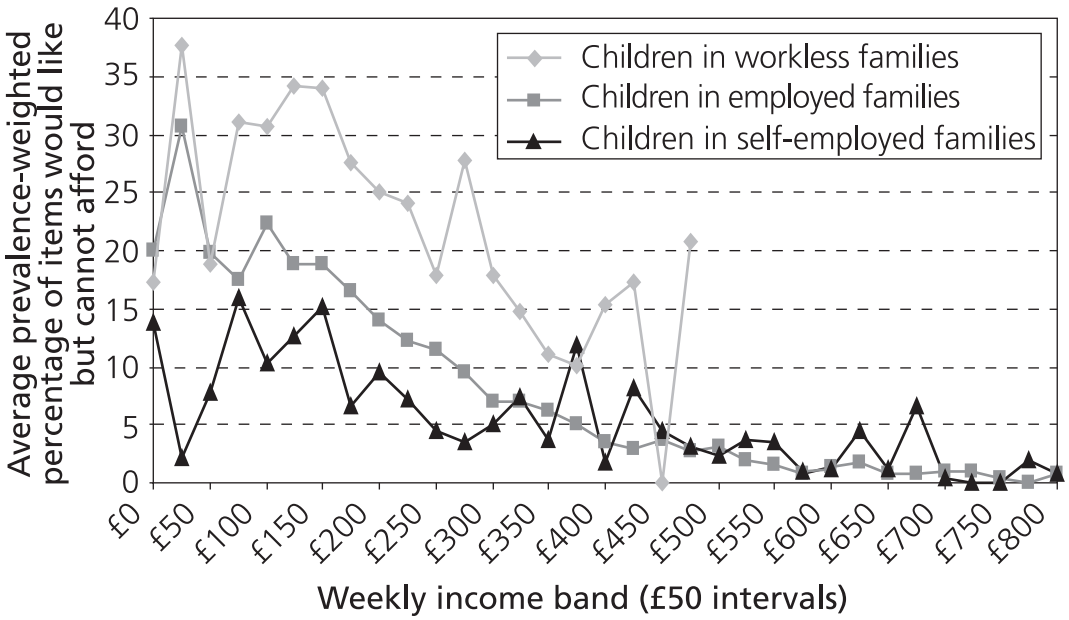
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in the UK. Sample size: 12,918 families.
Source: EFS, 2001/02 to 2006.

Figure 6.5 Average level of daily living deprivation by £25 income bands and family work status (FACS), 2001 to 2005



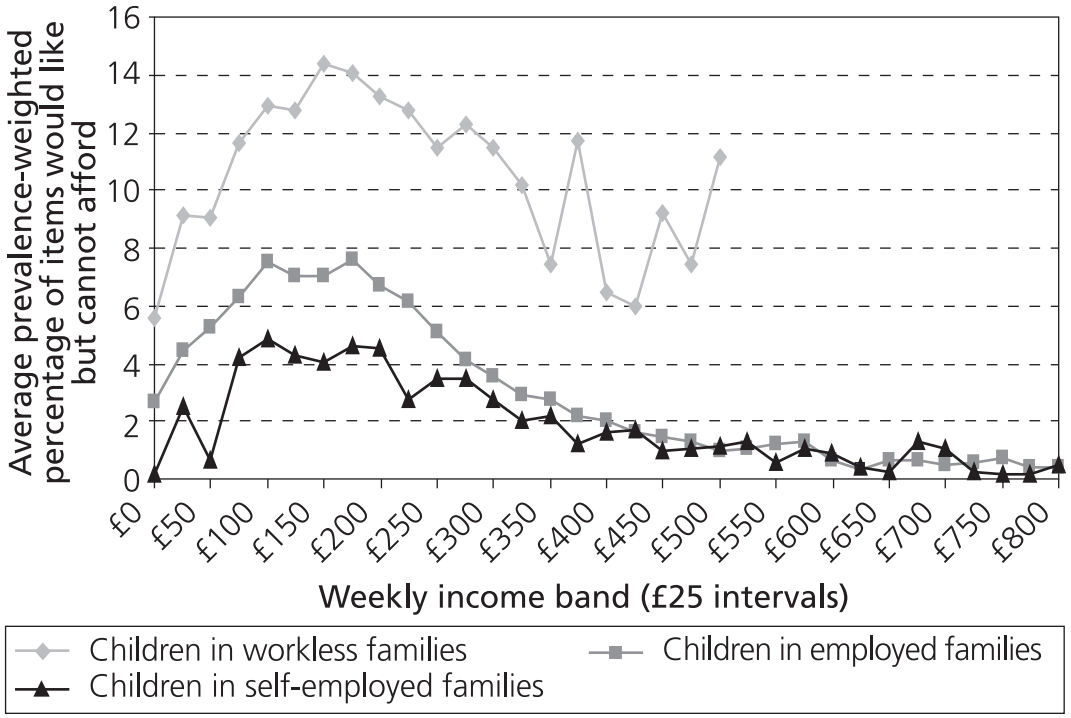
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 35,735 families.
Source: FACS, 2001 to 2005.

Figure 6.6 Average level of daily living deprivation by £25 income bands and family work status (BHPS), 1996 to 2006



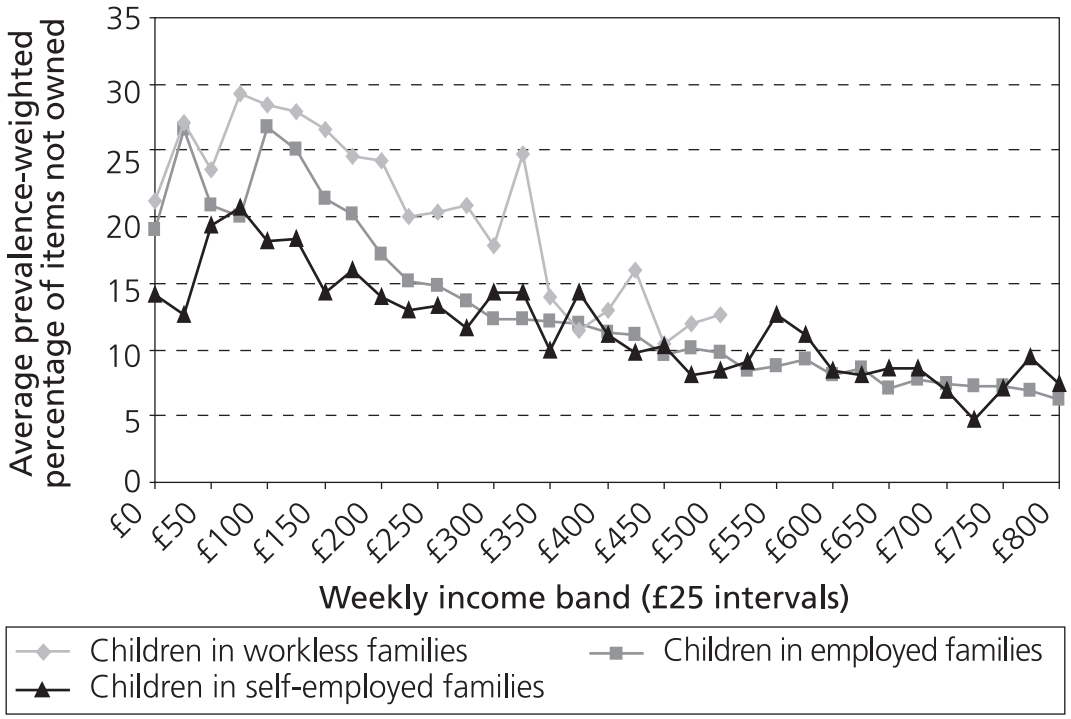
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Figure 6.7 Average level of consumer durable deprivation by £25 income bands and family work status (FACS), 2001 to 2005



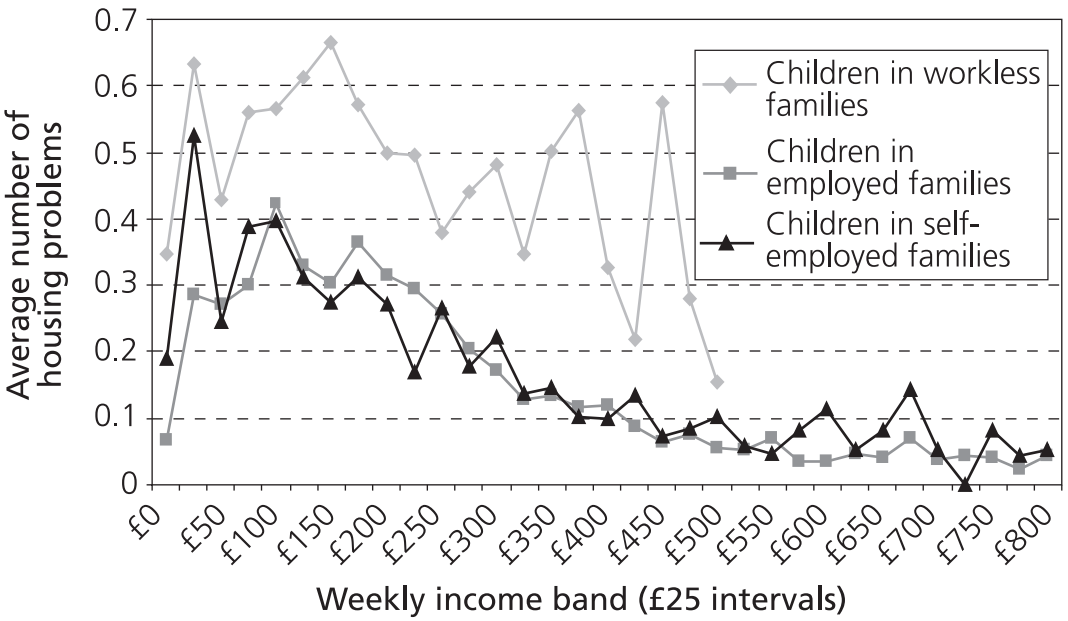
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 35,735 families.
Source: FACS, 2001 to 2005.

Figure 6.8 Average lack of consumer durables by £25 income bands and family work status (BHPS), 1996 to 2006



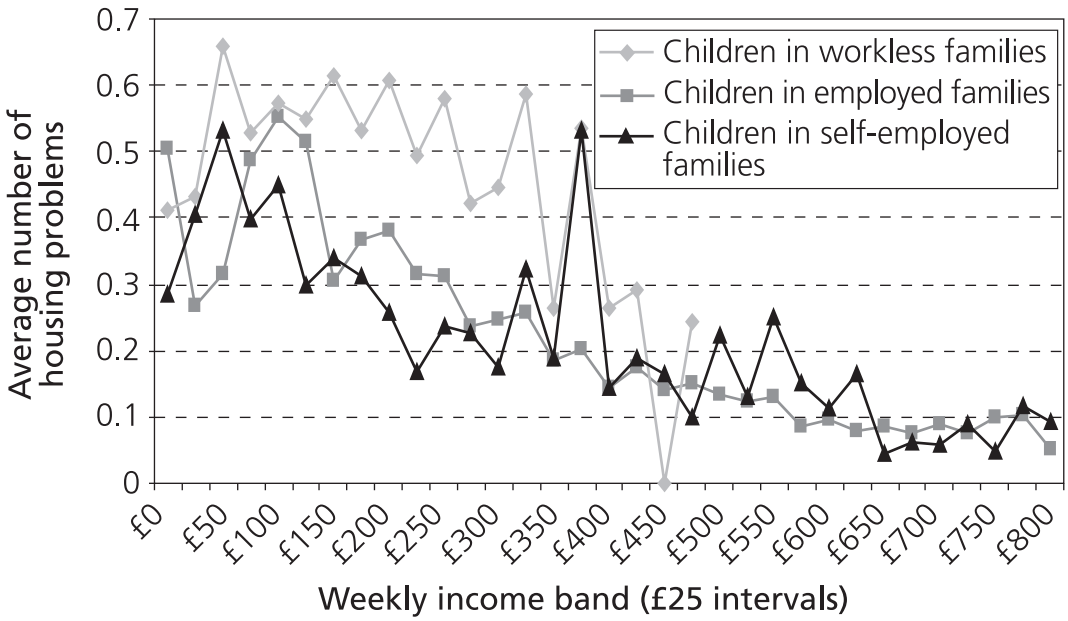
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Figure 6.9 Average level of housing problems by £25 income bands and family work status (FACS), 2001 to 2006



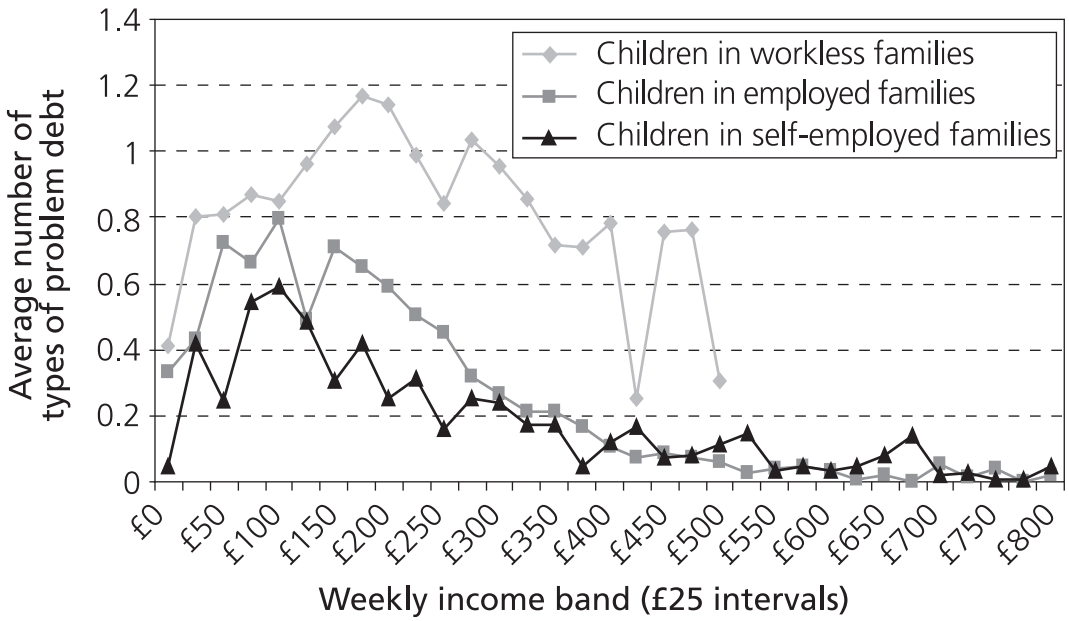
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 42,556 families.
Source: FACS, 2001 to 2006.

Figure 6.10 Average level of housing problems by £25 income bands and family work status (BHPS), 1996 to 2006



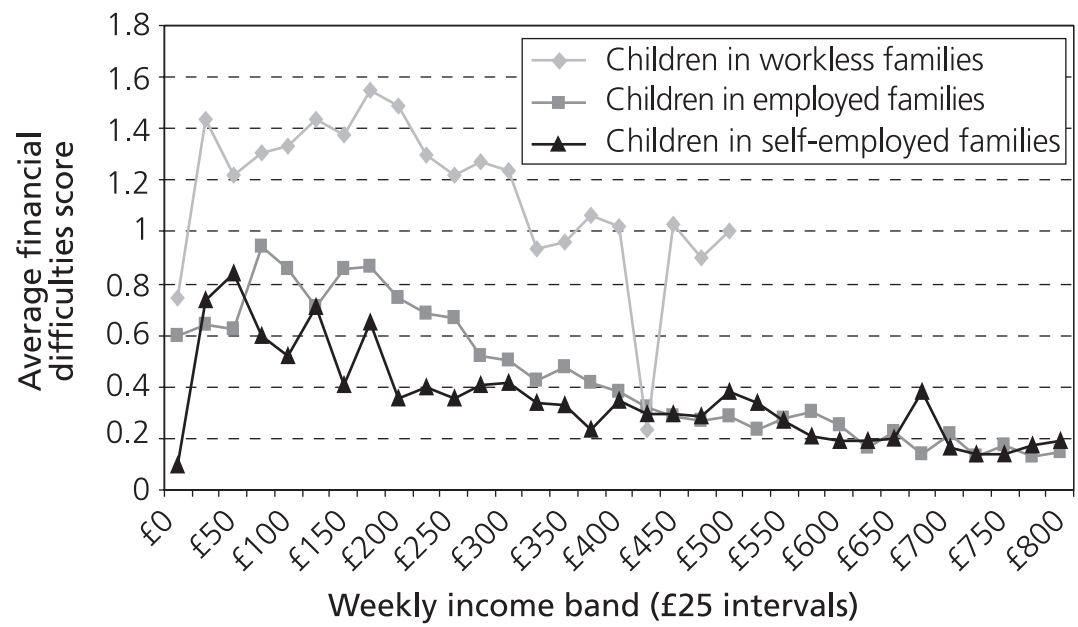
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Figure 6.11 Average level of problem debts by £25 income bands and family work status (FACS), 2001 to 2006



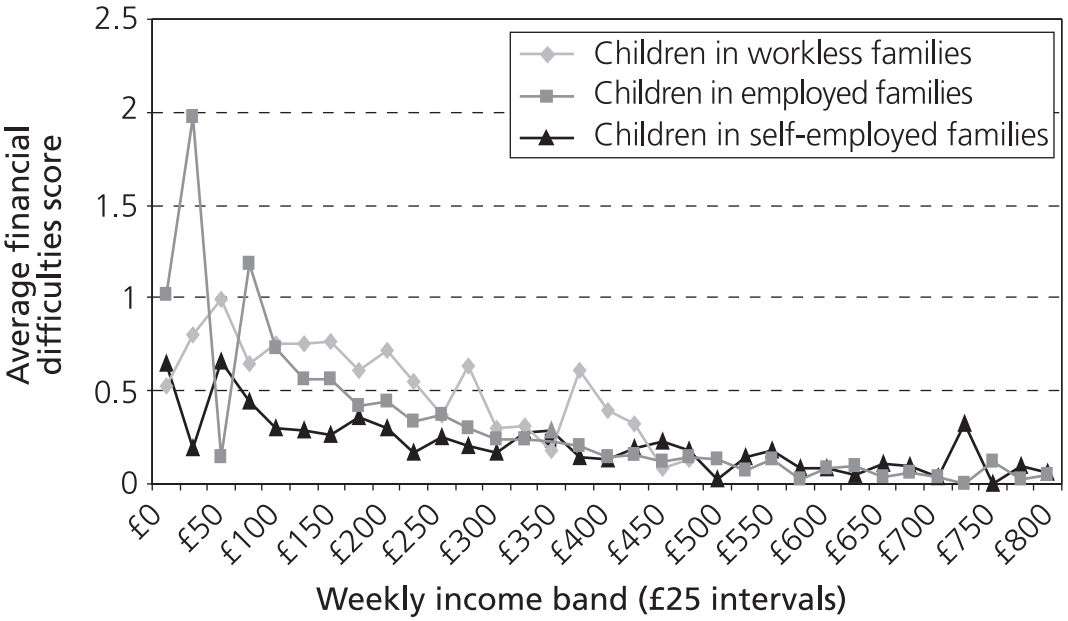
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 45,556 families.
Source: FACS, 2001 to 2006.

Figure 6.12 Average extent of financial difficulties by £25 income bands and family work status (FACS), 2001 to 2006



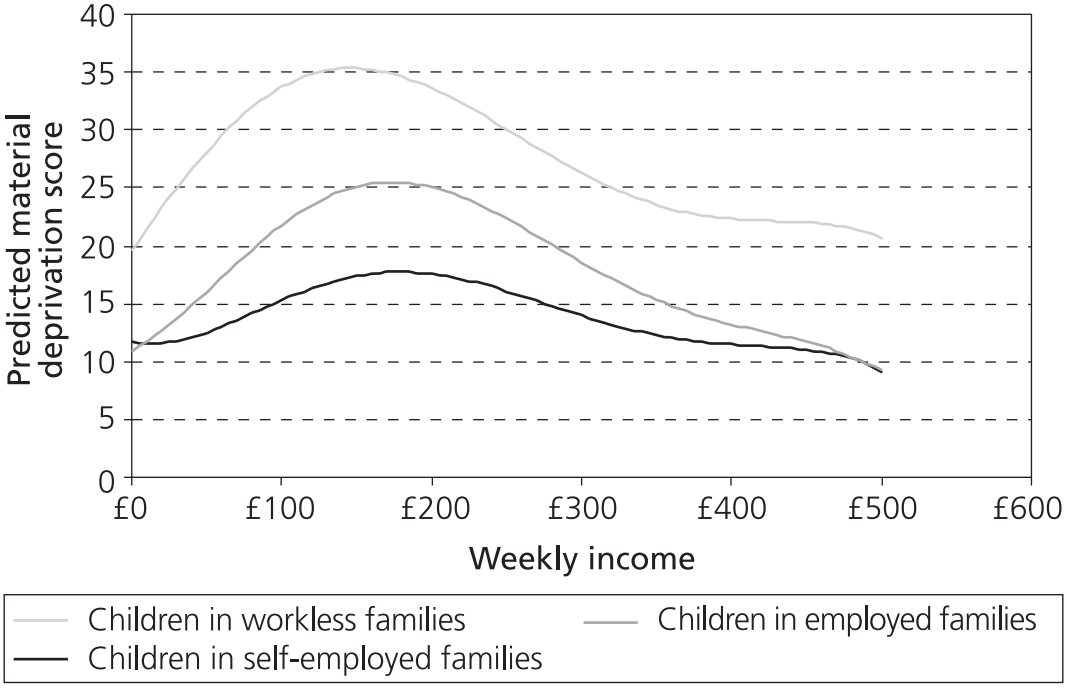
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 42,556 families.
Source: FACS, 2001 to 2006.

Figure 6.13 Average extent of financial difficulties by £25 income bands and family work status (BHPS), 1996 to 2006



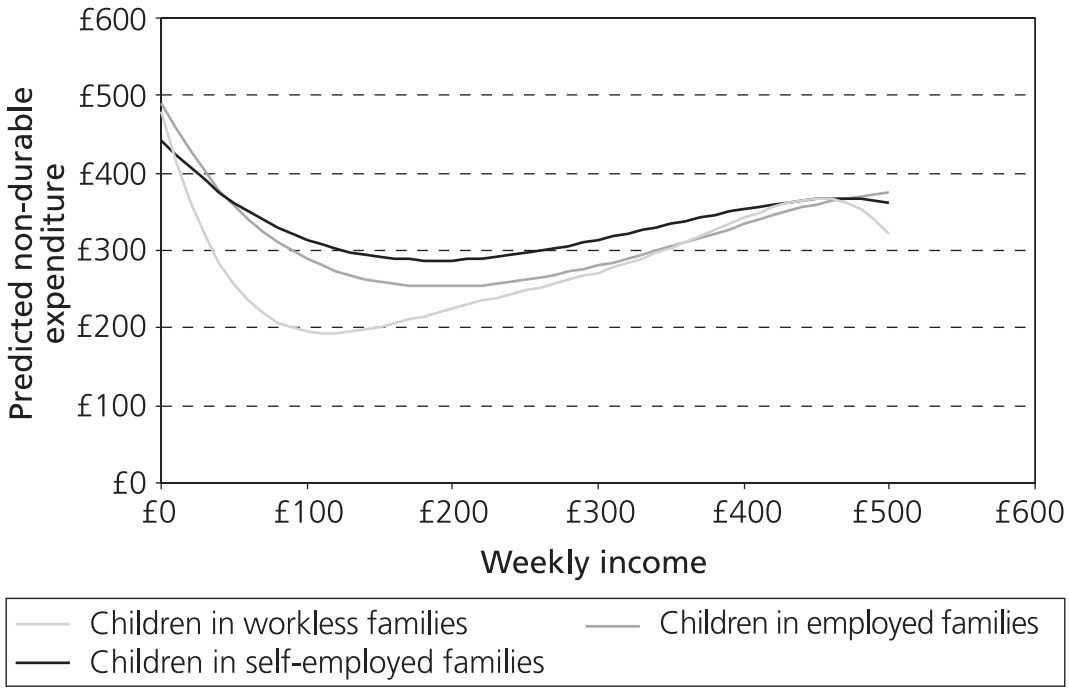
Note: The values for workless families with incomes above £500 a week are not shown.
Base: All children in GB. Sample size: 16,596 families.
Source: BHPS, 1996 to 2006.

Figure 6.14 Predicted level of material deprivation by income and family work status (FRS), 2004/5 to 2006/7



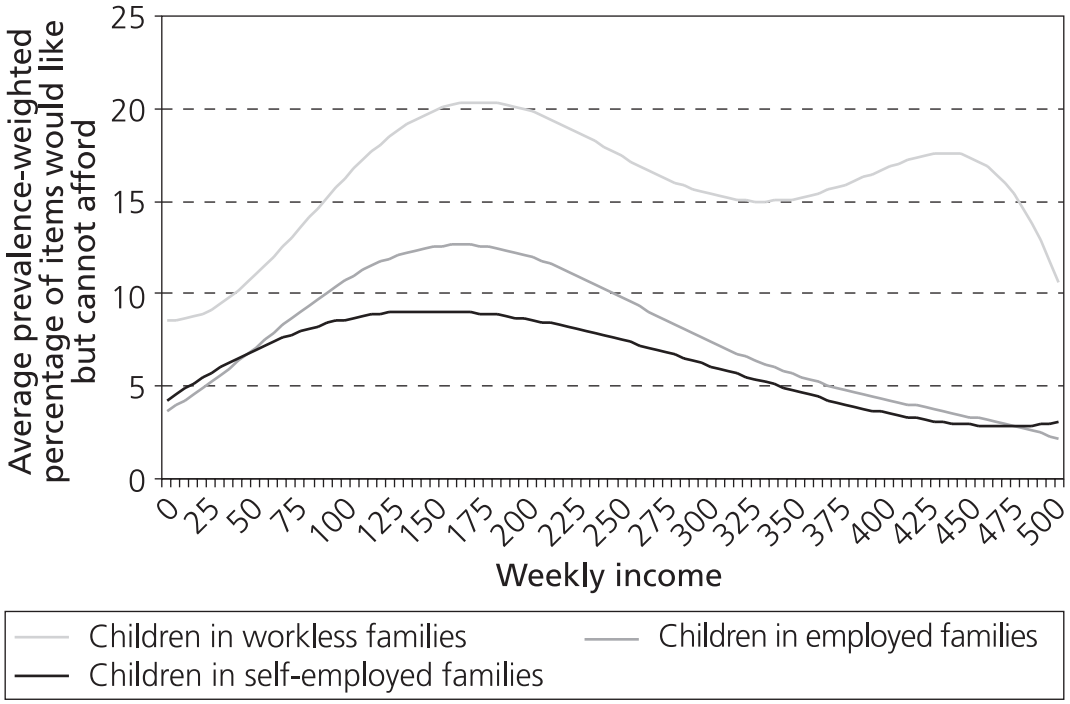
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 19,672 families.
Source: FRS, 2004/05 to 2006/07.

Figure 6.15 Predicted level of non-durables spending by income and family work status (FES), 2001/2 to 2006



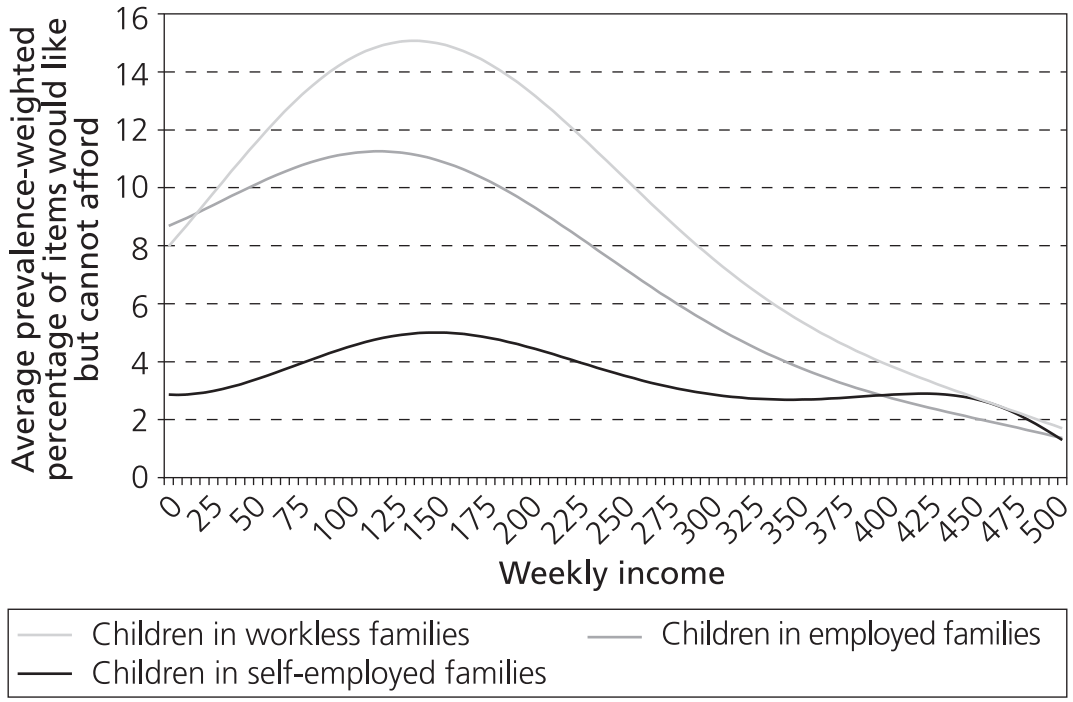
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 9,544 families.
Source: EFS, 2001/02 to 2006.

Figure 6.16 Predicted level of daily living deprivation by family work status (FACS), 2001 to 2005



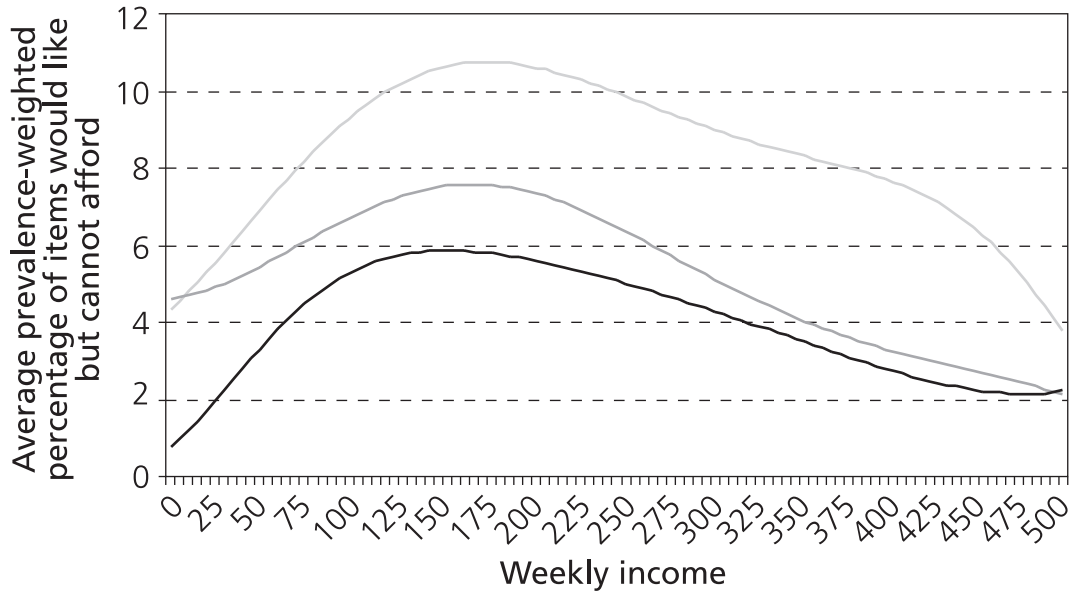
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 28,008 families.
Source: FACS, 2001 to 2005.

Figure 6.17 Predicted level of daily living deprivation by family work status (BHPS), 1996 to 2006



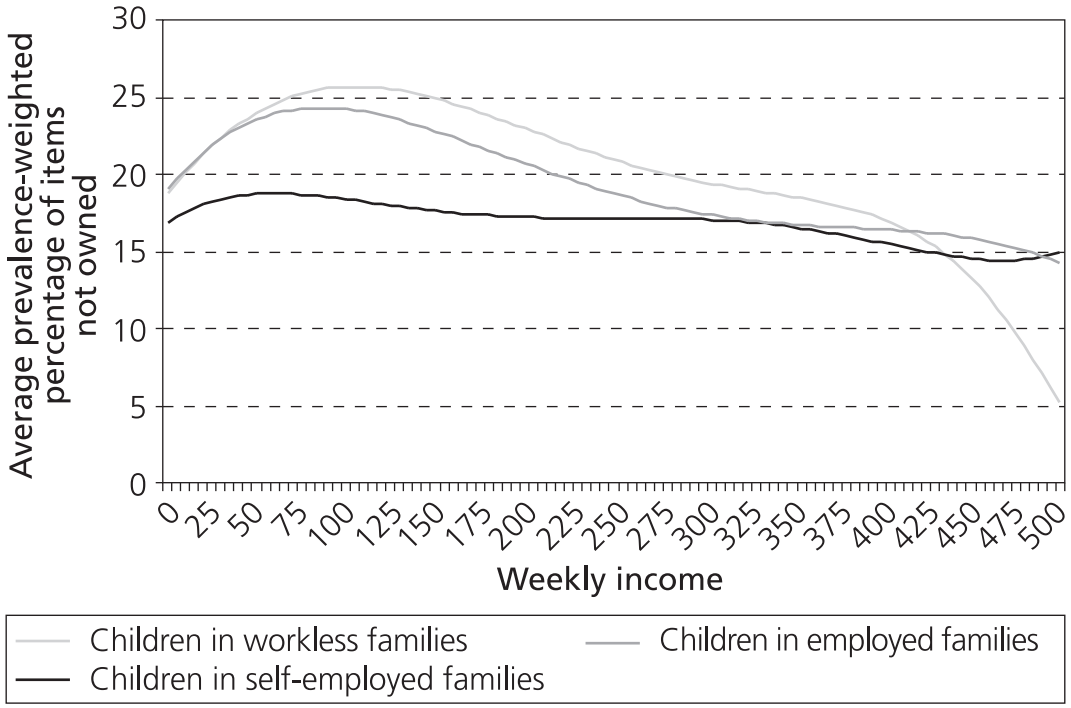
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 11,145 families.
Source: BHPS, 1996 to 2006.

Figure 6.18 Predicted level of consumer durable deprivation by family work status (FACS), 2001 to 2005



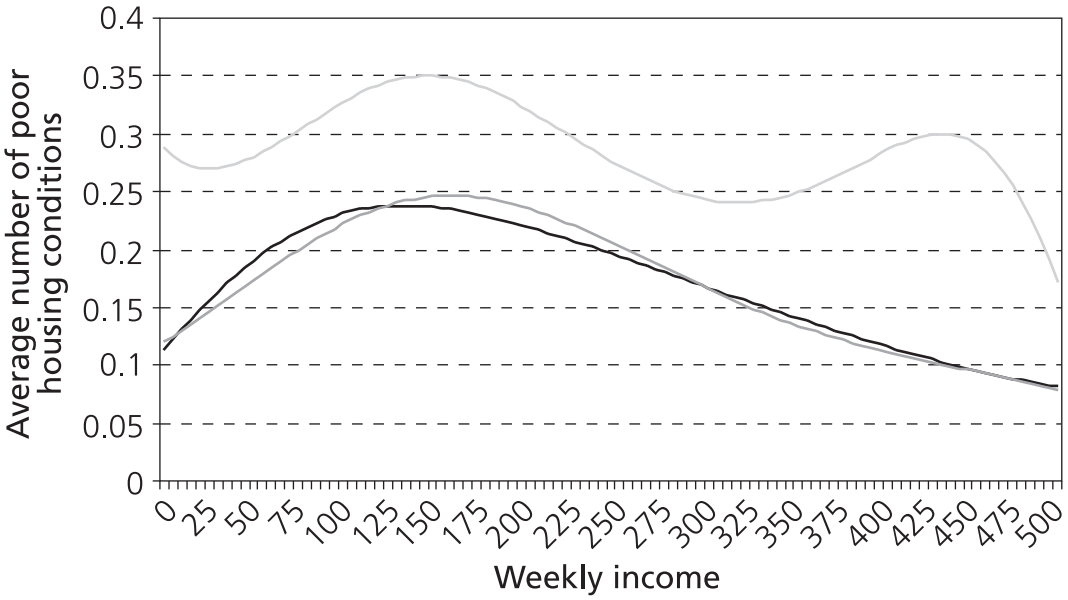
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 28,008 families.
Source: FACS, 2001 to 2005.

Figure 6.19 Predicted level of lack of consumer durables by family work status (BHPS), 1996 to 2006



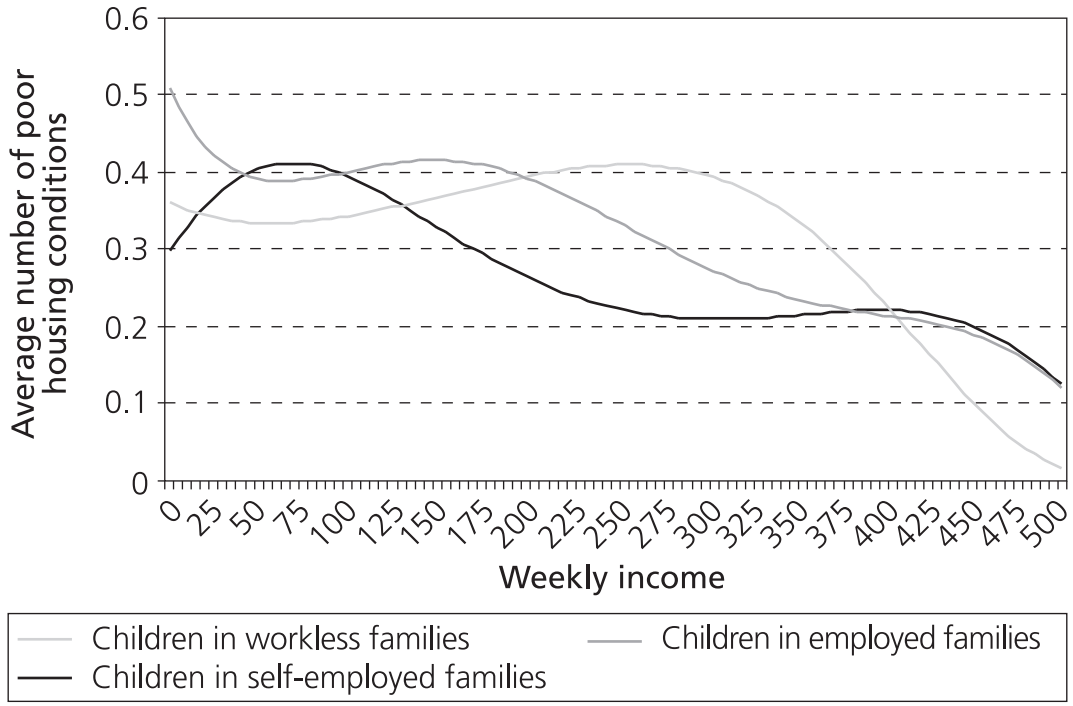
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 11,145 families.
Source: BHPS, 1996 to 2006.

Figure 6.20 Predicted level of poor housing conditions by family work status (FACS), 2001 to 2006



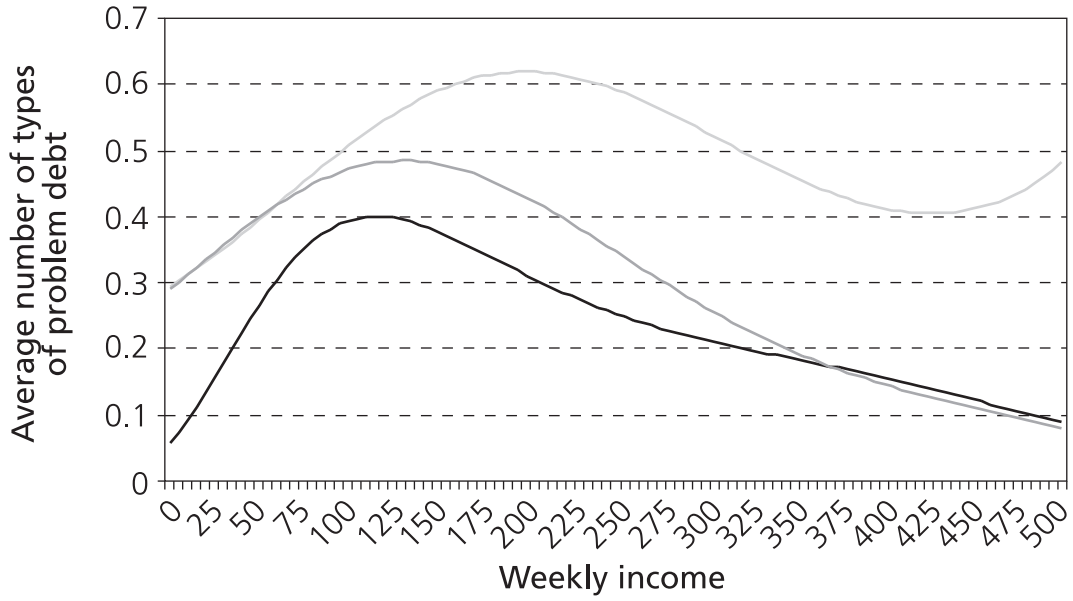
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 33,209 families.
Source: FACS, 2001 to 2006.

Figure 6.21 Predicted level of poor housing conditions by family work status (BHPS), 1996 to 2006



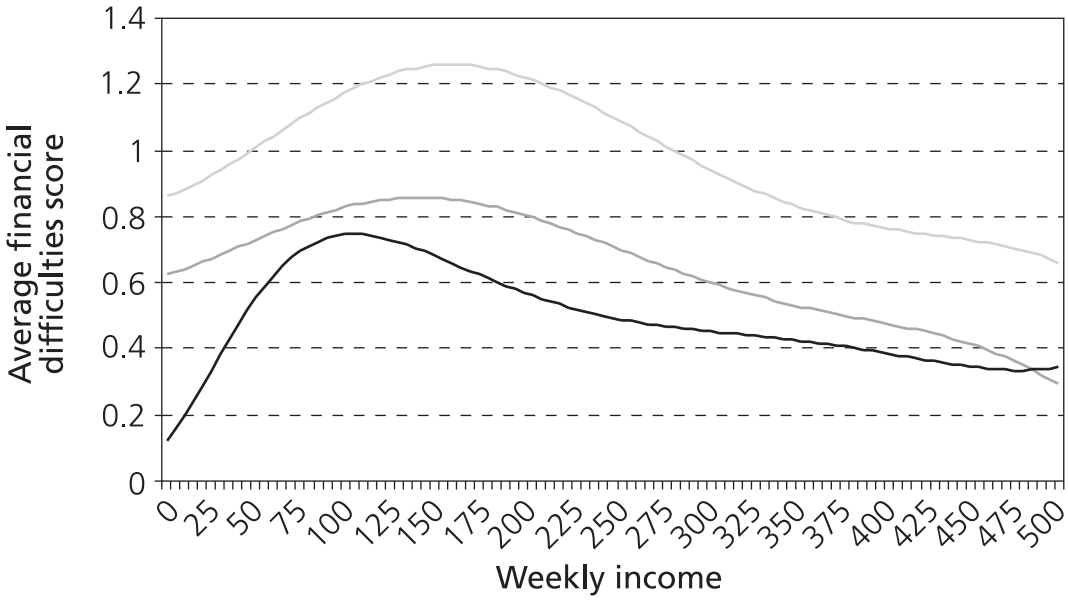
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 11,145 families.
Source: BHPS, 1996 to 2006.

Figure 6.22 Predicted level of problem debt by family work status (FACS), 2001 to 2006



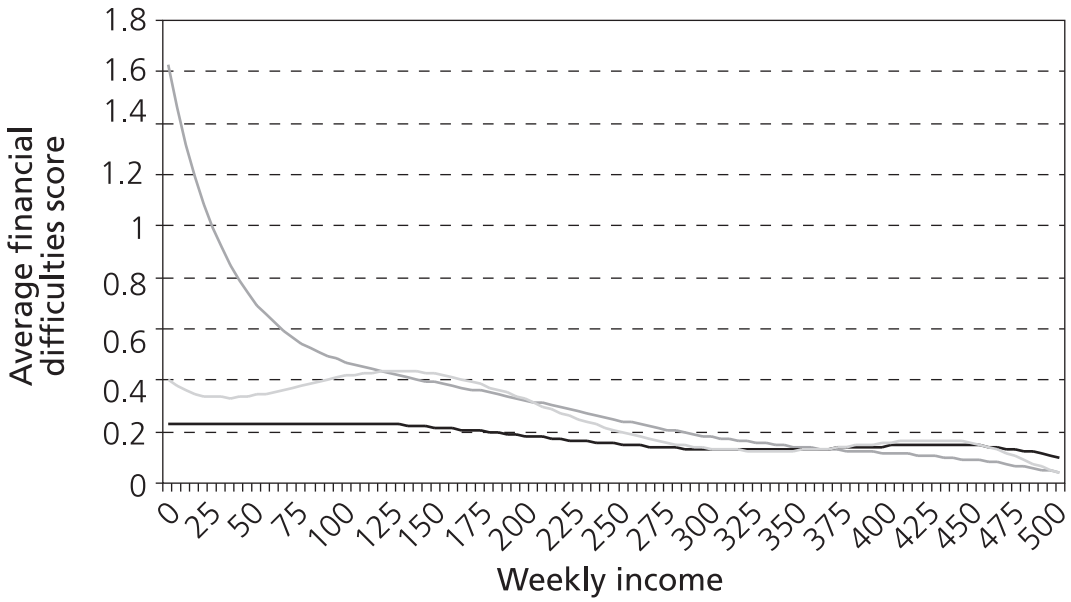
Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 33,209 families.
Source: FACS, 2001 to 2006.

Figure 6.23 Predicted extent of financial difficulties by family work status (FACS), 2001 to 2006



Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 33,209 families.
Source: FACS, 2001 to 2006.

Figure 6.24 Predicted extent of financial difficulties by family work status (BHPS), 1996 to 2006



Base: Predicted from a regression using all families with equivalised income of less than £500 a week (see text for details). Sample size: 11,145 families.
Source: BHPS, 1996 to 2006.

Table 6.1 Relative spending, by income group and work status (EFS), 2001/02 to 2006

Income group	Work status of family	Percentage of all children	Percentage of children spending < 50 per cent median	Percentage of children spending >=50 and <60 per cent median	Percentage of children spending >=60 and <100 per cent median	Percentage of children spending >= median	Total
<50 per cent of median	Employed	3.0	26.5	12.7	38.9	21.9	100
	Self-employed	1.4	11.7	7.4	42.3	38.6	100
	Workless	4.9	33.4	21.6	35.8	9.1	100
>=50 per cent and <60 per cent median	Employed	3.4	20.3	20.1	44.1	15.6	100
	Self-employed	1.0	13.3	8.5	55.1	23.1	100
	Workless	5.7	24.8	23.3	44.1	7.8	100
>=60 per cent and <median	Employed	24.9	7.7	9.0	55.9	27.4	100
	Self-employed	4.8	6.5	5.5	46.6	41.5	100
	Workless	6.5	11.1	14.7	58.3	15.9	100

Base: All children in the UK. Sample size: 12,918 families.

Source: EFS, 2001/02 to 2006.

Table 6.2 Material deprivation, by income group and work status (FRS), 2004/05 to 2006/07

Income group	Work status of family	Percentage of all children	Percentage in severe hardship	Percentage in hardship but not severe hardship	Percentage not in hardship	Total
<50 per cent of median	Employed	3.6	28.1	10.0	62.0	100
	Self-employed	2.1	9.7	8.5	81.8	100
	Workless	5.5	50.9	18.9	30.2	100
>=50 per cent and <60 per cent median	Employed	4.2	22.1	14.2	63.7	100
	Self-employed	1.0	8.8	12.3	78.8	100
	Workless	5.4	54.4	21.4	24.3	100
>=60 per cent and <median	Employed	27.6	11.9	11.7	76.4	100
	Self-employed	4.0	6.3	6.4	87.3	100
	Workless	6.7	43.1	19.3	37.6	100

Base: All children in the UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 6.3 Hardship, by income group and work status (FACS), 2001 to 2006

			Percentage of children in hardship				
Income group	**Work status of family**	**Percentage of all children**	**Daily living**	**Consumer durables**	**Housing conditions**	**Problem debts**	**Financial difficulties**
< 50 per cent median	Employed	4.4	29.5	30.5	4.6	16.8	24.0
	Self-employed	1.4	18.9	18.4	4.3	11.8	17.7
	Workless	6.2	56.2	53.3	11.8	25.2	39.9
>=50 per cent and <60 per cent median	Employed	4.6	30.2	29.9	4.3	15.8	21.1
	Self-employed	0.9	18.9	18.8	3.0	5.1	9.5
	Workless	5.3	61.9	58.7	9.5	29.0	44.2
>=60 per cent and <median	Employed	27.0	15.8	18.9	2.4	8.1	14.9
	Self-employed	4.8	11.6	11.4	2.0	4.5	9.6
	Workless	6.5	54.0	52.4	7.4	25.4	36.3

Notes: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 6.4 Hardship, by income group and work status (BHPS), 1996 to 2006

Income group	Work status of family	Percentage of all children	Percentage of children in hardship: Daily living	Consumer durables	Housing conditions	Financial difficulties
<50 per cent of median	Employed	2.9	58.6	42.1	5.8	38.5
	Self-employed	2.7	33.8	22.8	4.5	24.0
	Workless	7.8	76.1	52.1	10.1	43.6
>=50 per cent and <60 per cent median	Employed	3.6	50.0	24.9	2.7	27.4
	Self-employed	1.4	29.8	15.4	3.3	24.4
	Workless	2.9	71.4	48.9	12.3	34.4
>=60 per cent and <median	Employed	25.6	31.9	15.2	2.2	20.0
	Self-employed	4.7	20.7	12.3	3.2	15.0
	Workless	3.8	57.8	34.1	9.1	30.0

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

7 Dynamics of work, poverty and living standards

This chapter looks at the dynamics of work, poverty and living standards over three-year periods. It considers the extent to which hardship is a transitory experience for individual families, and how the likelihood of hardship relates to the length of time in poverty.

The conclusions are:

- The proportion of children in any type of long-term hardship is greater than the proportion in long-term poverty (where long-term is defined as three consecutive annual interviews). However, very few children are both in long-term poverty and in any type of long-term hardship.
- Poverty is slightly more transient for children in employed families than self-employed families, but is considerably less transient for children in workless families than children in families in either working group. Daily living and consumer durable hardship exhibit a similar degree of transiency to poverty, but most other hardship measures are more transient than poverty. Hardship for children in workless families is considerably less transient than for the working groups. But, in contrast to the poverty picture, hardship is more transient for self-employed families than employed families for Families and Children Study (FACS) hardship measures; although some of the British Household Panel Survey (BHPS) measures suggest a much lower degree of transiency for the self-employed than the employed.
- The proportion of children in hardship rises with poverty duration for most of the hardship measures, but not to a substantial degree: a considerable proportion of families remain out of any type of hardship even during prolonged periods of poverty.

Continued

- The difference in the living standards of families with different work states can be seen in a dynamic analysis: for a given experience of poverty, those with time out of work are much more likely than those always in work to experience hardship, and those always in self-employment are less likely than those always in employment to experience hardship. And, even allowing for differences in poverty duration, the likelihood of hardship differs across the work groups for most of the hardship measures, suggesting that the differences between the work types shown in previous chapters are not all due to differences in the length of time in poverty across the work groups.

This chapter looks at the dynamics of work, poverty and living standards using data from three consecutive annual interviews from FACS and BHPS surveys.[12] In particular, it considers the degree to which hardship is a transitory experience for individual families and how the likelihood of hardship relates to the length of time in poverty.

The analysis of this chapter divides into four sections. The first section consists of an overview of the prevalence of long-term poverty and hardship rates. The second presents a summary of poverty and hardship experiences over time and their relationships to work experience. The degree to which poverty and hardship are transitory states is considered in the third section, while the final section examines whether the likelihood of hardship depends upon the duration of poverty. Most of the analysis covers three-year periods for particular families, with the final year of these three-year periods ranging from 2003 to 2006 for FACS and from 1998 to 2006 for BHPS.[13]

7.1 The prevalence of long-term poverty and hardship

Tables 7.1 and 7.2 compare the prevalence of long-term poverty and hardship with current poverty and hardship rates for the period 2003 to 2006 (any spells out of the state between annual interviews have been ignored for this definition). Twenty-two per cent of children in FACS are in current poverty, and 10 per cent are in long-term poverty (defined as three or more consecutive interviews in poverty). Similarly, 18 per cent of children in the BHPS are in current poverty, but only six per cent are in long-term poverty.

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12 Information on work dynamics between interviews is available in both surveys, but is not used in this chapter in order that the work dynamics are comparable with the hardship dynamics, for which there is no information available between interviews.

13 Three-year periods were used in order to generate a sufficient number of observations while also allowing a reasonably long period over which to observe the dynamics. The statistics for BHPS in Table 7.2 are restricted to the years 2003 to 2006 to be comparable to those for FACS.

The ratio of the proportions in current hardship and long-term hardship are of a similar magnitude for the daily living and consumer durables measures and hardship in just one or two categories. For example, in FACS, 16 per cent of children are in long-term hardship in one category or more, which is half of the 32 per cent currently in hardship in one category or more. But long-term hardship is much less likely than current hardship for the other hardship measures, and for having hardship in three or more categories: for example, only two per cent of children are in long-term hardship in three or more categories, which is only around one quarter of the nine per cent currently in hardship in three or more categories.

It is also possible to compare directly the proportion of children in long-term poverty and long-term hardship: 16 per cent of children in FACS and 18 per cent of children in BHPS are in at least one type of long-term hardship, which is substantially higher than the prevalence of long-term poverty (cited in the first paragraph of this section).

Finally, the proportions of children in both long-term poverty and long-term hardship are low: only four per cent of children in FACS and three per cent of children in BHPS are both in long-term poverty and in any type of long-term hardship. Somewhat surprisingly, the proportion of those in long-term poverty who are also in long-term hardship is lower than the proportion of those in current poverty who are also in current hardship.

7.2 Work, poverty and hardship dynamics over three years

7.2.1 Work dynamics

Most families are in the same work status over all three years (Tables 7.3 and 7.4). Eighty-six per cent of families currently employed in FACS and 88 per cent of those in BHPS were in employment in the previous two interviews, and 65 per cent of those currently in self-employment and 76 per cent of those currently workless in FACS (and 72 per cent and 71 per cent respectively of those in BHPS) were in the same work state at the previous two interviews. For those currently employed and not always in employment, there is a fairly even division between having spent time in self-employment and having spent time workless. The currently self-employed are considerably more likely to have spent time in employment in the previous two years than to have been out of work, and the currently workless are considerably more likely to have spent time in employment rather than self-employment in the previous two years.

Overall, most families are in employment throughout the three years (final columns of Tables 7.3 and 7.4). Much smaller proportions are in self-employment or workless throughout the three years, and substantial proportions have been in both employment and self-employment or have been both in employment and workless. The numbers of families who have been in 'self-employment and

workless', and who have been in all three states, are both very small so these two groups are combined with the 'employment and workless' group to form a single 'work and workless' group in the analysis below.

7.2.2 Poverty and hardship dynamics

Over three years, around two thirds (66 per cent in FACS and 68 per cent in BHPS) of children never experience poverty (Tables 7.5 and 7.6).[14] This proportion has risen from 64 per cent in 2003 to 67 per cent in 2006 in FACS, and from 64 per cent in the period 1998-2000 to 71 per cent in the period 2004-2006 in BHPS. The average proportion of children always in poverty over three years has remained around 9 to 10 per cent in FACS, but has declined over the longer period observed in BHPS from 14 per cent during 1998-2000 to 6 per cent during 2004-2006.

The proportion of children never experiencing hardship during the three years is higher than that never experiencing poverty, according to almost all of the hardship measures in both FACS and BHPS, reflecting that hardship itself is less prevalent than poverty in these two surveys. Unsurprisingly, differences in the proportions across the hardship measures reflect the differences in the prevalence of each hardship measure, with children especially likely to avoid poor housing conditions and problem debt across the three years. However, the proportion of children sometimes experiencing daily living deprivation in BHPS is unusually high.

The prevalence of sometimes or always experiencing hardship has generally declined over time, in line with the decline in the poverty rate, although the proportion of children sometimes or always in hardship has declined to a greater extent according to the daily living and consumer durables measure than the housing conditions, problem debt and financial difficulties measures.

7.2.3 The relationships between work dynamics and poverty and hardship dynamics

Children in families which are always in work over a three-year period are much less likely to experience poverty during that period than those with parents who are sometimes or always out of work (Tables 7.7 and 7.8). FACS data indicates that there is little difference in the poverty dynamics for those 'always employed' and those 'always self-employed', and that those who mix the two over a three-year period are more likely to be in poverty at some point. But BHPS data suggests that both those 'always self-employed' and those who mix the two types of work are more likely to be in poverty at some point than those 'always employed'. Hence, FACS data suggests that instability in the type of work (employed or self-employed) is associated with a higher risk of poverty, and BHPS data suggests that self-employment is associated with a greater risk of experiencing poverty than employment.

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[14] It should again be noted that this excludes spells in poverty which fall between annual interviews.

There is a clear – and unsurprising – relationship between the permanency of the work state and the risk of poverty. Children in families whose parents are not always in work are more likely to experience poverty than families who always have at least one parent working: around two thirds of those who are both in work and workless over a three-year period will experience poverty at some point, and about a fifth will always be in poverty, according to both surveys. Similar proportions of those 'always workless' will experience poverty at some point, although the 'always workless' are more likely to always be in poverty than the 'sometimes workless' group.

The 'always self-employed' are slightly less likely to experience hardship than the 'always employed' in FACS. The experience of hardship for those mixing employment and self-employment is very similar to that for the 'always employed' and 'always self-employed' in FACS. This means that the additional degree of poverty experienced by those 'sometimes self-employed' over the employed is not reflected in a greater experience of hardship. The picture in the BHPS is slightly different. There is little difference in the hardship experience between the 'always employed' and the 'always self-employed', but the group which mixes employment and self-employment is more likely to experience hardship at some time than the other two groups. Overall then, both surveys suggest that those in self-employment are less likely to than those in employment to experienced hardship when experiencing poverty.

In comparing those 'always working' with those 'sometimes or always workless', the differences in hardship experience in both surveys are slightly narrower than the differences in poverty experience, although it is still the case that those 'sometimes workless' or 'always workless' are much more likely than the 'always working' to experience hardship as well as poverty.

7.2.4 Hardship dynamics conditional on work dynamics and poverty dynamics

Figures 7.1 to 7.9 present the hardship dynamics across work groups conditional on the poverty experience for each family. These confirm the results in Tables 7.7 and 7.8 that, for a given experience of poverty, those always self-employed are less likely to experience hardship than the always employed, and that workless families are, in general, more prone to hardship than the working groups even allowing for differences in the poverty experience.

Yet perhaps the most striking and consistent pattern across these figures is the finding that although hardship dynamics are heavily dependent upon poverty dynamics for the always working groups, they vary to a much lesser degree with poverty dynamics for the sometimes workless and always workless groups. Indeed, in some cases – such as problem debt hardship in FACS – whether a sometimes workless family has never been in poverty or has always been in poverty makes little difference to the risk of experiencing hardship. Consequently, the differences in hardship dynamics across work groups are much greater for those never in

poverty and sometimes in poverty than for those always in poverty. Nevertheless, even for the always in poverty bars, the figures distinctly show a rising proportion across work groups from the always employed group to the always workless group of those experiencing hardship. This suggests that the poverty distinction alone is not fully capturing the impact of different work experiences, possibly because the depth of poverty when in poverty, or the income gap above the poverty threshold when not in poverty, varies across work group, or because working *per se* enables families to better maintain their living standards from any particular level of income.

Another point of importance from Figures 7.1 to 7.9 is the consistency in the patterns across the hardship measures. This is especially notable in light of the evidence in Tables 7.1 and 7.2 that most families in long-term hardship are only in such a position according to one of the hardship measures, and very few are in long-term hardship for three or more of the measures. Hence, the consistency across Tables 7.5 to 7.8 is not explained simply by a similar group of families being in hardship for all measures, and suggests that the same types of relationships occur for different families experiencing different types of hardship.

Finally, the figures highlight the high proportions of children who are in families who are in poverty for all three years and yet are never in hardship. For example, the long first segments for the always working and always in poverty families in FACS in figures 7.1 and 7.3 show that over half of this group never experiences daily living deprivation, and almost half never experience consumer durable deprivation. This is explored further in tables 7.9 and 7.10. About one third of children in poverty for three years (regardless of work status) never experience daily living deprivation according to FACS, while almost one third never experience consumer durables deprivation and much higher proportions are never in hardship according to the other measures. The proportions are similar for BHPS, with the exception of daily living deprivation which is lower (because hardship using this measure is more prevalent generally). Overall, according to FACS, 16 per cent of children who are always in poverty over the three years never experience any type of hardship, while the BHPS shows seven per cent never experience any type of hardship. The fact that this overall proportion is lower than for any single hardship measure highlights again how different families may be judged as being in hardship differently depending upon the type of hardship measure. Yet this overall proportion is still sizeable and shows that a considerable number of families manage to remain out of any type of hardship even during periods of prolonged poverty, while substantial numbers may remain out of one particular type of hardship.

7.3 How transitory are poverty and hardship?

The transitory nature of poverty and hardship is explored more explicitly in Tables 7.11 to 7.14. These tables show the proportions of those currently in poverty (or hardship) who were neither in poverty (or hardship) at the previous interview, nor

in poverty (or hardship) at the subsequent interview, described here as transitory poverty or transitory hardship.[15] The advantage of this transitory statistic for hardship over the simple incidence of hardship over three years presented above is that the statistic is unaffected by the cross-section prevalence of the hardship measure, which allows a more meaningful comparison across different hardship measures. The drawback is that the sample sizes are much smaller (the base sample is only those in hardship) which means that analysing the transiency of hardship conditional on the transiency on poverty is infeasible.

The proportion of children in poverty who are in transitory poverty is 18 per cent for FACS data and 19 per cent for BHPS data.[16] Broadly similar proportions of those in daily living hardship (16 per cent for FACS and 17 per cent for BHPS) and those in consumer durables hardship (21 per cent for FACS and 14 per cent for BHPS) are in transitory hardship. Problem debt hardship and financial difficulties hardship tend to be slightly more transitory, but some 39 per cent of children in FACS and 31 per cent of children in BHPS in housing conditions hardship are in transitory hardship. The high degree of transiency in housing conditions may seem surprising given that accommodation characteristics might be expected to be less flexible than daily living or even consumer durables, but this may reflect the fact that changes in housing conditions hardship can result from a single change in ratio of bedrooms needed to bedrooms required (which could result from changes in household structure) or a single improvement in heating conditions in the household.

In BHPS data, there has been a notable rise since the late 1990s in the proportion of children in poverty who are in transitory poverty and a rise in the proportion of children in daily living hardship who are in transitory hardship. On the other hand, there has also been a decline in the proportion of those in housing conditions hardship who are in transitory hardship (FACS data covers too short a period to detect any trends).

If in poverty, children in employed families are very slightly more likely to be in transitory poverty (26 per cent in FACS and BHPS) than children in self-employed families (25 per cent in FACS and 24 per cent in BHPS), and children in workless families are much less likely to be in transitory poverty than both working groups (11 per cent in FACS and 12 per cent in BHPS) (Table 7.11). However, according to FACS data, the relative positions of the employed and self-employed are reversed for the hardship measures: children in hardship are more likely to be in transitory hardship if they are in a self-employed family than in an employed family. In addition, the difference between those in work and those out of work is greater for transitory hardship than transitory poverty. In contrast, BHPS data suggests that children in self-employed families in daily living and housing hardship are

15 Hence, the analysis is for the years 2002 to 2005 in FACS and for 1997 to 2005 in BHPS.

16 Although, for the comparable years of 2003-2005, the proportion in transitory poverty in BHPS is higher than in FACS.

less likely to be in transitory hardship than children in employed families, with little difference for the other hardship measures. However, with the exception of housing conditions hardship, BHPS data confirms the FACS finding that children in hardship in workless families are least likely to be in transitory hardship. This difference between the surveys may reflect the longer time period covered by BHPS or the small base sample sizes of those in hardship, particularly in the case of housing conditions hardship.

7.4 Does the risk of hardship depend upon the duration of poverty?

One final aspect of the dynamic relationship between poverty and hardship is whether the proportion of children in hardship changes with the duration of poverty. If families are able to use savings or other stored resources (such as a stock of consumer durables), they might be able to maintain their living standards for a while at the start of a poverty spell, but would, over time, deplete those savings and stored resources, and become more likely to fall into hardship. In addition, there could be a change in the composition of families at longer durations of poverty towards those with a greater likelihood of hardship which might also raise the proportion of children in hardship at longer durations of poverty.

Figures 7.10 to 7.18 compare hardship rates for children in families in their first year of poverty, in their second year of poverty, and in their third and subsequent years of poverty. As would be expected, the proportion of children in most types of hardship rises over the first three years of poverty (final set of columns in the figures), although the change between the second year and the third and subsequent years is typically quite small. In addition, considerable proportions of children are in families who are not in hardship even after three or more years in poverty, reiterating the point made above that many families appear to have the means to avoid hardship even after prolonged periods in poverty. It is notable that the rising pattern in hardship rates with poverty duration is not observed for housing conditions in both FACS and BHPS, suggesting that hardship relating to accommodation does not have a strong relationship with the length of time in poverty, at least over the three-year period examined here. In addition, the picture is not consistently repeated within the different work groups in both surveys, suggesting that the rise in the proportions in hardship may reflect a shift towards work groups with a higher propensity for hardship as the duration of poverty lengthens.

Even when conditioning on the length of time in poverty (comparing the same shaded bars across different work types), children in families who have been workless at some point over the three years leading up to the current poverty are generally more likely to be in hardship than those who have always been in work, and those always in self-employment are typically less likely to be in hardship than those always in employment. Hence, the differences in hardship rates between

the work groups shown earlier are not all due to differences in poverty duration and suggests that other factors, such as the depth of poverty or the ability to have stored resources with which to maintain living standards during downturns in income, may also be important.

Table 7.1 Proportions of children in current and long-term poverty and hardship (FACS), 2003 to 2006

	Percentage of children in poverty or hardship		Percentage of children in joint poverty and hardship	
	Currently	Long term	Currently	Long term
Poverty	21.9	9.5	n/a	n/a
Hardship measure				
Daily living	17.1	9.4	8.5	2.8
Consumer durables	18.0	7.9	8.3	2.2
Housing conditions	3.0	0.6	1.6	0.2
Problem debt	8.9	2.9	4.5	0.8
Financial difficulties	15.8	5.7	6.5	1.4
Number of hardship categories				
1+ categories	32.2	16.2	13.0	4.0
2+ categories	17.4	6.8	8.8	2.1
3+ categories	8.5	2.2	4.7	0.7
4+ categories	3.5	0.5	2.2	0.2
5 categories	0.5	0.1	0.3	0.0

Notes: The variables underpinning daily living and consumer durable hardship were not available in 2006. Long-term poverty and hardship are defined as three consecutive interviews in the state. The number of hardship categories in the long term is calculated as the number of hardship measures where the family is in long-term hardship (and not whether the family has been in that number of hardship categories over the three interviews).

Base: All children in GB in 2003 to 2006. Sample size: 27,805 families.

Source: FACS, 2001 to 2006.

Table 7.2 Proportions of children in current and long-term poverty and hardship (BHPS), 2003 to 2006

	Percentage of children in poverty or hardship		Percentage of children in joint poverty and hardship	
	Currently	Long term	Currently	Long term
Poverty	18.0	6.3	n/a	n/a
Hardship measure				
Daily living	24.3	12.1	9.0	2.3
Consumer durables	11.4	5.0	5.1	1.1
Housing conditions	3.8	1.3	1.4	0.3
Financial difficulties	16.9	6.4	5.6	1.0
Number of hardship categories				
1+ categories	36.3	17.7	11.5	2.9
2+ categories	15.1	5.0	6.3	1.3
3+ categories	4.4	0.7	2.3	0.4
4+ categories	0.9	0.0	0.7	0.0

Notes: Long-term poverty and hardship are defined as three consecutive interviews in the state. The number of hardship categories in the long term is calculated as the number of hardship measures where the family is in long-term hardship (and not whether the family has been in that number of hardship categories over the three interviews).

Base: All children in GB in 2003 to 2006. Sample size: 5,702 families.

Source: BHPS, 2001 to 2006.

Table 7.3 Work dynamics, by current work status (FACS), 2003 to 2006

	Current family work status			
Percentage with work history over three interviews	Employed	Self-employed	Workless	Number of observations
Always employed	86.0	0.0	0.0	12,050
Always self-employed	0.0	64.8	0.0	2,114
Employed and self-employed	6.1	30.4	0.0	1,783
Employed and workless	7.6	0.0	21.5	1,673
Self-employed and workless	0.0	3.4	1.8	150
All three states	0.3	1.4	0.7	95
Always workless	0.0	0.0	76.0	2,376
Total	100.0	100.0	100.0	20,241

Base: All children in GB in 2003 to 2006.

Source: FACS, 2001 to 2006.

Table 7.4 Work dynamics, by current work status (BHPS), 1998 to 2006

	Current family work status			
Percentage with work history over three interviews	**Employed**	**Self-employed**	**Workless**	**Number of observations**
Always employed	88.4	0.0	0.0	5,893
Always self-employed	0.0	71.7	0.0	1,056
Employed and self-employed	5.6	23.1	0.0	754
Employed and workless	5.7	0.0	21.9	626
Self-employed and workless	0.0	3.4	6.0	106
All three states	0.3	1.9	1.1	52
Always workless	0.0	0.0	71.0	679
Total	100.0	100.0	100.0	9,166

Base: All children in GB in 1998 to 2006.

Source: BHPS, 1996 to 2006.

Table 7.5 Poverty and hardship dynamics, by year (FACS), 2003 to 2006

Percentage of children with dynamics over three annual interviews	2003	2004	2005	2006	All years
Poverty					
Never	63.4	65.1	67.0	67.1	65.7
Sometimes	27.0	25.2	23.9	23.1	24.8
Always	9.5	9.6	9.0	9.8	9.5
Daily living deprivation hardship					
Never	68.0	72.0	74.6	n/a	71.5
Sometimes	21.0	18.9	17.2	n/a	19.1
Always	11.0	9.0	8.1	n/a	9.4
Consumer durable deprivation hardship					
Never	63.7	67.3	72.2	n/a	67.7
Sometimes	27.3	25.1	21.0	n/a	24.5
Always	9.0	7.6	6.9	n/a	7.9
Housing conditions hardship					
Never	94.0	94.0	94.6	94.2	94.2
Sometimes	5.2	5.4	5.0	5.3	5.2
Always	0.8	0.6	0.4	0.5	0.6
Problem debt hardship					
Never	82.0	82.6	83.8	85.0	83.3
Sometimes	14.5	14.6	13.7	12.3	13.8
Always	3.6	2.8	2.5	2.7	2.9
Financial difficulties hardship					
Never	70.1	72.1	72.9	72.1	71.8
Sometimes	23.6	22.1	21.9	22.6	22.6
Always	6.3	5.8	5.2	5.3	5.7

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

Table 7.6 Poverty and hardship dynamics, by year (BHPS), 1998 to 2006

Percentage of children with dynamics over three annual interviews	1998-2000	2001-2003	2004-2006	All years
Poverty				
Never	64.1	69.8	71.0	68.1
Sometimes	22.1	22.8	22.9	22.5
Always	13.9	7.4	6.1	9.4
Daily living deprivation hardship				
Never	50.1	58.3	64.4	57.2
Sometimes	31.3	27.5	23.8	27.7
Always	18.5	14.2	11.8	15.0
Lack of consumer durables hardship				
Never	65.4	76.7	84.3	75.0
Sometimes	20.6	16.0	11.0	16.1
Always	14.1	7.3	4.7	8.9
Housing conditions hardship				
Never	92.9	93.4	93.0	93.1
Sometimes	6.1	5.9	5.5	5.8
Always	1.0	0.7	1.5	1.0
Financial difficulties hardship				
Never	65.7	68.0	70.6	68.0
Sometimes	27.2	26.3	23.0	25.6
Always	7.1	5.7	6.5	6.5

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

Source: BHPS, 1996 to 2006.

Table 7.7 Poverty and hardship dynamics, by work dynamics (FACS), 2003 to 2006

	Family work dynamics				
Percentage of children with dynamics over three annual interviews	**Always employed**	**Always self-employed**	**Employed and self-employed**	**Work and workless**	**Always workless**
Poverty					
Never	80.4	76.6	73.4	15.9	22.0
Sometimes	16.0	17.7	23.2	63.2	42.5
Always	3.6	5.7	3.3	20.9	35.5
Daily living deprivation hardship					
Never	82.8	87.9	84.9	39.0	22.8
Sometimes	13.3	10.6	11.8	41.7	39.4
Always	3.9	1.5	3.3	19.3	37.7
Consumer durable deprivation hardship					
Never	77.7	85.3	81.5	34.2	24.2
Sometimes	18.8	12.1	16.4	48.7	46.9
Always	3.5	2.6	2.1	17.2	28.9
Housing conditions hardship					
Never	97.2	97.3	97.1	86.1	81.3
Sometimes	2.6	2.2	2.4	13.2	16.7
Always	0.3	0.5	0.5	0.7	2.0
Problem debt hardship					
Never	90.9	94.7	91.4	55.0	55.1
Sometimes	7.7	5.1	7.4	35.8	36.3
Always	1.3	0.2	1.3	9.2	8.6
Financial difficulties hardship					
Never	79.3	83.9	79.4	46.3	42.1
Sometimes	17.8	14.5	17.9	41.7	39.4
Always	3.0	1.6	2.6	11.9	18.5

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

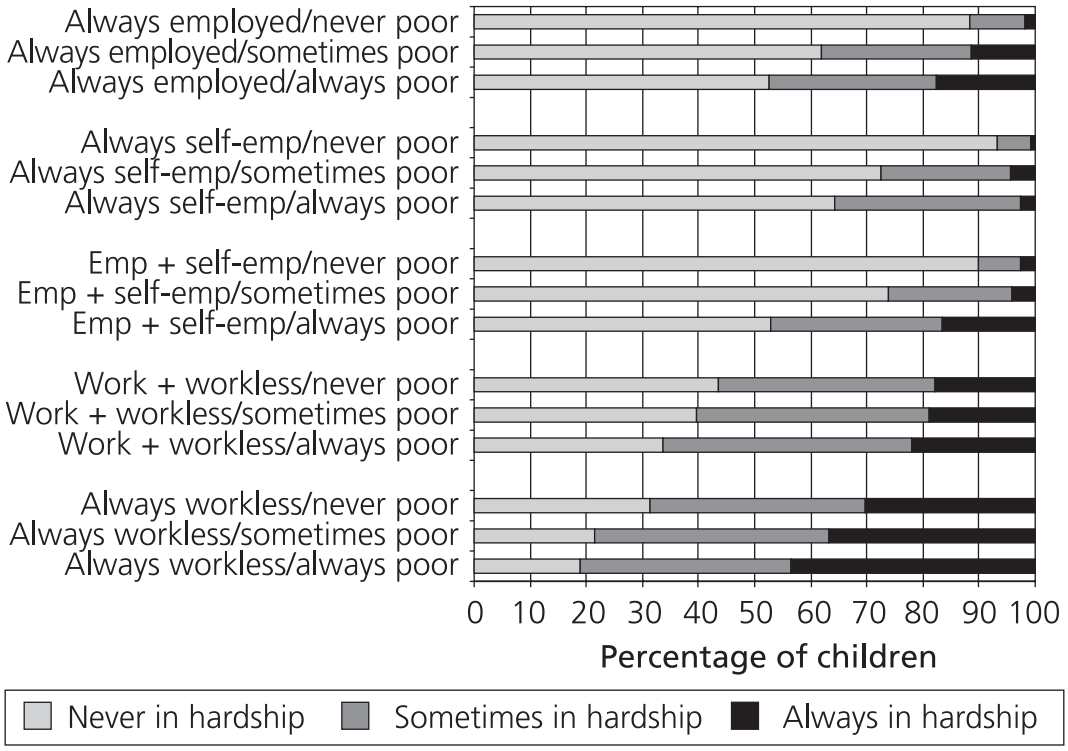
Table 7.8 Poverty and hardship dynamics, by work dynamics (BHPS), 1998 to 2006

	Family work dynamics				
Percentage of children with dynamics over three annual interviews	**Always employed**	**Always self-employed**	**Employed and self-employed**	**Work and workless**	**Always workless**
Poverty					
Never	86.5	59.9	65.4	11.9	11.5
Sometimes	11.4	30.3	30.3	66.0	38.1
Always	2.1	9.8	4.3	22.1	50.4
Daily living deprivation hardship					
Never	66.3	69.8	58.4	23.3	13.3
Sometimes	25.2	21.3	34.7	39.1	35.1
Always	8.5	8.9	6.9	37.6	51.5
Lack of consumer durable hardship					
Never	82.7	81.6	79.7	49.6	37.1
Sometimes	12.3	11.6	14.2	28.4	34.0
Always	5.0	6.8	6.2	21.9	28.8
Housing conditions hardship					
Never	96.5	95.6	94.7	88.7	79.9
Sometimes	3.2	3.0	4.8	9.5	16.8
Always	0.2	1.4	0.6	1.9	3.3
Financial difficulties hardship					
Never	74.6	76.8	63.7	35.2	49.2
Sometimes	21.4	19.6	32.3	49.9	36.2
Always	4.1	3.6	4.0	14.9	14.6

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

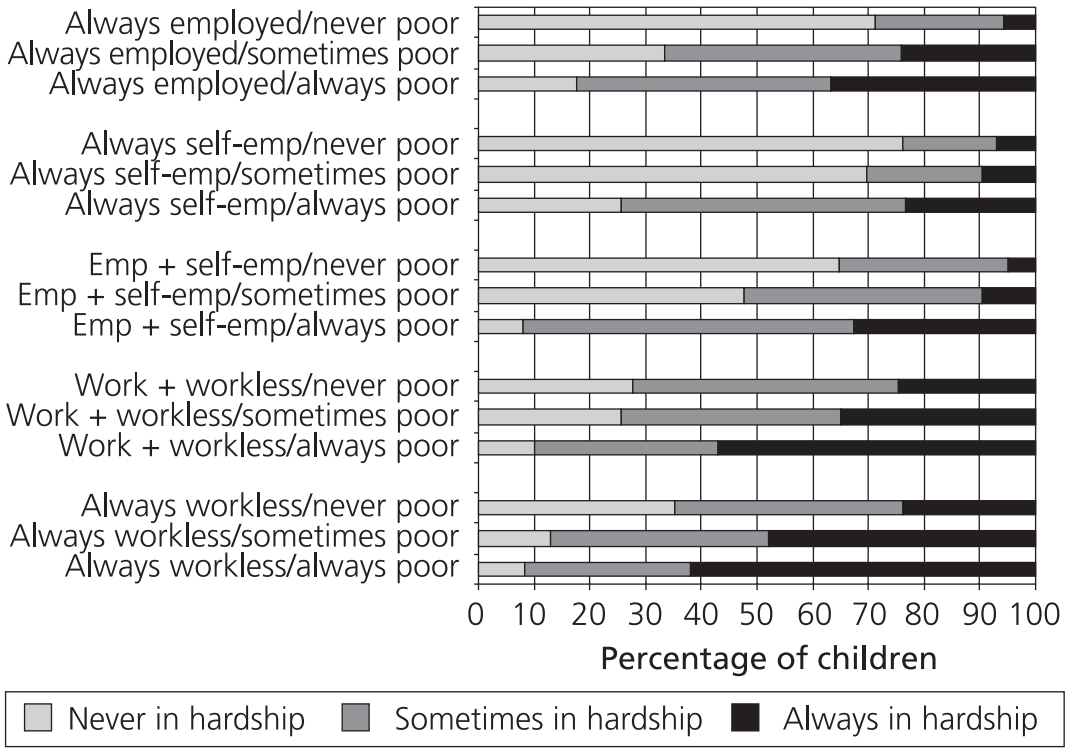
Source: BHPS, 1996 to 2006.

Figure 7.1 Daily living hardship dynamics by work and poverty dynamics (FACS), 2003 to 2005



Note: The variables underpinning daily living hardship were not available in 2006.
Base: All children in GB in 2003 to 2005. Sample size: 15,243 families.
Source: FACS, 2001 to 2005.

Figure 7.2 Daily living hardship dynamics by work and poverty dynamics (BHPS), 1998 to 2006

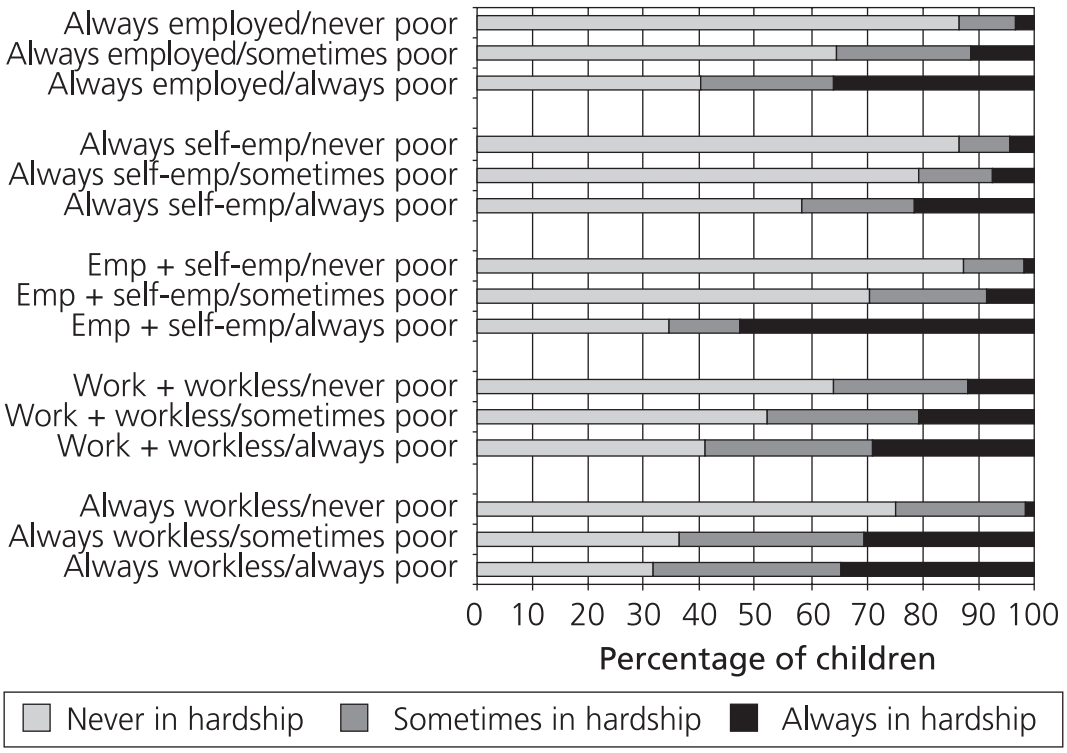


Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Figure 7.3 Consumer durable hardship dynamics by work and poverty dynamics (FACS), 2003 to 2005

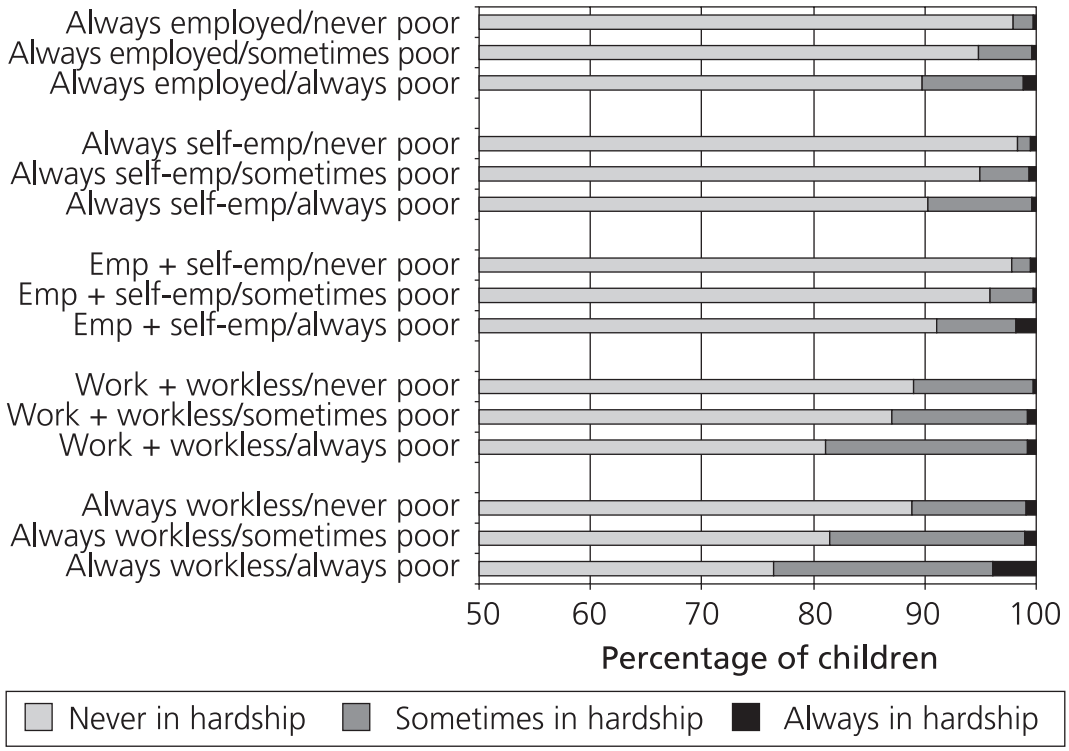
Note: The variables underpinning consumer durable hardship were not available in 2006.
Base: All children in GB in 2003 to 2005. Sample size: 15,243 families.
Source: FACS, 2001 to 2005.

Figure 7.4 Consumer durable hardship dynamics by work and poverty dynamics (BHPS), 1998 to 2006



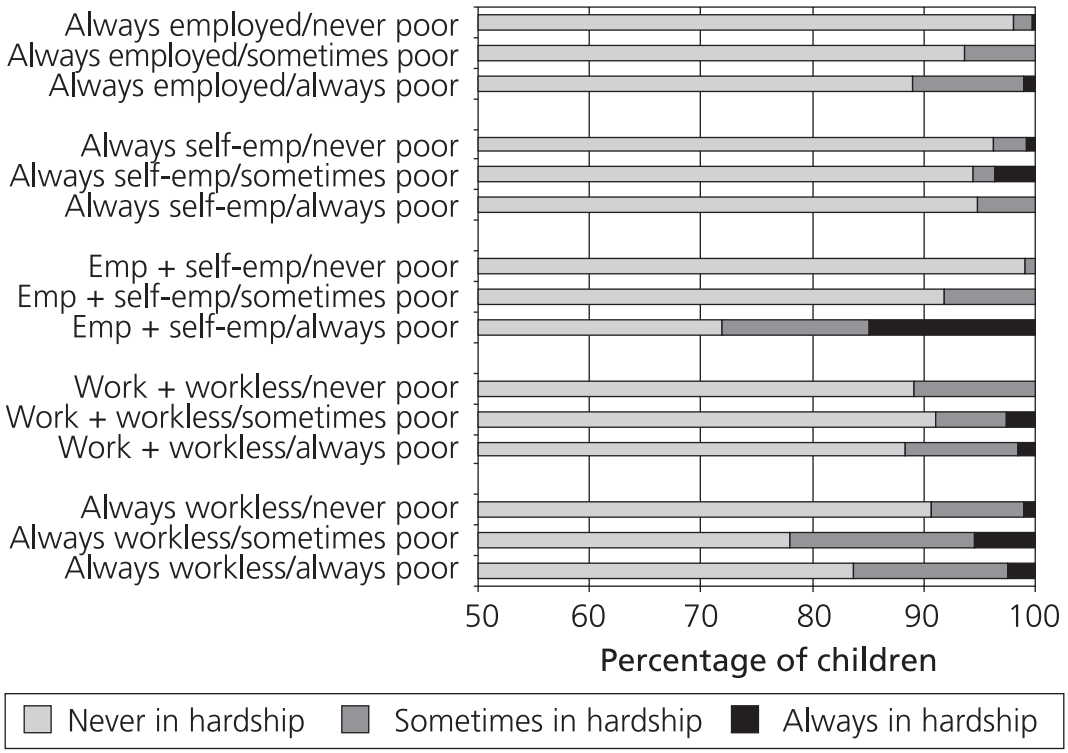
Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Figure 7.5 Housing conditions hardship dynamics by work and poverty dynamics (FACS), 2003 to 2006



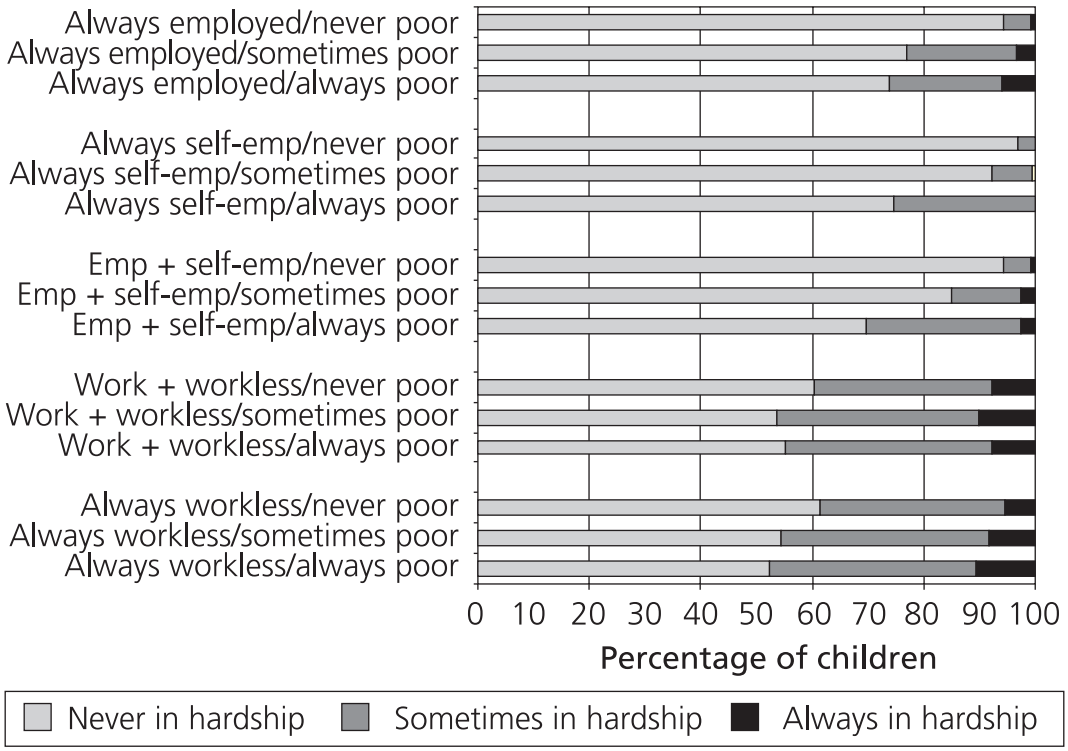
Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 7.6 Housing conditions hardship dynamics by work and poverty dynamics (BHPS), 1998 to 2006



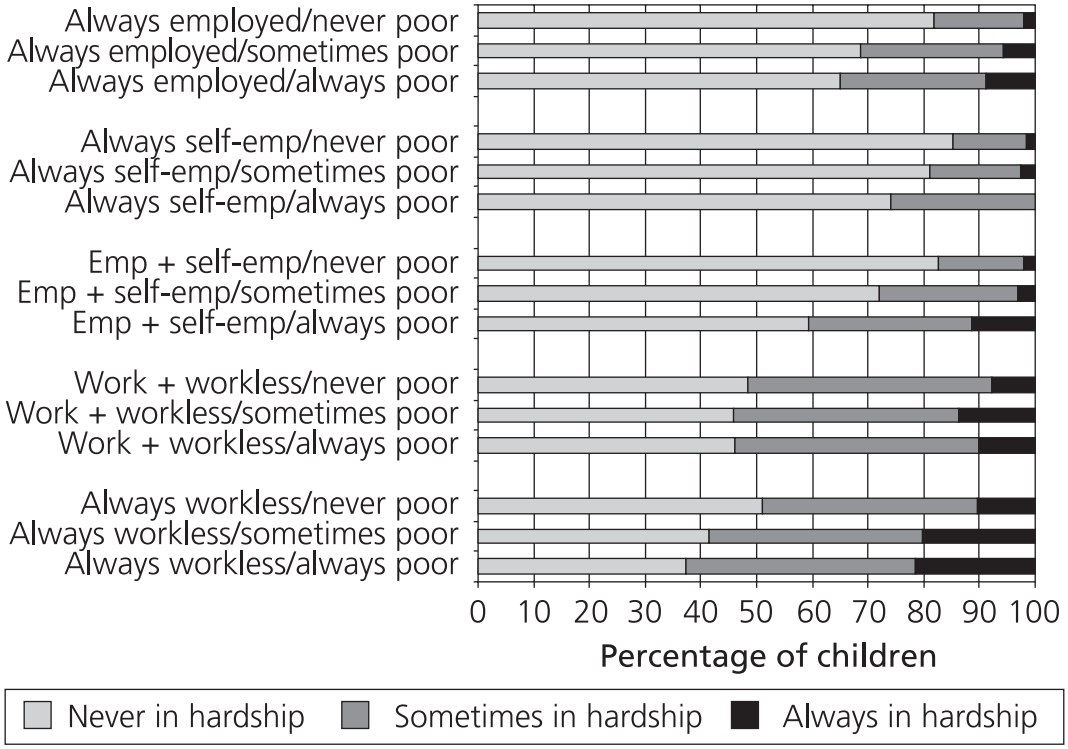
Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Figure 7.7 Problem debt hardship dynamics by work and poverty dynamics (FACS), 2003 to 2006



Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 7.8 Financial difficulties hardship dynamics by work and poverty dynamics (FACS), 2003 to 2006



Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 7.9 Financial difficulties hardship dynamics by work and poverty dynamics (BHPS), 1998 to 2006

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Table 7.9 Proportions of children never in hardship, by poverty experience (FACS), 2003 to 2006

	Type of hardship					
Percentage of children never in hardship	**Daily living**	**Consumer durables**	**Housing conditions**	**Problem debt**	**Financial difficulties**	**All measures**
Poverty experience						
Never in poverty	85.6	81.0	97.4	92.5	80.3	65.7
Sometimes in poverty	49.6	46.8	90.2	68.1	58.2	26.4
Always in poverty	33.1	31.5	81.8	59.7	48.3	16.0

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

Table 7.10 Proportions of children never in hardship, by poverty experience (BHPS), 1998 to 2006

	Type of hardship				
Percentage of children never in hardship	Daily living	Consumer durables	Housing conditions	Financial difficulties	All measures
Poverty experience					
Never in poverty	70.0	86.1	97.7	76.8	54.9
Sometimes in poverty	36.0	60.0	90.6	50.5	19.8
Always in poverty	12.2	38.2	86.4	44.9	6.7

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

Source: BHPS, 1996 to 2006.

Table 7.11 Proportions of child poverty and hardship which are transitory, by year (FACS), 2003 to 2006

Percentage of child poverty or hardship which is transitory	Poverty	Daily living hardship	Consumer durables hardship	Housing conditions hardship	Problem debt hardship	Financial difficulties hardship
2003	19.4	15.3	20.3	42.9	25.7	22.9
2004	18.2	13.3	19.9	35.8	27.9	22.6
2005	20.0	19.0	22.4	38.7	33.2	28.8
2006	14.9	n/a	n/a	38.4	28.5	28.3
All years	18.2	15.7	20.8	39.3	28.7	25.6

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

Table 7.12 Proportions of child poverty and hardship which are transitory, by year (BHPS), 1998 to 2006

Percentage of child poverty or hardship which is transitory	Poverty	Daily living hardship	Consumer durables hardship	Housing conditions hardship	Financial difficulties hardship
1997-1999	14.5	15.3	12.1	36.0	24.2
2000-2002	22.6	15.4	17.0	33.4	28.3
2003-2005	23.4	20.2	15.1	22.1	24.0
All years	19.1	16.5	14.0	30.6	25.5

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

Source: BHPS, 1996 to 2006.

Table 7.13 Proportions of child poverty and hardship which are transitory, by work status (FACS), 2003 to 2006

Percentage of child poverty or hardship which is transitory	Poverty	Daily living hardship	Consumer durables hardship	Housing conditions hardship	Problem debt hardship	Financial difficulties hardship
Employed	25.5	21.8	27.0	39.0	29.9	30.4
Self-employed	25.2	30.1	33.7	52.8	40.5	36.6
Workless	10.8	9.5	13.1	37.4	26.0	17.6

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

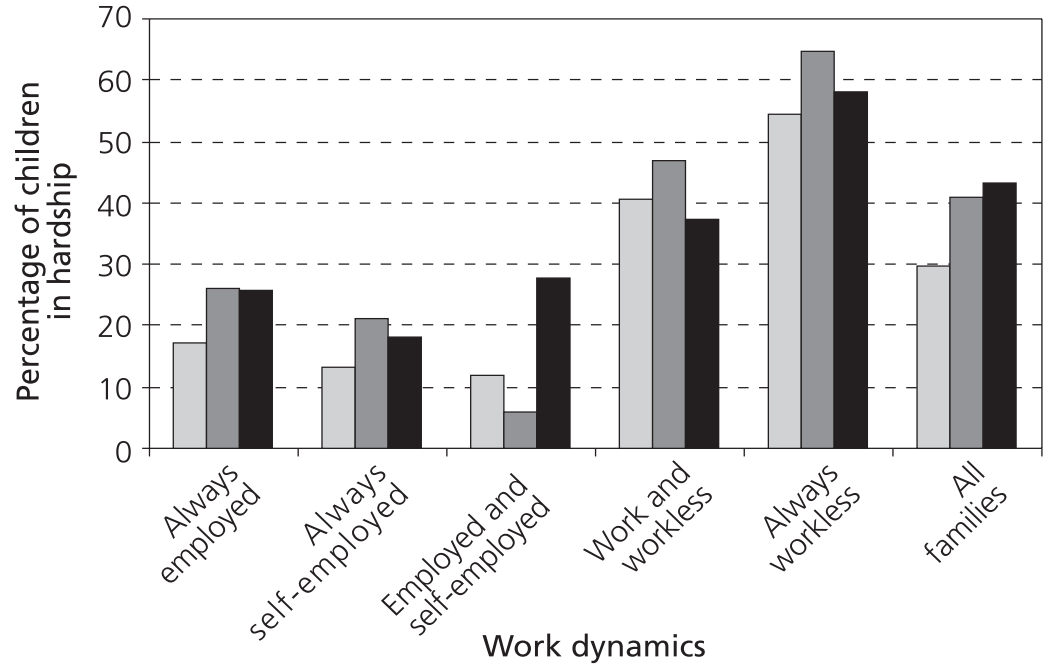
Table 7.14 Proportions of child poverty and hardship which are transitory, by work status (BHPS), 1998 to 2006

Percentage of child poverty or hardship which is transitory	Poverty	Daily living hardship	Consumer durables hardship	Housing conditions hardship	Financial difficulties hardship
Employed	25.9	22.3	16.2	45.9	28.8
Self-employed	23.9	16.3	16.3	13.1	29.2
Workless	12.4	6.7	9.1	26.1	19.7

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

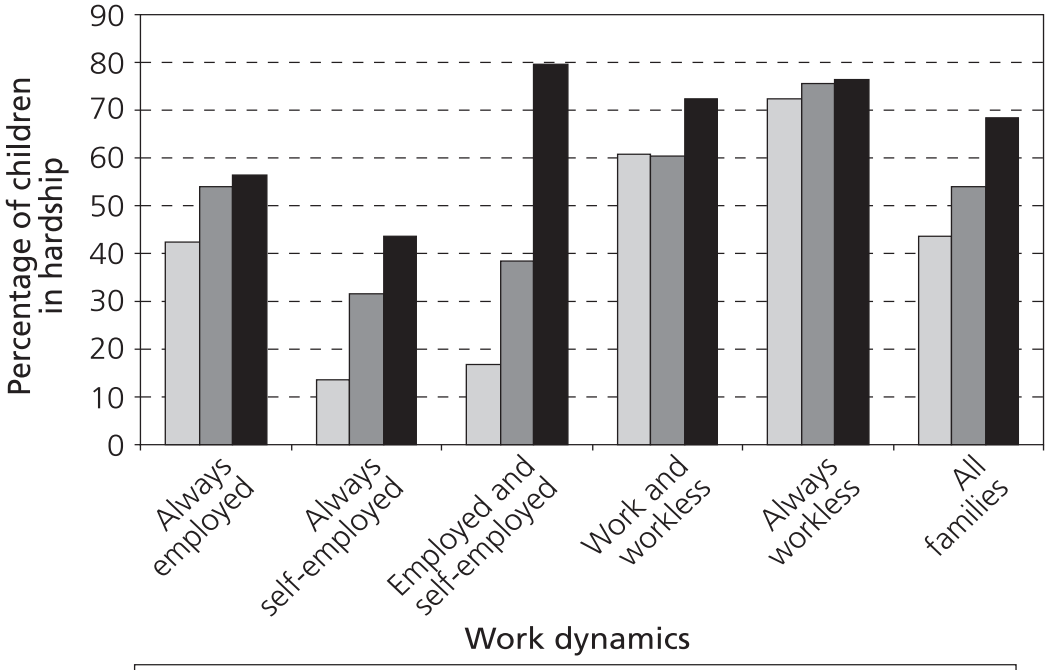
Source: BHPS, 1996 to 2006.

Figure 7.10 Daily living hardship by poverty duration and work dynamics (FACS), 2003 to 2005



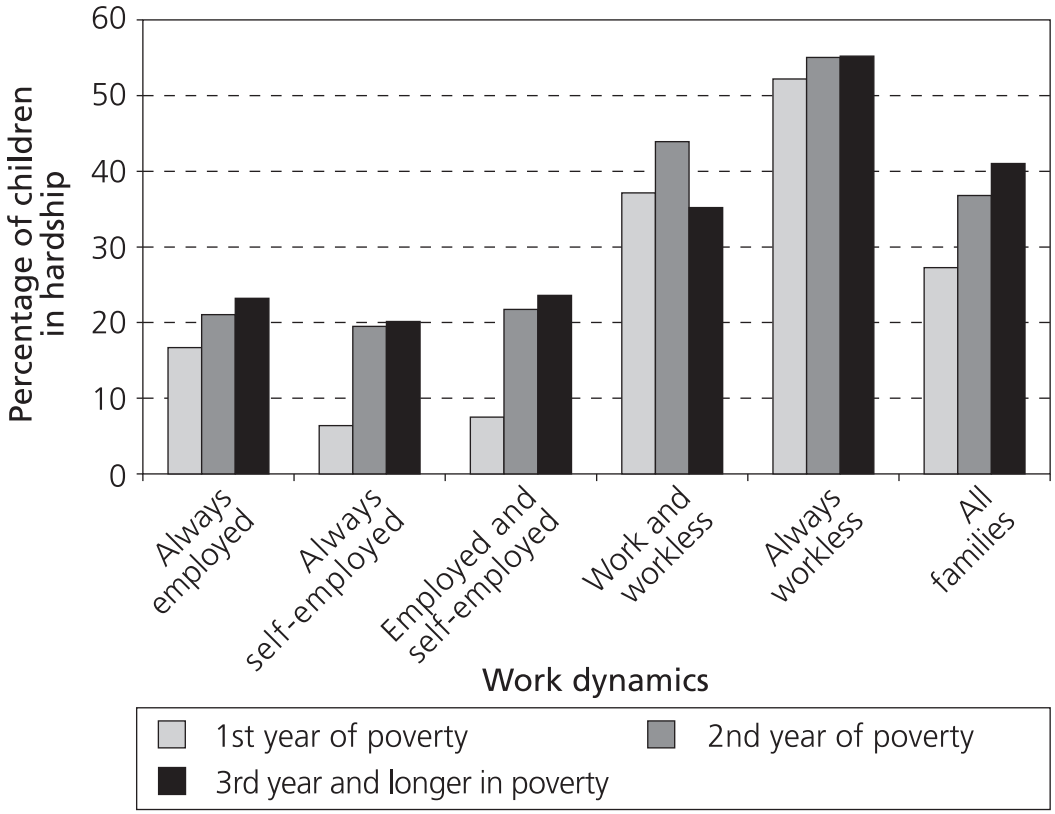
Note: The variables underpinning daily living hardship were not available in 2006.
Base: All children in GB in 2003 to 2005. Sample size: 15,243 families.
Source: FACS, 2001 to 2005.

Figure 7.11 Daily living hardship by poverty duration and work dynamics (BHPS), 1998 to 2006



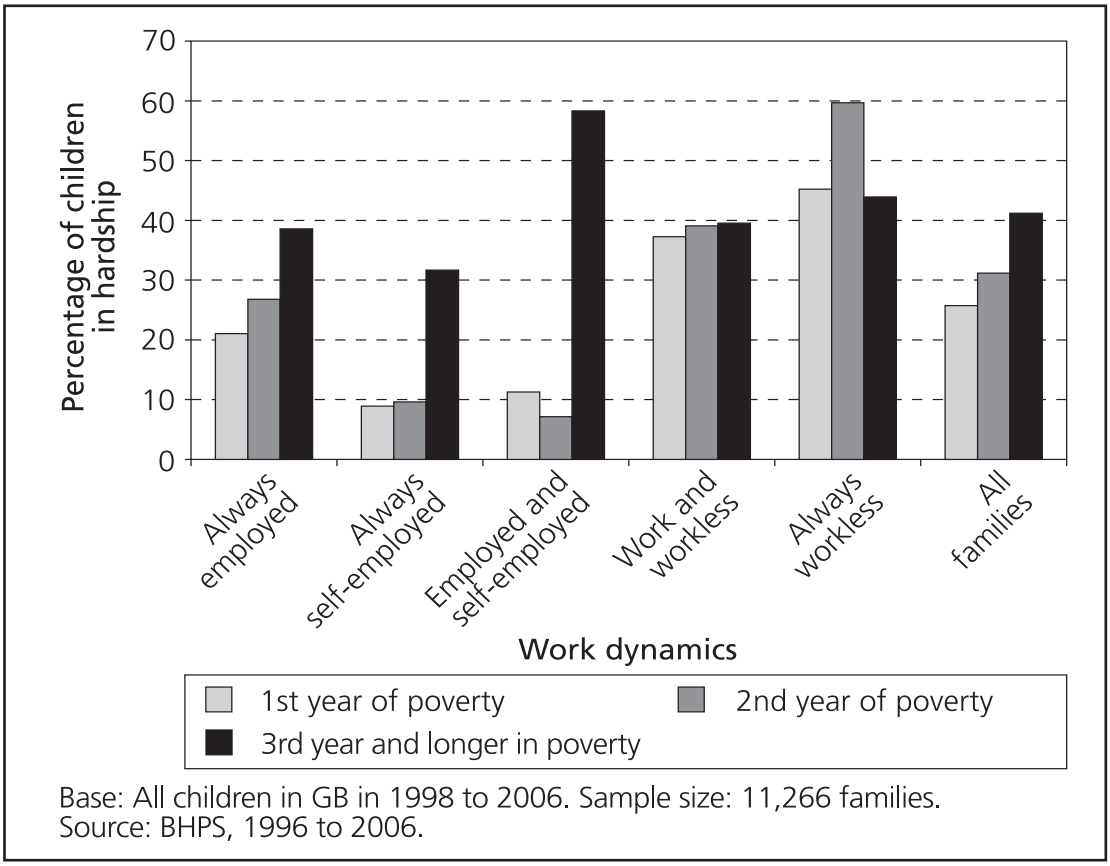
Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Figure 7.12 Consumer durables hardship by poverty duration and work dynamics (FACS), 2003 to 2005



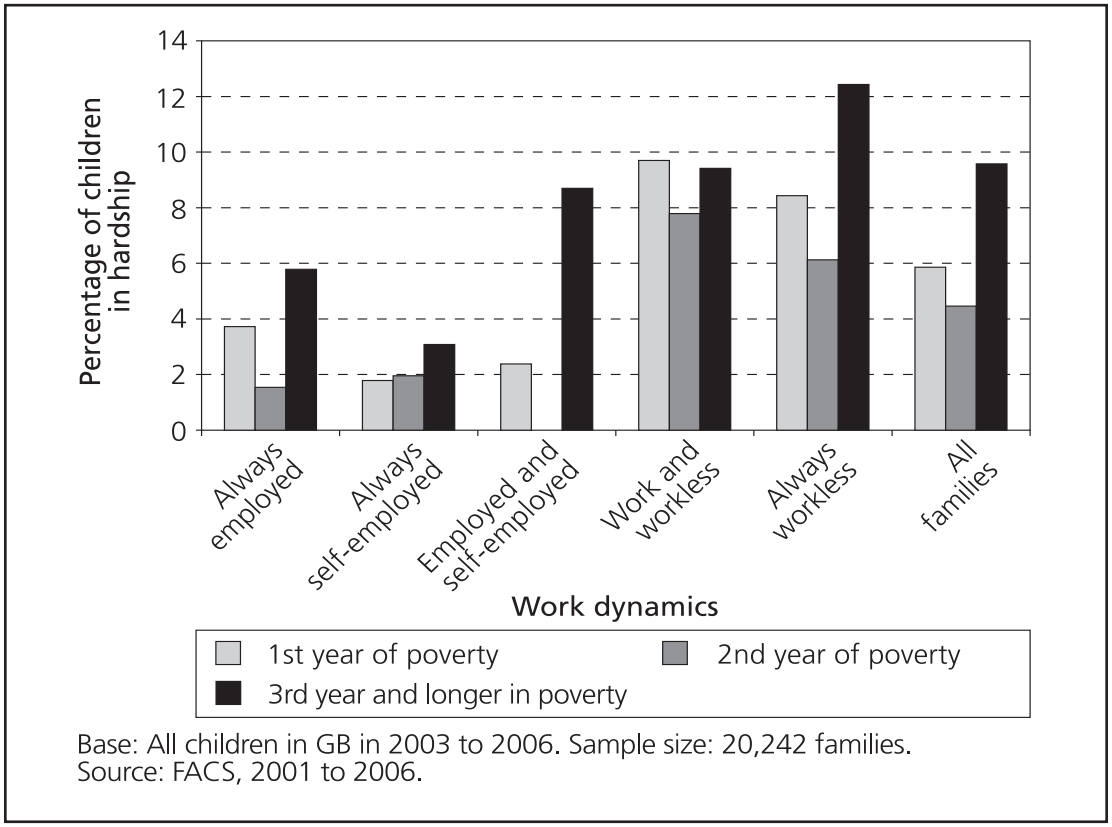
Note: The variables underpinning consumer durables hardship were not available in 2006.
Base: All children in GB in 2003 to 2005. Sample size: 15,243 families.
Source: FACS, 2001 to 2005.

Figure 7.13 Consumer durables hardship by poverty duration and work dynamics (BHPS), 1998 to 2006



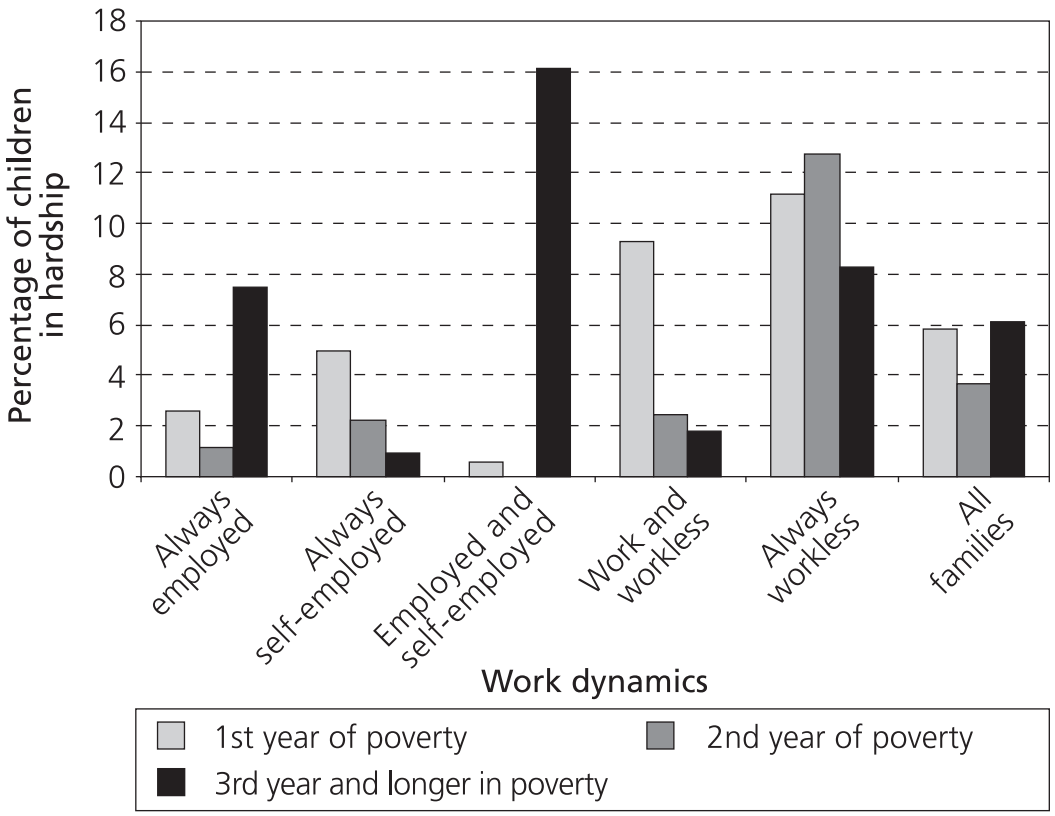
Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Figure 7.14 Housing conditions hardship by poverty duration and work dynamics (FACS), 2003 to 2006



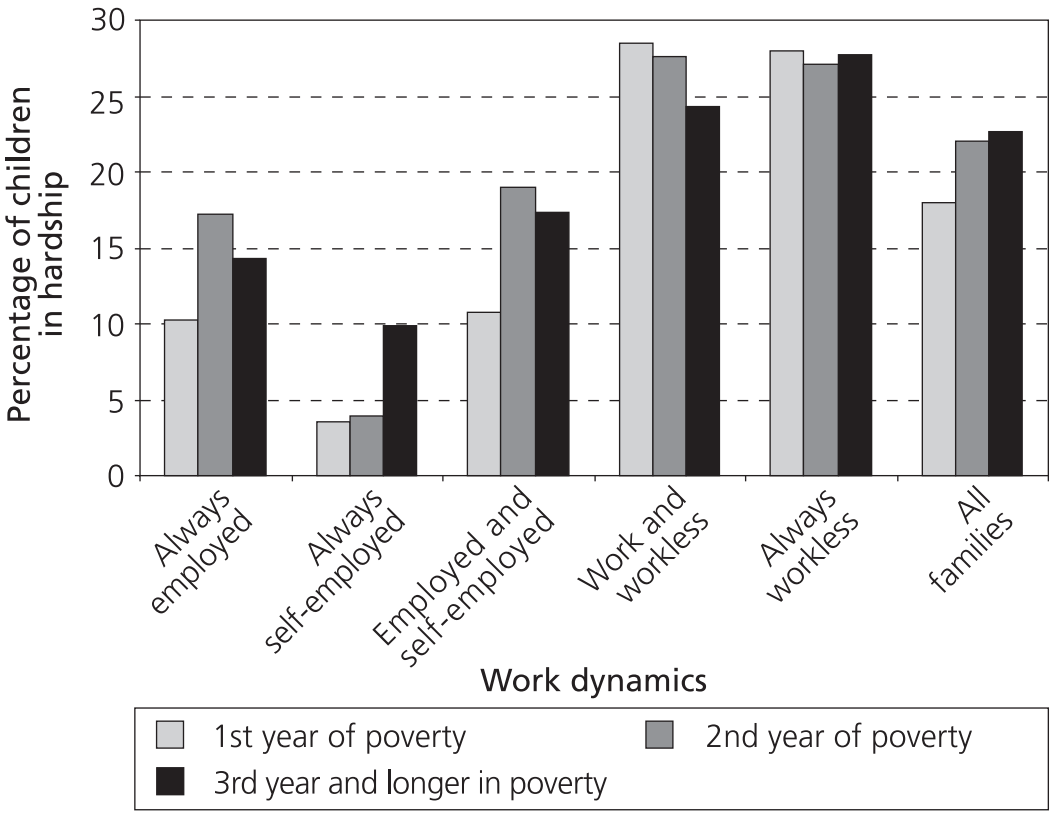
Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 7.15 Housing conditions hardship by poverty duration and work dynamics (BHPS), 1998 to 2006



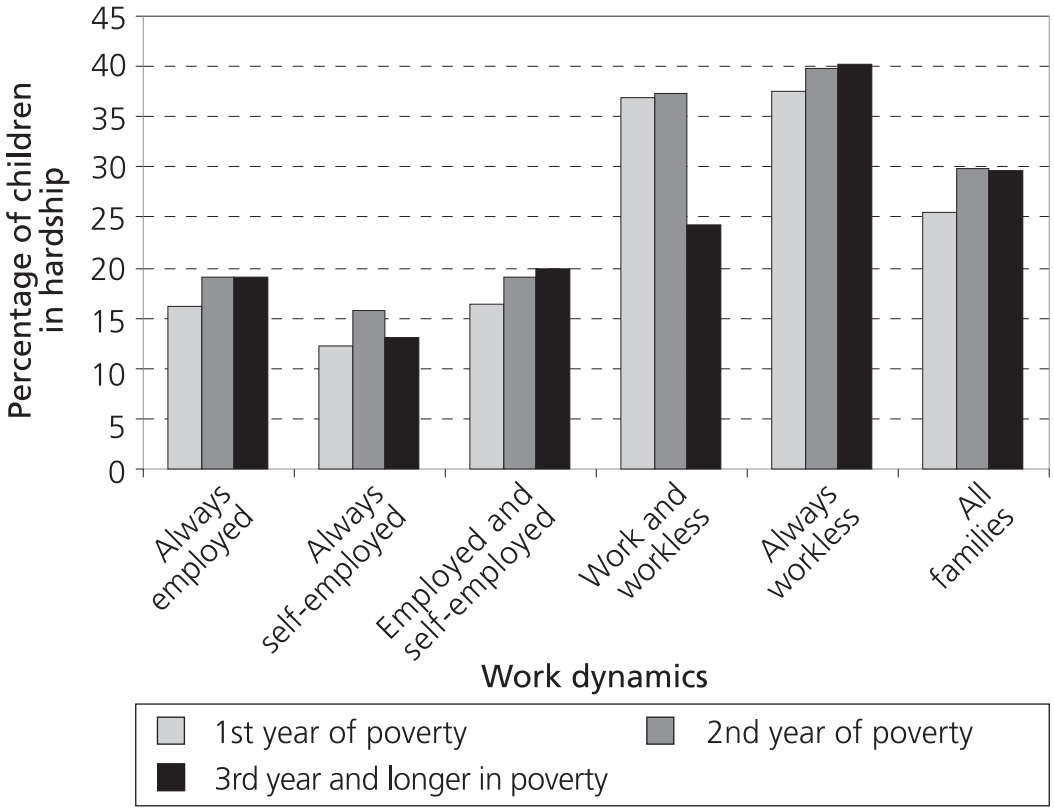
Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

Figure 7.16 Problem debt hardship by poverty duration and work dynamics (FACS), 2003 to 2006



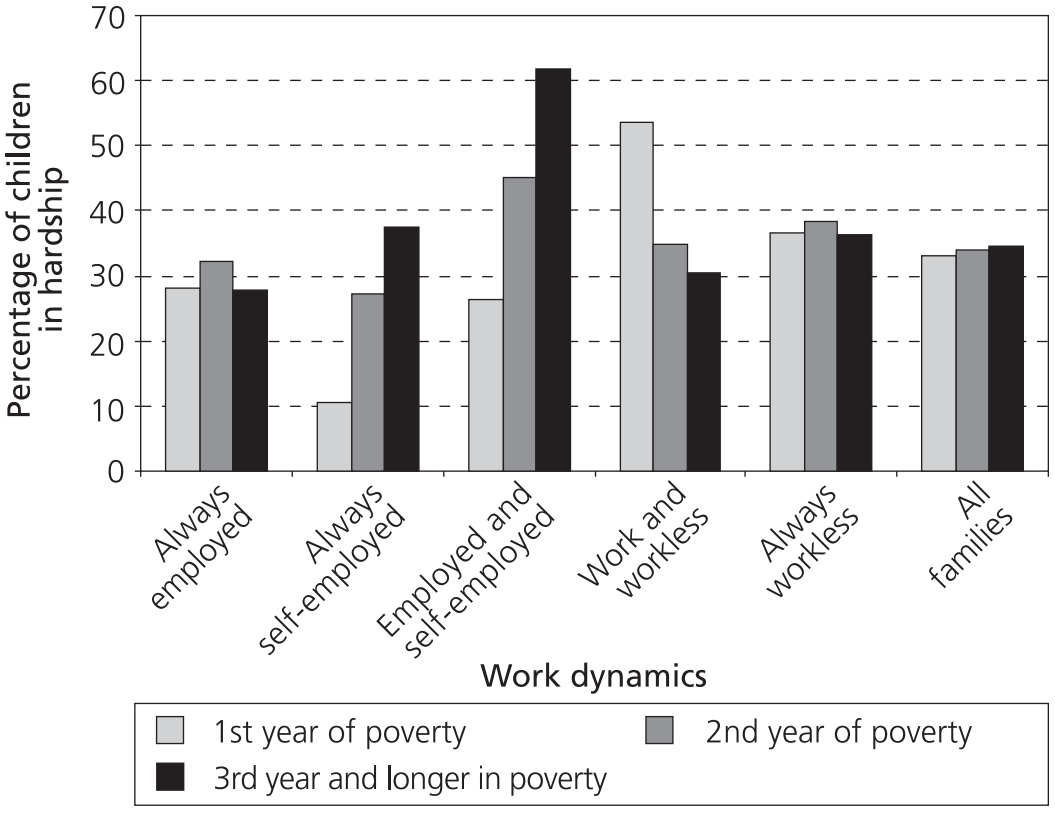
Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 7.17 Financial difficulties hardship by poverty duration and work dynamics (FACS), 2003 to 2006



Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.
Source: FACS, 2001 to 2006.

Figure 7.18 Financial difficulties hardship by poverty duration and work dynamics (BHPS), 1998 to 2006



Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.
Source: BHPS, 1996 to 2006.

8 Which children are more likely to live in a household with a low income, and which children are more likely to live in a household with a low living standard?

This chapter examines the differences in the characteristics of households with children with low incomes, and households with children with low living standards.

The findings are:

- Compared with all children, children in poverty are more likely to come from: a lone parent, workless or self-employed family; a large family; a family with young children; a family with poorly-educated parents; a non-white family.
- The same is true when comparing children in hardship with all children.
- Compared with children in poverty, children in hardship are more likely to come from a lone parent family, a workless family, a large family, or a family with young children.

This chapter examines the differences in the characteristics of households with children with low incomes, and households with children with low living standards. Part of the motivation for this chapter arises from wondering whether a different impression of who is 'poor' might arise if measures of living standards other than disposable income were used. The chapter therefore compares the composition of children in households in poverty (i.e. below 60 per cent of median income) with those in households in hardship (as defined in Section 3.4). Note that this is done one characteristic at a time: Chapter 9 asks whether the risk factors of having a low income differ significantly from those of having a low living standard using multivariate regression techniques.

Tables 8.1 to 8.30 show the composition of children in various definitions of poverty and hardship (according to other measures of living standards), including long-term poverty and hardship (long-term is defined as three consecutive annual interviews in this state). The analysis has been undertaken separately for each dataset, but using, as far as is possible, a consistent set of characteristics and explanatory variables. The characteristics considered are:

- family type and economic status (combined);
- number of children;
- age of youngest child;
- parental education;
- ethnicity.

To understand the principle behind these tables, consider Table 8.1. The right-most cell in the top row says that 37.7 per cent of children live in a couple family with two adults in work. The other cells in the top row show what fraction of children in poverty, or various forms of hardship, or joint poverty and hardship, live in a couple family with two adults in work. If the incidence of poverty and hardship were unrelated to this characteristic, then every other cell in the top row would show a proportion around 37.7 per cent. In reality, far fewer than 37.7 per cent of children in various forms of poverty and hardship live in a couple family with two adults in work, from which one should conclude that children living with two working adults face a lower than proportionate risk of poverty and/or hardship. The rest of the chapter considers how all the characteristics are related to the risk of poverty and/or hardship.

8.1 Family type and economic status

Tables 8.1 to 8.6 analyse the composition of children in poverty and in hardship (separately and together) by family type and economic status.

They show that:

- In all datasets, the risk of poverty is disproportionately low for children in couples with two employees. The same is true for children in couples with two workers and couples with at least one self-employed adult. In BHPS only, the same is also true for children in couples with one person employed. The risk is disproportionately high for other children except for children with a working lone parent: in this case the risk of poverty is disproportionately lower in the Expenditure and Food Survey (EFS) and the Family Resources Survey (FRS) but higher in the British Household Panel Survey (BHPS) and the Families and Children Study (FACS).
- In comparison with those in poverty, hardship is generally less concentrated amongst the self-employed.
- Children in households which are in both poverty and hardship are disproportionately to be found in lone parent families. For example, children in lone parent families make up around 25 per cent of all children, but constitute just over 40 per cent of those in poverty, just over 50 per cent of those in hardship, and around 55 per cent of those in poverty and hardship (based on Table 8.2, but the pattern is clear for the other measures and datasets, except spending hardship).
- The risk of long-term income poverty is disproportionately high for children in workless families and, in FACS, for one-earner couples, and therefore disproportionately low for children with a working lone parent (in both BHPS and FACS). The risk of long-term hardship is disproportionately high for children in workless couple families and all lone parent families, and the risk of long-term poverty and hardship is disproportionately high for children in workless families, especially lone parents.

8.2 Number and age of youngest child

Tables 8.7 to 8.12 examine the composition of children in poverty and in hardship (separately and together) by the number of children in the family. They show that:

- Children in families with three or more children are disproportionately likely to be in income poverty, and in hardship (examined separately). The housing conditions measure shows the biggest concentration amongst children from these large families: over half of children in housing conditions hardship live in large families, but around 30 per cent of all children live in large families.
- Children in long-term poverty or hardship, or children in both poverty and hardship, are increasingly concentrated amongst families with three or more children.

Tables 8.13 to 8.18 examine the composition of children in poverty and hardship (separately and together) by the age of the youngest child in the family.

They show that:

- Children in families with younger children are disproportionately more likely to be in income poverty and/or hardship (examined separately). As with large families, this is particularly the case for housing conditions hardship, with around 60 per cent of children in housing conditions hardship in FACS living in families where the youngest child is aged under five. This pattern is least evident for financial difficulties hardship (in other words, children in families with younger children are still more likely than other children to be in a family experiencing financial difficulties, but the effect is not as strong as it is for the other measures of hardship).
- The same pattern is true for the long-term poverty and hardship measures, except for being in long-term financial difficulties hardship in the BHPS.

8.3 Parental education

Tables 8.19 to 8.24 examine the composition of children in poverty and in hardship (separately and together) by the highest qualification or education level of the adults in the family. They show that:

- Those with lower levels of parental education face a disproportionate risk of income poverty and all measures of hardship. As the level of parental education is closely related to the adults' earnings and the family income, this is unsurprising. However, the pattern is the least noticeable for the financial difficulties measure of hardship (in other words, children in families with highly-educated parents are still less likely than other children to be in a family experiencing financial difficulties, but the effect is not as strong as it is for the other measures of hardship).
- Similar patterns can be seen for long-term poverty and hardship.

8.4 Ethnicity

Tables 8.17 to 8.20 examine the composition of children in poverty and in hardship (separately and together) by the ethnicity of the adults in the family.[17] They show that:

- In general, all ethnic minorities face a disproportionately high risk of income poverty and hardship (the most frequent exception is children in Indian families, although it does vary with the measure). Of course, the fact that the overwhelming majority of children in the UK have parents who are white means that the overwhelming majority of children in poverty and hardship live in families where the adults are white.

Table 8.1 Composition of children in poverty and hardship, by family type and work status (EFS), 2001/02 to 2006

	Children in income poverty (< 60 per cent of median)	Children in spending hardship (< 60 per cent of median)	Children in joint income and spending hardship (< 60 per cent of median)	All children
Percentage of children in families				
Couple:				
2 workers, employed	5.9	15.2	2.9	37.7
2 workers, self-employed	5.1	3.8	1.7	11.4
1 worker, employed	18.7	23.1	21.5	18.4
1 worker, self-employed	6.6	3.3	3.6	3.7
No workers	20.3	16.6	24.7	6.2
Couple, all	**56.6**	**62.0**	**54.4**	**77.4**
Lone parent:				
Employed	8.3	8.7	5.7	10.0
Self-employed	0.9	1.2	0.5	0.9
No work	34.3	28.1	39.5	11.8
Lone parent, all	**43.5**	**38.0**	**45.7**	**22.7**

Base: All children in the UK. Sample size: 12,918 families.

Source: EFS, 2001/02 to 2006.

[17] It should be noted that FACS and BHPS give a different impression of the proportion of children from ethnic minorities than FRS and EFS. It is not clear whether this is due to the design of the survey and the resulting sample composition, or the particular definition of the ethnicity variable. Ethnicity is measured only for adults in FRS and BHPS and only for the respondent (usually the mother) in the FACS. In the EFS, it is measured only for the Household Reference Person, defined as the person who owns or is legally responsible for paying the rent of the accommodation. If there are joint householders then the household reference person will be the one with the higher income. If the income is the same, then the eldest householder is taken.

Table 8.2 Composition of children in poverty and hardship, by family type and work status (FRS), 2004/05 to 2006/07

	Children in poverty (< 60 per cent median)	Children in poverty (< 70 per cent median)	Children in hardship	Children in joint poverty and hardship (< 60 per cent median)	Children in joint poverty and hardship (< 70 per cent median)	All children
Percentage of children in families						
Couple						
2 workers, employed	5.9	8.3	10.1	1.8	2.9	36.3
2 workers, self-employed	6.5	6.1	2.1	1.5	1.6	7.9
1 worker, employed	22.3	25.1	18.9	16.1	18.6	21.1
1 worker, self-employed	7.4	6.0	2.6	3.5	2.7	4.1
No workers	17.2	14.2	15.5	22.5	19.6	5.9
Couple, all	**59.3**	**59.7**	**49.2**	**45.4**	**45.4**	**75.3**
Lone parent						
Employed	7.0	9.8	15.0	6.8	9.8	11.4
Self-employed	0.5	0.5	0.5	0.3	0.2	0.4
No work	33.1	30.2	35.4	47.5	44.5	12.8
Lone parent, all	**40.6**	**40.5**	**50.9**	**54.6**	**54.5**	**24.6**

Base: All children in UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 8.3 Composition of children in poverty and hardship, by family type and work status (FACS), 2001 to 2006

	Children in poverty	Children in hardship					All children
		Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	
Percentage of children in families							
Couple:							
2 workers, employed	5.1	10.8	13.5	10.9	10.8	19.4	36.4
2 workers, self-employed	3.5	2.5	2.7	3.2	2.5	4.6	10.9
1 worker, employed	21.6	15.6	15.4	16.2	16.0	15.0	17.4
1 worker, self-employed	5.3	3.0	2.5	3.5	2.5	2.6	4.1
No workers	14.4	13.7	11.4	14.7	12.0	9.7	4.9
Couple, all	**49.9**	**45.6**	**45.5**	**48.5**	**43.8**	**51.3**	**73.7**
Lone parent							
Employed	12.5	13.7	16.0	12.0	16.2	14.3	11.8
Self-employed	1.3	0.8	0.9	0.7	1.0	1.0	0.8
No work	36.2	40.0	37.5	38.9	39.0	33.4	13.7
Lone parent, all	**50.0**	**54.5**	**54.4**	**51.6**	**56.2**	**48.7**	**26.3**

Continued

Table 8.3 Continued

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families						
Couple:						
2 workers, employed	2.7	2.6	2.2	2.6	3.1	36.4
2 workers, self-employed	0.7	0.8	0.8	0.9	1.5	10.9
1 worker, employed	14.4	14.5	13.9	16.3	14.6	17.4
1 worker, self-employed	2.8	2.8	3.8	2.6	2.3	4.1
No workers	18.5	17.0	21.9	16.1	16.4	4.9
Couple, all	**39.1**	**37.7**	**42.6**	**38.5**	**37.9**	**73.7**
Lone parent						
Employed	9.4	10.7	7.1	11.6	10.3	11.8
Self-employed	0.9	0.8	0.5	0.9	0.8	0.8
No work	50.7	50.9	49.8	49.0	51.1	13.7
Lone parent, all	**61.0**	**62.4**	**57.4**	**61.5**	**62.2**	**26.3**

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 8.4 Composition of children in poverty and hardship, by family type and work status (BHPS), 1996 to 2006

	Children in poverty	Children in hardship				All children
		Daily living	Consumer durables	Housing conditions	Financial difficulties	
Percentage of children in families						
Couple:						
2 workers, employed	2.7	19.7	16.6	11.3	23.5	36.4
2 workers, self-employed	7.1	4.7	3.4	6.9	6.7	10.1
1 worker, employed	16.1	19.5	18.2	22.5	20.4	22.4
1 worker, self-employed	10.1	4.6	6.2	6.3	3.4	5.2
No workers	16.2	10.5	10.5	15.1	9.3	4.8
Couple, all	**52.2**	**59.0**	**54.9**	**62.1**	**63.3**	**78.9**
Lone parent						
Employed	11.5	15.3	14.8	6.5	14.9	10.3
Self-employed	2.1	1.9	2.2	1.3	1.7	1.1
No work	34.1	23.8	28.1	30.1	20.1	9.7
Lone parent, all	**47.7**	**41.0**	**45.1**	**37.9**	**36.7**	**21.1**

Continued

Table 8.4 Continued

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families					
Couple:					
2 workers, employed	2.4	1.4	3.1	2.6	36.4
2 workers, self-employed	2.2	1.3	7.0	3.6	10.1
1 worker, employed	14.4	11.2	9.7	15.0	22.4
1 worker, self-employed	6.2	6.4	3.3	5.7	5.2
No workers	18.7	17.5	26.4	19.6	4.8
Couple, all	**43.9**	**37.8**	**49.5**	**46.5**	**78.9**
Lone parent					
Employed	10.5	12.4	3.7	10.4	10.3
Self-employed	1.9	2.1	0.3	2.2	1.1
No work	43.7	47.6	46.4	40.8	9.7
Lone parent, all	**56.1**	**62.1**	**50.4**	**53.4**	**21.1**

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

Table 8.5 Composition of children in long-term poverty and hardship, by family type and work status (FACS), 2003 to 2006

	Children in poverty	Children in hardship					All children
		Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	
Percentage of children in families							
Couple:							
2 workers, employed	3.5	8.1	10.0	9.2	10.1	14.6	37.9
2 workers, self-employed	3.0	1.8	2.0	10.6	1.7	2.7	11.9
1 worker, employed	20.8	14.1	13.2	12.1	17.0	14.0	16.8
1 worker, self-employed	5.5	1.8	3.1	7.7	1.6	1.4	4.0
No workers	15.5	15.4	12.8	8.7	12.5	9.1	4.4
Couple, all	**48.3**	**41.2**	**41.1**	**48.3**	**42.9**	**41.8**	**75.0**
Lone parent							
Employed	11.2	11.7	13.8	14.5	15.4	13.9	12.1
Self-employed	1.2	0.9	0.9	0.0	0.8	1.5	0.9
No work	39.3	46.2	44.2	37.2	41.0	42.8	12.0
Lone parent, all	**51.7**	**58.8**	**58.9**	**51.7**	**57.2**	**58.2**	**25.0**

Continued

Table 8.5 Continued

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families						
Couple:						
2 workers, employed	1.6	1.7	3.8	1.4	1.4	37.9
2 workers, self-employed	0.5	0.0	0.0	1.0	0.0	11.9
1 worker, employed	10.7	11.8	5.1	17.6	14.2	16.8
1 worker, self-employed	0.3	2.2	8.9	1.4	0.6	4.0
No workers	18.0	19.7	13.9	14.2	11.3	4.4
Couple, all	**31.1**	**35.4**	**31.7**	**35.6**	**27.5**	**75.0**
Lone parent						
Employed	7.8	4.9	2.5	6.2	6.0	12.1
Self-employed	1.0	0.8	0.0	0.7	0.6	0.9
No work	60.0	58.8	65.8	57.4	66.0	12.0
Lone parent, all	**68.8**	**64.5**	**68.3**	**64.3**	**72.6**	**25.0**

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

Table 8.6 Composition of children in long-term poverty and hardship, by family type and work status (BHPS), 1998 to 2006

	Children in poverty	Children in hardship				All children
		Daily living	Consumer durables	Housing conditions	Financial difficulties	
Percentage of children in families						
Couple:						
2 workers, employed	2.6	14.2	14.3	6.5	19.2	37.7
2 workers, self-employed	2.8	3.7	2.1	18.6	5.3	10.6
1 worker, employed	14.3	18.1	20.1	10.4	18.4	22.0
1 worker, self-employed	11.1	4.5	7.7	0.0	4.1	5.3
No workers	13.6	10.7	9.1	15.4	6.7	3.9
Couple, all	**44.4**	**51.2**	**53.3**	**50.9**	**53.7**	**79.5**
Lone parent						
Employed	9.9	16.7	14.2	10.8	18.2	10.6
Self-employed	1.7	2.9	3.0	0.0	1.9	1.0
No work	43.8	29.3	29.4	38.3	26.3	9.0
Lone parent, all	**55.4**	**48.9**	**46.6**	**49.1**	**46.4**	**20.6**

Continued

Table 8.6 Continued

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families					
Couple:					
2 workers, employed	4.0	3.4	0.0	1.7	37.7
2 workers, self-employed	0.9	0.4	0.0	2.7	10.6
1 worker, employed	11.6	16.5	24.6	9.7	22.0
1 worker, self-employed	5.6	8.3	0.0	7.9	5.3
No workers	15.5	9.6	0.0	11.1	3.9
Couple, all	**37.6**	**38.2**	**24.6**	**33.1**	**79.5**
Lone parent					
Employed	8.3	9.0	22.2	6.2	10.6
Self-employed	1.8	1.8	0.0	0.6	1.0
No work	52.3	51.0	53.2	60.0	9.0
Lone parent, all	**62.4**	**61.8**	**75.4**	**66.8**	**20.6**

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

Source: BHPS, 1996 to 2006.

Table 8.7 Composition of children in poverty and hardship, by number of children in the family (EFS), 2001/02 to 2006

	Children in income poverty (< 60 per cent of median)	Children in spending hardship (< 60 per cent of median)	Children in joint income and spending hardship (< 60 per cent of median)	All children
Percentage of children in families with				
One child	19.6	16.5	16.2	24.5
Two children	35.9	35.3	33.4	45.3
Three or more children	44.5	48.2	50.4	30.2

Base: All children in the UK. Sample size: 12,918 families.

Source: EFS, 2001/02 to 2006.

Table 8.8 Composition of children in poverty and hardship, by number of children in the family (FRS), 2004/05 to 2006/07

	Children in poverty (< 60 per cent median)	Children in poverty (< 70 per cent median)	Children in hardship	Children in joint poverty and hardship (< 60 per cent median)	Children in joint poverty and hardship (< 70 per cent median)	All children
Percentage of children in families with						
One child	21.1	20.1	23.4	21.2	20.3	25.8
Two children	37.0	38.3	35.8	34.2	34.9	44.7
Three or more children	41.8	41.6	40.8	44.6	44.8	29.5

Base: All children in UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 8.9 Composition of children in poverty and hardship, by number of children in the family (FACS), 2001 to 2006

		Children in hardship					
	Children in poverty	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families							
One child	20.5	21.9	25.5	18.4	20.3	22.6	23.9
Two children	35.6	34.7	36.7	24.4	35.6	38.1	44.9
Three or more children	44.0	43.4	37.9	57.2	44.1	39.2	31.3

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families						
One child	19.9	21.7	15.5	15.5	20.8	23.9
Two children	32.2	34.0	22.9	22.9	34.6	44.9
Three or more children	47.9	44.3	61.6	61.6	44.7	31.3

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 8.10 Composition of children in poverty and hardship, by number of children in the family (BHPS), 1996 to 2006

		Children in hardship				
	Children in poverty	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families						
One child	16.8	21.7	26.7	16.8	23.0	23.9
Two children	35.9	38.0	35.6	22.1	40.7	45.7
Three or more children	47.3	40.2	37.7	61.1	36.3	30.4

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families					
One child	16.3	20.9	12.7	17.5	23.9
Two children	33.2	32.7	19.8	34.6	45.7
Three or more children	50.5	46.5	67.6	47.9	30.4

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

Table 8.11 Composition of children in long-term poverty and hardship, by number of children in the family (FACS), 2003 to 2006

		Children in hardship					
	Children in poverty	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families							
One child	15.9	19.6	21.2	12.6	17.3	19.6	19.8
Two children	33.8	33.1	39.2	19.3	36.7	39.3	48.2
Three or more children	50.3	47.3	39.7	68.1	46.0	41.1	32.0

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families						
One child	17.2	15.0	8.9	14.2	14.2	19.8
Two children	30.3	34.1	20.3	29.1	32.6	48.2
Three or more children	52.6	50.9	70.9	56.7	53.2	32.0

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

Table 8.12 Composition of children in long-term poverty and hardship, by number of children in the family (BHPS), 1998 to 2006

		Children in hardship				
	Children in poverty	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families						
One child	10.4	18.7	22.3	7.0	18.0	20.4
Two children	29.0	35.9	32.8	22.4	43.4	48.2
Three or more children	60.6	45.4	44.9	70.6	38.5	31.4

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families					
One child	11.3	12.3	4.7	11.2	20.4
Two children	26.4	24.7	32.9	35.9	48.2
Three or more children	62.3	63.0	62.4	52.9	31.4

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

Source: BHPS, 1996 to 2006.

Table 8.13 Composition of children in poverty and hardship, by age of youngest child in the family (EFS), 2001/02 to 2006

	Children in income poverty (< 60 per cent of median)	Children in spending hardship (< 60 per cent of median)	Children in joint income and spending hardship (< 60 per cent of median)	All children
Percentage of children in families with youngest child				
Aged under 5	44.0	48.2	50.5	39.8
Aged 5-10	29.6	28.8	28.2	29.2
Aged over 10	26.4	23.0	21.4	31.0

Base: All children in the UK. Sample size: 12,918 families.

Source: EFS, 2001/02 to 2006.

Table 8.14 Composition of children in poverty and hardship, by age of youngest child in the family (FRS), 2004/05 to 2006/07

	Children in poverty (< 60 per cent median)	Children in poverty (< 70 per cent median)	Children in hardship	Children in joint poverty and hardship (< 60 per cent median)	Children in joint poverty and hardship (< 70 per cent median)	All children
Percentage of children in families with youngest child						
Aged under 5	45.6	46.3	46.2	47.4	48.2	40.9
Aged 5-10	32.7	32.4	32.8	33.0	32.4	33.3
Aged over 10	21.7	21.3	21.0	19.6	19.4	25.8

Base: All children in UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 8.15 Composition of children in poverty and hardship, by age of youngest child in the family (FACS), 2001 to 2006

		Children in hardship					
	Children in poverty	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with youngest child							
Aged under 5	49.3	51.2	54.2	58.9	53.9	50.0	44.1
Aged 5-10	31.2	31.6	30.3	26.3	32.2	32.9	33.2
Aged over 10	19.5	17.2	15.5	14.8	13.9	17.1	22.7

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with youngest child						
Aged under 5	52.3	55.4	60.5	55.9	52.5	44.1
Aged 5-10	30.2	28.5	24.4	30.4	30.2	33.2
Aged over 10	17.5	16.1	15.1	13.7	17.3	22.7

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 8.16 Composition of children in poverty and hardship, by age of youngest child in the family (BHPS), 1996 to 2006

		Children in hardship				
	Children in poverty	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families with youngest child						
Aged under 5	49.6	46.0	53.9	53.4	43.8	40.2
Aged 5-10	34.5	34.7	30.2	32.6	35.4	35.8
Aged over 10	15.9	19.3	15.9	14.1	20.9	24.0

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families with youngest child					
Aged under 5	52.3	59.3	57.6	48.1	40.2
Aged 5-10	33.7	28.4	29.1	33.8	35.8
Aged over 10	14.1	12.2	13.3	18.1	24.0

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

Table 8.17 Composition of children in long-term poverty and hardship, by age of youngest child in the family (FACS), 2003 to 2006

		Children in hardship					
	Children in poverty	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with youngest child							
Aged under 5	44.3	46.0	50.6	63.3	46.5	45.8	38.8
Aged 5-10	34.4	34.8	32.0	17.9	38.3	37.3	35.7
Aged over 10	21.3	19.3	17.3	18.8	15.2	16.8	25.5

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with youngest child						
Aged under 5	44.0	53.5	69.6	54.7	46.2	38.8
Aged 5-10	35.1	29.8	12.7	29.1	37.1	35.7
Aged over 10	20.9	16.7	17.7	16.3	16.7	25.5

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

Table 8.18 Composition of children in long-term poverty and hardship, by age of youngest child in the family (BHPS), 1998 to 2006

		Children in hardship				
	Children in poverty	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families with youngest child						
Aged under 5	49.3	43.5	52.5	50.0	35.8	36.4
Aged 5-10	36.4	36.4	30.4	29.2	42.8	38.2
Aged over 10	14.3	20.1	17.1	20.8	21.5	25.4

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families with youngest child					
Aged under 5	53.3	62.2	62.4	28.3	36.4
Aged 5-10	35.8	26.0	4.7	54.5	38.2
Aged over 10	11.0	11.8	32.9	17.2	25.4

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

Source: BHPS, 1996 to 2006.

Table 8.19 Composition of children in poverty and hardship, by parental education (EFS), 2001/02 to 2006

	Children in income poverty (< 60 per cent of median)	Children in spending hardship (< 60 per cent of median)	Children in joint income and spending hardship (< 60 per cent of median)	All children
Percentage of children in families with parent leaving school aged				
16 or before	62.0	65.5	68.3	44.1
After 16, before 19	22.2	19.8	17.6	27.5
19 or after	15.8	14.8	14.1	28.5

Note: Age parent left school refers to the parent who left school the latest.

Base: All children in the UK. Sample size: 12,918 families.

Source: EFS, 2001/02 to 2006.

Table 8.20 Composition of children in poverty and hardship, by parental education (FRS), 2004/05 to 2006/07

	Children in poverty (< 60 per cent median)	Children in poverty (< 70 per cent median)	Children in hardship	Children in joint poverty and hardship (< 60 per cent median)	Children in joint poverty and hardship (< 70 per cent median)	All children
Percentage of children in families with parent leaving school aged						
16 or before	65.5	66.2	71.5	75.2	75.2	48.2
After 16, before 19	15.0	15.1	13.1	11.7	11.8	18.4
19 or after	19.6	18.7	15.4	13.0	13.0	33.4

Note: Age parent left school refers to the parent who left school the latest.

Base: All children in UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 8.21 Composition of children in poverty and hardship, by parental education (FACS), 2001 to 2006

		Children in hardship					
	Children in poverty	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with highest qualification							
None	21.5	23.0	22.1	24.1	19.8	17.7	8.8
NVQ 1/below GCSE	11.4	12.6	11.9	10.0	14.0	10.4	6.3
NVQ 2/GCSE	28.2	27.0	26.5	23.7	29.6	25.2	19.8
NVQ 3/A level	16.3	15.7	16.7	19.6	16.9	17.3	19.6
NVQ 4/5	15.0	15.6	15.3	14.2	14.9	16.6	21.7
College	7.7	6.1	7.6	8.3	4.8	12.8	23.9

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with highest qualification						
None	28.9	29.9	33.7	24.6	26.6	8.8
NVQ 1/below GCSE	12.7	12.3	10.0	13.8	12.8	6.3
NVQ 2/GCSE	29.9	28.1	26.6	31.5	29.7	19.8
NVQ 3/A level	12.5	13.6	16.3	15.0	13.9	19.6
NVQ 4/5	11.8	12.2	10.4	12.3	12.0	21.7
College	4.1	3.9	3.2	2.7	4.9	23.9

Notes: The highest qualification refers to the highest level obtained by either parent. The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 8.22 Composition of children in poverty and hardship, by parental education (BHPS), 1996 to 2006

	Children in poverty	Children in hardship				All children
		Daily living	Consumer durables	Housing conditions	Financial difficulties	
Percentage of children in families with highest qualification						
None	15.7	15.9	18.8	30.8	15.4	7.8
NVQ 1/below GCSE	14.4	10.9	14.8	9.4	7.9	6.5
NVQ 2/GCSE	23.9	19.0	20.8	19.1	19.2	16.8
NVQ 3/A level	12.6	12.4	11.4	9.9	9.8	10.8
NVQ 4/5	27.7	31.5	25.3	26.9	34.9	38.5
College	5.7	10.3	9.0	3.9	12.8	19.5

	Children in joint poverty and hardship				All children
	Daily living	Consumer durables	Housing conditions	Financial difficulties	
Percentage of children in families with highest qualification					
None	19.4	22.4	33.1	20.7	7.8
NVQ 1/below GCSE	16.9	23.1	9.9	12.8	6.5
NVQ 2/GCSE	22.9	20.8	21.6	24.8	16.8
NVQ 3/A level	13.1	10.8	7.8	9.9	10.8
NVQ 4/5	24.6	20.3	25.6	27.5	38.5
College	3.2	2.7	2.0	4.2	19.5

Notes: The highest qualification refers to the highest level obtained by either parent.

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

Table 8.23 Composition of children in long-term poverty and hardship, by parental education (FACS), 2003 to 2006

		Children in hardship					
	Children in poverty	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with highest qualification							
None	25.0	24.7	28.7	25.1	20.8	22.3	7.8
NVQ 1/below GCSE	12.1	14.6	13.1	5.4	17.9	12.4	5.9
NVQ 2/GCSE	27.9	27.3	24.5	18.2	25.7	26.2	19.4
NVQ 3/A level	15.7	15.4	16.8	21.7	17.9	15.7	20.4
NVQ 4/5	13.7	13.3	11.7	12.8	14.3	13.5	21.5
College	5.6	4.6	5.0	16.7	3.4	9.9	25.0

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with highest qualification						
None	31.8	40.1	36.7	26.9	25.0	7.8
NVQ 1/below GCSE	12.7	9.9	10.1	14.3	14.4	5.9
NVQ 2/GCSE	31.5	26.4	30.4	26.6	33.9	19.4
NVQ 3/A level	8.8	10.4	11.4	16.1	10.4	20.4
NVQ 4/5	9.3	8.5	10.1	14.3	12.8	21.5
College	5.9	4.8	1.3	1.7	3.6	25.0

Notes: The highest qualification refers to the highest level obtained by either parent. The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

Table 8.24 Composition of children in long-term poverty and hardship, by parental education (BHPS), 1998 to 2006

	Children in poverty	Children in hardship				All children
		Daily living	Consumer durables	Housing conditions	Financial difficulties	
Percentage of children in families with highest qualification						
None	19.8	18.1	20.9	27.0	21.5	6.9
NVQ 1/below GCSE	16.9	11.3	18.5	10.8	4.9	5.9
NVQ 2/GCSE	22.8	17.3	16.3	29.5	16.6	15.7
NVQ 3/A level	11.6	12.7	10.4	0.3	9.7	10.0
NVQ 4/5	26.7	32.0	25.1	32.3	36.5	40.7
College	2.3	8.5	8.7	0.0	10.8	20.9

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families with highest qualification					
None	24.8	28.8	29.3	32.6	6.9
NVQ 1/below GCSE	18.7	31.7	0.0	13.4	5.9
NVQ 2/GCSE	17.8	15.0	22.2	22.1	15.7
NVQ 3/A level	13.7	8.2	0.0	4.7	10.0
NVQ 4/5	23.9	15.3	48.5	27.2	40.7
College	1.1	0.9	0.0	0.0	20.9

Note: The highest qualification refers to the highest level obtained by either parent.

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

Source: BHPS, 1996 to 2006.

Table 8.25 Composition of children in poverty and hardship, by ethnicity (EFS), 2001/02 to 2006

	Children in income poverty (< 60 per cent of median)	Children in spending hardship (< 60 per cent of median)	Children in joint income and spending hardship (< 60 per cent of median)	All children
Percentage of children in families with ethnicity				
White	78.4	76.0	72.8	88.0
Mixed	1.8	1.2	74.9	1.0
Asian	12.8	14.0	16.5	6.0
Black	4.6	5.7	6.1	3.3
Other	1.6	2.5	2.5	1.1
Unknown	0.8	0.6	0.8	0.7

Base: All children in the UK. Sample size: 12,918 families.

Source: EFS, 2001/02 to 2006.

Table 8.26 Composition of children in poverty and hardship, by ethnicity (FRS), 2004/05 to 2006/07

	Children in poverty (< 60 per cent median)	Children in poverty (< 70 per cent median)	Children in hardship	Children in joint poverty and hardship (< 60 per cent median)	Children in joint poverty and hardship (< 70 per cent median)	All children
Percentage of children in families with ethnicity						
White	74.6	76.9	76.6	73.1	74.8	83.9
Mixed	1.2	1.2	1.5	1.3	1.5	1.0
Indian	2.9	2.6	2.2	2.1	1.9	2.4
Pakistani/ Bangladeshi	10.1	8.9	7.8	10.9	9.7	4.3
Black	5.1	4.8	6.9	7.1	6.9	3.5
Chinese/Other	2.3	1.9	2.1	2.3	2.1	1.5
Unknown	3.7	3.6	2.9	3.1	3.0	3.3

Base: All children in UK. Sample size: 25,249 families.

Source: FRS, 2004/05 to 2006/07.

Table 8.27 Composition of children in poverty and hardship, by ethnicity (FACS), 2001 to 2006

		Children in hardship					
	Children in poverty	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with ethnicity							
White	87.7	88.4	85.7	82.7	88.9	90.3	92.3
Mixed	1.1	1.5	1.6	3.0	2.1	1.6	0.8
Indian	1.5	1.4	1.6	1.6	1.1	1.0	1.4
Other Asian	5.9	4.1	6.0	7.6	3.8	3.3	2.4
Black	3.1	3.9	4.1	3.5	3.5	3.1	2.1
Other	0.8	0.7	1.0	1.7	0.6	0.7	1.0

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with ethnicity						
White	87.1	83.7	79.9	87.4	87.9	92.3
Mixed	1.6	1.6	3.1	2.0	2.1	0.8
Indian	1.3	1.3	1.8	1.1	0.9	1.4
Other Asian	5.5	8.4	9.5	5.5	4.9	2.4
Black	3.9	4.2	4.7	3.5	3.6	2.1
Other	0.6	0.9	1.1	0.5	0.6	1.0

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB. Sample size: 42,556 families.

Source: FACS, 2001 to 2006.

Table 8.28 Composition of children in poverty and hardship, by ethnicity (BHPS), 1996 to 2006

	Children in poverty	Children in hardship				All children
		Daily living	Consumer durables	Housing conditions	Financial difficulties	
Percentage of children in families with ethnicity						
White	86.8	86.7	82.4	69.0	87.5	92.7
Mixed	1.7	1.9	2.3	0.9	1.1	0.8
Indian	2.8	2.3	3.5	1.5	2.6	1.9
Other Asian	4.9	5.9	7.5	18.7	5.5	2.8
Black	3.6	2.9	3.6	9.3	2.9	1.4
Other	0.3	0.2	0.7	0.6	0.4	0.5

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families with ethnicity					
White	83.2	77.6	63.3	84.7	92.7
Mixed	2.6	3.7	0.4	1.6	0.8
Indian	3.3	4.1	2.5	5.0	1.9
Other Asian	5.5	8.1	18.0	4.6	2.8
Black	5.3	6.2	15.8	3.9	1.4
Other	0.1	0.2	0.0	0.2	0.5

Base: All children in GB. Sample size: 16,596 families.

Source: BHPS, 1996 to 2006.

Table 8.29 Composition of children in long-term poverty and hardship, by ethnicity (FACS), 2003 to 2006

		Children in hardship					
	Children in poverty	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with ethnicity							
White	87.4	90.1	84.9	86.3	90.8	92.8	93.8
Mixed	1.2	2.0	2.3	2.9	3.1	2.8	0.6
Indian	1.3	0.8	1.4	2.5	1.0	0.4	1.2
Other Asian	6.9	3.4	7.9	2.5	2.6	1.1	1.9
Black	2.9	3.5	3.1	3.9	2.2	2.8	1.8
Other	0.2	0.2	0.5	2.0	0.3	0.0	0.7

	Children in joint poverty and hardship					
	Daily living	Consumer durables	Housing conditions	Problem debts	Financial difficulties	All children
Percentage of children in families with ethnicity						
White	89.2	79.6	73.4	85.3	92.8	93.8
Mixed	2.0	1.8	7.6	1.8	4.0	0.6
Indian	0.9	1.5	2.5	3.2	0.0	1.2
Other Asian	4.2	13.6	6.3	8.3	1.4	1.9
Black	3.8	3.1	10.1	1.4	1.8	1.8
Other	0.0	0.3	0.0	0.0	0.0	0.7

Note: The variables underpinning daily living and consumer durable hardship were not available in 2006.

Base: All children in GB in 2003 to 2006. Sample size: 20,242 families.

Source: FACS, 2001 to 2006.

Table 8.30 Composition of children in long-term poverty and hardship, by ethnicity (BHPS), 1998 to 2006

	Children in poverty	Children in hardship				All children
		Daily living	Consumer durables	Housing conditions	Financial difficulties	
Percentage of children in families with ethnicity						
White	82.9	83.9	78.5	62.2	81.7	93.2
Mixed	2.8	3.2	3.7	0.0	1.3	0.7
Indian	2.7	2.4	3.5	0.0	2.7	1.9
Other Asian	7.5	8.3	11.7	26.5	11.3	2.6
Black	4.1	2.1	1.8	11.3	2.4	1.1
Other	0.0	0.1	0.8	0.0	0.6	0.5

	Children in joint poverty and hardship				
	Daily living	Consumer durables	Housing conditions	Financial difficulties	All children
Percentage of children in families with ethnicity					
White	79.2	66.0	43.4	85.2	93.2
Mixed	5.1	6.8	0.0	1.5	0.7
Indian	3.9	5.5	0.0	9.2	1.9
Other Asian	6.7	16.0	31.7	0.0	2.6
Black	5.1	5.7	24.9	4.1	1.1
Other	0.0	0.0	0.0	0.0	0.5

Base: All children in GB in 1998 to 2006. Sample size: 11,266 families.

Source: BHPS, 1996 to 2006.

9 Are the risk factors for hardship different from those for poverty? Do the risk factors for hardship change when accounting for income and past income?

This chapter examines the risk factors for poverty, hardship (low living standards), and joint poverty and hardship for families with children. It uses multivariate regression techniques, which means that the impact of particular characteristics of families with children on these risks can be estimated, taking account of other characteristics of the household.

Part of the motivation for doing this is simply to examine which characteristics affect the risk of poverty and hardship for families with children. But another part is to explore which characteristics have opposite impacts on the risk of poverty and the risk of hardship: this would happen if a characteristic increases the risk of poverty but reduces the risk of hardship.

Continued

It finds that:

- The following characteristics increase the risk of poverty: being a couple family rather than a lone parent, given the family's work status; having more children in the family; having a youngest child aged over ten; having adults who are self-employed (rather than employed); having no working adults in the family; having one worker rather than two for couples; having parents with low levels of education; being from a non-white ethnic group; not having a health problem.
- Many of these characteristics are also consistently associated with a higher risk of hardship: having no working adults in the family; having one worker rather than two for couples; having parents with low levels of education; being from a non-white ethnic group.
- But some characteristics have opposite impacts on the risk of hardship and the risk of poverty: being a lone parent family, rather than a couple (conditional on work status); having three or more children; having a youngest child aged over ten; having adults who are self-employed (rather than employed); having a health problem. For these characteristics, it matters whether low income or low living standards are used to define which children are the worst off in society.
- There are small changes in which characteristics have a significant impact on the risk of hardship when account is taken of current income and past income in the regression, but these are hard to generalise.
- The following characteristics are all associated with a greater risk of joint poverty and hardship: having more children in the family; having adults who are self-employed rather than employed; having adults who are workless rather than employed or self-employed; for couples, having one worker rather than two; having parents with low levels of education; having a health problem; and being from a non-white ethnicity.

Chapter 8 considered whether the composition of children in poverty differed from that of children in various forms of hardship, and from all children. It did this by examining one characteristic at a time. This chapter develops that by looking at the risk factors for poverty and hardship using multivariate regression techniques. By using multivariate regression techniques, it is possible to examine the impact of each characteristic, holding all the other characteristics fixed, and also to examine whether the risk factors for poverty differ significantly from those for hardship.

Part of the motivation for doing this is simply to examine which characteristics affect the risk of poverty and hardship. But, as in Chapter 8, part of the motivation for this chapter arises from wondering whether a different impression of which children are the worst off in society – or, in this chapter, which factors are associated with a higher risk of being amongst the worst off in society – might be formed if measures of living standards other than disposable income were used. In other

words, this chapter addresses whether there are any characteristics of households with children which are more closely associated with the risk of poverty than the risk of hardship, even taking account of the other characteristics of the family.

Section 9.1 discusses the risk factors for poverty, and Section 9.2 discusses the risk factors for hardship. Section 9.3 discusses the results of comparisons of these two: in other words, for each characteristic, it compares the impact it has on the risk of poverty with the impact on the risk of hardship. This section shows that some characteristics have opposite effects on the risk of poverty and hardship, and one response to this might be to focus on those families with children which are both in poverty and hardship, and so the risk factors for such joint poverty and hardship are examined in Section 9.4. Section 9.5 discusses the risk factors for long-term poverty and hardship.

Box 9.1 gives details of how the results were derived. Summary tables of results are given in this chapter.

Box 9.1 Methodology

The results in this chapter relate to the risk factors for relative poverty and hardship, using a number of measures of hardship. All the outcomes of interest are binary variables, and so the risk factors have been estimated using logit regressions (see Glossary). For the Family Resources Survey (FRS) only, two measures of poverty have been used: having a household income below 60 per cent of median income, and having a household income below 70 per cent of median income. The higher poverty line has been analysed as the Government's combined relative low income and material deprivation indicator uses 70 per cent of median income as the low income threshold.

The regressions were performed separately for each dataset, but using, as far as is possible, a consistent set of characteristics. These characteristics include those which are specifically analysed as risk factors:

- whether the family is a couple or lone parent;
- number of children (coded as 1, 2 and 3 or more);
- age of youngest child (in bands);
- work status;
- whether there are one or two workers (for couples);
- whether more than one family lives in the household;
- parental education (highest level attained by either parent for couples);
- whether a parent has a health problem (not available in the FES/Expenditure and Food Survey (EFS));
- ethnicity.

Continued

Characteristics which were included only as control variables and are not examined as risk factors include:

- age of parents (the mean age for couples, and entered as a quadratic);
- the financial year of the survey;
- the region.

Some of the regressions also include current or past income. Past income was defined as follows:

- for the Families and Children Study (FACS), this was the average weekly income from the past 24 months, and a seven-category variable for the poverty experience over those 24 months, where data on income in each month over the previous 24 months had been created using information from the work histories (see Browne and Paull, forthcoming);
- past income and poverty for the British Household Panel Survey (BHPS) includes the same variables, but with the average income and poverty experience calculated only over the three current observed values at the three consecutive interviews leading up to and including the interview under analysis.

In order to avoid specifying too precisely the underlying relationship between living standards and income, the independent (or explanatory, or right-hand-side) variables included a fifth-order polynomial of income (i.e., income, income squared, income cubed, income raised to the fourth power and income raised to the fifth power). As Chapter 3 states, the income measure in FACS is family-level income; for the other surveys, it is household-level income.

All tests of statistical significance are at the five per cent level. Tests of whether the coefficients were significantly different from zero used the so-called robust standard errors. Tests of whether the two coefficients on a given characteristic were significantly different from each other across each pair of regressions made use of the covariance between the two sets of coefficients. The full sets of coefficients from the regressions are not shown.

All the analysis is at the family level using unweighted data.

9.1 What are the risk factors for being in poverty?

Table 9.1 summarises the results from the regressions that show how the risks of poverty for families with children are related to household characteristics.

There is a great deal of consistency between the regressions about which characteristics increase the risk of poverty. The following are all associated with a greater risk of poverty in all regressions, given the other characteristics in the regressions (with cases where there was no significant impact on the risks noted in brackets):

- Being a couple family rather than a lone parent (this is not the case in BHPS: it is possible this reflects the compositional differences between the BHPS sample of families and those of the other datasets (see Section 3.1)).
- Having more children in the family.
- Having a youngest child aged over ten (this is not the case in BHPS).
- Having adults who are self-employed rather than employed.
- Having no working adults in the family.
- For couples, having one worker rather than two.
- Having parents with low levels of education.
- Being in a family with no health problems (not in BHPS, nor for being below 70 per cent of median income in FRS).
- Being from a family with a non-white ethnicity.

Two of these results are perhaps counter-intuitive:

- Chapter 8 showed that the risk of poverty is higher for workless couples than workless lone parents, and higher for one-earner couples than working lone parents. But the regressions underpinning this chapter have included work status and family type as separate explanatory variables; the finding in this chapter is that, having accounted for work status, the risk of poverty is higher for couple families than lone parent families.
- The fact that being in a family with a health problem is associated with a lower risk of poverty probably arises because some adults with health problems receive extra benefits or tax credits because of their poor health or disability; see Chapter 5 of Brewer *et al.* (2008), for further discussion.

The one characteristic where the regressions give differing impressions of the risks is:

- In FRS, EFS and BHPS, families in households with more than one family have a lower risk of poverty, but results based on FACS indicate a higher risk for those in households with more than one family. As noted in Box 9.1, this may reflect the use of a family measure of income in FACS rather than the household measure used in the other surveys.

9.2 What are the risk factors for hardship?

Table 9.2 summarises the results from the regressions that show how the risks of hardship for families with children are related to characteristics. Three or four (depending on the dataset) regression models were estimated for each measure of hardship:

1 A regression based on the entire sample of families with children, otherwise identical to that for poverty, whose results were reported in Table 9.1.

2 A regression based on the entire sample of families with children which also accounts for current income.

3 A regression based on the entire sample of families with children which accounts for past income (defined precisely in Box 9.1).

4 A regression based on the sample of families with children in poverty.

Regression model 1 is comparable to that used in Section 9.1. The purpose of the additional regression models 2 to 4 (over the one that was implemented for poverty) is to examine:

- Which relationships hold within the entire population and within the poverty group (by comparing models 1 and 4).
- Which groups are at risk of hardship even having accounted for their income (model 2).
- Which groups are at risk of hardship even having accounted for past income (model 3).

There is less consistency between the regressions about which characteristics increase the risk of hardship given the other characteristics in the regressions, than there was for the regressions about poverty; this probably reflects that the hardship measures are capturing different concepts.

In regression model 1, the following are all associated with a greater risk of hardship:

- Having adults who are employed rather than self-employed (except spending hardship, consumer durables hardship (BHPS), housing conditions hardship (FACS and BHPS), and financial difficulties hardship (BHPS), where there is no significant impact on the risk).
- Having adults who are workless rather than employed or self-employed.
- For couples, having one worker rather than two (except housing conditions hardship (BHPS), where there is no significant impact on the risk).
- Having parents with low levels of education.
- Having a health problem (except consumer durables hardship (BHPS), where there is no significant impact on the risk).
- Being from a non-white ethnicity (except for financial difficulties hardship (FACS), where there is no significant impact on the risk).

The characteristics where the regressions give differing impressions of the risks are:

- Being a lone parent rather than a couple, which raises the risk of hardship for all but two of the hardship measures, reduces the risk of spending hardship, and has no significant impact on housing conditions hardship (BHPS).
- Having more children in the family is associated with a higher risk of hardship for all measures except for consumer durables hardship (FACS and BHPS); this

may reflect that families with more children have greater need for consumer durables than small families.

- Having the youngest child aged over ten has no consistent pattern at all: it is associated with a higher risk of material deprivation (FRS) and problem debt hardship, a lower risk of consumer durable hardship (FACS and BHPS), and has no significant impact on the risk of the other (i.e. the majority of the) hardship measures.
- Families in households with more than one family have a lower risk of most forms of hardship, but a higher risk of housing conditions hardship (FACS and BHPS) and financial difficulties hardship (BHPS), and no significant change in the risk of spending hardship (EFS) or daily living hardship (FACS).

Regression model 2 shows how these characteristics change the risk of hardship when account is taken of differences in income (by accounting for income in the regression). In general, taking account of differences in income has little impact on which characteristics are associated with a higher or lower risk of hardship. In particular, compared with the results from regression model 1, discussed above, when account is taken of differences in income:

- being in a couple is never associated with a greater risk of hardship, and therefore is consistently associated with a reduced risk of hardship (or has no association);
- having the youngest child aged over ten is associated with a lower risk of consumer durable hardship (FACS and BHPS) and financial difficulties hardship (FACS), and has no significant or consistent impact on the risk of the majority of the hardship measures.

There are few or no important changes to the impact of:

- having more children in a family;
- having adults who are employed rather than self-employed;
- having adults who are workless rather than employed or self-employed;
- couples, having one worker rather than two;
- being in a household with more than one family;
- having more educated parents
- having a parent with a health problem; and
- being from a non-white ethnicity.

Regression 3 shows how these characteristics change the risk of hardship when account is taken of differences in past income (by accounting for past income in the regression) for FACS and BHPS only. In general, taking account of differences in past income rather than current income has little impact on which characteristics are associated with a higher or lower risk of hardship: there are a handful of

instances where the statistical significance of a relationship is different between models 2 and 3, see Table 9.2 for full details.

Regression model 4 in Table 9.2 examines the risk factors of being in hardship amongst those families in poverty. The main purpose of this is to see whether the findings discussed above are also true for those families with children in poverty. In general, there were more cases than the other three regression models where characteristics had no statistically significant impact on the risk of hardship. This could reflect the smaller sample size (which makes detecting impacts more difficult), or could reflect a genuine fact that some of the risk factors are not important for those within poverty. Amongst those in poverty, the following are all associated with a greater risk of hardship:

- Being a lone parent rather than a couple, which raises the risk of hardship for most of the hardship measures (for spending hardship, housing conditions hardship (FACS and BHPS) and financial difficulties hardship (BHPS), there is no significant impact on the risk).
- Having adults who are employed rather than self-employed (except housing conditions hardship (FACS and BHPS), where there is no significant impact on the risk).
- Having adults who are workless rather than employed or self-employed (except consumer durables hardship (BHPS) and financial difficulties (BHPS), where there is no significant difference between workless and employed families).
- Having parents with low levels of education.
- Having a health problem (except consumer durables hardship (BHPS) and housing conditions hardship (BHPS), where there is no significant impact on the risk).
- Being from a non-white ethnicity (but there are many cases where there is no significant impact on the risk: mixed, Indian and other ethnicities for material deprivation hardship (FRS), other ethnicities for spending hardship (EFS), Asian and black ethnicities for housing conditions hardship (FACS), Asian and other ethnicities for problem debt hardship (FACS), Asian and black ethnicities for financial difficulties hardship (FACS), and all non-white ethnicities for financial difficulties hardship (BHPS)).

The characteristics where the regressions give differing impressions of the risks are:

- Having more children in the family, which is associated with higher hardship risk for most measures, but with a lower risk of consumer durables hardship (BHPS), and there is no significant impact on the risk of consumer durables hardship (FACS) or financial difficulties hardship (FACS or BHPS).
- Having the youngest child aged over ten, which mostly has no significant impact on the risks of hardship amongst those in poverty: the exceptions are that it is associated with a higher risk of financial difficulties hardship (BHPS), and a lower risk of spending hardship and consumer durables hardship (BHPS).

- For couples, having one worker rather than two, which increases the risk of most hardship measures, except housing conditions hardship (BHPS), where it lowers the risk, and consumer durables hardship (BHPS) and housing conditions hardship (FACS and BHPS), where there is no significant impact on the risk.
- Families in households with more than one family, which have a lower risk of most forms of hardship, but a higher risk of housing conditions hardship (FACS and BHPS) and financial difficulties hardship (BHPS), and no significant change in the risk of spending hardship, daily living hardship (FACS), or consumer durables hardship (BHPS).

9.3 Which characteristics have opposite effects on the risk of being in poverty and the risk of being in hardship?

It is possible to compare the results from the regressions of poverty and of hardship to see which characteristics impact on the risks of poverty and hardship in the same direction (i.e. increase the risk of both, or decrease the risk of both), and which characteristics have opposite impacts on the risks (i.e. increase the risk of one and decrease the risk of the other). It is this latter group for which it matters whether we use low income or low living standards to define poverty for children. This is done by comparing the coefficients in the regressions reported in Section 9.1 with those from regression model 2 in Section 9.2.

The characteristics which both increase the risk of poverty and the risk of hardship (according to regression model 1) are:

- Having no working adults in the family.
- For couples, having one worker rather than two.
- Having parents with low levels of education.
- Being from a non-white ethnicity.

The characteristics which have opposing impacts on the risk of poverty and the risk of hardship – i.e. increase one and decrease the other – are:

- Being a couple rather than a lone parent family, which is mostly associated with a higher risk of poverty and a lower risk of hardship.
- Having an older youngest child, which is mostly associated with a higher risk of poverty, but has different impacts on different measures of hardship.
- Having more children in the family, which is associated with a higher risk of poverty, and an inconsistent impact on the risk of hardship (it raises the risk for all hardship measures except consumer durable hardship (FACS and BHPS)).
- Having a self-employed adult in the family, rather than employees, which is associated with a higher risk of poverty and a lower risk of hardship.

- Having an adult with a health problem, which is mostly associated with a lower risk of poverty and a higher risk of hardship.

The remaining factor, being in a multi-family household, has no consistent associations with either poverty or hardship.

9.4 What are the risk factors for being in joint poverty and hardship?

One reaction to the fact that poverty and hardship can give different impressions of which groups are the poorest is to examine which types of families are likely to be in joint poverty and hardship. Table 9.3 summarises the results from the regressions that show how the risk of joint poverty and hardship is related to characteristics (this also includes the combination of being in material deprivation and below 70 per cent of median income, as this is one of the measures of child poverty monitored by the Government)[18].

There is a good deal of consistency between the regressions; the following characteristics are all associated with a greater risk of joint poverty and hardship:

- Having more children in the family.
- Having adults who are self-employed rather than employed, which increases the risk for a few measures of joint poverty and hardship, but has no significant impact on the risk of the official combined poverty and material deprivation indicator (FRS), joint poverty and: spending hardship, daily living hardship (FACS), consumer durable hardship (FACS), housing conditions hardship (FACS), problem debt hardship (FACS), financial difficulties hardship (FACS).
- Having adults who are workless rather than employed or self-employed.
- For couples, having one worker rather than two.
- Having parents with low levels of education.
- Having a health problem (this has no significant impact on the risk of joint poverty (60 per cent of median income) and material deprivation (FRS), joint poverty and consumer durables hardship (FACS and BHPS) and joint poverty and housing conditions (BHPS)).
- Being from a non-white ethnicity.

The characteristics where the regressions give differing impressions of the risks are:

- Being a couple family rather than a lone parent family, which reduces the risk for joint poverty and material deprivation hardship (FRS), daily living hardship

[18] Model 4 of Table 9.2 showed the impact of characteristics on the risk of hardship amongst families in poverty; Table 9.3 shows, for all families, the impact of characteristics on the risk of joint poverty and hardship.

(BHPS), consumer durables hardship (FACS and BHPS) and problem debt hardship (FACS). It raises the risk only in the case of joint poverty and spending hardship, and there is no significant impact on the risk of joint poverty (60 per cent of median income) and material deprivation (FRS), joint poverty and daily living hardship (FACS), housing conditions hardship (FACS and BHPS), financial difficulties hardship (FACS and BHPS).

- Having a youngest child aged over ten, which raises the risk for many of the joint poverty and hardship measures, but lowers the risk for joint poverty and consumer durables hardship (BHPS), and has no significant impact on the risk of joint poverty and spending hardship, joint poverty and daily living hardship (BHPS) and joint poverty and housing conditions hardship (BHPS).
- Families in a multi-family household, which have a higher risk for joint poverty and housing conditions hardship (FACS and BHPS), and joint poverty and financial difficulties hardship (FACS), but a lower risk for joint poverty and material deprivation hardship (FRS), daily living hardship (BHPS), and consumer durables hardship (BHPS). There is no significant impact on the risk of joint poverty and spending hardship, daily living hardship (FACS), consumer durables hardship (FACS), problem debts (FACS) and financial difficulties hardship (FACS).

9.5 What are the risk factors for being in long-term poverty and/or long-term hardship?

Table 9.4 examines the risk factors of being in long-term poverty and (separately) long-term hardship (in FACS and BHPS only). In this analysis, there were few characteristics which had a significant impact on the risks of all forms of long-term hardship, but this may be a consequence of very few families being in long-term hardship.

The following are all associated with a greater risk of long-term poverty in both regressions (with cases where there was no significant impact on the risks noted in brackets):

- Being a lone parent family rather than a couple (this is not the case in FACS).
- Having more children in the family.
- Having a youngest child aged over ten.
- Having adults who are self-employed rather than employed.
- Having no working adults in the family.
- For couples, having one worker rather than two.
- Having parents with low levels of education.
- Being from a family with a non-white ethnicity (in BHPS) or an Asian ethnicity (FACS).
- Living in a household with more than one family (this is not the case in BHPS).

Being from a family with health problems has no significant impact on the risk of long-term poverty.

The following characteristics are all associated with a greater risk of long-term hardship:

- Being a lone parent rather than a couple (with no exceptions).
- Having more children in the family (except for long-term consumer durables hardship (FACS) and financial difficulties hardship (FACS), where there was no significant impact on the risk).
- Having adults who are workless rather than employed or self-employed (except for long-term housing conditions hardship (FACS and BHPS) and financial difficulties hardship (BHPS), where there is no significant impact on the risk).
- For couples, having one worker rather than two (except for long-term housing conditions hardship (FACS and BHPS), where there is no significant impact on the risk).
- Having parents with low levels of education (except for long-term housing conditions hardship (BHPS), where there is no significant impact on the risk).
- Having a health problem (except for long-term consumer durables hardship (BHPS) and housing conditions hardship (BHPS), where there is no significant impact on the risk).
- Being from a non-white ethnicity (except that there are many instances where there are no significant impacts on the risk).

The characteristics for which the regressions give differing impressions of the impact on the risks of long-term hardship are:

- Having the youngest child aged over ten, which raises the risk of long-term daily living hardship (BHPS), problem debt hardship (FACS) and lowers the risk of long-term financial difficulties hardship (FACS), but has no significant impact on the risk of the others.
- Having adults who are self-employed rather than employed, which raises the risk of long-term housing conditions hardship (FACS and BHPS), but lowers the risk of daily living hardship (FACS), problem debt hardship (FACS) and financial difficulties hardship (FACS), and has no significant impact on the risk of the others.
- Living in a multi-family household, which is associated with a lower risk of long-term consumer durables hardship (FACS and BHPS), but a higher risk of long-term housing conditions hardship (BHPS), problem debts (FACS) and financial difficulties hardship (BHPS).

Finally, Table 9.5 examines the risk factors of being in joint long-term poverty and long-term hardship (in FACS and BHPS only). In this analysis, there were few characteristics which had a significant impact on the risks, reflecting the very low number of families who are in both long-term poverty and hardship.

The following characteristics are all associated with a greater risk of joint long-term poverty and long-term hardship (there were many exceptions to these where there were no significant impact on the risks; these are not listed, but can be seen in Table 9.5):

- Being a lone parent rather than a couple.
- Having more children in the family.
- Having the youngest child aged over ten.
- Having adults who are self-employed rather than employed.
- Having adults who are workless rather than employed or self-employed.
- For couples, having one worker rather than two.
- Having parents with low levels of education.
- Being from a non-white ethnicity.

Living in a multi-family household is associated with a lower risk of joint long-term poverty and hardship, and having a health problem has no significant impact on the risk of joint long-term poverty and hardship.

There were no cases where the regressions gave differing impressions of the impact of the characteristics on the risks of joint long-term poverty and hardship.

Table 9.1 Impact of family characteristics on the risk of poverty for families with children

	FRS 60 per cent median	EFS 60 per cent median	FACS 60 per cent median	BHPS 60 per cent median	FRS 70 per cent median
Couple	+	+	+	•	+
Number of children					
Two > one	+	+	+	+	+
Three > one	+	+	+	+	+
Three > two	+	+	+	+	+
Age of youngest child					
5-10 > under 5	+	•	+	•	+
Over 10 > under 5	+	+	+	•	+
Over 10 > 5-10	+	•	+	•	+
Work status:					
Self-employed > employed	+	+	+	+	+
Workless > employed	+	+	+	+	+
Workless > self-employed	+	+	+	+	+
Two workers (> one)	–	–	–	–	–
Multi-family household	–	–	+	–	–
More-educated parents	–	–	–	–	–
Parent has health problem	–	n/a	–	•	•
Non-white ethnicity:					
Mixed	•	n/a	n/a	n/a	+
Indian	+	n/a	n/a	n/a	+
Pakistani/ Bangladeshi	+	n/a	n/a	n/a	+
Asian	n/a	+	+	n/a	n/a
Black	+	+	+	n/a	+
Other	+	+	•	n/a	+
All	n/a	n/a	n/a	+	n/a

Notes: + means the characteristic is associated with a greater risk of poverty, – means the characteristic is associated with a reduced risk of poverty, and • means that no simple inferences could be drawn. Based on regression models with the following sample sizes: EFS, 12,736 families; FRS, 25,249 families; FACS, 41,300 families and BHPS, 13,140 families.

Table 9.2 Impact of family characteristics on the risk of hardship for families with children

Regression model: 1 entire sample 2 with income controls 3 with past income controls 4 poverty sample	Material deprivation (FRS)			Spending hardship (EFS)			Daily living (FACS)				Daily living (BHPS)				Consumer durables (FACS)				Consumer durables (BHPS)				Housing conditions (FACS)				Housing conditions (BHPS)				Problem debts (FACS)				Financial difficulties (FACS)				Financial difficulties (BHPS)			
	Model			Model			Model				Model				Model				Model				Model				Model				Model				Model				Model			
	1	2	4	1	2	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Couple	–	–	–	+	•	•	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	•	•	•	•	•	–	–	–	–	–	–	–	–	–	–	–	•
Number of children																																									
Two > one	•	•	•	+	+	+	•	–	–	•	+	•	•	•	–	–	–	•	–	–	–	–	•	•	•	•	•	•	•	•	+	+	•	+	•	•	•	•	•	•	•	•
Three > one	+	+	+	+	+	+	+	+	•	+	+	+	•	+	•	–	–	•	–	–	–	–	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	•	+	+	+	•
Three > two	+	+	+	+	+	+	+	+	+	+	+	+	•	•	+	•	–	•	•	•	•	•	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	•	+	+	+	•
Age of youngest child																																									
5-10 > under 5	+	•	•	•	•	–	•	–	–	–	•	•	•	•	–	–	–	–	–	–	–	•	–	–	–	–	•	•	•	•	•	•	•	•	•	–	•	•	•	•	•	•
Over 10 > under 5	+	•	•	•	•	–	•	•	_	•	•	•	•	•	–	–	–	•	–	–	–	–	•	•	•	•	•	•	•	•	+	+	•	•	•	–	–	•	•	•	•	+
Over 10 > 5-10	•	•	•	•	•	•	+	•	•	•	•	•	•	•	•	•	–	•	–	–	–	–	•	•	•	+	•	•	•	•	+	•	•	•	•	–	•	•	•	•	•	+
Work status:																																									
Self-employed > employed	–	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	•	–	•	•	•	–	•	•	•	•	•	•	•	•	–	–	–	–	–	–	–	–	•	–	•	–
Workless > employed	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	•	•	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	•	•	•
Workless > self-employed	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	•	•	+
Two workers (> one)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	•	•	–	–	–	•	•	•	•	+	–	–	–	–	–	–	•	•	–	•	•	•
Multi-family household	–	–	–	•	•	•	–	–	–	–	•	•	•	•	–	–	–	–	–	–	–	•	+	+	+	+	+	+	+	+	–	–	•	–	–	–	–	–	+	+	+	+
More-educated parents	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Parent has health problem	+	+	+	n/a			+	+	+	+	+	+	+	+	+	+	+	+	•	•	•	•	+	+	+	+	+	+	+	•	+	+	+	+	+	+	+	+	+	+	+	+

Continued

Table 9.2 Continued

Model: 1 entire sample 2 with income controls 3 with past income controls 4 poverty sample	Material deprivation (FRS) Model			Spending hardship (EFS) Model			Daily living (FACS) Model				Daily living (BHPS) Model				Consumer durables (FACS) Model				Consumer durables (BHPS) Model				Housing conditions (FACS) Model				Housing conditions (BHPS) Model				Problem debts (FACS) Model				Financial difficulties (FACS) Model				Financial difficulties (BHPS) Model			
	1	2	4	1	2	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Non-white ethnicity:																																										
Mixed	+	•	•	n/a			n/a				n/a				n/a				n/a				n/a				n/a				n/a				n/a				n/a			
Indian	+	+	•	n/a			n/a				n/a				n/a				n/a				n/a				n/a				n/a				n/a				n/a			
Pakistani/ Bangladeshi	+	+	+	n/a			n/a				n/a				n/a				n/a				n/a				n/a				n/a				n/a				n/a			
Asian	n/a			+	+	+	+	+	+	+	n/a				+	+	+	+	n/a				+	+	•	•	n/a				+	•	•	•	•	•	–	•	n/a			
Black	+	+	+	+	+	+	+	+	+	+	n/a				+	+	+	+	n/a				•	•	•	•	n/a				+	+	•	+	•	•	•	•	n/a			
Other	+	+	•	+	+	•	+	+	•	+	n/a				+	+	+	+	n/a				+	+	+	+	n/a				+	+	+	•	•	•	•	+	n/a			
All	n/a			n/a			n/a				+	+	+	+	n/a				+	+	+	+	n/a				+	+	+	+	n/a				n/a				+	•	•	•

Notes: + means the characteristic is associated with a greater risk of hardship, – means the characteristic is associated with a reduced risk of hardship, and • indicates no inferences could be drawn. Based on regressions with sample sizes of families: EFS, 12,736; FRS, 25,249; FACS, 41,300; and BHPS, 13,140. See text for a full description of the models.

Table 9.3 Impact of family characteristics on the risk of joint poverty and hardship for families with children

	Material deprivation (FRS, 60 per cent)	Material deprivation (FRS, 70 per cent)	Spending hardship (EFS)	Daily living (FACS)	Daily living (BHPS)	Consumer durables (FACS)	Consumer durables (BHPS)	Housing conditions (FACS)	Housing conditions (BHPS)	Problem debts (FACS)	Financial difficulties (FACS)	Financial difficulties (BHPS)
Couple		–	+		–	–	–			–		
Number of children												
Two > one	+	+	+	+	+	+				+	+	+
Three > one	+	+	+	+	+	+		+	+	+	+	+
Three > two	+	+	+	+	+	+	+	+	+	+	+	+
Age of youngest child												
5-10 > under 5	+	+						–				
Over 10 > under 5	+	+		+			–			+	+	+
Over 10 > 5-10	+	+		+		+		+		+	+	+
Work status:												
Self-employed > employed	+				+		+		+			+
Workless > employed	+	+	+	+	+	+	+	+	+	+	+	+
Workless > self-employed	+	+	+	+	+	+	+	+	+	+	+	+
Two workers (> one)	–	–	–	–	–	–	–	–	–	–	–	–
Multi-family household	–	–			–		–	+	+		+	
More-educated parents	–	–	–	–	–	–	–	–	–	–	–	–
Parent has health problem		+	n/a	+	+			+		+	+	+

Continued

Table 9.3 Continued

	Material deprivation (FRS, 60 per cent)	Material deprivation (FRS, 70 per cent)	Spending hardship (EFS)	Daily living (FACS)	Daily living (BHPS)	Consumer durables (FACS)	Consumer durables (BHPS)	Housing conditions (FACS)	Housing conditions (BHPS)	Problem debts (FACS)	Financial difficulties (FACS)	Financial difficulties (BHPS)
Non-white ethnicity:												
Mixed			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Indian	+	+	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pakistani/ Bangladeshi	+	+	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Asian	n/a	n/a	+	+	n/a	+	n/a	+	n/a	+	+	n/a
Black	+	+	+	+	n/a	+	n/a	+	n/a	+	+	n/a
Other	+	+	+	+	n/a	+	n/a	+	n/a		+	n/a
All	n/a	n/a	n/a	n/a	+	n/a	+	n/a	+	n/a	n/a	+

Notes: + means the characteristic is associated with a greater risk of joint poverty and hardship, – means the characteristic is associated with a reduced risk of joint poverty and hardship, and a blank means that no simple inferences could be drawn. Based on regressions with the following sample sizes: EFS, 12,736 families; FRS, 25,249 families; FACS, 41,300 families; and BHPS, 13,140 families.

Table 9.4 Impact of family characteristics on the risk of long-term poverty and hardship for families with children

	Long-term poverty		Long-term hardship								
	FACS, 60 per cent median	BHPS, 60 per cent median	Daily living (FACS)	Daily living (BHPS)	Consumer durables (FACS)	Consumer durables (BHPS)	Housing conditions (FACS)	Housing conditions (BHPS)	Problem debts (FACS)	Financial difficulties (FACS)	Financial difficulties (BHPS)
Couple		–	–	–	–	–	–	–	–	–	–
Number of children											
Two > one	+	+		+		–					+
Three > one	+	+	+	+			+	+	+		+
Three > two	+	+	+	+		+	+	+	+		
Age of youngest child											
5-10 > under 5	+	+		+					+		+
Over 10 > under 5	+	+		+					+	–	
Over 10 > 5-10	+									–	
Work status:											
Self-employed > employed	+	+	–				+	+	–	–	
Workless > employed	+	+	+	+	+	+		+	+	+	+
Workless > self-employed	+	+	+	+	+	+			+	+	
Two workers (> one)	–	–	–	–	–	–			–	–	–
Multi-family household	+				–	–		+	+		+
More-educated parents	–	–	–	–	–	–	–		–	–	–
Parent has health problem			+	+	+		+		+	+	+
Non-white ethnicity:											
Asian	+	n/a		n/a	+	n/a		n/a		–	n/a
Black		n/a	+	n/a	+	n/a		n/a			n/a
Other		n/a	+	n/a	+	n/a		n/a	+		n/a
All	n/a	+	n/a	+	n/a	+	n/a		n/a	n/a	

Notes: + means the characteristic is associated with a greater risk of hardship, – means the characteristic is associated with a reduced risk of hardship, and a blank means that no simple inferences could be drawn. Based on regressions with sample sizes of families: EFS, 12,705; FRS, 25,249; FACS, 41,300; and BHPS, 13,140.

Table 9.5 Impact of family characteristics on the risk of long-term joint poverty and hardship for families with children

	Daily living (FACS)	Daily living (BHPS)	Consumer durables (FACS)	Consumer durables (BHPS)	Housing conditions (FACS)	Problem debts (FACS)	Financial difficulties (FACS)	Financial difficulties (BHPS)
Couple		–					–	
Number of children								
Two > one								+
Three > one	+	+	+	+	+	+	+	+
Three > two	+	+		+	+	+	+	+
Age of youngest child								
5-10 > under 5		+						+
Over 10 > under 5	+		+					+
Over 10 > 5-10	+							
Work status:								
Self-employed > employed		+			+			+
Workless > employed	+	+	+	+	+	+	+	+
Workless > self-employed	+	+	+	+		+	+	
Two workers (> one)	–	–	–	–		–	–	–
Multi-family household				–				+
More-educated parents	–	–	–	–		–		–
Parent has health problem								
Non-white ethnicity:								
Asian		n/a	+	n/a		+		n/a
Black	+	n/a		n/a				n/a
Other		n/a		n/a	+			n/a
All	n/a	+	n/a	+	n/a	n/a	n/a	+

Notes: + means the characteristic is associated with a greater risk of joint poverty and hardship, – means the characteristic is associated with a reduced risk of joint poverty and hardship, and a blank means that no simple inferences could be drawn. Housing conditions for BHPS could not be estimated due to too few observations in joint long-term poverty and hardship. Based on regressions with the following sample sizes: EFS, 12,705 families; FRS, 25,249 families; FACS, 41,300 families; and BHPS, 13,140 families.

10 Conclusions and policy implications

For many years, but with a more recent impetus, Government policy has reflected the notion that society has a duty to protect vulnerable individuals, particularly children, against living in 'poverty'. This notion of 'poverty' may encompass many different ideas about what is an acceptable state for people to live in, from allowing people the opportunity to attain a reasonable standard of living (such as a minimum income), to very specific judgements about what material necessities should be enjoyed by all (such as a daily living index), or more general measures of well-being (such as subjective opinions on the current situation). The specific objectives may be long debated, but the important contribution of this report is to show the degree to which current income, as currently measured in UK household surveys, identifies those households with children who have the lowest living standards judged by other criteria.

This report has thoroughly investigated the relationship between income and a wide range of other measures of living standards for households with children using data from four major household surveys covering Great Britain (and in some cases, Northern Ireland as well). The analysis has focused on the lower end of the income distribution, considering how these other measures of living standards may vary for different types of households with children officially defined as living in poverty and examining, in particular, the differences between families with self-employed parents and those with employed or non-working parents.

The evidence presented confirms but deepens the findings from existing studies that income and other measures of living standards often give different impressions of which households have the lowest standard of living. Although some sorts of families tend to have both a high risk of poverty and a high risk of a low living standard, there are some families for whom income and living standards are in disagreement. It has also found that there is more variation in living standards amongst those with low incomes than the majority of families. The next steps could be to investigate in greater depth why this arises in these particular cases; whether it matters; and, perhaps most importantly, to consider by which criterion or criteria 'poverty' should be judged.

While the research presented in this report was being undertaken, the Government proposed how it would measure progress towards eradication of child poverty (Child Poverty Unit, 2009). This research was not about identifying an appropriate measure of child poverty, but the results in this report may help inform the debate about whether it is sensible or feasible to seek to reduce a relative income measure of child poverty to very low levels.

10.1 Findings

The report has documented a number of consistent findings, which fall into three main groups: the relationship between income and living standards, the relationship between work status and living standards given income, and the dynamics of poverty and hardship given work status.

For the first two of these, the findings are as follows:

10.1.1 Do children from households with the lowest incomes have the lowest living standards?

Chapter 5 showed:

- Children from households with the lowest incomes have living standards which are greater, on average, than households with slightly higher incomes. To be precise, the one per cent of children living in households with incomes below £50 a week have average living standards comparable to those with incomes of £250 to £500 a week, depending on the type of living standards measure.
- The lowest average living standards are to be found amongst children living in households with incomes of £100 to £200 a week, depending on the measure. These values currently represent around 30 to 50 per cent of median income.
- There is little difference in the hardship rates and average living standards between children with household incomes below 50 per cent of median income and those with household income between 50 per cent and 60 per cent of median income.
- There is more variation in living standards within income bands for households with incomes less than £300 a week, showing that the poorest households contain high proportions of households who have living standards which are either well below or far above the average for their income level.

10.1.2 Are living standards different for children in self-employed families?

Chapter 6 showed:

- When comparing households with children with similar incomes, self-employed families with children have higher average living standards than employed families with children, who in turn have higher average living standards than workless families with children. The difference between the average living standards of self-employed families and those of families of other work statuses

is greater at the bottom of the income distribution than elsewhere: there are few systematic differences between the average living standards of self-employed families and those of families of other work statuses with incomes of £400 a week or more.

- Many of these findings are true even if other characteristics of the household are accounted for, although there is some variation between the measures of living standards.

10.1.3 Which children are more likely to live in a household with a relative low income, and which children are more likely to live in a household with a low living standard?

It is, therefore, overwhelmingly clear that not all households with children who have a low income according to a household survey necessarily have a low living standard. But the discrepancies between the impression given by income and other measures of living standards are not random. Analysis in Chapter 8 of the composition of children in poverty, and children with a low level of another measure of living standard (hereafter 'hardship'), shows that compared with all children, children in poverty or hardship are more likely to come from:

- a lone parent family;
- a workless family;
- a large family;
- a family with young children;
- a family with poorly-educated parents;
- a non-white family.

Compared with children in poverty, children who are both in poverty and in hardship are even more likely to come from:

- a lone parent family;
- a workless family;
- a large family;
- a family with young children.

A more sophisticated analysis used multivariate regression techniques to examine the risks of being in poverty and hardship, and how this varied with characteristics of the household. The advantage of using regression techniques is that the impact of each characteristic on the risks can be examined holding fixed the other characteristics. This analysis showed that the following characteristics increase the risk of poverty (from Chapter 9):

- being a couple family rather than a lone parent (conditional on work status);
- having more children in the family;

- having a youngest child aged over ten;
- having adults who are self-employed (rather than employed);
- having no working adults in the family;
- having one worker rather than two (in a couple family);
- having parents with low levels of education;
- not having a health problem;
- being from a non-white ethnic group.

Most of these results are intuitively sensible; the fact that having a health problem reduces the risk of poverty is presumably because the equivalence scale makes no allowance for the extra costs of poor health, and health-related benefits count towards disposable income.

Many of these characteristics are also consistently associated with a higher risk of hardship:

- having no working adults in the family;
- having one worker rather than two (in a couple family);
- having parents with low levels of education;
- being from a non-white ethnic group.

But the characteristics listed below have opposite impacts on the risk of hardship from the risk of poverty; for these characteristics, it matters whether low income or low living standards are used to define the children who are the worst off in society.

- Being a lone parent family, rather than a couple (conditional on work status) (reduces poverty risk, increases hardship risk).
- Having three or more children, which is associated with a higher risk of poverty, and a higher risk of hardship for all except the consumer durable hardship (Families and Children Study (FACS) and British Household Panel Survey (BHPS)).
- Having a youngest child aged over ten (increases poverty risk, but inconsistent impact on the risk of hardship).
- Having adults who are self-employed (rather than employed) (increases poverty risk, reduces hardship risk).
- Having a health problem (reduces poverty risk, increases hardship risk).

One response to this would be to define the worst off in society as those children in households in both poverty and hardship, and the following characteristics are all associated with a greater risk of joint poverty and hardship:

- having more children in the family;
- having adults who are self-employed rather than employed;

- having adults who are workless rather than employed or self-employed;
- for couples, having one worker rather than two;
- having parents with low levels of education;
- having a health problem; and
- being from a non-white ethnicity.

10.1.4 Dynamics of work, poverty and living standards

Chapter 7 explored the dynamics of poverty and hardship over three-year periods. It considered the extent to which hardship is a transitory experience for individual families, and how the likelihood of hardship relates to the length of time in poverty. It found that:

- Twenty-two per cent of children are in current poverty in FACS, but ten per cent are in persistent or long-term poverty (defined here as three or more consecutive interviews in poverty). Similarly, 18 per cent of children in the BHPS are in current poverty, but only six per cent are in long-term poverty.
- The proportion of children in poverty who are in transitory poverty (defined as not in poverty at the previous and future interview) is just under one in five (18 per cent for FACS data and 19 per cent for BHPS data). Poverty is slightly more transient for children in employed families than self-employed families, but is considerably less transient for children in workless families than children in families from either working group. Daily living and consumer durable hardship exhibit a similar degree of transiency to poverty, but most other hardship measures are more transient than poverty. Hardship for children in workless families is considerably less transient than for the working groups. But, in contrast to the poverty picture, hardship is more transient for self-employed families than employed families for FACS hardship measures; although some of the BHPS measures suggest a much lower degree of transiency for the self-employed than the employed.
- The proportion of children in hardship rises with poverty duration for most of the hardship measures, but not to a substantial degree: a considerable proportion of families remain out of any type of hardship even during prolonged periods of poverty.
- The difference in the living standards of families with different work states can be seen in a dynamic analysis: for a given experience of poverty, those with time out of work are much more likely than those always in work to experience hardship, and those always in self-employment are less likely than those always in employment to experience hardship. And, even allowing for differences in poverty duration, the likelihood of hardship differs across the work groups for most of the hardship measures, suggesting that the differences between the work types shown in previous chapters are not all due to differences in the length of time in poverty across the work groups.

10.1.5 What might cause the differences between income and other measures of living standards for some types of households?

It has been known for many years that differences arise when using income and other measures of living standards to rank households (although no previous study has analysed households with children with a focus on those in poverty and on the differences between work types). Indeed, it should not be surprising that income and the other measures of living standards often give differing impressions of the relative position of a particular household: 'disposable income' and 'material living standards' are different concepts, so households with low disposable incomes need not be the same as those households with low material living standards, even if both were measured perfectly and over a long period of time.

This report suggested five situations that may explain why the measure of disposable income recorded in household surveys might not always match the impression given by other measures of living standards (from Chapter 1):

1 *The concept of 'income' that is intended to be captured by the household survey may be conceptually wrong.*

2 *The income that is recorded in the household survey may be an inaccurate measure of the income that is supposed to be recorded in the household.*

3 *The standard of living measure that is intended to be captured by the household survey may be conceptually wrong.*

4 *The standard of living measure that is recorded in the household survey may be an inaccurate measure of the standard of living measure that is supposed to be recorded in the household survey.*

5 *The income that is recorded in household surveys may be a poor reflection of income assessed over a long period.*

Although this report did not – and could not, given the limitations of household survey data – explore the reasons for the discrepancies between income and other measures of living standards, the findings are consistent with the following possible explanations.

1 ***The concept of 'income' that is intended to be captured by the household survey may be conceptually wrong.***

All of the analysis in this report has used a measure of equivalised disposable income. As Chapter 1 discussed, this involves a number of assumptions.

One is that the measure of disposable income should be equivalised using the Modified OECD scale, in order to allow the disposable income of households of different sizes and compositions to be compared. This means that differences between the living standards of households of different sizes and compositions that remain after accounting for (equivalised) disposable income might reflect that the Modified OECD equivalence scale was inappropriate. For example, Chapter 9 showed that being a lone parent, rather than a couple family, increases the

hardship risk, even having accounted for differences in work status and income, and having a youngest child aged over 10 increases the hardship risk even having accounted for differences in work status and income: both are consistent with the Modified OECD income equivalence scale being inappropriate, with lone parents having too low a weight relative to couples, and children aged 10 or over having too low a weight relative to younger ones.

That the Modified OECD income equivalence scale is inappropriate was also suggested recently by researchers who estimated a minimum income standard for different sorts of households: see Bradshaw *et al*. (2008). In principle, all of the measures of living standards analysed in this report could be used to estimate alternative equivalence scales.

The difference between lone parents and couples might reflect that couple families have higher levels of non-purchased resources, perhaps because they are more able to engage in so-called home production than lone parents, and these resources would not be measured by disposable income. The difference between older children and younger children might reflect the fact that older children cost more than younger ones, or that older children have a demand for consumption items which do not feature as priorities in measures of material living standards.

It has been argued that the costs of dealing with a long-term health problem should be deducted from the Households Below Average Income (HBAI) measure of disposable income. The finding in this report that having an adult (or a child, in the surveys that measure this) with a long-standing health problem reduces the poverty risk but increases hardship risk could be explained by the presence of additional costs incurred by households because of the health problems which have not been reflected in the HBAI measure of disposable income.

2 *The income that is recorded in the household survey may be an inaccurate measure of the income that is supposed to be recorded in the household.*

This is an obvious candidate for the finding that self-employed families have a higher risk of poverty, but a lower risk of hardship, even conditional on income or poverty status, than employed families. Indeed, previous studies, referenced in Appendix C, have estimated the extent to which income might be under-reported for the self-employed. Difficulties in measuring income other than earnings (i.e. income from assets or savings, or other unearned sources) might also explain why having parents with a high standard of education has a stronger (protective) effect on the risk of hardship than on poverty. However, it will never be possible for studies using the methodology in this study to determine whether (and if so, how much) income is actually being mismeasured.

3 *The standard of living measure that is intended to be captured by the household survey may be conceptually wrong.*

4 *The standard of living measure that is recorded in the household survey may be an inaccurate measure of the standard of living measure that is supposed to be recorded in the household survey.*

All of our findings could be explained by the particular measures of living standards that we analysed being conceptually or practically flawed, and the report cannot provide evidence that this is not the case (indeed, Chapter 2 discussed some reasons why indices or indicators of material deprivation might be inaccurate measures of living standards). In particular, the fact that this report has used a large number of other measures of living standards might be seen as a weakness of using measures other than income, because the analyst will need to decide which of the 11 he or she prefers. On the other hand, the report has shown how the pattern of findings are reasonably robust across a range of different measures of living standards; some notable differences between the other measures of living standards are:

- housing conditions hardship, where the incidence (as defined by this report) is low, and particularly concentrated amongst large families, and some ethnic minority families;
- financial difficulties hardship, which seems less related to income and less related to household characteristics which should indicate a low level of resources than the other measures.

5 *The income that is recorded in household surveys may be a poor reflection of income assessed over a long period. Although income (correctly measured) over an individual's lifecycle has to be equal to spending (correctly measured) over their lifecycle, the fact that individuals can shift resources over time mean that this need not be the case at every point in time.*

The general pattern, explored in Chapters 5 and 6, that households with the lowest incomes do not have the lowest living standards may be due to instances of households correctly reporting that their income is temporarily very low, but where this is not the case over a longer period of time. However, various findings in this report suggest that this does not seem to be a particularly important explanation for the mismatch between current income and hardship:

- Chapter 7 showed that the proportion of children in hardship rises with poverty duration for most of the hardship measures, but not to a substantial degree, and a considerable proportion of families remain out of any type of hardship even during prolonged periods of poverty.
- The difference in the living standards of families with different work states does not disappear even after accounting for the duration of time in poverty, so the differences between the work types shown in Chapter 6 are not all due to differences in the length of time in poverty across the work groups.
- Chapter 5 showed that the mismatch between income and living standards at the very bottom of the income distribution (below £100 a week) is not resolved by using a measure of income over a longer period: households with the lowest income averaged over three surveys do not have the lowest living standards, and the 'hump-shaped' profiles of hardship against income for households with income above £50 a week are very similar for current income and average past

income. If anything, households with the lowest income averaged over two years seem to have higher living standards than households with a very low income in a single year. Temporary fluctuations in income do not seem, then, to be an important explanation for the high living standards of those with very low current incomes.

This project was partly motivated by the recent volatility in the child poverty rate amongst children in self-employed families (see Figure 1.1). In addition, it had been suspected that one cause of the differences between the average living standards of low-income employed families and low-income self-employed families was that self-employed families have more volatile income, and are therefore more likely to be experiencing a temporary period of low income.

However, this report has shown that, of all children in poverty in a given year (based on FACS and BHPS), children in employed families are more likely to be experiencing transitory poverty (defined as not being in poverty in the previous or following year) than children in self-employed families. This suggests that recent volatility in the rate of poverty for children from self-employed families does not reflect volatility at the level of individual families, but instead reflects volatility at an aggregate level due to sampling error (children from self-employed families are less than a fifth of all children). And it means that the difference in the average living standard of children from employed or self-employed families cannot be ascribed to a higher volatility of income amongst the latter group.

10.2 Remaining puzzles

Two of the findings from this report stand out both as being surprising and as not being easily explained.

First, the magnitude of the difference in living standards between workless families and families with at least one worker with similar incomes (shown in Chapter 5 and Chapter 6) is difficult to explain. The gap is consistent across all the living standards measures, and remains even allowing for differences in current income, in recent past income, and in poverty duration. Part of the motivation for this project was to explore the fact that self-employed families have, on average, higher living standards than would be suggested by their income (or, as past research has put it, the 'missing income' of the self-employed), but it would be interesting to understand more why workless families have, on average, lower living standards than would be suggested by their income.

The second puzzle is that a substantial number of families manage to remain out of hardship even during prolonged periods of poverty (shown in Chapter 7). Indeed, the length of poverty is not strongly related to the likelihood of hardship, which is contrary to the view that households can generally maintain their living standards for a short period of time after entering poverty. Of course, part of the explanation for both findings could be that some households have their income persistently mis-measured by household surveys.

10.3 Policy implications and recommendations

The relatively high living standards enjoyed by those with the very lowest incomes (i.e. £0 to £50 a week) means that there is very little sense in monitoring trends in the number of children in such households, or in assuming that the characteristics of such children are informative about the children who have the lowest living standards.

However, it is not necessarily the case that looking at a larger group of children at the bottom of the income distribution is sufficient to get around this problem. For example, although the lowest living standards are to be found amongst households with children with incomes between £100 a week and £200 a week, or roughly 30 to 50 per cent of median income, the high living standards of the poorest one per cent of children mean that there is little difference in the hardship rates and low living standards between children with household incomes below 50 per cent of median income and those with household incomes between 50 per cent and 60 per cent of median income. The underlying issue is that the former group – children with household incomes below 50 per cent of median income – contains households with a larger range of living standards than the group of children with incomes between 50 per cent and 60 per cent.

A response to this would be to exclude all households with children who report a very low income (such as below £50 a week or below £100 a week). There is some merit in this, because it would remove those households for whom income and other measures of living standards are very weakly related. But it would also remove some households who genuinely have a very low income and a very low level of living standards. It is also unclear how to interpret changes over time in a measure such as 'children with incomes less than 60 per cent median but over £50 a week', and beyond the scope of this study to discuss the political acceptability of a measure of child poverty which excludes – albeit for well-founded statistical reasons – those households with children reporting the lowest incomes of all.

An alternative to using income thresholds (whether relative or absolute) to identify the number and characteristics of the children who are the worst off in society is to use a different measure of living standards. But, as this report has shown, there are many other measures that can be chosen, and these can provide different impressions of which children have the lowest living standards. And there are practical and conceptual difficulties with measures of living standards other than income which have not been explored in detail here. For example, there is a degree of arbitrariness involved in constructing indices or indicators of living standards, and there are conceptual difficulties in ensuring that indices or indicators are meaningful when compared over time. The use of spending as a measure of living standards avoids both of these problems, but data on spending is expensive to collect and may be subject to measurement error just as much as is income.[19]

[19] Many of these issues were discussed in the Government's consultation of how to measure child poverty in 2002, and some are being re-addressed in the 2009 consultation on tracking progress towards the elimination of child poverty in 2020.

Another alternative would be to use those households who had both a low income and a low living standard to identify the number and characteristics of the children who are the worst off in society. This can be seen as a pragmatic compromise, which seeks to reduce the inaccuracies or bias that arise from using a single measure of living standards to define the poorest children, but it also has some conceptual or theoretical justification (see Bradshaw and Finch (2003), for example). One of the definitions of child poverty currently tracked by the Government is indeed constructed in this way; on a practical note, it would aid understanding if the Government reported the numbers in poverty, and in hardship, and in both, so the extent of the overlap and how it changes over time can easily be seen. However, as stated above, there are conceptual difficulties in ensuring that indices or indicators are meaningful when compared over time.

10.4 Implications for future research and the design of surveys

Although this project was not intended to analyse the way in which income and other measures of living standards are measured, it is clear that FACS uses an entirely different way of measuring the income of self-employed families to other households surveys, one which does not allow individuals to report losses – or negative income – from self-employment activities, and that this does appear to affect the relative position of self-employed families with children. As FACS is shortly to be stopped, this finding is relevant mostly for those interpreting existing studies that use data on self-employment income in FACS, but also for those designing questions to measure the income of the self-employed in future household surveys.

One reason given above as to why income (as currently measured in households surveys in the UK) and other measures of living standards do not always agree was that income is equivalised using the Modified OECD equivalence scale. As the Government has just re-stated its desire to continue to use income-based measures of child poverty, then it would be sensible to review the use of the Modified OECD equivalence scale: the findings in this report question its validity amongst low-income households with children by showing that lone parent families have higher average levels of material deprivation than couple families, and families with older children have higher average levels of material deprivation than those with younger children, having taken account of differences in equivalised income.

It would be very useful to understand why some families with children who appear to have a very low income manage to avoid hardship, perhaps by commissioning qualitative research to follow-up particular families in the Family Resources Survey or FACS.

Finally, wealth is poorly measured in most household surveys, and it would therefore be very useful to use the forthcoming Wealth and Assets Survey to explore whether the living standards of those with apparently low income are being maintained through high levels of wealth.

Appendix A
Data

This appendix gives further detail on the data used in this report. Section A.1 summarises some of the key sample statistics, Section A.2 considers the British Household Panel Survey (BHPS) sample in detail and Section A.3 provides further information on the construction of the measures of living standards in the Families and Children Study (FACS) and BHPS.

A.1 Survey statistics

Table A.1 summarises the most important aspects of the datasets and Table A.2 gives the sample sizes by year.

Table A.1 Summary of datasets

	FRS/HBAI	FES/EFS	FACS	BHPS
Years	1994/2005 to 2006/07	1996/2007 to calendar 2006	2001 to 2006 (waves 3-8)	1996 to 2006 (waves 6-16)
Cross-sectional or longitudinal?	Cross-section	Cross-section	Longitudinal	Longitudinal
Approximate number of households with children in each wave/year	c. 8,000	c. 2,100	c. 7,500	c. 1,500
Spending and food		Yes		
Material deprivation	Yes		Yes	Yes
Financial assets	Yes			
Housing problems			Yes	Yes
Problem debts			Yes	
Financial difficulties			Yes	Yes

Notes: Family Resources Survey (FRS); Households Below Average Income (HBAI); Family Expenditure Survey (FES); Expenditure and Food Survey (EFS).

Table A.2 Sample sizes, by year

	FRS	FES/EFS	FACS	BHPS	FACS (dynamic analysis)	BHPS (dynamic analysis)
1996/97	8,273	2,249		1,608		
1997/98	7,587	2,187		1,577		
1998/99	7,269	2,272		1,578		1,336
1999/2000	8,017	2,334		1,535		1,304
2000/01	7,535	2,179		1,549		1,281
2001/02	8,042	2,509	7,483	1,534		1,259
2002/03	9,187	2,228	7,268	1,513		1,260
2003/04	8,979	2,336	7,193	1,480	5,131	1,249
2004/05	8,731	2,148	6,881	1,447	5,065	1,225
2005/06	8,581	2,133	6,910	1,403	5,047	1,188
2006/07	7,937	1,564	6,821	1,372	4,999	1,163

Notes: Figures refer to number of families with children. The years are financial years for FRS and for the FES/EFS until 2005/06. The sample for EFS in 2006 only covers nine months of data from April to December and consequently has a smaller sample size than other years. The years are calendar years for FACS and BHPS with interviews in the autumn of each year. The dynamic samples for the FACS and BHPS consist of those families who have been interviewed for three or more consecutive years.

Base: All families with children in the UK for years 2002/03 to 2006/07 for the FACS and all years for the FES/EFS, and all families with children in GB for the years 1996/97 to 2001/02 for the FRS and all years for the FACS and BHPS.

Sources: FRS, 1996/97 to 2006/07; FES, 1996/97 to 2000/01; EFS, 2001/02 to 2006; FACS, 2001 to 2006; BHPS, 1996 to 2006.

A.2 The BHPS sample

This section examines in detail the BHPS sample by comparing basic sample statistics with FACS and also by comparing the entire BHPS sample with the subsample with non-missing values for income. The first two columns of Table A.3 present the comparison between FACS and BHPS for the common set of years 2001 to 2006. The final three columns of the table show the differences between the entire BHPS sample, the subsample with income observations, and the subsample with missing income. It should be noted that all of the statistics for BHPS have been weighted using the cross-section weights provided in the BHPS datasets.

Table A.3 Sample statistics for FACS and BHPS

Percentage of children in	FACS 2001-2006	BHPS 2001-2006	BHPS 1996-2006 All	BHPS 1996-2006 With income	BHPS 1996-2006 Missing income
Couple families	73.7	83.3	82.8	81.3	92.0
Number of children:					
One child	23.9	25.0	24.7	23.8	30.1
Two children	44.9	46.8	45.7	46.4	41.1
Three plus children	31.3	28.2	30.0	29.8	28.8
Age of youngest child:					
Under 5	44.1	42.1	43.2	44.1	38.0
5 – 10	33.2	34.4	34.5	34.9	32.4
Over 10	22.7	23.6	22.2	21.1	30.0
Work status:					
Employed	65.7	71.6	70.5	69.3	81.2
Self-employed	15.8	17.0	16.5	17.1	11.1
Workless	18.6	11.4	13.0	13.6	7.7
Two workers	47.3	46.7	45.7	51.8	6.9
Multi-family household	13.1	15.9	15.3	12.7	31.7
Average age of parents	37.6	37.6	37.2	37.0	38.2
Highest qualification:					
None	8.8	5.5	7.1	5.7	16.2
Up to A level	45.6	30.0	34.4	33.7	38.9
Higher education	45.6	64.6	58.5	60.7	44.9
Parent has health problem	30.7	21.0	20.4	20.9	17.2
Ethnicity:					
White	92.3	94.2	94.4	95.0	90.3
Asian	3.9	3.6	3.6	3.0	7.3
Black	2.1	0.8	0.8	0.8	1.1
Other	1.8	1.3	1.2	1.2	1.4
In hardship:					
Daily living			28.2	28.7	25.2
Consumer durables			16.3	16.3	16.7
Housing			3.6	2.8	8.3
Financial difficulties			18.5	18.7	17.3
Number of hardship categories:					
One or more			42.1	42.2	41.6
Two or more			19.0	18.8	20.4
Three or more			5.4	5.0	7.7
Four			0.7	0.7	0.7

Base: All children in GB. Sample sizes: FACS, 42,556 families; BHPS, 16,596 families.

Sources: FACS, 2001 to 2006; BHPS, 1996 to 2006.

In comparison with FACS, the BHPS sample contains a higher proportion of children in couple families (83 per cent compared to 74 per cent in FACS) and has a higher proportion of children in employed families (72 per cent compared to 66 per cent) and a lower proportion in workless families (11 per cent compared to 19 per cent). The proportion of white families is also slightly higher than in FACS. The average education level for parents is higher in BHPS and the survey has a smaller proportion of parents with health problems than FACS, but the differences in these characteristics may result from differences in the survey questionnaires. Hence, it should be borne in mind that differences in the analysis between BHPS and the other surveys may be due to sample differences, particularly in respect to the higher proportion of couples in BHPS and (possibly consequently) the higher proportion of employed families and lower proportion of workless families than in the other surveys.

Within the BHPS sample, 14 per cent of children are in families which have a missing value for income.[20] This proportion rises slightly over time (from 12.6 per cent in 1996 to 15.6 per cent in 2006) and is higher for children in couple families than those in lone parent families (15 per cent compared to 6 per cent) and for those in employed families (12 per cent) than those in self-employed or workless families (7 per cent and 6 per cent respectively). More generally, families with missing income are more likely than those with non-missing income to be couples, to have fewer children, to have older youngest children, to be employed, to have fewer than two workers, to be in a multi-family household, to have lower levels of education and to be non-white (final two columns, Table A.3). However, overall, the subsample of children in families with non-missing income does not differ to a substantial degree from the entire sample in these demographic factors, partly because the missing proportion is not very high. Hardship rates for daily living and financial difficulties are lower for families with missing income, while hardship rates for consumer durables and housing are higher (final row, Table A.3). This does not give any clear indication that those with missing income may come disproportionately from the lower or higher end of the income distribution. Moreover, aside from the housing variable, the proportions in hardship are little different between the entire sample and the subsample of those with non-missing values for income. Hence, the entire BHPS sample has been used in this report wherever income is not required in the analysis, while the subsample with non-missing income has been used where an income or poverty measure is required.

[20] To be precise, 14.4 per cent of all observations (families) have a missing income value, while a weighted proportion of 13.7 per cent of children live in a family with a missing income value.

A.3 Construction of the hardship measures from FACS and BHPS

There are six hardship measures used from FACS and five from BHPS:

(a) Daily living (food, clothes, leisure).

(b) Lack of consumer durables.

(c) Housing conditions.

(d) Type of housing.

(e) Problem debt (FACS only).

(f) Extent of financial difficulties.

For all these measures, the first step was to create an index, by combining the answers to several questions. The second step was to produce a binary indicator of hardship. Details of the questions used to create the index, and the thresholds used to create the indicator, are provided in Table 3.2. The measures carry the same names and capture similar concepts in FACS and BHPS but are derived from different questions. The remainder of this section highlights the differences between FACS and BHPS in the construction of the measures.

A.3.1 Daily living and consumer durables

The questions about enforced lack of items in FACS have been divided into two, 'daily living' and 'consumer durables' deprivation. This has been done for several reasons:

- Economic theory suggests that spending on non-durables and ownership of durables are likely to respond differently to changes in resources, and this split mirrors that.
- The previous literature using these datasets has made this distinction.
- The BHPS consumer durables measure is simply 'non-ownership', rather than 'non-ownership and would like but cannot afford' as in FACS. As BHPS does not measure an enforced lack of consumer durables, but only a lack, it should not be combined with the deprivation measures that are available for daily living.
- It provides some consistency with the measures from FES/EFS, which are about non-durable spending.

The number of daily living deprivation items is much greater in FACS than BHPS. The threshold for hardship was set at one-fifth (20 per cent) for both datasets. Both datasets exhibit a marked decline in daily living deprivation over time. For consumer durables, the hardship threshold was set at different levels in the two surveys to allow for the fact that BHPS measures 'lack' of ownership and FACS measures an 'enforced lack'.

The questions used to derive the daily living and consumer durables hardship measures in FACS were not included in the 2006 survey.

A.3.2 Housing conditions

The actual number of bedrooms in the household had to be estimated for BHPS using the reported 'number of rooms in the house excluding kitchens and bathrooms' minus one. This generated a similar proportion of families with insufficient bedrooms as FACS.

The 'house adequately warm' and 'accommodation problems' questions are quite different between the two surveys: BHPS accommodation problems cover a much broader range of issues generating different proportions of hardship between the surveys. But these differences balanced in the final 'housing conditions' measure and so there are similar proportions in housing conditions hardship in both surveys.

A.3.3 Problem debt

The 'problem debt' measure is the number of debt items that the family reports it is behind on. This is not specifically asked in BHPS, so there is no comparison variable for BHPS.

A.3.4 Financial difficulties

The 'financial difficulties' measure for BHPS includes two questions about loan repayments and paying for accommodation, but they are subjective judgements rather than objective questions on arrears, and have therefore been included in the 'financial difficulties' rather than 'problem debt' measure.

Appendix B
Measuring self-employment income

B.1 Self-employment income in FRS

Individuals who report their work status as being self-employed are asked a series of questions about their share of a profit or loss in accounts prepared for Her Majesty's Revenue and Customs (HMRC). The interviewer requests respondents to consult documents when reporting their share of a profit or loss, including tax assessments, annual accounts and tax returns. However, in the majority of cases, no document was consulted. Respondents are also asked whether reported profits or losses are before or after tax and over what period of time they were earned. In over 95 per cent of cases, the period was one 12-month period, normally a tax year. If respondents do not prepare accounts for HMRC they are then asked about their income from self-employment as if they were employed. Such questions are designed for groups such as sub-contractors who are officially self-employed, but have pay arrangements similar to employees.

B.2 Self-employment income in FES/EFS

Individuals who reveal that they have self-employment income (either from their main occupation or a subsidiary one) are asked whether they have submitted accounts to HMRC. Where they have, the respondents are asked for their share of the profit or loss figure shown in the most recent accounts submitted. The interviewer prompts the respondent to consult the accounts before giving an answer, so that EFS aims to record income as it has been submitted to the tax authorities.[21]

[21] In 2006, 28 per cent of self-employed respondents consulted some document before answering the questions. This accounts for just under 40 per cent of those who had actually submitted accounts to HMRC.

Finally, respondents are asked for how many weeks these accounts cover, enabling us to calculate an average weekly or annual income for self-employed individuals. In over 95 per cent of cases, the period in question was a year. As a result of this, variability in self-employment income within a 12-month period cannot explain any of our results. Where no accounts have been submitted to HMRC, self-employed individuals are asked for their average weekly or monthly income from the job or business over the previous 12 months.

B.3 Self-employment income in FACS

Individuals who report that they are self-employed are asked whether they have been self-employed for under six months, or six months or more (question wrk36). If they have been in business for less than six months, they are asked what they think their income from the business will be (question wrk37) and what period this amount covers (question wrk38). If they have been in business for six months or more, they are asked, on average, how much money they take out of the business each week for their and their family's use (question wrk39). This group are then asked whether they make any profit in addition to this weekly allowance (question wrk40) and, if they do, they are asked how much their total income from the business is after all expenses, taxes, etc., and including additional profit (question wrk41), and what period this covers (question wrk42). In addition, all workers are asked whether, apart from the job they have just reported on, they have any other paid work that brings a regular income (question wrk78), how much they receive for this extra paid work after taxes and any other deductions (question wrk81), and the period this covers (question wrk82). The weekly earnings from self-employment were calculated as the responses from questions wrk37, wrk39 and wrk41, plus the response to question wrk81, all converted to weekly amounts.

It should be noted that the nature of the questions do not permit negative values for self-employment income. Before the subtraction of Council Tax, there were no cases of negative income; there were 69 cases of negative income after subtracting Council Tax, and all of these were set to zero.[22]

Of the 6,999 currently self-employed individuals with dependent children in waves 3 to 8 of FACS, 687 (ten per cent) had missing values for self-employment income. These missing values were replaced with interpolated values in 273 cases (four per cent of all self-employed) or with imputed values in 414 cases (six per cent of all self-employed) as described for all missing earnings values in in Section 3.2.

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[22] Each year of FACS had the following number of cases: 2001 – 11; 2002 – 20; 2003 – 10; 2004 – 7; 2005 – 10; 2006 – 11.

B.4 Self-employment income in BHPS

Individuals who report their employment state as self-employed are asked whether they prepare annual business accounts for Her Majesty's Revenue and Customs. If they do prepare accounts, they are asked for the beginning and end dates of most recent accounts and the amount of their share of the profit or loss figure shown on the accounts. Further questions then establish whether this figure is a profit (earnings) or loss and whether it is before or after the deduction of income tax and National Insurance. Those who do not prepare business accounts are asked for their average weekly or monthly income from the job or business in the last 12 months. Further questions then establish whether this figure is before or after the deduction of income tax and National Insurance.

The income measure used for BHPS in this report is the total household net income variable (whhneti) from 'The British Household Panel Survey Derived Current and Annual Net Household Income Variables, Waves 1-16, 1991-2007 (Study number 3909)'. The net income variables for this dataset were 'constructed using definitions that match those used in Britain's official income distribution statistics, viz the annual publication Households Below Average Income from the Department of Work and Pensions, formerly known as the Department of Social Security.'[23]. As the most recent accounting period for self-employment may be up to four years out of date, self-employment income is updated to allow for inflation using the method used in the HBAI. It is not explicitly described how losses from self-employment are used in the construction of the net income variable, but the self-employment earnings variables in the net income files contain no negative values. There were 18 cases of negative income after subtracting Council Tax, which were set to zero.[24]

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23 See *Documentation for Derived Current and Annual Net Household Income Variables, BHPS waves 1-14* by Horacio Levy, Francesca Zantomio, Holly Sutherland and Stephen P. Jenkins, November 2006, which accompanies the dataset.

24 These came from the following years: 1996 – 1; 1997 – 2; 1998 – 2; 1999 – 1; 2000 – 2; 2001 – 2; 2002 – none; 2003 – 2; 2004 – 3; 2005 – 2; 2006 – 1.

Appendix C
Using Engel curves to estimate under-reporting of income in household surveys

As well as using consumption as a measure of resources, economists have also used the proportion of spending devoted to food (hereafter referred to as food's budget share) as a measure of well-being. This dates back to Engel's work in the nineteenth century, and the so-called Engel's Law states that the food's budget share is inversely related to household real income. Of course, this is not a law, but an empirical observation: as incomes rise, households spend a declining fraction of their extra income on food (economists would say that Engel's Law applies because the income elasticity of food is always less than one). The relationship between food's budget share (or spending on food) and income is known as an Engel curve.

Engel's Law is frequently used by economists in the following way: assuming that the relationship between food's budget share and income (i.e. the Engel curve) is constant over time, or if it varies over time only in predictable ways which can be accounted for in empirical analysis, then one can infer changes over time in real resources from changes over time in food's budget share (equivalently, one can compare different types of households at the same point in time to infer differences in the resources available to different households).

There have been many applications of this, the most relevant of which to this report is estimating the extent to which the self-employed under-report their income.[25] The basic argument is that, if one assumes that:

- the relationship between spending on food, true income and other household characteristics is the same for self-employed and employed households, and
- spending on food is reported accurately by all households, and
- employed households accurately report income, but self-employed households inaccurately report income

then one can use the relationship between spending and income for employed households to infer the true income of self-employed households given their level of spending.[26] The procedure is as follows: one estimates an expenditure function for the employed, and inverts to obtain a predicted income for a given level of expenditure. We can use the (accurately reported) data on expenditure of self-employed households and our estimated relationship between expenditure and income to read off the 'true' income of self-employed households. Comparing this true income with their reported income gives an estimate of their underreporting.

One commonly advanced reason why expenditure should be measured more accurately than income for a given household in the same survey is that respondents who may have concealed income from the taxation authorities may be wary of giving accurate earnings information to the body carrying out the survey for fear of being charged with tax evasion. Indeed, as noted in Appendix B, the EFS, FRS and BHPS questionnaires explicitly ask self-employed respondents for the level of income they submitted to HMRC in their most recent accounts. However, this fear should not prevent them from giving accurate expenditure figures. However, validating this argument is extremely difficult.

Studies that use food consumption to infer 'true' income include the following examples. Pissarides and Weber (1989) estimate that true self-employment income in the UK is 55 per cent higher than reported in FES. Lyssiotou *et al*. (2004) relax some of the functional form assumptions in Pissarides and Weber (1989) and estimate the equivalent ratio to be 118 per cent for blue-collar self-employed households and 64 per cent for white-collar self-employed households. Tedds

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25 Other uses include using Engel's Law to estimate equivalence scales, and using Engel's Law to infer differences in price levels between households or between time periods.

26 One substantial complication in this argument is that, as argued above, a household's spending is more likely to depend on its long-run level of resources than its income in a given period (which is what is typically recorded in a household survey), and the extent to which incomes vary over time is likely to be different for employed and self-employed households.

(2007), using non-parametric techniques, shows that the under-reporting amongst Canadian self-employment households is much higher amongst those reporting low incomes than high incomes. Finally, Kim *et al.* (2008) use longitudinal data to try to estimate long-run income.

Although this report analyses food's budget share using FES, for reasons described below, we do not go as far as to derive an estimate of 'missing income'. One issue that the papers above have had to deal with is the distinction between permanent and current income. A household that, during the period of the survey, has temporarily low income might maintain relatively high consumption by running down savings or by borrowing. Conversely, a household with temporarily high income might choose to save much of this additional income. If households consume out of their 'permanent income' rather than their current income, one has to be careful about inferring results about mis-reporting using data on current income alone. It could be that those households which we observe with expenditure that is high relative to their reported income are not in fact under-reporting, but have experienced some sort of shock that has temporarily reduced their income.

The literature has dealt with this problem in a number of ways. Some have data at their disposal that allow them to calculate (or at least approximate) permanent income. The earlier literature, which began with Pissarides and Weber (1989), used instrumental variables to try to get around the fact that we don't observe permanent income. More recently, Tedds (2007) has data on changes in assets over a specified period in time. This, along with current income, will be a good guide to permanent income as those who are accumulating (decumulating) assets are likely to be experiencing temporarily high (low) income. As noted above, Kim *et al*. (2008) have access to longitudinal data which allows them to attempt to account for differences between current and permanent income.

If this problem is ignored, and the procedure described above is carried out using current income rather than permanent income, then it is assumed (implicitly or otherwise) that the observed measure of income is permanent income with a degree of measurement error. It has long been known that using a dependent variable that suffers from measurement error induces an 'attenuation bias' that results in a bias of the coefficient towards zero. If the measurement error is greater for self-employed households than it is for employed households, the magnitude of the bias will be greater for self-employed households than it will be for employed households. Therefore, the estimated 'missing income' would be biased upwards.

Further research, building on developments in the literature since Pissarides and Weber (1989), could look at this problem again using UK data, either by using data that allows a better measurement of permanent income than in EFS, or by obtaining some measure of the magnitude of the measurement error associated with the income of self-employed households (using panel data for example), and using it to correct for the upward bias described above.

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