

# Child Poverty in Armenia: Analysis of the 2008 Integrated Living Conditions Survey

A Report for UNICEF

Yekaterina Chzhen

October 2009

Working Paper No. EC 2416

#### Acknowledgements

Many thanks to Prof. Jonathan Bradshaw for his helpful comments and suggestions

#### **Author's contact details**

Department of Social Policy and Social Work, University of York. Heslington York YO10 5DD, UK.

yc535@york.ac.uk

#### 1. Introduction

This paper assesses the incidence and patterns of child poverty in Armenia based on the 2008 Integrated Living Conditions Survey (ILCS). Since no single measure captures child poverty sufficiently well, this paper analyses consumption-based poverty, material deprivation and housing deprivation as well as the overlaps between these measures. A child under 19 is treated as the unit of analysis.<sup>1</sup>

Children in Armenia are among the groups most vulnerable to poverty. Although extreme (food) child poverty rates are comparable to individual and household poverty rates, total poverty rates are higher for children than for the population as a whole. Children in larger families, younger children and children with disabilities are at a particularly high risk of poverty.

Twenty-six per cent of all children are classed as poor using the total poverty line, while three per cent of children live in families whose consumption falls below the extreme (food) poverty line. Children are more likely to be poor, everything else held equal, if they have two or more siblings, if they have a disability or live with a disabled child, if they live in families headed by persons with secondary education or lower, if their families are headed by non-married persons and if they live in workless households. There are also substantial regional differences in child poverty rates. Poor children are significantly more likely to live in materially deprived households and to live in poor housing conditions, such as overcrowding, lacking important housing amenities, having several housing problems and conditions described as bad or very bad.

This paper analyses the poverty profile and living conditions of children in Armenia. It presents the consumption-based poverty rates for children and the households characteristics that are associated with a higher risk of poverty (Section 2); the material deprivation rates, based on household ownership/lack of durable goods (Section 3); the housing deprivation rates, based on household ownership/lack of housing amenities, the number of reported housing problems, subjective assessment of dwelling conditions, and the number of rooms per person (Section 4); the overlaps in various deprivation measures and children's household characteristics associated with an increased likelihood of deprivation on each of these measures (Section 5); and the role of social security benefits, such as old age pensions, family benefits and child benefits, in alleviating child poverty (Section 6).

2

<sup>&</sup>lt;sup>1</sup> The household level ILCS dataset was used and a child weight was constructed as the product of the household weight and the number of children under 19 in the household to approximate the population of children in Armenia. The population weight is the product of the household weight and the number of household members. All estimates are weighted using the derived child weights, with the exception of population and household poverty rates in Table 1.

#### 2. Consumption-based child poverty

This paper uses consumption per adult equivalent as a basis for poverty measurement. Total monthly household consumption includes expenditure on food and relevant non-food items, as well as the value of food produced for own consumption. To account for the sharing of resources within a household, this measure is divided by the equivalent household size. Two poverty lines are used: the extreme (food) poverty line of 17,232 drams per month per adult equivalent and the total poverty line of 25,188 drams per month per adult equivalent. The extreme poverty line is based on the value of a 2,232 calorie food basket per person per month using price data from the 2004 Integrated Living Conditions Survey, adjusted for seasonal and regional price variations, modified using the per adult equivalence scale and inflated to the 2008 price levels using the relevant Consumer Price Indices. The total poverty line is based on the value of food consumption plus the value of relevant non-food consumption.

Three per cent of children live below the extreme poverty line and 26 per cent below the total poverty line, based on the ILCS 2008 data. The poverty rates are three per cent and 21 per cent for all households and three per cent and 23 per cent for all individuals, respectively (Table 1). Thus, children are at a higher risk of total poverty than the population as a whole.

Table 1 Poverty rates at different thresholds (%)

Threshold	All individuals	All households	All children under 19
Extreme (food) poverty			
line (17,232 dram per	3.0	2.9	3.2
month adult equivalent)			
Total poverty line			
(25,188 dram per month	22.9	21.4	26.0
per adult equivalent)			

Source: Author's estimates from ILCS 2008 data.

Average poverty rates mask substantial variation in exposure to poverty and adverse living conditions by household characteristics. Table 2a presents the results of a

\_

<sup>&</sup>lt;sup>2</sup> The following formula is used to derive the equivalence scale:  $EA_i = (A_i + a C_i)^{\theta}$  where  $A_i$  is the number of adults in the household i,  $C_i$  is the number of children,  $\theta$  is the scale parameter ( $\theta$ =0.87) and a is the cost of a child relatively to an adult (a=0.65). Children are individuals of age 14 and below (National Statistical Office of the Republic of Armenia, 2009, 'Social Snapshot and Poverty in Armenia 2009').

<sup>&</sup>lt;sup>3</sup> Non-food consumption includes the following categories: alcoholic beverages and tobacco, clothing and footwear, household goods, transportation, utilities, recreation, education, health, and the rental value of durable goods as well as in-kind non-food consumption such as non-food goods and services received free of charge (National Statistical Office of the Republic of Armenia, 2009, 'Social Snapshot and Poverty in Armenia 2009').

descriptive analysis of child poverty based on the ILCS 2008 data using the extreme and total poverty lines. Extreme poverty rates, total poverty rates, average poverty gaps<sup>4</sup> calculated using total poverty threshold, composition of total child poverty and composition of all children are tabulated by the relevant demographic and socioeconomic household characteristics. Child poverty rates vary significantly with the number of children in the household, the age group of the youngest child, number of disabled children, as well as the characteristics of the household head, such as gender, the highest level of education and employment status. There is also significant variation by the proportion of adults in the household who are employed and regional variation by province. The mean (total) poverty gap is 13 per cent, which is the average percentage by which the consumption of those classed as poor would have to be increased in order to reach the total poverty line.

Children in larger families are more likely to be poor. Children with two or more siblings are at the highest risk of poverty using both extreme and total poverty thresholds. Thus, 35 per cent of children in families with three or more children under 19 are poor, compared with 26 per cent of all children, using the total poverty line. Four per cent of children in large families are extremely poor, compared with three per cent overall.

Younger children are more likely to be poor. Children in families where the youngest child is five years old or younger are at the highest risk of poverty. Thus, 29 per cent of children in such families are poor, compared with 20 per cent of children in families where the youngest child is 15-18 years old. A similar pattern is observed using the extreme poverty threshold.

Those in households with one or more disabled children are at the highest risk of poverty. Although only two per cent of children are disabled or live with other disabled children, 50 per cent of them are poor and 17 per cent are extremely poor. They are over-represented amongst poor children (4 per cent) and are furthest from the poverty line, on average (20 per cent).

Children in female headed households are substantially more likely to be poor. Although only one-quarter (26 per cent) of all children live in female headed households, one-third (30 per cent) of them are poor and five per cent are extremely poor, compared with 25 per cent and three per cent of children in male headed households, respectively.

Marital status of the household head is an important predictor of child poverty. Children in households with a single (never married), widowed or divorced head are more likely to be poor (31 per cent) than those in households with married or

<sup>&</sup>lt;sup>4</sup> The poverty gap shows how far a particular group is from the poverty line, on average. It is calculated as the poverty line minus the total consumption per adult equivalent divided by the poverty line, for those below the poverty line only.

cohabiting heads (24 per cent), using the total poverty line. They are also about twice as likely to fall below the extreme poverty line.

Living in a household with a more educated head reduces the risk of poverty. Children living in households where the household head has no education or primary education only (33 per cent), secondary education (30 per cent), or vocational or incomplete higher education only (23 per cent) are substantially more likely to be poor than those in households where the head is a university graduate (12 per cent), using the total poverty threshold. Children in households where the head has secondary education only are at the highest risk of extreme poverty (4 per cent). More than half of all children (52 per cent) live in such households, however.

**Employment status of the household head is another crucial predictor of child poverty.** Children in households where the head did any profitable work within the past seven days are at the lowest risk of poverty using either of the two thresholds. Thus, 21 per cent of children whose head of household is working are poor, compared with 32 per cent of children with non-working heads. However, just under one-half of all children (45 per cent) live in households where the head is not working.

The number of adult household members in employment also appears to affect child poverty rates. Children in households where no adults aged 19-60 are employed are at the highest risk of poverty, while those in households where all adults are working are the least likely to be poor. Children in households where not only working age adults are employed are at the lowest risk of extreme poverty (under 1 per cent). However, more than one-half of all children (53 per cent) live in households where not all adults aged 19-60 work.

Table 2a Poverty rates, gaps and composition by type of household

	Child	Child	Average	Poverty	Composition
	poverty rate	poverty rate	(total)	composition	of all
	(extreme)	(total)	poverty gap		children
	(1)	(2)	(3)	(4)	5)
Number of children under 19					_
One	3.7*	18.8***	14.6	15.1	20.8
Two	2.2*	23.2***	11.2	42.6	47.7
Three or more	4.3*	35.0***	14.2	42.4	31.5
Age of the youngest child					
0-5	3.5	28.9**	13.3	45.3	40.9
6-14	3.0	25.5**	13.0	42.2	43.1
15-18	2.8	20.1**	11.7	12.5	16.1
Number of adults (aged 19 - 60)					
None/one	5.13	26.6	14.2	6.4	6.2
Two	2.61	26.5	12.4	52.2	51.1
Three	3.75	27.1	13.7	20.7	19.9
Four or more	3.4	23.6	13.4	20.7	22.8

	Child	Child	Average	Poverty	Composition		
	poverty rate	poverty rate	(total)	composition	of all		
	(extreme)	(total)	poverty gap		children		
	(1)	(2)	(3)	(4)	5)		
Number of retired household m	embers						
None	3.3	24.3	13.1	57.2	61.2		
One	2.5	28.5	13.0	30.7	28.0		
Two or more	4.2	29.1	12.1	12.1	10.8		
Number of disabled adults							
None	3.1	25.5	13.1	83.3	84.8		
One or more	3.7	28.7	12.5	16.7	15.2		
Number of disabled children							
None	2.9***	25.5**	12.7	96.3	98.1		
One or more	17.2***	49.5**	[19.5]	3.7	1.9		
Gender of head of household							
Male	2.5**	24.6*	12.2	70.5	74.5		
Female	5.0**	30.1*	14.9	29.5	25.5		
Marital status of head							
Married / cohabiting	2.5**	24.2**	12.2	66.2	71.3		
Never	4.9**	30.6**	14.5	33.8	28.7		
married/widowed/divorced	4.9	30.6	14.5	33.0	20.7		
Highest level of education of ho	ousehold hea	d					
None / primary	2.8**	33.0***	11.5	9.7	7.6		
Secondary	4.1**	30.3***	13.7	60.7	52.1		
Vocational / incomplete higher	2.9**	23.4***	12.2	23.0	25.6		
Higher / postgrad	0.6**	11.8***	11.0	6.7	14.7		
Employment status of househo	ld head						
Not worked in the past 7 days	4.3**	31.7***	13.2	54.6	44.8		
Worked in the past 7 days	2.3**	21.4***	12.7	45.4	55.2		
Proportion of adults (19-60) in work							
No adults work	8.6***	39.8***	16.3	20.7	13.6		
Not all adults work	3.2***	24.7***	13.4	49.8	52.7		
All adults work	1.1***	22.6***	9.8	23.2	26.8		
Not only adults work	0.8***	23.5***	10.1	6.3	7.0		
All (Unweighted N= 4,652)	3.2	26.0	13.0	100.0	100		

Child poverty rates vary substantially across ten marzes (provinces) of the Republic of Armenia and Yerevan city. Table 2b shows a descriptive analysis of child poverty across ten marzes and Yerevan city. The differences by province are significant using both extreme and total thresholds. Extreme child poverty rates range from the low of one per cent in Vayots Dzor to the high of seven per cent in Shirak. A similar pattern is observed for total poverty rates. Poverty rates are below average in the capital.

<sup>[]</sup> weighted proportions are based on fewer than 50 unweighted cases.

Child weights are used. Statistical significance: \*=p<0.05, \*\*=p<0.01, \*\*\*=p<0.001 (separate cross-tabulations with chi-square tests).

Table 2b: Poverty rates, gaps and composition by marzes and Yerevan city

	Child	Child	Average	Poverty	Composition
	poverty rate	poverty rate	(total)	composition	of all
	(extreme)	(total)	poverty gap		children
	(1)	(2)	(3)	(4)	(5)
Yerevan	3.0**	20.8**	12.5	24.1	30.2
Aragatsotn	1.5**	25.1**	7.1	3.8	3.9
Ararat	1.5**	26.7**	14.4	8.5	8.3
Armavir	2.4**	28.5**	11.5	10.1	9.3
Gegharkunik	1.2**	25.1**	5.7	7.1	7.3
Lori	5.4**	29.1**	19.3	11.3	10.1
Kotayk	3.6**	33.8**	15.8	13.1	10.1
Shirak	6.8**	34.6**	13.9	13.3	10.0
Sjunik	1.3**	23.1**	9.1	3.9	4.4
Vayots Dzor	0.9**	16.2**	[10.8]	1.4	2.2
Tavush	2.8**	20.6**	9.2	3.4	4.3
All (Unweighted N=4,652)	3.2	26.0	13.0	100.0	100.0

Child weights are used.

Table 3 shows the estimated odds of being in poverty for each of the household characteristics analysed above, holding other characteristics constant. The results confirm the findings from the descriptive analyses above. Children with two or more siblings are the most likely to be poor, everything else held equal. Disabled children and those who live with disabled children are eight times more likely to be extremely poor than other children and almost three times more likely to fall below the total poverty line. At the same time, age of the youngest child is no longer statistically significant, when other important characteristics are controlled for.

#### Characteristics of the household head are important predictors of child poverty.

Children in households with a non-married head are more than twice as likely to be extremely poor as those with married or cohabiting household heads. Children whose household heads have completed higher education are the least likely to be poor, using either poverty line. However, gender of the household head is no longer a statistically significant predictor of child poverty. Although employment status of the household head is no longer significant, children in households where no adults aged 19-60 work are the most likely to be poor, controlling for other household characteristics.

Regional differences largely disappear after controlling for household characteristics. There is no significant variation by province in the odds of extreme poverty. As regards total poverty, children in the province of Kotayk are 72 per cent

<sup>[]</sup> weighted proportions are based on fewer than 50 unweighted cases.

more likely to be poor and those in Shirak are 53 per cent more likely to be poor than children in Yerevan, all else being equal.

Table 3 Odds of being consumption poor

	Child	Child poverty
	poverty rate	rate (total)
	(extreme)	
Number of children under 19 (ref: one)		
Two	0.54*	1.22
Three or more	1.26	2.04***
Age of the youngest child (ref: 0-5)		
6-14	0.87	0.79
15-18	0.84	0.75
Number of adults 19-60 (ref: two)		
None/one	0.92	1.00
Three	1.04	1.04
Four or more	1.24	0.83
Number of retired (ref: none)		
One	0.58	0.97
Two or more	2.36	1.18
One or more disabled adults	1.16	1.10
One or more disabled children	8.33***	2.61**
Female head of household	1.50	1.12
Head never married / divorced / widowed	2.37*	1.19
Highest level of education of household head (ref: secondary)		
None / primary	0.70	0.91
Vocational / incomplete higher	0.74	0.78
Higher / postgrad	0.13***	0.36***
Household head worked in the past 7 days	1.92	0.88
Proportion of adults in work (ref: not all adults work)		
No adults work	2.91**	1.70**
All adults work	0.32**	0.81
Not only adults work	0.17*	0.78
Province (ref: Yerevan)		
Aragatsotn	0.73	1.39
Ararat	0.55	1.25
Armavir	1.12	1.35
Gegharkunik	0.53	1.15
Lori	1.88	1.28
Kotayk	1.10	1.72**
Shirak	1.78	1.53*
Sjunik	0.55	1.16
Vayots Dzor	0.35	0.68
Tavush	1.02	0.85
Pseudo R-square	0.15	0.07

Source: Author's estimates from ILCS 2008 data.

Child weights used. Statistical significance: \*=p<0.05, \*\*=p<0.01, \*\*\*=p<0.00.

# To summarise, having controlled for other household characteristics to eliminate any spurious associations, children are most likely to be living in poverty if

- there are three or more children in the household
- there is at least one disabled child in the household
- the household head does not have higher education
- the household head is single (never married), divorced or widowed
- no adults aged 19-60 worked in the past seven days
- they live in Kotayk or Shirak provinces.

# However, poverty is not limited to these most vulnerable children. The majority of poor children live in households that do not appear to be at the highest risk of poverty and

- live in one or two child families
- live in two parent families
- do not have any disabled children
- have a male head of household
- have a married or cohabiting head of household
- have someone in the household in employment.

#### 3. Material deprivation

To complement the consumption-based poverty analysis, this section analyses the material deprivation of children in Armenia. It is measured as households' lack of durable assets using a simple count index and a prevalence weighted index. The following nine durable goods have been included in the analysis: refrigerator, washing machine, mobile telephone, vacuum cleaner, video recorder, photo camera, audio system, car and PC. These items are chosen because at least ten per cent of all households in ILCS 2008 report owning them. However, it is not clear whether the households that lack these items cannot afford them or choose not to own them. Table 4 shows the proportion of children living in households lacking each of these items and Table 5 shows the proportions of children lacking a number of these items.

Poor children are substantially more likely to live in households lacking each of these durable goods than all children. Children in extremely poor households are the most likely to lack each of these items. For example, while 11 per cent of all children live in households without a refrigerator, 17 per cent of poor and 23 per cent of extremely poor children live in households lacking this item. While 81 per cent of children live in households without a car, almost all of poor children (96 per cent and 97 per cent of poor and extremely poor children, respectively), live in such households.

Table 4 Durable goods lacked (%)

	All children	Poor children	(Extremely) poor children
Refrigerator	10.6	16.6	23.4
Washing machine	17.6	26.7	38.3
Mobile telephone	21.6	39.8	53.7
Vacuum cleaner	54.5	70.2	82.5
Video recorder	63.3	79.5	88.5
Photo camera	73.9	88.3	90.7
Audio system	73.9	83.6	92.1
Car	80.6	95.8	97.1
PC	91.4	97.6	98.1

Child weights used.

There are noticeable differences in deprivation rates between all children and poor children. Poor children are more likely to live in households lacking more durable goods than children overall. Around one per cent of all children live in households not lacking any of these durable goods, compared with only 0.2 per cent and 0.1 per cent of poor and extremely poor children, respectively (Table 5, Figure 1). Interestingly, poor children are more likely to lack all nine items (3 per cent) than extremely poor children (0.1 per cent). However, the extreme (food) poverty measure picks up only 3 per cent of all children and may not be a reliable enough indicator of extreme poverty. To achieve a deprivation rate that is comparable with the estimated total consumption child poverty rate of 26 per cent, the deprivation threshold is drawn at lacking seven or more items. This results in 19 per cent of all children experiencing material deprivation.<sup>5</sup> The corresponding rates for poor children are substantially higher at 35 per cent and 31 per cent, using the total and extreme poverty measures, respectively.

\_

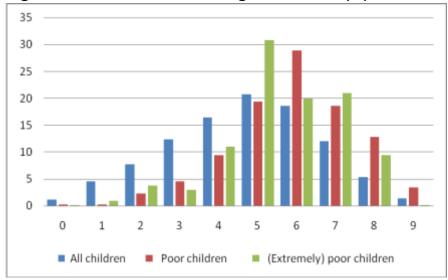
<sup>&</sup>lt;sup>5</sup> If the threshold is drawn at six more items, the material deprivation rate is substantially higher at 37 per cent.

Table 5 Number of durable goods lacked (%)

Number of durable goods lacked	All children	Poor children	(Extremely) poor children
0	1.2	0.2	0.1
1	4.5	0.3	0.9
2	7.7	2.3	3.8
3	12.4	4.6	3.0
4	16.4	9.4	11.0
5	20.7	19.4	30.8
6	18.6	28.9	20.0
7	12.0	18.6	21.0
8	5.3	12.8	9.4
9	1.4	3.4	0.1

Child weights used.

Figure 1 Number of durable goods lacked (%)



Source: Author's estimates from ILCS 2008 data.

Child weights used.

An obvious problem with this methodology is that the items included in the simple count index may not be of equal importance to the households' well-being, but the ILCS provides no information about the desirability or importance of these durable goods. Furthermore, there is no information on whether the item is lacked because the household cannot afford it or because it is not wanted. Using the prevalence weighted deprivation index helps overcome this drawback at least in part because it is based on the assumption that households are relatively more deprived if they lack an item that most other household have. For example, lacking a refrigerator carries more weight than lacking a PC because more households have a refrigerator than a

PC. Each score of 1 (item lacked) is multiplied by the proportion of children in the weighted sample who live in households owning this item. The scores are then summed across all items and divided by the total number of items, i.e. nine items, for each household. The resulting score is multiplied by 100 to create a continuous variable that ranges from 0 (not lacking any items) to 100 (lacking all items that everybody else owns). Unfortunately, the resulting index has missing values for any household that has missing information on any of the nine durable goods.

Poor children have a higher prevalence weighted deprivation score, on average. While the mean score for all children is 17.2, it is substantially higher at 22.5 and 25.67 for poor and extremely poor children, respectively (Table 6). This suggests that poor children live in households lacking more of the items that other households tend to own.

Table 6 Average prevalence weighted deprivation score and deprivation rates

	All children	Poor children	(Extremely) poor children
Mean	17.2	22.5	25.7
Standard Deviation	9.9	9.9	10.7

Source: Author's estimates from ILCS 2008 data.

Child weights used.

#### 4. Housing deprivation

Housing problems can have an adverse impact on children's health, safety, education and social development. The ILCS 2008 includes questions about housing, such as the number of amenities and rooms in use as well as questions about housing problems and perceived quality of living conditions.

#### Poor children often live in accommodation lacking important amenities.

Children in poor households are consistently more likely to live in dwellings without each of the housing facilities analysed<sup>6</sup>: kitchen, centralised gas supply, telephone, flush toilet, bathtub or shower, cold and hot running water (Table 7). However, children in extremely poor households are not necessarily more likely to lack these housing amenities than all poor children, which again points to the potential unreliability of the extreme poverty measure. For example, extremely poor children are less likely to live in households without cold running water, a kitchen or a flush toilet than all poor children. Yet, at the same time, extremely poor children are the most likely to live in dwellings without a centralised gas supply (51 per cent

-

<sup>&</sup>lt;sup>6</sup> The amenity is either not available or not in working condition.

compared to 34 per cent of poor children and 28 per cent of all children), telephone, and hot running water.

Table 7 Housing amenities lacked or not in working order (%)

Dwelling lacks	All children	Poor children	(Extremely) poor children
Cold running water	7.7	9.5	5.2
Kitchen	11.9	18.4	15.5
Central gas supply	28.3	34.1	50.6
Landline telephone	29.8	38.9	45.3
Flush toilet	36.7	40.7	30.8
Bathtub or shower	39.7	51.4	52.2
Hot running water	74.2	87.3	94.5

Source: Author's estimates from ILCS 2008 data.

Child weights used.

Poor children are more likely to lack more of the housing amenities than all children. One-fifth (20 per cent) of all children live in houses not lacking any of these amenities, but 11 per cent and five per cent of poor children and extremely poor children, respectively, live in such households (Table 8, Figure 2). Children in extremely poor households are the most likely to lack three amenities (30 per cent) and six amenities (9 per cent), but they are the least likely to live in households lacking all seven amenities (1 per cent). To achieve a housing deprivation rate that is comparable with the total consumption child poverty rate for 2008 (26 per cent), the deprivation threshold is drawn at lacking four or more amenities. This definition results in 26 per cent of all children experiencing housing deprivation. The corresponding rates for all poor and extremely poor children are substantially higher at 36 per cent and 33 per cent, respectively.

Table 8 Number of housing amenities lacked or not in working order (%)

	All children	Poor children	(Extremely) poor children
0	20.3	10.7	5.1
1	21.7	19.3	17.8
2	15.8	16.6	14.4
3	16.6	18.0	29.9
4	12.0	16.8	16.8
5	7.2	8.6	6.5
6	4.3	7.2	8.7
7	2.3	2.9	0.9

Source: Author's estimates from ILCS 2008 data.

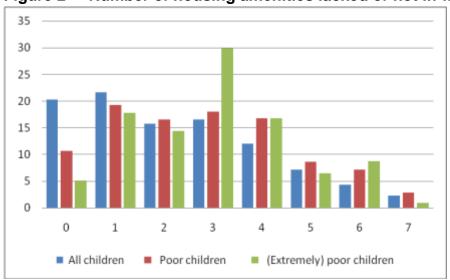


Figure 2 Number of housing amenities lacked or not in working order (%)

Child weights used.

Poor children are more likely to live in worse housing conditions. Children in consumption poor households are generally more likely to live in dwellings with reported housing problems than all children (Table 9). For example, 38 per cent of poor children and 51 per cent of extremely poor children live in households that report rot in window frames and doors compared with 28 per cent of all children. Some housing problems are almost equally prevalent amongst all households, such as bad garbage collection. At the same time, the housing problems reported by fewer than 10 per cent of children's households are less likely to be reported by the households of poor children, such as industrial pollution, heavy traffic, noise and 'other' problems.

Table 9 Housing problems reported (%)

Dwelling lacks	All children	Poor children	(Extremely) poor children
Industrial pollution	2.6	2.3	1.5
Heavy traffic	3.0	1.1	1.0
Noise from neighbours or from outside	6.6	4.7	10.9
'Other'	7.2	5.9	5.8
Elevator is frequently out of order	9.7	12.7	15.7
Insufficiency day light	16.2	22.1	31.7
Leaking roof	22.8	32.7	39.6
Rot in window frames and doors	28.2	38.1	51.0
Rotten walls, floors	31.6	41.7	57.6
Not enough space	35.3	42.1	44.7
Humidity	36.7	43.2	52.5
Water supply is bad	41.0	42.8	45.9
Garbage collection is bad	42.4	43.7	42.9
Insufficiency of warmth	46.6	54.6	60.0

Source: Author's estimates from ILCS 2008 data.

Poor children are also more likely to live in households reporting more of the housing problems than all children. Excluding the question about the elevator being frequently out of order because some houses do not have elevators, only seven per cent of extremely poor children live in households that do not report any of the 13 housing problems, while 11 per cent of all children and 11 per cent of all poor children live in such households (Table 10, Figure 3). Children in poor and extremely poor households are less likely to live in houses with only one, two or three reported housing problems than all children, while they are more likely to live in households reporting four or more problems. However, almost no children live in households reporting 12 or 13 problems, while no extremely poor children live in houses reporting ten or more problems. To arrive at a housing deprivation rate comparable with the total consumption child poverty rate of 26 per cent, children in households reporting five or more problems (28 per cent) can be defined as housing deprived. This results in the deprivation rates of 39 per cent for poor children and 51 per cent for extremely poor children. The definition of housing deprivation based on the number of reported problems shows a higher degree of overlap with consumption poverty than the one based on the number of housing amenities lacked.

Table 10 Number of housing problems reported (%)

Dwelling lacks	All children	Poor children	(Extremely) poor children
0	11.2	10.6	7.0
1	15.7	11.5	8.5
2	19.5	15.7	15.7
3	13.6	10.6	7.1
4	11.5	13.1	10.5
5	10.7	13.3	13.8
6	7.1	8.3	12.8
7	5.2	7.8	5.9
8	3.2	5.9	12.9
9	1.9	3.0	5.7
10	0.2	0.1	0.0
11	0.1	0.2	0.0
12	0.01	0.0	0.0
13	0.01	0.0	0.0

Source: Author's estimates from ILCS 2008 data.

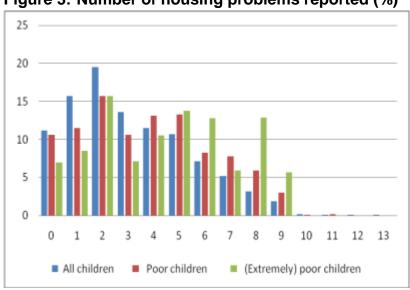


Figure 3: Number of housing problems reported (%)

Child weights used.

#### Poor children are more likely to live in subjectively worse housing conditions.

While about one-third (30 per cent) of all children in live households that describe their dwelling conditions as bad or very bad, two-fifths (42 per cent) of poor children and three-fifths (59 per cent) of extremely poor children live in such households. At the same time, 58 per cent of all children live in households with 'satisfactory' housing conditions, but only 53 per cent of all poor children and 36 per cent of extremely children live in such households. Conversely, poor children are about half as likely to live in households with housing conditions described as good or very good. Poor children (42 per cent) are significantly more likely to live in subjectively bad or very bad dwelling conditions than non-poor children (26 per cent).

Table 11 Perceived quality of dwelling conditions (%)

	All children	Poor children	(Extremely) poor children
Good or very good	11.3	4.7	4.5
Satisfactory	58.2	53.3	36.3
Bad or very bad	30.5	42.1	59.2

Source: Author's estimates from ILCS 2008 data.

Child weights used.

Poor children are more likely to live in overcrowded accommodation. The average number of rooms (excluding kitchens, bathrooms and toilets) per person in the primary dwelling is higher for all children (0.60) than for poor children (0.53) or extremely poor children (0.53). If the threshold is drawn at 0.43 or fewer rooms per person, the overcrowding rate for all children is 29 per cent, compared with 39 per

cent for all poor children and 35 per cent for extremely poor children (Table 12). While 25 per cent of non-poor children live in overcrowded accommodation, the rate is highest (39 per cent) for children in households falling below the total poverty line but still above the extreme poverty line (Table 13).

Table 12 Average number of rooms per person and overcrowding rates

	All children	Poor children	(Extremely) poor children
Mean (SD)	0.60 (0.24)	0.53 (0.22)	0.53 (0.19)
Overcrowding rate (%)	28.8	39.2	35.0

Source: Author's estimates from ILCS 2008 data.

Child weights used.

Table 13 Overcrowding by poverty status (%)

	Non-poor children	Poor but not extremely poor children	(Extremely) poor children
Not overcrowded	74.8	60.2	65.0
Overcrowded	25.2	39.8	35.0

Source: Author's estimates from ILCS 2008 data.

The association between the overcrowding status and poverty status is statistically significant at p<0.001

Child weights used.

#### 5. Overlaps in poverty indicators

Table 14 summarises the rates of poverty based on the measures analysed in the previous sections.

Table 14 Percentage of children poor by each indicator (2008)

	% children
Consumption poor (extreme poverty line)	3.2
Consumption poor (total poverty line)	26.0
Materially deprived (based on durable goods lacked)	18.6
Housing deprived (based on amenities lacked)	25.7
Housing deprived (based on housing problems)	28.4
Housing deprived (bad or very bad housing conditions)	30.5
Living in overcrowded accommodation	28.8

Source: Author's estimates from ILCS 2008 data.

Excluding the extreme poverty measure, 69 per cent of children are poor on at least one of the six indicators: total consumption poverty, material deprivation, three measures of housing deprivation, and overcrowding. Only one-third (31 per cent) are not deprived on any of the studied indicators, while two-fifths (43 per cent) are deprived on at least two and one-quarter (26 per cent) are poor on at least three indicators (Table 15). To achieve a composite deprivation rate that is comparable with the total consumption child poverty rate of 26 per cent, children living in households deprived on at least three out of six indicators can be defined as deprived. This composite measure is, therefore, based not only on consumption poverty, but also on material deprivation and four different indicators of housing deprivation.

Table 15 Proportion of children poor or deprived (six indicators)

	% children
No ways	31.4
At least one	68.6
At least two	43.4
At least three	26.3
At least four ways	13.1
At least five ways	5.3
All six ways	1.4

Source: Author's estimates from ILCS 2008 data.

Child weights used.

There is also a substantial degree of overlap between total consumption poverty and the measures of deprivation. A significantly higher proportion of poor than non-poor children are deprived on each of the studied indicators (Table 16). For example, 35 per cent of poor children are also materially deprived, compared with only 13 per cent of non-poor children.

Table 16 Overlap between total poverty and deprivation (column %)

	Not poor	Poor
Materially deprived (based on durable goods lacked)	12.9	34.9
Housing deprived (based on amenities lacked)	22.3	35.5
Housing deprived (based on housing problems)	24.9	38.5
Housing deprived (bad or very bad housing conditions)	26.4	42.1
Living in overcrowded accommodation	25.2	39.2

Source: Author's estimates from ILCS 2008 data.

All associations are statistically significant at p<0.001.

There is some overlap between the three housing deprivation measures. Thus, 49 per cent of children in households lacking four or more amenities are also in households that report five or more housing problems and 58 per cent are in households describing their housing conditions as bad or very bad. The measures of housing deprivation also overlap with material deprivation: 51 per cent of materially deprived children are in households lacking four or more amenities, 51 per cent are in households reporting five or more housing problems and 54 per cent are in households that describe their conditions as bad or very bad.

Poor children are more likely to be deprived on a composite measure of housing deprivation. Two-fifths (60 per cent) of children are housing deprived on at least one of the four housing related measures, one-third (34 per cent) are deprived on at least two, 16 per cent are deprived on at least three and a small minority (5 per cent) are deprived on all four indicators (Table 17). Poor children are significantly more likely to be deprived on more housing indicators than non-poor children. Almost one-half (48 per cent) of poor children are deprived on at least two housing measures compared with 28 per cent of non-poor children. Three times as many poor children (9 per cent) are deprived on all four measures as non-poor children (3 per cent).

Table 17 Proportion of children housing deprived (four housing indicators)

	% children	% of poor children	% non-poor children
No ways	40.4	27.7	44.9
At least one	59.6	72.3	55.1
At least two	33.5	48.3	28.3
At least three	16.0	25.6	12.6
All four ways	4.5	9.1	2.9

Source: Author's estimates from ILCS 2008 data.

Child weights used.

There is a considerable degree of overlap among all five indicators by some of the household characteristics. Children with more siblings as well as those in families with lower educated household heads are significantly more likely to be poor on each of the indicators: total consumption poverty, material deprivation, three measures of housing deprivation, and overcrowding (Table 18a).

Other household characteristics make children vulnerable to some kinds of poverty or deprivation but not to others. For example, children in families where the youngest child is under six years old are significantly more likely to be consumption poor and to live in overcrowded accommodation, but there are no significant differences in material or housing deprivation rates by age of the youngest child. Children in families with fewer adults aged 19-60 are more likely to be materially deprived, have fewer housing amenities and more dwelling problems, but,

as would be expected, are less likely to live in overcrowded accommodation. Children in families with one or more disabled adults are more likely to live in accommodation with more housing problems, worse reported housing conditions and fewer rooms per person. Disabled children are more likely to be poor on each of the indicators except housing deprivation based on the number of amenities. Children in female headed households are more likely to be poor on each of the indicators except amenities-based housing deprivation and overcrowding. The same pattern is observed for children in households with non-married heads.

### Employment status of the household head and the proportion of working adults in the household are crucial predictors of poverty and deprivation.

Children in households where the head did not work in the past seven days are more likely to be consumption poor and live in overcrowded accommodation, but less likely to be housing deprived based on the number of amenities. Children in households where all adults aged 19-60 work are the least likely to be poor, while those in families where not only adults work are the least likely to be materially deprived and to live in overcrowded accommodation. At the same time, children in families where not all adults work are the least likely to lack housing amenities.

#### There are also significant regional differences in poverty and deprivation rates.

Children in Yerevan are the least likely to live in households lacking housing amenities, but are the most likely to live in overcrowded accommodation (Table 17b). This is not a surprising finding given that Yerevan has the highest prevalence of apartment accommodation. Children in Aragatsotn are the least likely to be materially deprived, to live in households describing their housing conditions as bad or very bad, and to live in overcrowded accommodation, while children in Gegharkunik are the most likely to experience material deprivation and amenities-based housing deprivation. Children in Vayots Dzor are the least likely to be consumption poor and to live in households reporting more than five housing problems, while those in the province of Tavush are the most likely to be housing deprived based on the number of reported problems and the subjective assessment of living conditions.

 Table 18a
 Poverty and deprivation rates by household characteristics

	Child	Material	Housing	Housing	Housing	
	poverty	deprivation	deprivation	deprivation	deprivation	Over- crowding
	(total)	aopiivation	(amenities)	(problems)	(subjective)	oromanig
Number of children under	r 19		,	, , , , , , , , , , , , , , , , , , ,	, , ,	
One	18.8***	18.2**	19.9***	23.7**	26.0***	18.0***
Two	23.2***	16.0**	21.3***	27.3**	27.7***	24.4***
Three or more	35.0***	22.9**	36.3***	33.4**	37.8***	42.8***
Age of the youngest child						
0-5	28.9**	17.4	24.2	28.9	31.2	39.5***
6-14	25.5**	19.5	28.0	28.8	31.0	23.3***
15-18	20.1**	19.3	23.5	26.4	27.4	16.8***
Number of adults (aged 1	9 - 60)					
None/one	26.6	39.6***	26.3*	35.1*	40.5	11.0***
Two	26.5	21.3***	28.3*	26.8*	30.4	22.8***
Three	27.1	15.8***	23.4*	26.2*	28.9	30.0***
Four or more	23.6	9.4***	21.7*	32.3*	29.4	46.3***
Number of retired househ			21.7	02.0	20.4	40.0
None	24.3	19.5	26.4	28.2	31.3	27.1*
One	28.5	18.3	25.4	30.3	29.7	30.0*
Two or more	29.1	14.5	22.6	25.1	28.2	35.9*
Number of disabled adults		14.5	22.0	23.1	20.2	33.9
	<b>s</b> 25.5	17.9	26.2	27.1**	29.1**	27.1***
None			_			
One or more	28.7	22.5	23.0	36.1**	38.1**	38.5***
Number of disabled child		40.0*	05.5	00.4*	00.4*	00.5*
None	25.5**	18.3*	25.5	28.1*	30.1*	28.5*
One or more	49.5**	34.9*	34.1	46.1*	50.5*	44.3*
Gender of head of househ		47.0*	05.7	00 45***	00 0***	00.0
Male	24.6*	17.6*	25.7	26.15***	28.3***	29.0
Female	30.1*	21.7*	25.8	35.13***	36.9***	28.4
Marital status of head	0.4.0**	4 - 4 + +	0.4.0	00 4**	07 0444	00.4
Married / cohabiting	24.2**	17.1**	24.9	26.4**	27.6***	29.4
Never						
married/widowed/divor	30.6**	22.5**	27.8	33.5**	37.8***	27.4
ced						
Highest level of education						
None / primary	33.0***	23.0***	45.7***	35.5***	41.6***	34.3*
Secondary	30.3***	22.6***	32.3***	31.5***	34.1***	30.3*
Vocational /	23.4***	16.9***	16.6***	24.9***	25.2***	28.9*
incomplete higher						
Higher / postgrad	11.8***	5.2***	7.8***	20.3***	21.1***	20.9*
Employment status of ho	usehold l	nead				
Not worked in the past	31.7***	20.2	21.8***	28.3	31.2	33.7***
7 days	51.7	20.2	21.0	20.3	31.2	55.1
Worked in the past 7	21.4***	17.3	28.9***	28.6	30.0	24.9***
days	Z1.4	17.3	20.9	∠0.0	30.0	24.3
Proportion of adults (19-6		rk				
No adults work	39.8***	25.9***	16.4***	26.5	29.1	32.8***
Not all adults work	24.7***	14.9***	17.7***	28.2	28.6	33.8***
All adults work	22.6***	22.4***	39.7***	30.0	33.0	20.5***
Not only adults work	23.5***	14.2***	48.3***	27.6	37.0	17.3***
All (Unweighted N=						
4,652)	26.0	18.6	25.7	28.4	30.5	28.6

Child weights used.
Statistical significance: \*=p<0.05, \*\*=p<0.01, \*\*\*=p<0.001 (separate cross-tabulations with chi-square tests).

Table 18b Poverty and deprivation rates by household characteristics

	Child	Material	Housing	Housing	Housing	Over-
	poverty	deprivation	deprivation	deprivation	deprivation	crowding
	(total)		(amenities)	(problems)	(subjective)	
Yerevan	20.8**	10.6***	4.7***	30.0***	27.5***	35.5***
Aragatsotn	25.1**	6.1***	40.9***	19.8***	22.6***	9.8***
Ararat	26.7**	23.4***	46.3***	38.1***	40.3***	22.6***
Armavir	28.5**	17.5***	41.5***	27.4***	30.4***	19.0***
Gegharkunik	25.1**	28.4***	52.3***	18.7***	32.7***	27.7***
Lori	29.1**	25.6***	36.0***	31.4***	31.0***	25.3***
Kotayk	33.8**	22.6***	15.6***	27.6***	25.4***	32.3***
Shirak	34.6**	18.9***	28.9***	25.4***	27.7***	31.7***
Sjunik	23.1**	22.2***	16.8***	15.2***	29.7***	29.5***
Vayots Dzor	16.2**	16.1***	25.3***	14.2***	28.5***	21.1***
Tavush	20.6**	10.6***	42.0***	48.9***	55.0***	31.6***
All (Unweighted N=4,652)	26.0	18.6	25.7	28.4	30.5	28.6

Child weights are used.

Table 19 shows the estimated odds of being deprived on each of the deprivation indicators and on the composite measure of poverty/deprivation for each of the household characteristics, holding other characteristics constant. It is important to control for a number of important factors to eliminate spurious associations. For example, female household heads tend to be lower educated than male heads, which would result in higher deprivation rates for children living with female heads, capturing the effect of education rather than the effect of gender. The household and regional characteristics included in the separate logistic models reported in Table 19 do a better job explaining the variation in household deprivation rates based on the number of amenities lacked than predicting the odds of being deprived on other indicators or the odds of being deprived on the composite deprivation index (being deprived on three or more out of six items).

#### The number of children in the household is a crucial predictor of deprivation.

Children with one sibling are less likely to be materially deprived than sole children, everything else held equal, although there are no significant differences between sole children and those with two or more siblings. Those with two or more siblings are 62 per cent more likely to live in households lacking important amenities, 77 per cent more likely to live in households reporting housing problems, 66 per cent more likely to live in households describing their living conditions as bad or very bad and five times more likely to live in overcrowded accommodation than sole children. Those in families with three or more children are more than twice as likely to be poor on the composite deprivation measure as those in one-child families. Children in families where the youngest child is under six are the most likely to experience overcrowding,

but there are no significant differences in other deprivation rates by age of the youngest child, when other important household characteristics are controlled for.

Numbers of adults and retired persons in the household make an important difference to deprivation rates, even after controlling for other factors. Children in families with no adults aged 19-60 or one adult only are more than three times more likely to be materially deprived than children in families with two or more adults, while children in families with three or more adults are the least likely to experience material deprivation. However, children in families with four or more adults are 44 per cent more likely to live in households that report five or more housing problems than children with two adults in the household. Furthermore, those with more adults in the household are progressively more likely to live in overcrowded accommodation. Children with no retired household members are the most likely to live in households classed as materially deprived and housing deprived on all three measures as well as being poor on the composite measure, but are the least likely to live in overcrowded accommodation, everything else held equal.

Having disabled adults or children in the household increases the probability of being deprived. Children in families with one or more disabled adults are 83 per cent more likely to experience material deprivation, 61 per cent more likely to live in households reporting more of the housing problems, 69 per cent more likely to be live in reportedly bad or very bad dwelling conditions and 54 per cent more likely to be poor on the composite measure than children with no disabled adults in the household. At the same time, disabled children are more than twice as likely to experience material deprivation, to live in subjectively bad or very bad housing conditions and to be poor on the composite measure than those in families with no disabled children, everything else held equal.

Characteristics of the household head are also important predictors of child **deprivation.** Children with female heads are 61 per cent more likely to live in households reporting five or more housing problems, confirming the finding from the descriptive analysis in Table 17a. There are no significant differences by gender of the household head as regards other deprivation indicators, however. Children living with non-married heads of household are 86 per cent more likely to live in subjectively bad or very bad housing conditions and 70 per cent more likely to be poor on the composite measure. Children whose household heads are more educated are less likely to be deprived on each of the studied indicators and on the composite measure. For example, children living with university educated heads are only 18 per cent as likely to be materially deprived as children living with heads with secondary education or lower. Once other household characteristics are controlled for, there are no significant differences by employment status of the household head for any of the indicators. Interestingly, children where all working age adults work or not only adults work are more likely to live in households lacking four or more amenities than children in households where not all adults work.

Regional differences in child deprivation rates remain even after household characteristics are controlled for. Overall, children in the province of Tavush are the most likely to be deprived: they are 4.5 times as likely to be materially deprived, almost ten times as likely to live in households lacking important amenities, almost twice as likely to live in households reporting housing problems, almost three times as likely to live in subjectively bad housing conditions and more than twice as likely to be poor on the composite deprivation measure as children in Yerevan (the reference category). Children in Gergharkunik are 13.5 times more likely to live in households lacking four or more amenities than children in Yerevan, but they are also the least likely to live in households reporting five or more housing problems. Confirming the results of the descriptive analysis in Table 18b, children in Yerevan are the most likely to live in overcrowded accommodation

Table 19 Odds of being deprived

	Deprived on three or more	Material deprivation	Housing deprivation (amenities)	Housing deprivation (problems)	Housing deprivation (subj.)	Over- crowding
Number of children unde	indicators	<u>,,</u>				
Two	1.19 (1 <del>0</del> 1. 0116	0.74*	1.01	1.32*	1.10	1.72***
	2.42***	1.01	1.62**	1.77***	1.66**	5.03***
Three or more  Age of the youngest child		1.01	1.62	1.77	1.00	5.03
6-14	0.90	0.82	1.12	1.11	0.98	0.62***
15-18	0.90	0.82	1.12	1.11	0.96	0.62
Number of adults 19-60 (		0.63	1.01	1.14	0.91	0.70
None/one	1.30	3.38***	1.31	1.31	1.37	0.44*
Three	0.94	0.59**	1.00	1.01	0.93	1.70**
Four or more	1.12	0.39	1.05	1.44*	0.93	3.22***
Number of retired (ref:	1.12	0.27	1.05	1.44	0.99	3.22
none)						
One	0.53***	0.69*	0.51***	0.82	0.49***	0.97
Two or more	0.49**	0.48**	0.47***	0.82	0.43	1.70**
One or more disabled			0.47			
adults	1.54**	1.83***	1.14	1.61**	1.69***	1.17
One or more disabled						
children	2.18*	2.10*	1.53	2.14	2.18*	1.73
Female head of	4.04	4.00	0.00	4 C 4*	0.00	4 4 7
household	1.01	1.03	0.88	1.64*	0.98	1.17
Head never married /	4 70*	0.07	1.34	1.00	1 06**	0.05
divorced / widowed	1.70*	0.97	1.34	1.00	1.86**	0.95
Highest level of educatio	n of househo	old head (ref	: secondary)	)		
None / primary	1.21	1.01	1.85**	1.07	1.26	1.02
Vocational / incomplete	0.65**	0.73*	0.47***	0.70**	0.66**	0.85
higher		0.73	0.47	0.70	0.00	0.03
Higher / postgrad	0.27***	0.18***	0.19***	0.52***	0.53***	0.60**
Household head worked	1.02	1.06	1.26	1.20	0.98	0.85
in the past 7 days				1.20	0.55	0.00
Proportion of adults in w	•		•			
No adults work	1.01	1.27	0.88	0.91	0.88	1.31

	Deprived on three or more indicators	Material deprivation	Housing deprivation (amenities)	Housing deprivation (problems)	Housing deprivation (subj.)	Over- crowding
All adults work	1.17	0.96	2.31***	1.22	1.14	0.84
Not only adults work	1.46	0.56	3.20***	1.01	1.53	0.67
Province (ref: Yerevan)						
Aragatsotn	0.58	0.54	7.37***	0.46**	0.64	0.15***
Ararat	1.78*	2.61***	11.45***	1.13	1.40	0.35***
Armavir	0.95	1.77*	6.75***	0.70	0.82	0.31***
Gegharkunik	1.26	3.37***	13.49***	0.41**	0.96	0.53**
Lori	1.18	2.65***	7.92***	0.96	0.98	0.50**
Kotayk	0.98	2.62***	2.75***	0.77	0.76	0.61**
Shirak	1.23	1.83*	8.09***	0.74	0.91	0.57**
Sjunik	0.79	2.44**	2.58**	0.34***	0.97	0.68
Vayots Dzor	0.56	1.86	5.68***	0.34***	0.94	0.34***
Tavush	2.31***	4.52***	9.54***	1.80**	2.67***	0.65
Pseudo R-square	0.09	0.13	0.23	0.05	0.06	0.15

Child weights used. Statistical significance: \*=p<0.05, \*\*=p<0.01, \*\*\*=p<0.00.

#### 6. Role of social protection benefits in poverty alleviation

#### Old age pensions

Old-age pensions make a difference to average child poverty rates. Forty-five per cent of all children live in households where at least one person is reportedly in receipt of an old-age pension. Table 20 shows what difference pensions make to average consumption-based child poverty rates. If pensions are deducted from total monthly household expenditure, which is then equivalised, the extreme child poverty rate would increase from three per cent to 11 per cent, while the total child poverty rate would go up from 26 per cent to 34 per cent. Thus, pension income makes a larger difference to households with relatively low consumption levels, with the average extreme poverty rate more than trebling if pension income is not counted as consumption. Of course, this analysis, as well as the analyses below, assumes that all of the pension income is consumed by the household.

Table 20 Child poverty rates with and without old-age pension income

Threshold	Child poverty rate		
	With pensions	Without pensions	
Extreme poverty line	3.2	10.8	
Total poverty line	26.0	33.7	

Source: Author's estimates from ILCS 2008 data.

Old-age pension income can make a difference to whether a child is poor or not. Table 21 shows what difference old-age pensions can make to children in poor (old-age pension recipient) households. If pensions were deducted from their total household consumption, 71 per cent of children who are currently not poor based on the extreme poverty line would have been classed as poor. At the same time, 23 per cent of children who are currently not poor based on the total poverty line would have been classed as poor if pension income were deducted from their household consumption.

Table 21 Poverty rates with and without old-age pension income for those in old-age pension recipient households

	Lifted above extreme	Lifted above total
	poverty line	poverty line (with
	(with pensions)	pensions)
Below extreme poverty line	70.0	
(without pensions)	70.8	
Below total poverty line		00.0
(without pensions)		23.0

Source: Author's estimates from ILCS 2008 data.

Child weights used.

#### **Family benefits**

#### Family benefit income makes a difference to average child poverty rates.

Around 24 per cent of all children live in households receiving family benefits. Table 22 shows that family benefit income makes a bigger difference to the average extreme child poverty rate than to the total child poverty rate. If family benefits are deducted from the total household expenditure, the extreme child poverty rate would more than double, going from three per cent to eight per cent. The total child poverty rate would go up by four percentage points from 26 per cent to 30 per cent. This suggests that family benefit income is very important to households with very low consumption (below the food poverty line).

Table 22 Child poverty rates with and without family benefit income

Threshold	Child poverty rate		
	With benefits	Without benefits	
Extreme poverty line	3.2	8.2	
Total poverty line	26.0	30.2	

Source: Author's estimates from ILCS 2008 data.

Family benefit income can also make a difference to whether a child is poor or not. Table 23 shows the re-calculated poverty rates for children in family benefit recipient households who are not currently poor. If benefit income were deducted from their household consumption, 62 per cent of children who are currently not poor based on the extreme poverty line would have been classed as poor. At the same time, 14 per cent of children who are currently not poor based on the total poverty line would have been classed as poor if family benefit income were deducted from their household consumption.

Table 23 Poverty rates with and without family benefit income for those in family benefit recipient households

	Lifted above extreme poverty line (with family benefit)	Lifted above total poverty line (with family benefit)
Below extreme poverty		
line	61.6	
(without family benefit)		
Below total poverty line		110
(without family benefit)		14.0

Source: Author's estimates from ILCS 2008 data.

Child weights used.

#### Child benefits

Child benefit income does not make any difference to average child poverty rates. Only around one per cent of all children live in households reportedly in receipt of child benefit. Table 24 shows what difference child benefit income makes to average child poverty rates. The average total child poverty rate would not change at all, while the extreme child poverty rate would go up by 0.1 percentage points.

Table 24 Child poverty rates with and without child benefit income

Threshold	Child poverty rate		
	With child benefit	Without child benefit	
Extreme poverty line	3.2	3.3	
Total poverty line	26.0	26.0	

Source: Author's estimates from ILCS 2008 data. Child weights used.

Child benefit income makes hardly any difference to whether a child is poor or not. Table 25 shows the re-calculated poverty rates for children in child benefit recipient household who are currently not poor. If child benefit income were deducted from their household consumption, four per cent of children who are currently not poor based the extreme poverty line would have been classed as extremely poor. At

the same time, fewer than one per cent of children who are currently not poor based on the total poverty line would have been classed as poor if child benefit income were deducted from their household consumption. Since so few families receive child benefit, it is not surprising that child benefit income does not make a difference to average child poverty rates.

Table 25 Poverty rates with and without child benefit income for those in child benefit recipient households

	Lifted above extreme poverty line (with child benefit)	Lifted above total poverty line (with child benefit)
Below extreme poverty		
line	3.6	
(without child benefit)		
Below total poverty line (without child benefit)		0.2

Source: Author's estimates from ILCS 2008 data.

Child weights used.

#### **Conclusions**

Twenty-six per cent of children in Armenia live in consumption poor households and three per cent fall below the extreme (food) poverty line. The estimated extreme consumption-based poverty rates are comparable with the corresponding poverty rates for all individuals, while the total child poverty rate (26 per cent) is somewhat higher than the corresponding population poverty rate of 23 per cent. Poor children are more likely to live in households lacking important durable goods and to live in adverse housing conditions, such as the lack of essential housing amenities, more housing problems, overcrowding and subjectively bad or very bad dwelling conditions.

### Overall, holding other factors constant, the following household characteristics are associated with a higher risk of child poverty:

- there are three or more children in the household
- there is at least one disabled child in the household
- the household head does not have higher education
- the household head is single (never married), divorced or widowed
- no adults aged 19-60 worked in the past seven days
- they live in Kotayk or Shirak provinces.

The following household characteristics are associated with a higher risk of material or housing deprivation, everything else held equal:

- there are three or more children in the household
- there is one or more disabled adults or children
- the household head is female (for housing deprivation based on the number of reported housing problems only)
- the household head is not married/cohabiting (for subjective housing deprivation only)
- the household head has secondary education or lower
- they live in the province of Tavush.

The targeted child benefit appears to make no difference to average child poverty rates, but the introduction of a universal child benefit could help alleviate child poverty. Given that the majority of children are affected by at least one dimension of poverty or deprivation, benefits that are targeted to particularly vulnerable groups of the population may not reach all of the poor or deprived children. Universal child benefits are meant to be relatively easy to administer and could raise the living standards of all families with children. Table 26 shows the potential reduction in total child poverty for different (hypothetical) child benefit levels. This simple analysis is based on the assumption that all of the child benefit income would be spent by the household, thus entering the consumption-based child poverty estimation. A child benefit of 3,000 drams per child under 19 years old per month would almost halve the total child poverty rate, but even a modest child benefit of 1,000 drams a month, which is only equivalent to around 6 per cent of the extreme (food) poverty line, would reduce child poverty by 6 percentage points (a reduction of around one-fifth).

Table 26 Total child poverty rates with universal child benefit (drams per child per month)

Threshold	CB=0	CB=1,000	CB=2,000	CB=3,000	CB=4,000	CB=5,000
Total poverty	26.0	20.3	16.3	13.9	11 7	10.3
rates	20.0	20.3	10.5	13.9	11.7	10.5

Base: all children.