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The dynamics of low income



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New Policy Institute

Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government

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1. Persistent and Transient Poverty

Background and definitions¹

- 1.1 Most of the analysis in this and the chapters that follow comes from the British Household Panel Survey (BHPS). The BHPS is an annual survey of 22,000 individuals in Great Britain (4,000 in Wales), including all individuals in a household. Topic coverage includes income, work status, health status, age group, gender and other variables that are relevant to this project. Most importantly, the survey is longitudinal – that is, it collects information from (as far as possible) the same individuals each year. The most recent available data is from 2008 meaning that all the analysis in this report therefore precedes the recession.
- 1.2 Not all of the respondents in the survey always report their income. We have removed any such individuals from the analysis entirely. The possible implications of this are discussed in the technical appendix. With the remaining cases, we can see if a person in poverty one year is in poverty the next, or how many years they spend in poverty over a defined period.
- 1.3 To carry out the analysis for this report, we need firstly to set out how we will define different types of poverty. We will measure poverty by looking at net household income after taxes are deducted, but before housing costs are paid. This “before housing costs” measure is used in the UK Child Poverty Act. An individual is said to be in poverty if household income is below 60% of the median at the time of the survey. From this, and using the longitudinal data from the BHPS, we can define the following:
 - **Persistent poverty**, where household income is below 60% of the Great Britain (GB) median for at least three years in a four-year period. This is the definition used in the UK Child Poverty Act 2010, and used by the Department for Work and Pensions in its Households Below Average Income reports.

¹See technical appendix for more information on the definition of poverty.

- ***Transient poverty***, where household or individual income is below 60% of the GB median for one or two years in a four-year period.
- 1.4 Income is measured before housing costs are deducted. This is consistent with the measures in the UK Child Poverty Act, but differs from the approach taken by the Welsh Government, which takes income after housing costs have been deducted. This latter approach is not possible from the BHPS dataset, which lacks a meaningful measure of housing costs, so the former is used instead.
 - 1.5 Poverty and low income are not synonymous. Poverty is about not being able to participate in the norms of modern society, and low income is its measure. One could certainly imagine a situation in which a family may have a short period of low income but still be able to afford to participate in society due to savings accrued beforehand, but for the purposes of this report, we will use the word “poverty” as shorthand for low income.
 - 1.6 It should be noted that the income data used in the analysis reflects income in the month preceding the survey. So, when we refer to people being in poverty in one year, two years and so forth, this actually means that the person reported a low income for one annual survey, two surveys etc. We only know about incomes for a one month period out of a possible 12 preceding months but we have analysed them and will refer to them as if they were entire years.
 - 1.7 Using the BHPS, we can calculate the proportion of individuals defined as being in each of the three types of poverty defined above. We will compare the levels in Wales to the levels in England and, in some cases, to the English North and Midlands (i.e. England minus London and the wealthy regions of the East, South West and South East). Later in the report, we will look at GB-level findings, and make comparisons with Wales where possible.

Methodology²

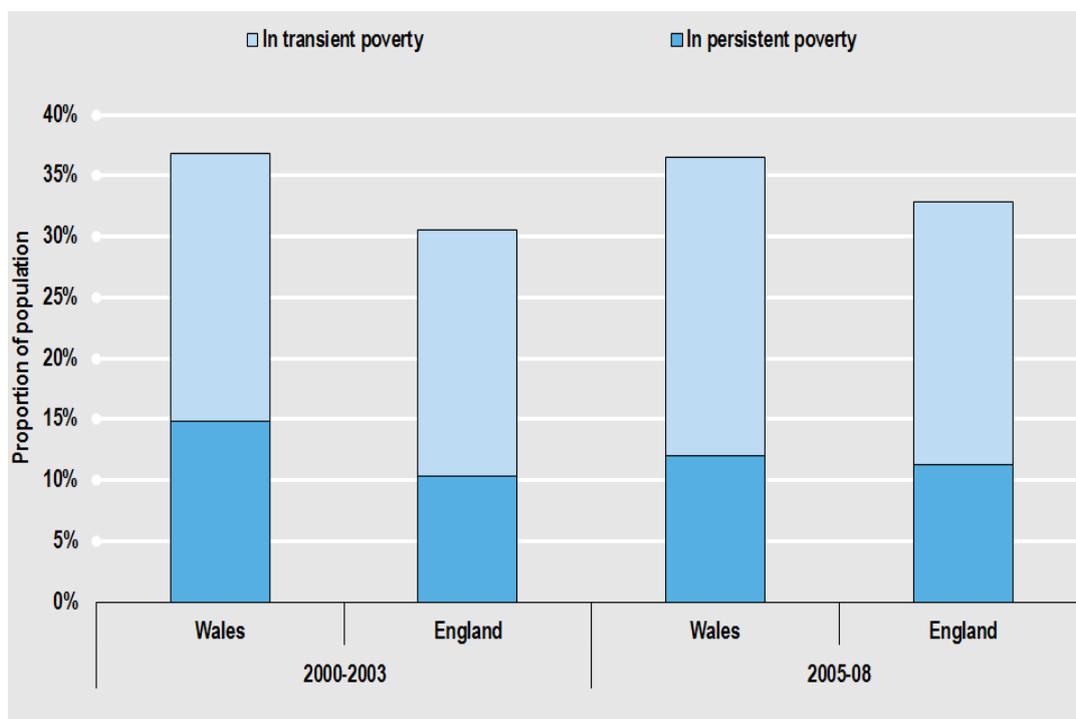
- 1.8 This study uses data from the BHPS from 2000 to 2008. Each year of BHPS contains household income data for 15,000+ participants, from which we can determine their poverty status. However, each year some participants will provide incomplete data or will drop out of the survey. At the same time, new participants will be added to the survey to maintain its overall size. In order to look at persistent poverty over a four-year period, we only include those individuals whose household's income is reported in each of those years.
- 1.9 Income is measured as the total income of the household, which is then adjusted for the size of the household. So everyone in the same household is assigned the same income value and therefore the same poverty status. This makes the not always correct but necessary assumption, that income is shared equally across the household. Individuals may also move household, so the results below are based on the proportion of individuals in poverty, rather than the proportion of households.
- 1.10 The BHPS allows us to link the data for each individual across all survey years in which they participate. This allows us to compare how the income and poverty status of an individual has changed between each year of the survey and therefore to determine if they experienced persistent or transient poverty.

Analysing persistent and transient poverty over short periods

- 1.11 Graph 1.1 below compares levels of persistent and transient low income in Wales to levels in England. It looks at two four-year periods, from 2000-2003 and 2005-2008, the latter being the most recent data available. We should note, however, that the Households Below Average Income publication, reports that the overall level of poverty in 2010-11 was no higher than in 2008. However, the proportion of poverty that can be described as persistent poverty may have risen.

² See technical appendix for discussion of survey attrition, more information on the measurement of income and an important note on equalisation.

Graph 1.1: Persistent and transient low income in Wales compared to England



Source: British Household Panel Survey, Waves J to M and O to R

1.12 In Graph 1.1 above, the percentage of people who were in poverty for at least one of the previous four years was higher in Wales than in England in both time periods. This is consistent with what we know about 'point-in-time' poverty in both countries – the percentages for Wales tend to be higher. For 2000-03, this difference between England and Wales could be seen in both persistent and transient poverty. So in the four years to 2003, 15% of people in Wales were in persistent poverty, compared with 10% in England. Overall, 22% of people in Wales were in transient poverty, compared to 20% in England.

1.13 In 2005-08, Wales had a persistent poverty rate of 12%, compared to 11% in England. However, Wales had a higher level of transient poverty, at 25%, compared to 22% in England. The higher proportion of people in poverty in Wales in the more recent period is therefore mainly accounted for by a higher proportion of individuals in transient poverty.

- 1.14 If we break England up into North and South, we see that the persistent and transient rates in the English North and Midlands are very similar to those in Wales. As in Wales, some 35% of people in the English North and Midlands had been in poverty for at least one year between 2005 and 2008. The figures for persistent and transient poverty in the English North and Midlands (12% and 23%) were also close to the figures for Wales (12% and 25% respectively).
- 1.15 Given that these findings are based on survey data, we need to understand how confident we can be in the results. This confidence is based in large part on the number of people surveyed. The sample size, in turn, depends on the analysis – if we are looking at four years of data, the number of cases with complete data for every year is lower than looking at one year in isolation due to people not reporting their income in one year or dropping out of the survey altogether.
- 1.16 For the period 2005-2008, there were some 2,000 cases in Wales in the BHPS with complete income data. Of these, 63% were not in poverty at any point in those four years, and 37% had experienced poverty. The confidence interval on this estimate is plus or minus 2.5%, giving a range for Wales of between 39.5% to 34.5% of individuals having experienced poverty. So we can say that the proportion of people in Wales who experienced poverty over those four years was statistically significantly higher than for England, where the rate was 32%.
- 1.17 This also means that the proportion of individuals in transient poverty in Wales was statistically significantly higher than in England (25% compared with 22%), and that there was no significant difference in the proportions in persistent poverty.

Summary

- 1.18 What does this tell us? Around one-third of the population of Wales experienced at least some period of poverty between 2005 and 2008. Although this is lower than the level of poverty in Wales for 2000-03, this proportion was slightly higher than the level in England for 2000-03. The difference is largely due to the higher level of transient poverty in Wales. The level of persistent poverty in Wales and England was very similar for both periods.

2. Characteristics of People in Transient and Persistent Poverty

- 2.1 This chapter looks at the characteristics of people in transient and persistent poverty. We focus on work status, family type, gender, disability, qualifications and housing tenure. For reasons of sample size, the analysis is presented at the Great Britain level. There is insufficient data to carry out analysis by ethnic group, even for Great Britain. In this chapter, we focus on the years 2005-2008 (Waves O to R of the BHPS).
- 2.2 The analysis is broken down into two types. Firstly, we look at the *proportion* of people in a particular group who are in poverty, be it persistent or transient. We then look the other way, at people in poverty, to see what *share* is in any particular group. Both approaches are important for the general understanding of poverty and for deciding a policy response: for example, a large proportion of a particular group may be in poverty, but if they represent a very small part of the population, they will nevertheless make only a small contribution to total poverty.

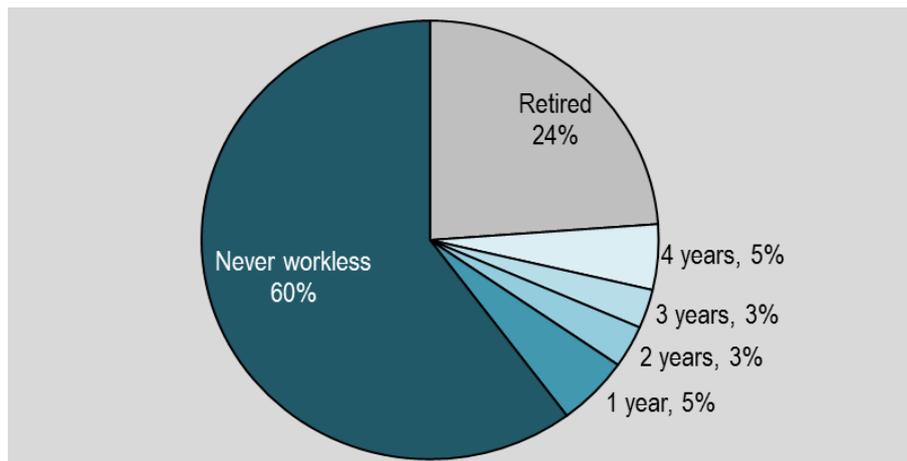
Work Status³

- 2.3 Before we look at how poverty varied across the period of 2005 to 2008 by work status, we need to understand how work status itself varied over that time. Figure 3.1 looks at the GB population by the number of years in a workless family from 2005 to 2008. It shows that one quarter of people lived in a family that was both workless and consisted of individuals aged over 60 years throughout the period of 2005 to 2008 (classed as 'retired' in Figure 2.1). Those who retired during the period could appear in any of the other categories.

³ Work status reflects whether any family members were in work in the week preceding the survey (see the technical appendix for more information).

2.4 Focusing on working age households, the majority of people were not in a workless family between 2005 and 2008. A total of 5% of people were in working age families that were workless throughout the whole period of 2005 to 2008. Most people in families that were workless at some point from 2005 to 2008 were not workless for all four years; most commonly, worklessness occurred for one year.

Figure 2.1: Number of years families were workless from 2005 to 2008



Source: British Household Panel Survey, Waves O to R. Data is for GB

2.5 We now consider work and poverty dynamics simultaneously. As people at or above retirement age will be making their working decisions in a different context, we remove them from the analysis. This applies to anyone who is aged 60 or over in the period of analysis – the 24% of people in retired families in Figure 2.1⁴. We return to non-working age families in the next section on family type.

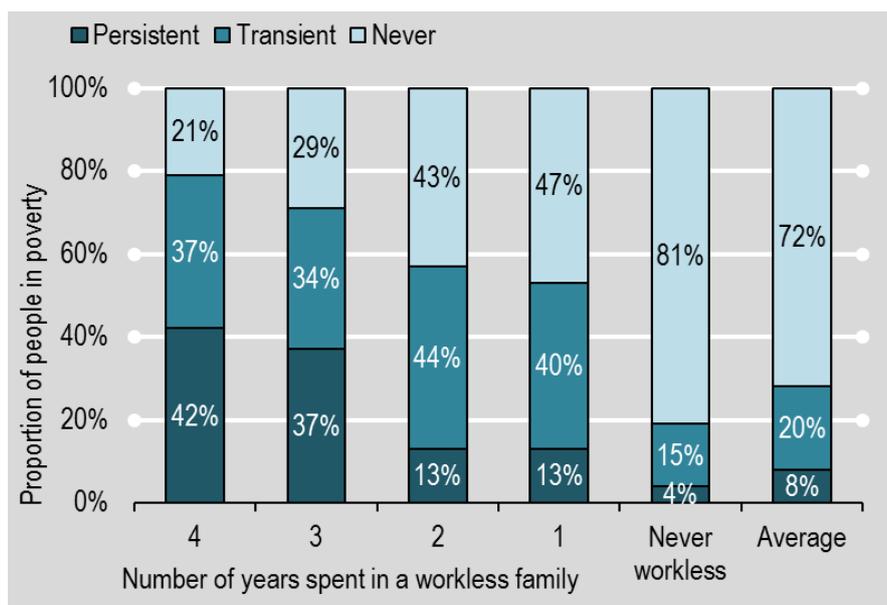
2.6 Figure 2.2 looks at the proportion of people experiencing poverty, either persistent or transient, by the number of years spent in a workless household from 2005 to 2008. The maximum a person could spend in a workless family over this period was four years. It shows that around four in five people in families that were workless throughout the period of 2005 and 2008, also experienced poverty over that period. Over half of this poverty was persistent. The proportion experiencing transient or persistent poverty was not much lower for people in families that were workless for three years rather than four.

⁴In total, around 4% of the population were in both a working family and a workless aged 60+ family during the period of analysis – they were excluded from the analysis on the association between work and poverty dynamics.

2.7 Over half of people who were in workless families for one or two years experienced poverty, with just over one in eight of them experiencing persistent poverty. At 19%, the proportion experiencing poverty was by far the lowest for people in families who were never workless, with only 4% of this group experiencing persistent poverty.

2.8 Figure 2.2 shows that being workless for all four years almost always results in poverty. It also shows us that the proportion of people in poverty only falls substantially when a member of the family is in work at least two out of four years. However, the proportion of people experiencing a spell of poverty does not dramatically fall unless there is at least one person in the family working throughout the period of the analysis.

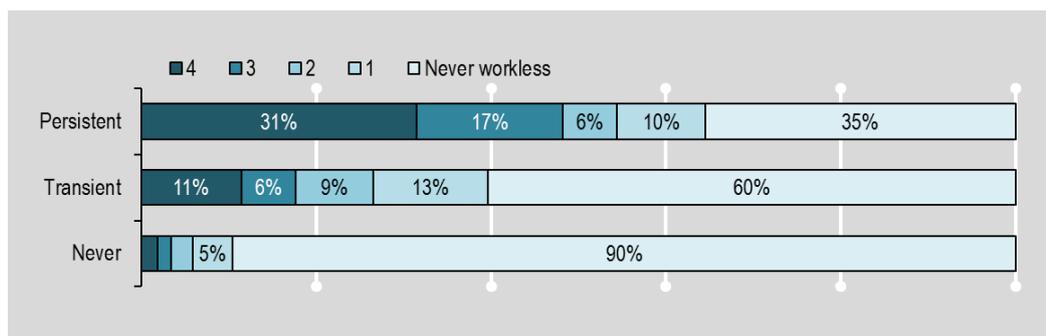
Figure 2.2: Proportion of people in poverty by the number of years spent in a workless family



Source: British Household Panel Survey, Waves O to R. Data is for GB

2.9 Having looked at the proportions of people in each group who were in persistent and transient poverty, we now look at the shares of persistent and transient poverty that are accounted for by each group. Figure 2.3 shows a breakdown of the type of poverty by the number of years spent in a workless household. Over half of those that experienced transient poverty in the period from 2005 to 2008 were never workless, along with over one-third of those that experienced persistent poverty. Two-thirds of those in persistent poverty were in work at least once between 2005 and 2008. Likewise, almost two-thirds of people had been workless at some point from 2005 to 2008. So, despite the low proportion in poverty there was still a large number of people who reported being in work in all four years but who also experienced persistent poverty.

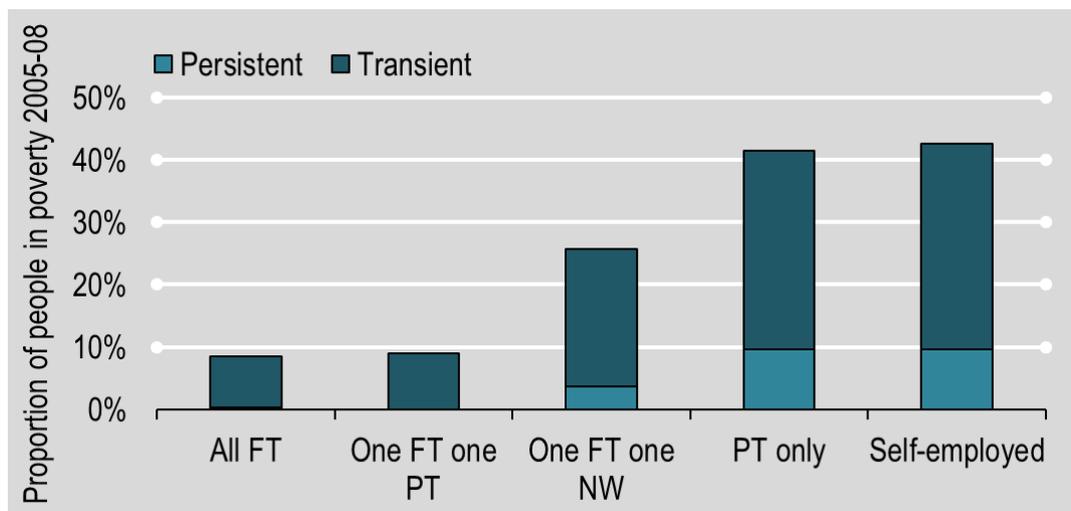
Figure 2.3: Proportion of people in persistent and transient poverty from 2005 to 2008 by number of years spent in a workless family



Source: British Household Panel Survey, Waves O to R. Data is for GB

2.10 The difference between working and not working households is obviously key. But the amount of work carried out in working households is also important. We now look at how the proportion of people in poverty varies between different types of working households. Figure 2.4 shows the proportion of people experiencing poverty (either transient or persistent) between 2005 and 2008 by the work-status of their family in 2008, for working households only.

Figure 2.4: Proportion of people in persistent and transient poverty by economic status of the family



Source: British Household Panel Survey, Waves O to R. Data is for GB

2.11 Families where all adults worked and some of that work was full-time were the least likely to have experienced poverty. The proportion of people in such families who experienced persistent poverty was less than 1%. However, having one adult in full-time work and one not working was not sufficient to remove entirely the risk of persistent poverty: in such families the proportion in persistent poverty was 8%.

2.12 Among working families, those where the only work done was part-time or were self-employed had the highest poverty levels - over four in 10 experienced some poverty and one in 10 experienced persistent poverty. These two groups are likely to have higher transient poverty rates for different reasons: self-employed families have, on average, more volatile earnings, sometimes considerably above the poverty line and sometimes considerably below whilst, as we saw before, people working part-time one year may be working full-time or not working at all the next.

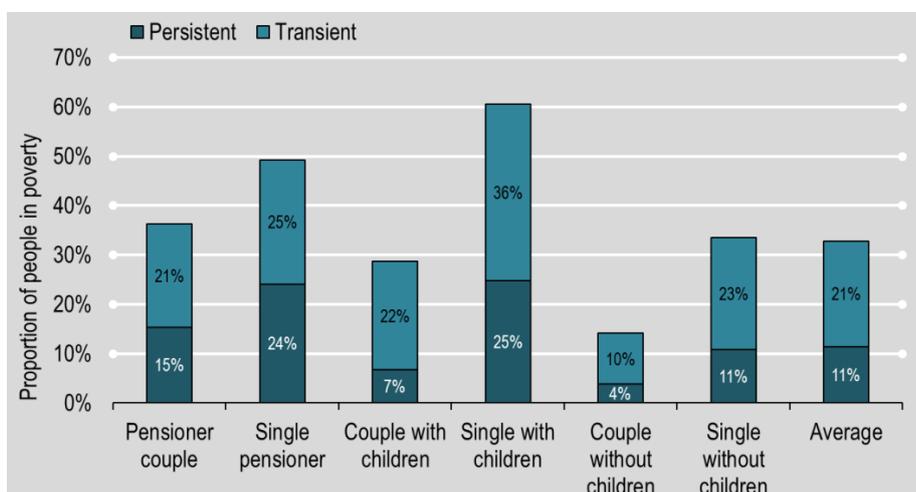
2.13 There are then two important points in this analysis. Firstly, work does reduce the risk of persistent poverty, and to a greater extent than it does transient poverty, but work does not reduce it to zero. The type of work also matters, both in terms of pay and hours. Secondly, people move in and out of work a lot. So to avoid poverty, the work must also be sustained.

Family Type and Gender

2.14 Like working status, family type can change from year to year. But there are also constraints on how dynamic family type can be; for instance a pensioner cannot become working age. A total of 20% of people in 2008 had been in a different family type at some point from 2005 to 2008. We found that the poverty rates for those groups that had changed, family type over the period were similar to the corresponding poverty rate for their family type in 2008. As such, we have categorised all cases in the subsequent analysis by family type in 2008.

2.15 Figure 2.5 shows the proportion of people who experienced poverty from 2005 to 2008 by their family type in 2008. Lone parents had the highest rate of transient poverty (36%) and persistent poverty (25%) meaning that, over the four-year period, over half (61%) of lone parents experienced poverty. Single pensioners also had high levels of persistent poverty at 24%, similar to the level for lone parents. Families with two adults were less likely to experience poverty than their single-adult equivalents. Families with children were more likely to have experienced poverty than the equivalent family type without children. The level of persistent poverty for couples with children was not much higher than for those without children, whilst the persistent poverty rate for lone parents was much higher than for single adults with no children.

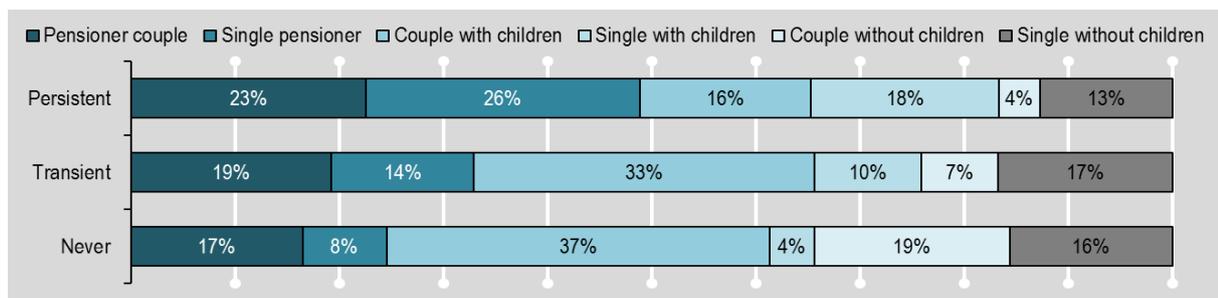
Figure 2.5: Proportion of people in each family type that experienced poverty from 2005 to 2008 by family type in 2008



Source: British Household Panel Survey, Waves O to R. Data is for GB

2.16 Figure 2.6 shows a breakdown of those that experienced persistent and transient poverty by family type. Pensioner families made up 45% of those in persistent poverty and 33% of those in transient poverty. People in families with children made up 51% of those in transient poverty and 34% of those in persistent poverty.

Figure 2.6: Proportion of people in persistent and transient poverty from 2005 to 2008 by family type in 2008



Source: British Household Panel Survey, Waves O to R. Data is for GB

2.17 It is important at this stage to note that the way we measure income makes a big difference to the prevalence of poverty, persistent or transient, among pensioners. In this report, we use the before housing costs measure (BHC) as it is the only approach permitted by the data in BHPS. This is the measure used in, for instance, the UK Child Poverty Act. Pensioners have low housing costs compared to the rest of the population, so much lower levels of poverty measured after housing costs are deducted (AHC).

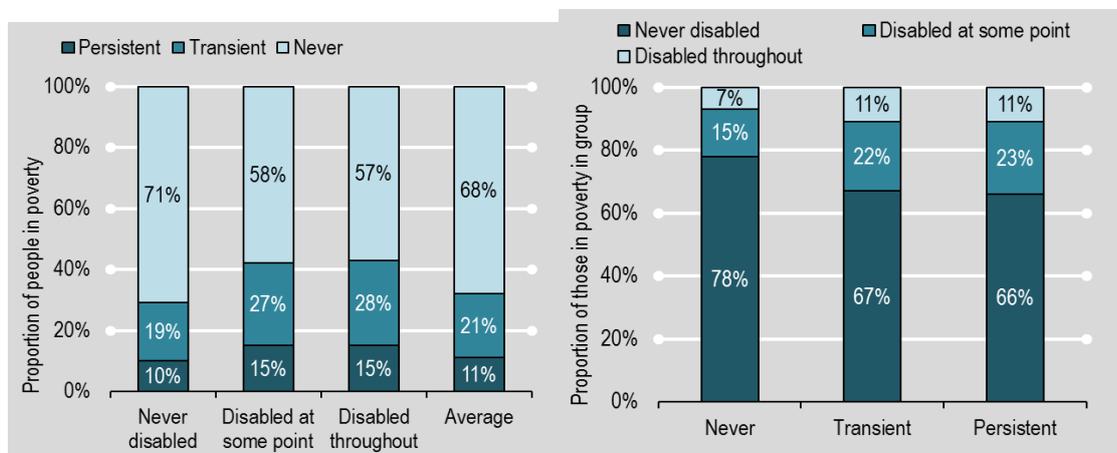
2.18 Although not shown in a graph, there are also differences in terms of gender. The proportion experiencing either persistent or transient poverty from 2005 to 2008 was higher for women at 35% compared with 30% for men. Women made up 51% of people never in poverty, 56% of those in transient poverty and 59% of those in persistent poverty. These variations can be accounted for by family type: single pensioners and lone parents - both of which groups had higher than average levels of poverty – and were mostly women.

Disability

2.19 Disabilities are not static; not all people who are disabled will always have been so. Likewise, disability and illness are closely related and some of those counted as disabled in the data will have a short-term condition that causes a disability.

- 2.20 Because poverty is measured at household level, we look at the number of disabled adults in a household, so disability can also be dynamic when people move in and out of households (as BHPS follows individuals). At any given point-in-time, around 16% of people lived in households that contained a disabled adult, but around 26% of households contained a disabled adult at some point from 2005 to 2008.
- 2.21 Figure 2.7 shows poverty among people living in households that (a) never contained a disabled adult (b) contained a disabled adult at some point but not throughout and (c) households that contained a disabled adult throughout 2005 to 2008. Over 40% of people in households that contained a disabled adult throughout the period 2005 to 2008 experienced poverty. The persistent poverty rate for this group was 15%.
- 2.22 Households that did not contain a disabled adult in the period from 2005 to 2008 had both a lower rate of experiencing poverty (29%) and a lower rate of persistent poverty (10%).
- 2.23 Around one-third of people who experienced both transient and persistent poverty were in households that contained a disabled adult at some point from 2005 to 2008.
- 2.24 So, living in a household that contained a disabled adult increased the chances of persistent poverty, even if the household disability status changed over time. But since as we noted above, only a minority of households contained a disabled adult at all the majority of the households that experienced poverty, did not contain a disabled adult during the period 2005-2008.

Figure 2.7: Proportion of people in households with a disabled adult in poverty in 2005-08 (left) and Proportion of those in poverty by whether the household contained a disabled adult (right)



Source: British Household Panel Survey, Waves O to R. Data is for GB

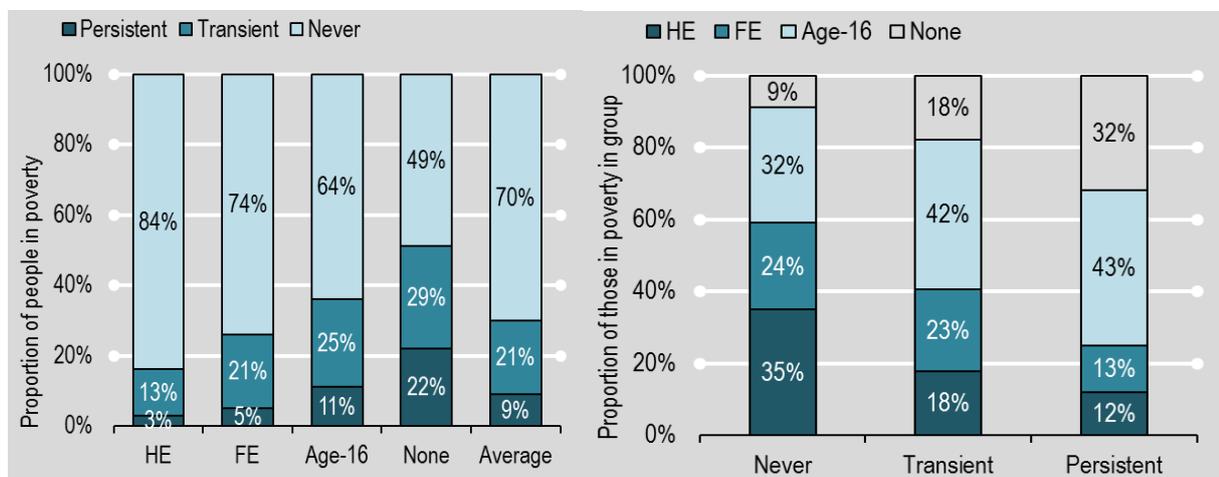
Qualifications

- 2.25 Individual qualification levels do change but only slowly and only in one direction. Only 5% of people aged under 60 years changed qualification level during 2005 to 2008. Since the educational level of the vast majority of individuals did not change, we have chosen to use the highest qualification level of the household reference person (HRP) in 2008 to indicate educational level throughout the period.
- 2.26 The reason for looking at the qualification level of the HRP is that they are the highest earner in the household (or, where the earnings are the same, the oldest member of the household). Qualifications influence income levels as higher qualifications may allow an individual to earn more money and therefore avoid poverty. As such, it is appropriate to focus on the highest earner when we analyse poverty by qualification level.
- 2.27 In our analysis of qualifications, we have excluded people in households where the HRP is aged 60 years or over. This is because our interest in qualifications lies in how they can increase earnings (and so prevent poverty) so we are interested only in individuals of working age. Individuals' ages over 60 years also tend to have a lower level of qualification and, as we noted earlier, a higher rate of poverty. This group has therefore been excluded in order to avoid exaggerating the level of poverty among those with low qualifications.

2.28 Figure 2.8 shows poverty in the period 2005 to 2008 by the highest qualification level of the HRP in 2008. Overall, 16% of people in households where the HRP had achieved a higher education qualification experienced poverty. In households where the HRP had no qualifications, 51% experienced poverty, of which 22% was persistent poverty. The proportion of people experiencing poverty at all and the proportion experiencing persistent poverty decreased with each qualification level - the higher the level of education, the lower the proportion experiencing any type of poverty. People in persistent poverty predominantly lived in families with low levels of qualifications.

2.29 Around 32% of people in persistent poverty lived in a household where the HRP had no formal qualifications, and a further 43% had only age-16 level qualifications. However, among those in transient poverty, 41% of people lived in households where the HRP had a higher or further education qualification.

Figure 2.8: Proportion of people in poverty in 2005-08 by qualification of HRP in 2008 (left) and the profile of those in poverty in 2005-08 by qualification of HRP in 2008 (right)



Source: British Household Panel Survey, Waves O to R. Data is for GB. NB: HE=higher education, FE=further education

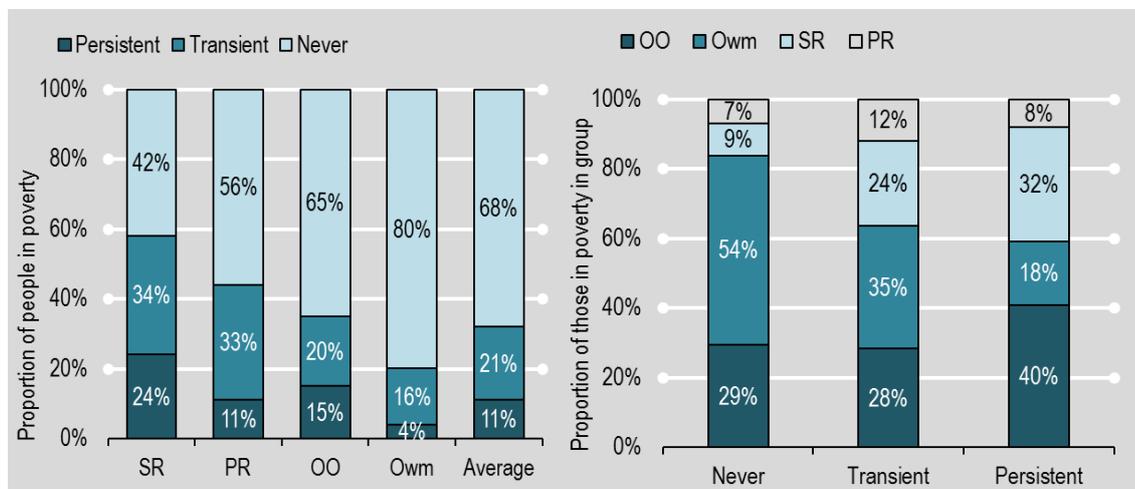
2.30 We have also repeated the analysis in Figure 2.7 by splitting the age of the HRP into two groups: 20 to 44 years and 45 to 59 years. The analysis is not shown because of the small sample size. However, it showed that a higher proportion of the younger group was in poverty across all qualification levels. In particular, a higher proportion of unqualified people aged 20 to 44 years were in poverty compared with unqualified people aged 45 to 59 years. But the pattern remains: for each age group the risk of experiencing persistent or transient poverty fell as the qualification level rose.

Housing Tenure

2.31 Except for those in the private rented sector, tenure tends to be reasonably static. Private renting is a highly dynamic tenure with around half of the people in private rented housing in 2008 not having been in that tenure for all of the three preceding years. However, since the private rented sector is much smaller than social rented or owner occupied, moves of people into and out of private renting has little effect on the other tenures. In the analysis below we have therefore chosen to use tenure in 2008 on the assumption that, for the vast majority of owners and social renters tenure has not changed since 2005. One should, however, be cautious of interpreting data on private renters, partly because they are a reasonably small group, but also because they are a dynamic group so any analysis of the link between persistent poverty and private renting is by definition less reliable.

2.32 Figure 2.9 shows proportions and shares of poverty by tenure. For the social rented sector, overall poverty was experienced by over half (58%) and persistent poverty by one-quarter (24%) of people. In terms of the proportion of people who experienced poverty, the level was higher for private renters than for those who owned outright (44% compared to 35%). But the proportion experiencing persistent poverty was higher for outright owners than private renters (15% compared to 11%). Around 20% of people living in owner occupied households with a mortgage experienced poverty, 4% were in persistent poverty. Despite the higher poverty rate among renters, owner-occupiers made up about 60% of people that experienced transient and persistent poverty – this is because owner occupation is by far the most common tenure.

Figure 2.9: Proportion of people in poverty in 2005-08 by tenure in 2008 (left) and the tenure profile of those in poverty in 2005-08 (right)



Source: British Household Panel Survey, Waves O to R. Data is for GB.

Key: SR=social rent, PR=private rent, OO=own outright, Owm=owns with mortgage

What we know about Wales

2.33 This chapter has looked at transient and persistent poverty by household characteristics. It looked at Great Britain as a whole to allow the use of a larger sample size and therefore a more reliable analysis of the data when broken down into population sub-groups. This section provides analysis of the same characteristics looking at how Wales differs in comparison with Great Britain and the North and Midlands of England. A full comparative analysis is not provided for reasons of sample size. Our aim in this section is only to highlight how the situation might differ in Wales.

Work status: Looking back to Figure 2.1, Wales had a slightly higher proportion of retired families compared to the rest of Great Britain (26% compared with 24%), a lower proportion of those who were in work for all four years (55% compared to 60%) and a slightly higher proportion that were at some point workless (19% compared with 16%). This means that the profile of those in poverty in Wales is likely to be more shifted towards workless and retired families compared to the rest of Great Britain. This is also true if we compare Wales to only the English North and Midlands.

Family status: The proportion of people in each family type in Wales was not particularly different to that in the rest of Great Britain. However, Wales has a slightly lower proportion of working-age couple families and higher proportion of pensioners than both the GB average and the average for the English North and Midlands. So, this is likely to mean that families in poverty in Wales are more likely to be pensioners and slightly less likely to be working-age families than is shown in Figure 2.6.

Disability: The proportion of people in households that contained a disabled adult in Wales (29%) was higher than in Great Britain (26%) therefore people in such households would make up a greater proportion of those in poverty in Wales than estimated in Figure 2.7. The level for the English North and Midlands (27.5%) was between the GB and Wales levels.

Qualification: There were no significant differences in the distribution of qualifications of HRP's when comparing either Wales or the English North and Midlands with GB as shown in Figure 2.8.

Tenure: The proportion of people living in the private rented sector was slightly lower. In the English North and Midlands the level of both private renting and outright owners was lower. So in terms of the profile of people in poverty in Wales, the private rented sector would be smaller and outright owners larger than shown in Figure 2.9.

Summary

- 2.34 This chapter shows the very strong link between work and poverty. Those who lived in workless households for the whole four year period were more likely than not to have experienced poverty. Some two-fifths experienced persistent poverty.
- 2.35 However, people in such households made up less than one-third of all those in persistent poverty. This means that the majority of people in persistent poverty lived in a working household for at least one of the four surveyed years. So worklessness brings a high risk of persistent poverty, but in work poverty is a substantial part of this story.

- 2.36 The amount of work done in a household makes a big difference. Only in households where all the adults work and at least one works full-time, does the proportion in persistent poverty drop below 5%. Around one in 10 of those in households where at least one adult was not working or all the work was part time were in persistent poverty.
- 2.37 These findings relating to work, cut across the other analysis. Those groups more likely to be workless – lone parents, people lacking qualifications – are more likely to be in poverty in general and persistent poverty in particular.

3. Moves in and out of Poverty

Background

- 3.1 The analysis in this chapter looks at people moving in and out of poverty. We look at whether these moves are associated with particular changes in circumstances – for example, a change in the household’s working status or family type.
- 3.2 In this chapter, we use the same definitions as the DWP use in their “Low Income Dynamics” series of reports. So to move out of poverty not only must a household’s income move above 60% of the median household income for that year, but it must have increased by at least 20%. We do this to ensure that changes in income are substantial and that a small fluctuation of a few pounds does not change the poverty status of a household one way or another.
- 3.3 In this chapter, we look at moves in and out of poverty in the years 2005-2008. The figures we give are based on the total number of moves between consecutive years in this period (i.e. 2005 to 2006, 2006 to 2007 and 2007 to 2008). This means that a person who was in poverty in 2005, then moved out and moved back in could be included more than once.
- 3.4 Over this period, around 7% of people who were not in poverty in one year were in poverty the subsequent year. People newly entering poverty make up one-third of people in poverty in any one year. Around one-third of people in poverty one year were not in poverty the next year. In any given year, 7% of individuals not in poverty had been in poverty the year before. The reason these figures are so symmetrical (one-third move in, one-third move out) is that the overall proportion of people in poverty over these four years was relatively static.

- 3.5 In the rest of this chapter, we will look at various events that the research literature suggests may be associated with moving in or out of poverty, such as increased household employment, changes in household composition and changes in the health status of people in the household. We look at pairs of events – one that may lift a person out of poverty, and one that may result in a person moving into poverty. For instance, we look at households where the number of working adults increased, and calculate what proportion was moved out of poverty. We then look at households where the number of working adults decreased, and calculate the proportion who moved into poverty.
- 3.6 There are two types of question that we need to answer. Firstly, what proportion of those experiencing the event moved into (or out of) poverty? Secondly, of all those moving into (or out of) poverty, what proportion experienced this event? We will start this chapter by looking at moves out of poverty.

Moves out of poverty

- 3.7 Table 3.1, below, shows the moves out of and into poverty associated with the events associated with changes in poverty status. As noted above, we have set thresholds for the increases to benefit, earnings and pension income to ensure that the changes are significant, albeit slightly lower than for overall changes in income. The events are:
- a decrease in the number of children in the household;
 - a lone parent family becoming a couple family;
 - a single adult without children becoming a couple;
 - an increase (of at least 10% and £10) in household benefit income;
 - an increase (of at least 10% and £10) in the household pension;
 - an increase (of at least 10% and £10) in the earned income of the household;
 - a change from a workless to a working household;

- a change from a household where some adults work to one where all adults work;
- an improvement in the health status of the respondent; and
- a decrease in the number of people with a disability in the household.

3.8 For all 10 events, we show the proportion of people who both experienced the event and moved out of poverty. We also show the proportion of all those moving out of poverty who experienced each event. It should be noted that the events are not exclusive and most individuals experienced more than one event. For instance, a household can experience both an increase in the number of people working and in the amount of benefit received through tax credits. The right-hand column in Table 3.1 therefore adds up to over 100%.

3.9 In the following commentary, we do not attribute cause and effect directly, although it is quite clear in some cases that, for instance, extra earned income has resulted in the family moving out of poverty. In other cases, it is much less clear so overall we err on the side of caution.

3.10 Around 95% of all those moving out of poverty experienced at least one of the events listed above. Almost all of these experienced a sufficiently sizeable increase in benefit, pension or earned income. The majority of the rest did see some increase in one of these three aspects of their income but the increase fell below the threshold specified above.

3.11 A rise in benefit income is an event that can be associated with a move out of poverty. The figures below bear this out. Of course, someone losing their job could see a rise in benefit income but a fall in overall income, which would not result in a move out of poverty.

Table 3.1 Events associated with moves out of poverty

	Proportion moving out of poverty	Proportion of all moves out of poverty
	%	%
Decrease in dependent children	33	6
Change from lone parent to couple with children	56	2
Change from single without children to couple without children (working age only)	63	1
Increase in benefit income	49	48
Increase in pension income	76	11
Increase in earned income	67	44
No longer a workless household	52	13
Increase in number of working people (in already working household)	50	12
Decrease in number of disabled people	37	8
Improvement in health status	30	23

Source: British Household Panel Survey, Waves O to R. Data is for GB

3.12 Of those families where the number of dependent children decreased from one year to the next, around one-third moved out of poverty. These accounted for 6% of all moves out of poverty.

3.13 For those in lone parent families that then became couple families with children, half moved out of poverty. However, this is a relatively rare event, and so accounts for only 2% of moves out of poverty. Likewise for working age singles without children becoming couples – almost two-thirds of people in such families also moved out of poverty. But this is another rare event, at least for people in poverty, accounting for only 1% of all moves out.

- 3.14 Obviously, increases in various types of income can lift people out of poverty. Around half of those whose benefits increased, three-quarters of those whose pensions increased and two-thirds of those whose earned incomes increased moved out of poverty. These changes combined, account for a large proportion of moves out of poverty – one-sixth of all such moves were associated with an increase in pensions and over one-half were associated with an increase in benefits or earned income.
- 3.15 The next two rows of Table 3.1 deal with household work status. In households that began ‘workless’ and became ‘working’, around half of people moved out of poverty. This accounted for 13% of all moves out of poverty. In households that changed from having ‘some working adults’ to ‘all working adults’, a similar proportion moved out of poverty. Such moves accounted for 12% of all moves out of poverty.
- 3.16 A total of 37% of families where the number of disabled family members fell, moved out of poverty. This accounts for 8% of all moves out of poverty.
- 3.17 For people who saw their own health status improve, some 30% moved out of poverty, accounting for 23% of all moves out. There are likely to be issues of inverse cause and effect being picked up here, since, for example, moving out of poverty may make someone feel healthier.
- 3.18 It is also worth unpacking the group for whom an increase in earned income resulted in a move out of poverty. Was this due to more people working or an increase in pay per working person? Among those who both moved out of poverty and saw an increase in earnings, around one-third lived in households where the number of people in employment rose. That means that the remaining two-thirds were in families where the ‘pay per person’ rose.

3.19 The dataset is not large enough for us to carry out the above analyses separately for Wales. In particular, we cannot look at these individual events for people who were in poverty in Wales – the numbers are too small. However, if we compare the prevalence of each event in Wales and England, they are very similar. For example, people living in Wales were no more or less likely than those living in England to live in a household with an increasing number of people in work, pension income or number of people with a disability. The exception was benefit income. Overall, 28% of people in Wales lived in a household where the benefit income increased from one year to the next. This compares with 23% in England. However, people in Wales were also more likely to live in a household where the benefit income decreased (23% for Wales compared to 18% for England). Both of these differences are simply reflective of the overall higher proportion of people claiming benefits in Wales than in England.

Moves into poverty

3.20 We can use the same categories as above, but in reverse, as follows:

- an increase in the number of children;
- becoming a lone parent family;
- moving from a couple without children to a single adult without children;
- a decrease (of at least 10% and £10) in benefit income;
- a decrease (of at least 10% and £10) in pension income;
- a decrease (of at least 10% and £10) in earned income;
- becoming a workless household;
- changing from a household where all the adults work to one where only some work;
- a deterioration in the health status of the respondent; and
- an increase in the number of people with a disability in the household.

Table 3.2: Events associated with moves into poverty

Event	Proportion moving into poverty	Proportion of all moves into poverty
	%	%
Increase in dependent children	12	7
Change from couple with children to lone parent family	43	4
Change from couple without children to single without children (working age only)	5	1
Decrease in benefit income	20	41
Decrease in pension income	16	9
Decrease in earned income	21	63
Become a workless household	37	17
Decrease in number of working people (but still working household)	10	12
Increase in number of disabled people	10	7
Deterioration in health status	6	16

Source: British Household Panel Survey, Waves O to R. Data is for GB

3.21 The table above is set up in the same way as Table 3.1. So we can see that 12% of people in families where the number of children increased (mainly through birth, but sometimes through families joining) moved into poverty that year. This accounted for 7% of all moves into poverty.

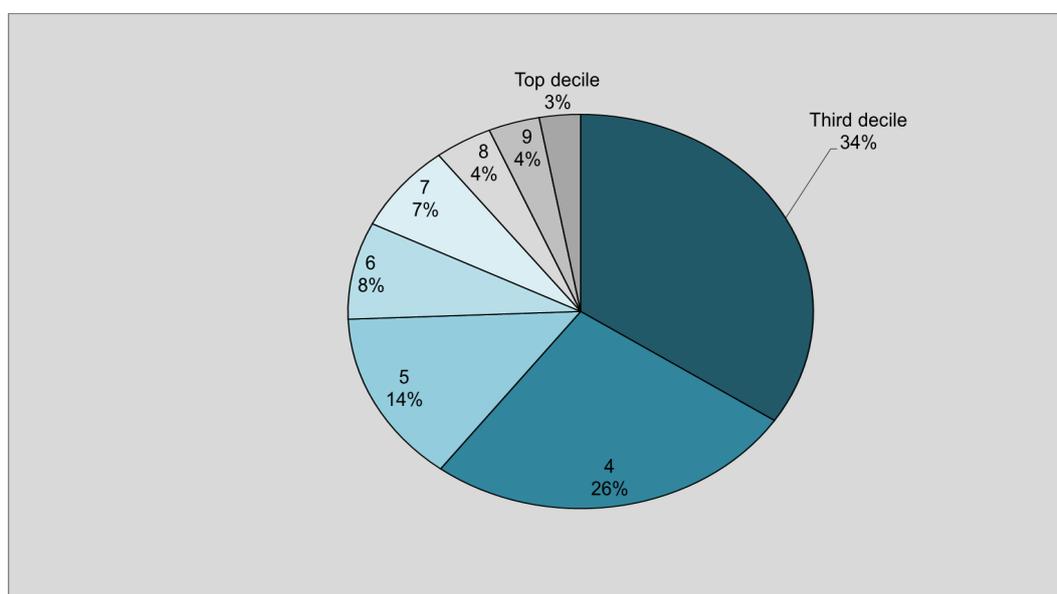
- 3.22 The proportion of people in families that became lone parent families and who moved into poverty is very high, at 43%. However, because this is quite a rare event (year on year), this only accounts for 4% of all moves into poverty. For families without children, moving from couples to singles did not often coincide with a move into poverty (5%) and makes up a very low proportion of all moves into poverty (less than 1%).
- 3.23 Much as we saw with moves out of poverty, changes in particular types of income make up a large proportion of moves into poverty. Around one in ten of all moves into poverty were for individuals who saw a decrease in pension income, two-fifths for those who saw a decrease in benefit income and two-thirds for those who saw a decrease in earned income.
- 3.24 Around one-third of people in households whose household work status moved from working to workless moved into poverty. Such changes account for 17% of all moves into poverty. Around one in ten people who lived in a household where the number of working people decreased but someone was still in work moved into poverty.
- 3.25 Finally, looking at the health events, for 10% of people in a household where the number of people with a disability increased, this coincided with a move into poverty. This accounted for 7% of all such moves. Around 6% of people who reported that their health had deteriorated also moved into poverty. This accounted for 16% of moves into poverty.

Origins and destinations of people moving into and out of poverty

- 3.26 In this section, we will look at the points of the income distribution people move to when moving out of poverty. We will also consider where in the distribution they were located before they moved in. The reason for doing this is to get a broader view of the income dynamics of people who spend time in poverty - just as there is a difference between spending one year in poverty and spending three years, there is a difference between moving to just above the poverty line and moving into the top half of the income distribution.

3.27 Graph 3.4 shows the destinations of people leaving poverty, by identifying the decile of the income distribution into which they moved. It combines all the years from 2005 to 2008; in effect, bringing together three years of moves out of poverty. As above, these moves are only included if there was an increase in income of 20% and £10 per week. Given that roughly 18% of the population is in poverty at any one time and given the stipulation that incomes must increase by a substantial amount, in order to be considered to have left poverty an individual has to have reached the third income decile or higher.

Figure 3.3: Destinations of people moving out of poverty

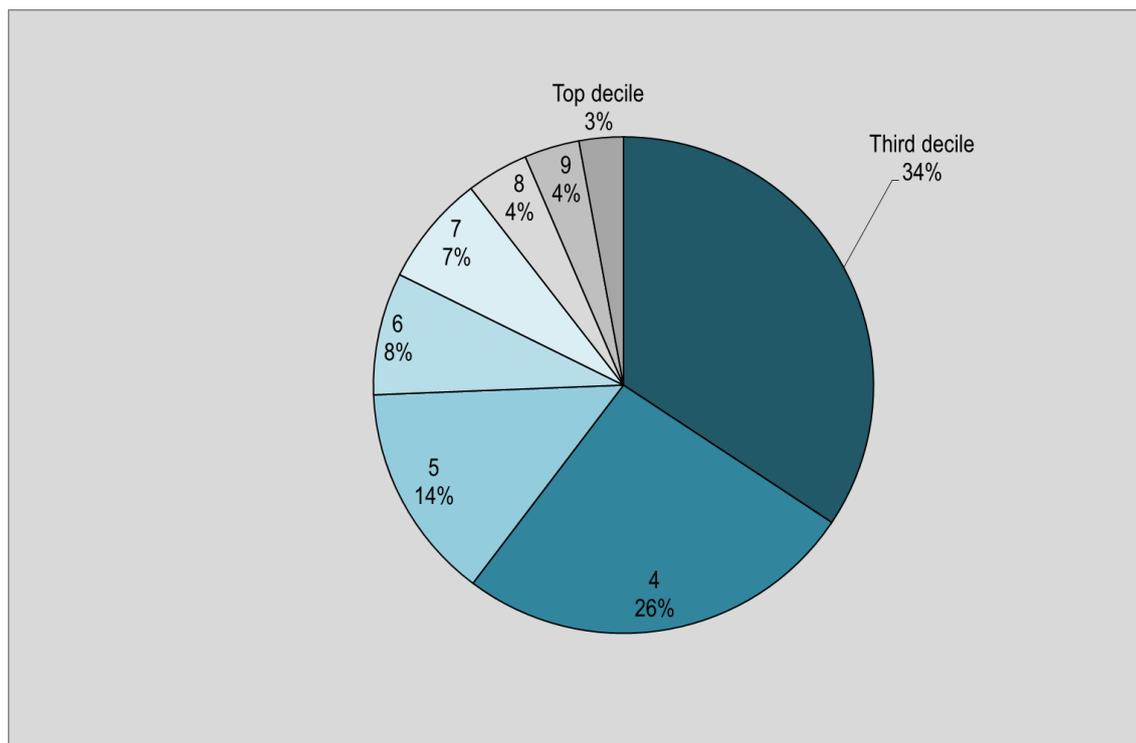


Source: British Household Panel Survey, Waves O to R. Data is for GB

3.28 Some 34% of people moving out of poverty move into the third income decile. That is, they move just above the “poverty line”. A slightly smaller proportion (26%) move to the fourth decile and 14% move to the fifth decile. In total then, of those leaving poverty, 74% remain in the bottom half of the income distribution.

3.29 We can do the same analysis in reverse, and look at the origins of people moving into poverty, analysing the parts of the income distribution they come from.

Figure 3.4: Origins of people moving into poverty



Source: British Household Panel Survey, Waves O to R. Data is for GB

3.30 The picture is almost a mirror image of Figure 3.3. On average, 34% of those moving into poverty were in the third decile the year before, 20% were in the fourth decile and 17% in the fifth. So in total, 71% of those moving into poverty came from the lower half of the income distribution.

Discussion

- 3.31 There is substantial movement within the bottom half of the income distribution, with three-quarters of those leaving poverty staying in the bottom half and a similar number of those entering poverty coming from the bottom half. But it also suggests that merely “leaving poverty” is not enough for many people to enjoy a sufficient standard of living. Someone in poverty for two years who then moves to the third income decile, as one-third of those leaving poverty do, is unlikely to see a significant rise in their standard of living. Or we could think of this the other way around - someone in the third income decile is unlikely to be able to build up the financial resources to withstand anything other than the shortest of future spells in poverty.
- 3.32 When we look at the events that are associated with moves out of poverty, clearly paid work makes a difference. We found that in two-thirds of cases where the number of people working in the household rose, individuals moved out of poverty. We saw that in one-third of cases where households became workless, the household moved into poverty. Overall, then, this analysis does indicate the importance of work as a means of escaping poverty but also indicates the effectiveness of other approaches, such as raising benefit income.

4. Technical appendix

Attrition in BHPS

- 4.1 BHPS has around 22,000 cases each year (around 4,000 of which are in Wales), and around three-quarters of cases contain income data. As we are conducting longitudinal analysis, we have excluded cases where there is incomplete income data for the period analysed – some people will ‘drop out’ of the survey from one year to the next or refuse to provide income information in one year and provide it in the next. Each year, new participants are added to the survey and just under 10% of respondents drop out. Table 4.1 shows the sample sizes for GB and Wales in 2005 and in the consecutive years analysed in this report.
- 4.2 When attempting to compare data for 2000-03 and 2005-08, a total of 32% of cases for which household income data was available dropped out. We therefore need to consider if people in poverty are more or less likely to drop out of the survey than people not in poverty as this might create bias in the resulting analysis. The BHPS is constructed in such a way that the weights adjust for people dropping out over time, but because the weights are calculated using purely demographic variables such as gender and age group, we make the assumption that in doing so, it also adjusts effectively for poverty in particular. This is not necessarily a valid assumption. In fact, looking at the whole sample for GB over the nine year period, around 89% of people who were not in poverty one year continued to the next year. This compares to 86% of those in poverty in one year who completed the survey the following year. So, the drop-out rate for people in poverty is higher than for people not in poverty. This means that we are likely to be under estimating the proportion of people experiencing poverty.
- 4.3 The longer the period in question, the greater the drop-out rate and its associated bias will be. So, we can have much more confidence in the estimates of the proportion of people spending time in poverty over shorter spells than longer ones. It is due to concerns over robustness that, in all but the second chapter, we only look at four-year periods, and at year to year transitions in and out of poverty.

Table 4.1: Number of participants in BHPS in GB and Wales over different time periods

	Any one year	Two consecutive years	2000-2003	2005-2008	2000-2008
All GB cases	22,000	19,000	16,000	17,000	12,500
All Wales cases	4,000	3,800	3,500	3,000	2,500
GB cases with income data	16,500	15,500	11,000	12,000	7,500
Wales cases with income data	3,000	2,800	2,500	2,000	1,500

Source: British Household Panel Survey, Waves O to R

Income and poverty measures

4.4 Poverty is defined as having less than 60% of the median household income before housing costs. It assumes that income is shared equally across the household. Income is also adjusted (equivalised - see below for more information) to reflect the size of the household so the income of different sized households can be directly compared. The collection of information on net income in BHPS as far as possible followed the method used in the HBAI to create a measure of net (disposable) household income, expressed in pounds per week. This is the main measure of income used by DWP in its poverty analysis.

4.5 Net income is the sum across all household members of: cash income from all sources (income from employment and self-employment, investments and savings, private and occupational pensions, and other market income, plus cash social security and social assistance receipts and private transfers (e.g. maintenance)) minus direct taxes (income tax, employee National Insurance Contributions, local taxes such as council tax) and occupational pension contributions.

- 4.6 The time period over which current income components are measured is the month prior to the interview. It does not reflect how income fluctuated since the last survey. So in this report an individual described as being in poverty was in a household with less than 60% of the median net income in the month prior to survey. Persistent poverty refers to individuals in a household with less than 60% of the median net income in the month prior to at least three of four annual surveys.
- 4.7 Poverty can be measured by looking at income before or after housing costs have been taken into account (BHC or AHC). Housing costs are rent, mortgage interest, water charges, service charges and building insurance. The UK Child Poverty Act uses BHC. This report uses the BHC measure of poverty because income is given BHC in the dataset and there is no measure of housing costs that would allow the construction of a standard AHC measure.

Employment

- 4.8 There are two key points that need to be understood about our analysis of work status in Chapter 3. The first is that in BHPS employment status reflects the work done in the week preceding the survey. As such in our longitudinal analysis of work status the term “never workless” means that in the week before each survey was completed the individual was in work. It is therefore possible that they experienced a spell of worklessness between surveys.
- 4.9 The second point to note is that our analysis looks at the economic status of the family (this is to be consistent with DWP analysis of poverty in HBAI). So families where someone is always working can include individuals who are never working over the period.

Equivalisation

- 4.10 Equivalisation is the process by which household income is adjusted for household size and composition. In order to enjoy a comparable standard of living, a household of, say, three adults, needs a higher income than a single person living alone but not three times that of a single person. The income obtained by the equivalisation process is thus a proxy for living standards and can be used to make valid comparisons between households. In order to calculate equivalised income, household incomes are divided by household equivalence factors, which vary according to the number of adults and the number and age of dependants in the household.
- 4.11 Our analysis uses the OECD Equivalisation scale. This is the same scale used in the Households Below Average Income report, which contributes to the measures in the UK Child Poverty Act 2010 and is widely accepted as the norm. The DWP Low Income Dynamics publication uses a different scale, the McClements equivalence scale; this scale is an alternative to the OECD but is now rarely used. This means that although the findings cannot be directly compared to much of the DWP Low income dynamics report, they can be directly compared to most other contemporary analysis of poverty in the UK. The main practical difference between the OECD and to the McClements scale is the different weight given to the income of single adults and for subsequent adults. The poverty rate for single adult families would therefore be higher under the OECD scale than under the McClements but the poverty rate for couple households would be lower.

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