



# Measuring Poverty

## CPAG brief summary and overview

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Poverty measurement, irrespective of the methods used, involves judgments. Poverty is about not having enough (and therefore is different from inequality) and this inevitably raises the question: what do we mean by enough and how do we measure that? Leaving that important discussion aside, there are two fundamental components in measuring levels of poverty, an income measure and a living standards measure. This brief document summarises the key components of each and their relationship to one another.

### **Measuring poverty**

A comprehensive approach to measuring child poverty includes four elements:

- An income measure, adjusted for family structure and expressed before or after housing costs
- A measure of hardship, based around deprivation of items and activities as a result of insufficient income and/or inadequate resources
- A measure of severe hardship (the extent or depth of hardship)
- A measure of persistence (poverty over time, that is how long children experience poverty)

Because measures of poverty and hardship involve making a judgment and asking the question: what is enough, that is what is enough income to ensure that:

- children have what we think they should have in the way of what we would regard as an acceptable standard of living and
- they don't live in hardship, that is, ensure that they are not denied the opportunities, resources and activities which as a society we would regard as necessary and acceptable in current New Zealand society.

How, then, are the various measures calculated and what do the various measures tell us about how well the above requirements are met?

# 1. Income Measures

Three key components:

A **measure of income** across the community, usually 50% or 60% of the median. Changes over time can be based on a fixed point (**constant value**, current measures use 2007 as the base and adjust for inflation) or a moving line (**relative value**, with the income level adjusted to reflect changes in income on an annual basis).

Income adjusted to reflect housing structure and composition – an **equivalence** scale is used to achieve this by weighting for size of household and age of household members.

Measures are expressed before (BHC) or after (AHC) **housing costs**. Current measures apply a standard 25% to the cost of housing, a figure which is recognized to under-represent the share of the budget for low income households unless they are on income related rents, i.e. low income households generally spend more than 25% of income on housing.

Allowing for these factors, how many children then are living in poverty using the income measure ?

**Table F.5**

**Numbers of poor children in New Zealand  
(ie the number of children in households with incomes below the selected thresholds)**

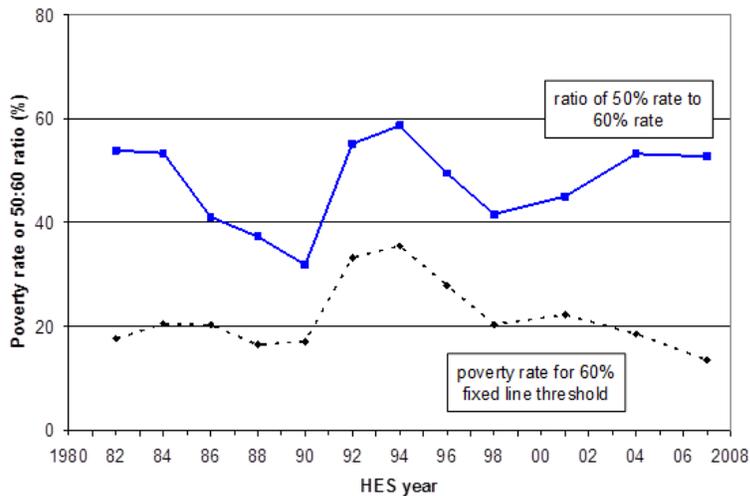
HES year	BHC		AHC			
	BHC 'moving line'		AHC 'moving line'			AHC 'anchored line (2007)'
	50%	60%	40%	50%	60%	60% (07 ref)
2001	120,000	250,000	115,000	215,000	310,000	380,000
2004	150,000	265,000	115,000	200,000	285,000	320,000
2007	135,000	210,000	115,000	175,000	240,000	240,000
2009	125,000	230,000	140,000	210,000	280,000	255,000
2010	150,000	250,000	120,000	210,000	315,000	275,000
2011	145,000	235,000	130,000	210,000	290,000	270,000
2012	130,000	225,000	135,000	215,000	285,000	255,000
2013	120,000	215,000	135,000	205,000	260,000	235,000
2014	150,000	250,000	-	220,000	305,000	245,000

## 2. Poverty Depth

This measures the extent of poverty, that is, how far are people below the poverty line. One way of doing this is to use the relationship between the 50% and 60% poverty measure. The graph below shows this relationship for children, with the gap increasing between 1988-2004 and then flattening.

**Figure F.8**

**Ratio of 50% poverty rate to 60% poverty rate using 1998 CV thresholds (BHC), dependent children**



## 3. Persistence of poverty

Using data from the Survey of Family Income and Expenditure (SOFIE) (now discontinued) it is possible to see how people's place in the income distribution picture changes over time. From this it was able to identify those who had remained in the bottom decile for a particular period throughout the seven years and this group was defined as being in chronic poverty. The data shows that of those children in current poverty, 60% are in chronic poverty (defined as being below the average throughout the seven years) and another 20% not in current poverty are in chronic poverty. The measure averages both household incomes and overall incomes over the seven years.



## 4. Hardship Measures

There have been a range of different measures over the last fifteen years – the table below attempts to summarise these. The most recent (MWI) uses the approach of absolute essentials for a minimum acceptable standard of living.

	APPROACH	OUTPUT	CATEGORIES	CHILD MEASURE
Living Standards Scale (LSS)	Living standards across whole population	Economic Living Standards Index (ELSI). Scale from severe hardship to very good living standards	Economising; ownership; Social participation; global self-rating	Generated from overall measure which includes child specific items
Deprivation Index – Dep17 <sup>1</sup>	Those with lower living standards	Measure of deprivation; deprivation index; score of 7 or more used as measure of deprivation	Enforced lack of essentials; Economised or cut back on essentials a lot because money needed for other essentials; In arrears more than once in last 12 months because of shortage of cash; Financial stress and vulnerability	Mixture of household and child specific items
Material Wellbeing Index (MWI) <sup>2</sup>	Total Population	Low to high material wellbeing – two broad categories: enforced lack perspective and freedom enjoyed perspective; Score of 9 or less measure of low living standards	Ownership or participation; Economising; Housing problems; Freedoms/Restrictions; Financial strain	

Specific items for each category:

Enforced lack of essentials – meat, fish or vegetarian meal each 2<sup>nd</sup> day ; 2 pairs of good repair, suitable shoes ; suitable clothes for important occasion ; presents for special occasions ; home contents insurance

Economised – went without or cut back on fresh fruit and vegetables ; bought cheaper cuts of meat or less than wanted ; put up with feeling cold to cut costs ; postponed visit to doctor ; postponed visit to dentist ; did without or cut back trips to shops ; delayed repairing or replacing broken or damaged appliances

In arrears – rates, electricity, water, vehicle registration, insurance or wof

Financial stress and vulnerability – borrowed from family or friends at least once in last year to cover daily living costs; feel very limited by availability of money when thinking about purchase of clothes or shoes for self ; could not pay unexpected bill of \$500 within a month without borrowing

The MWI included all the above items except borrowing from family or friends. It added the following: holiday away from home at least annually; overseas holiday once every 3 years; continued wearing of worn out clothes; spent less on hobbies/special interests than desired; dampness or mould; heating or keeping house warm in winter; \$300 spot purchase for an extra.

Note: for MWI, each item is given a score and the total of 9 or less represents the aggregate of these scores. For example, for economising items, not at all =2, a little =1, a lot =0.

## 4a. Child hardship/deprivation

Using the Dep-17 index, 17% of children have an index of 7+ while 21% have an index of 6+, a slightly lower threshold. The MWI does not yet produce data for children and the current data is not presented using any categorisation of living standards; these are still being developed. An MWI-9 is presented, using 9 items from the full MWI. This data shows that 26% of children are in the lower (of 4) threshold. The Table below is the child specific list developed from the Dep-17 data; with the exception of four items, these are drawn from the household data.

**Table D.6**

**20 items used for calibrating DEP-17 for school-aged children (aged 6-17 yrs)**

<b>Child-specific items</b>	<b>General household items</b>
warm winter clothes for each child	could not keep main rooms warm
two pairs good shoes for each child	cut back or went without fresh fruit and vegetables "a lot"
waterproof coat for each child	delayed repair or replacement of appliances ("a lot")
children continued wearing worn out clothes and shoes	late payment of vehicle wof /reg (more than once in last year)
separate bed for each child	late payment of electricity / water / gas (more than once)
separate bedroom for older and opposite sex children	received help from food bank or other community group (more than once)
able to have friends to birthday party	dampness or mould in dwelling (major problem)
each child has all school uniform required by school (s)	crime/vandalism in the area (major problem)
able to pay for school trips for each child	
able to attend music, dance, art and swimming lessons	
sport participation	
postponed doctor for children	

Note: the 4 shaded items are also in DEP-17

Perry, 2015b, p.24

Using the Dep-17 data, hardship rates are higher for children in sole parent families, but around half of those in hardship are in two parent families. Children in sole parent families are more likely to be in families in severe hardship. Beneficiary families have a higher rate of hardship, but at the 7+ level, around half of those in hardship are in families in paid work. Hardship is higher in larger families, and in families in HNZ housing. Rates are higher among Maori and Pacific households, but around half of those with a hardship rate of 6+ or worse are Pakeha.

How many children are in hardship? No figures to answer this are produced from the Dep-17 or the MWI. The nearest approximation is using a EU scale, with the standard threshold below equating to a measure of 7+ on the Dep-17 index.