

ECONOMIC POVERTY IN FINLAND 1971–2004*

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We examined trends in the economic poverty in Finland using two data sources, the Income Distribution Survey and the Consumption Expenditure Survey. We drew on the recent literature on poverty analysis to analyse a range of poverty measures, using dominance conditions to rank the distributions of living standards. Whilst the total numbers in poverty during the 1987–2004 on various definitions rose markedly, the composition of the poor also changed significantly. There is little doubt that unemployed households are the most vulnerable group of the population. Another vulnerable group is families with youngest children less than seven years. (JEL: I32)

1 Introduction

In this paper we analyse trends in income and consumption-based poverty indicators, which are all derived from the Income Distribution Surveys (IDS) and the Consumption Expenditure Surveys (CES) published by the Statistics

Finland. These measures classify individuals being in poverty if they live in households whose income or consumption falls below some poverty line expressed as a fraction of median income or consumption (40 per cent, 50 per cent and 60 per cent). These indicators are known as relative poverty indicators because whether someone is classed as being poor de-

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pends not just on their income and consumption but also on income and consumption expenditure of the median individual.¹

However, there are well-known weaknesses to measuring poverty in this way. It is generally agreed that poverty is multidimensional. We slightly mitigate this limitation in our paper that we also measure poverty defined simultaneously in terms of income and consumption. Secondly, none of the measure of poverty used is explicitly based on an assessment of needs, or what level of income and consumption would be enough to achieve some standard of living. This criticism simply says that poverty is also an absolute notion.

Even accepting to some extent the above limitations, our poverty measures do not provide only information about the number of poor but also on distance that separates those with incomes or consumption expenditures below poverty lines from the poverty thresholds. In other words the measures provide information on how poor the poor are. We believe that the seriousness of poverty is a very important issue and it may require different policies from those trying simply to bring people from just below the poverty line across it.

A characterization of poverty requires answers to questions such as: Who are the poor? How to identify the poor in terms of socio-economic and demographic variables as employment status, occupation, education, age and stage of life cycle? How has the composition of the poor changed over the period 1971–2004?

Section 2 provides a brief summary on poverty measures. We begin in section 3 by describing the data used. We then examine in this section the trends in relative poverty amongst the population as a whole. Section 4 focuses on subgroups of the population, examining poverty in different demographic and socio-economic groups and different regions in Finland. Section 5 concludes.

2 *Measuring poverty*

But though poverty itself is a rather sophisticated and multi-faceted phenomenon, the economics of poverty essentially boils down to two fundamental questions when measuring poverty. First, we have to choose the yardstick by which poverty should be measured. Second, how the degree of poverty relative to a particular poverty line is measured and how this is aggregated across those who are deemed to be poor. A difference between the literature for developing and developed countries is that absolute considerations have dominated the former, while relative poverty has been more important in the latter. Some people, for example, Townsend (1985), commenting on Sen (1983), has taken the view that poverty is entirely relative.

A widely used method of defining poverty is to relate incomes or expenditures to some proportion of prevailing national average. National average can be defined as median or mean, the proportion used can vary, say from 40 to 60 per cent, but the general principle is that poverty is to be defined wholly by distance from national average income or expenditure. Statistics of this kind are now widely used in comparative studies in the EU context (see e.g. Danziger and Jäntti, 2000). The choice between the median and the mean is in part a matter of their relative statistical properties. It is also a question of the level of poverty line.

There is now a large literature on poverty measures stimulated by the article of Sen (1976). One of the main contributions of this article was to call into question the widespread use of headcount measure. The main objection to the headcount is that it gives no indication of the severity of poverty. Households may be close to³ the poverty line or far below. For this reason, the theoretical literature has developed alternatives to the head count. Atkinson (1998) provides, however, an interesting defence for the head-count. If a minimum income is a basic right, then the head-count measures the number deprived of that right. It is an either/or condition.

What are then other candidates? The first is the poverty gap, which is the sum (integral) of the shortfall from the poverty line. The poverty

¹ *In fact the empirical practice of using equivalence scales brings back at least partially absolute “flavour” to any poverty measurement.*

gap in turn may be criticized for evaluating equally all transfers to household below the poverty line irrespective of the seriousness of their poverty. This measure is insensitive to transfers between two households on the same side of the poverty line. Therefore, more sophisticated measures have been developed so that the transfer from a household close to the poverty line to a household far below the line has the effect of reducing measured poverty. For example there is a class of measures proposed by Foster et al. (1984). For useful surveys on poverty measures see e.g. Foster (1984), Atkinson (1987), Ravallion (1994) and Zheng (1999). We shall focus on a few representative measures and those we used in our empirical analysis.

In the discrete case, let there be n income receiving units and let the income unit i be denoted by y_i .² The incomes (or expenditures) are arranged in ascending order and poverty line is z . In the continuous case, let the density and cumulative density of y be given respectively by $f(y)$ and $F(y)$ and let y lie between y_{min} and y_{max} .

The most commonly used measure of poverty is the so-called head count ratio, the fraction of income-receiving units which are below the poverty line. Denoting this by H , it follows that in the discrete case and continuous case, respectively,

$$(1) \quad H = \frac{1}{n} \sum_{i=1}^n 1(y_i \leq z),$$

where $1(\cdot)$ is an indicator function that is 1 if its argument is true and 0 otherwise. For example, if 10 per cent of the population are deemed to be poor, then $H = 0.10$. While identifying the number of the poor, it ignores how poor the poor are, and therefore has the absurd property that it remains unchanged when a previously poor unit becomes even poorer. For example, if we take one Euro from the poorest unit and give it to the richest unit, the head count ratio would remain unchanged. This is one reason why the head count measure used as a measure of poverty has been under severe attack (see e.g. Sen,

1976, 1979; Watts, 1968). For certain sorts of poverty comparisons, such as assessing overall progress in reducing poverty, head count ratio may be quite satisfactory. Atkinson (1987, 1998) was among the few scholars who saw that the attack on the head count is not fully justified. He argued that “minimum income may be seen as a basic right, in which case the head count may be quite acceptable as a measure of the number deprived of that right”.

To overcome drawbacks of the head count measure, the income gap ratio is suggested as a supplement. Denoting this by $I = 1 - m^z/z$, where m^z denotes the mean consumption of the poor. This gives the average of the poverty gaps ($z - y$) as a fraction of the poverty line. To take account of the numbers of the poor in the sense that if the poor units were exactly duplication, I would remain unchanged, it is suggested that the product of HI would be more satisfactory.³

$$(2) \quad HI = \frac{1}{n} \sum_{i=1}^n [1 - y_i / z] 1(y_i \leq z).$$

Thus HI is sensitive to both the numbers of the poor and to how poor they are. HI has an interesting interpretation, which makes it very attractive in policy applications. Namely HI measures the actual amount of income necessary to bring every household below the poverty line up to the poverty line. The drawback of the HI measure is that it is insensitive to redistribution of income within the poor household. If one Euro of income was taken from the poorest unit and given to a unit which is richer but still well below the poverty line the HI measure would remain unchanged. Sen (1976) has proposed a better measure of the severity of poverty, given by

$$(3) \quad S = H \left(1 - (1 - G_p) \frac{\mu_p}{z} \right),$$

where μ_p is the mean of y among the poor, and G_p is the Gini coefficient of inequality among the poor. If there is no inequality amongst the poor then $S = HI$. The S -measure in turn is not additive. In other words S is not equal to the

² In this study we utilised sample data. In this case $1/n$ is replaced by $w_i / \sum_{i=1}^n w_i$. w_i include the sampling weight and the number of members in household.

³ Here we neglect considerations related to the use of equivalence scales.

population weighted sum of poverty counts in the various sub-groups of society.⁴ A measure of the severity of poverty which is decomposable is the Foster et al. (1984) (hereafter FGT). The FGT class of measure can be written as

$$(4) \quad P_a = \frac{1}{n} \sum_{i=1}^n [1 - y_i / z]^a \mathbf{1}(y_i \leq z).$$

The parameter $a \geq 0$ measures how sensitive the index is to transfers between the poor units. For $a > 1$, transfer from low to high incomes will increase poverty. When $a = 2$, this measure can be expressed as

$$(5) \quad P_2 = H(I^2 + (1-I)^2 C_p^2) \mathbf{1}(y_i \leq z),$$

where C_p is the coefficient of variation among the poor. This class of measure has proven very useful for policy analyses. It already contains indices (H) and (HI) as special cases

$$(6) \quad P(a = 0) = P_0 = H$$

$$(7) \quad P(a = 1) = P_1 = HI.$$

It is clearly the decomposability of P_a which has led to its widespread application in practice.⁵ Divide the population into m subgroups, mutually exclusive and exhaustive, with group k having a fraction v_k of the population, $\sum_{k=1}^m v_k = 1$. Denote the poverty index in subgroup k by $P_{k,a}$, i.e.

$$(8) \quad P_a = \sum_{k=1}^m v_k P_{k,a},$$

thus overall poverty can be written as a weighted sum of subgroup poverty indices.

Although major advances have been made in the search for better cardinal measures of poverty, there is still widespread concern over arbitrariness in the choice of the poverty measure and the poverty line. Fortunately, for many applications, all that we need is the ordinal ranking of distribution. As Sen (1979) noted that “one may be forced to use more than one crite-

ri- on because of non-uniformity of accepted standard and look at the partial ordering generated by the criteria taken together” (p. 280). An important strand of research in poverty analysis (Atkinson, 1987; Foster and Shorrocks, 1988) drawing on and developing results from the theory of stochastic dominance has shown when one can make reasonable ordinal poverty comparisons.

If ordinal comparisons suffice, we need not confine ourselves to a particular poverty line and poverty measure. If the class of poverty measures satisfies certain conditions, we can apply the first-order dominance test. Then it can be shown that poverty will unambiguously increase (decrease) between two dates, say 1990 and 2004 in Finland, if the cumulative distribution for the latter date lies nowhere below (above) that for the former date, up to z_{max} . Comparing distributions of 1990 and 2004 if $F(2004, z)$ is everywhere above $F(1990, z)$ up to z_{max} , then the head count index must also be higher for 2004, no matter what the poverty line. When the first-order dominance is inconclusive, we can further restrict the range of admissible poverty measures (excluding H) then we can use a second order dominance condition. In other words we restrict attention to measures which reflect the depth of poverty such as HI and P_2 . When a second-order dominance, in turn, is inconclusive we can exclude H and HI then a third order dominance condition can be tested.

3 The data and results

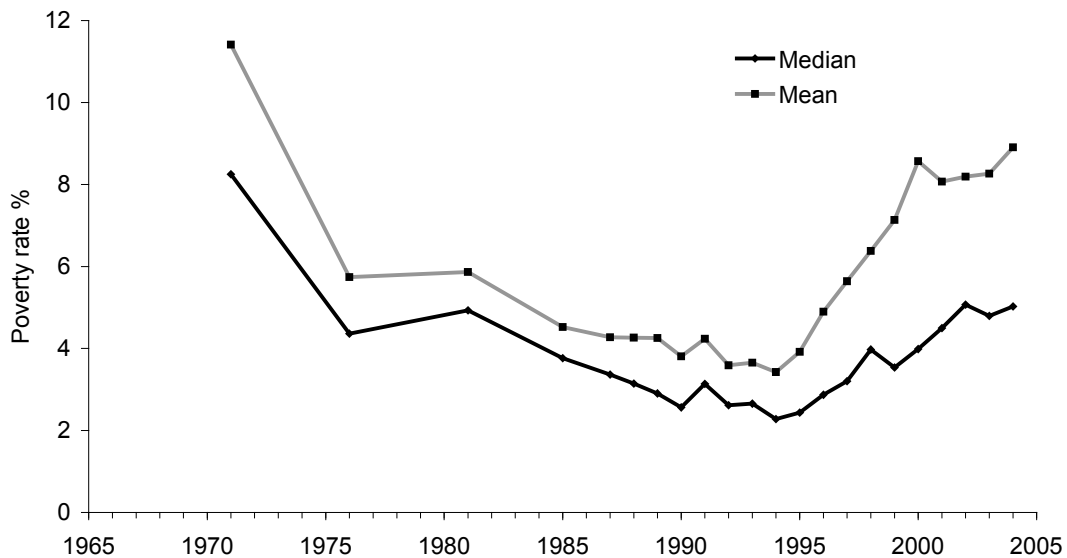
We use the Income Distribution Surveys (IDS) and the Consumption Expenditure Survey (CES)⁶ published by the Statistics Finland. The IDS is a sample survey of around 9 000–11 000 households drawn from the private households in Finland. The IDS contains information on incomes, taxes and benefits together with various socio-economic characteristics of the Finnish households. Most of the information contained in the IDS has been collected from vari-

⁴ In Appendix Figure A1 we present empirical figures for different ingredients of Sen-measure.

⁵ E.g. in analysing the targeting of poverty alleviation programs, see Kanbur (1987), Besley and Kanbur (1988) and Kanbur et al. (1994).

⁶ See Suoniemi and Sullström (1995) for a detailed exposition of this data set.

Figure 1. Percentage of the population below 50 per cent of mean and median disposable income, 1971–2004.



ous administrative registers. Auxiliary information is collected through interviews. Indirect taxes, such as VAT and specific commodity taxes and the provision of public services are not included on our data. This may have important consequences, because indirect taxes and public services tend to be regressive (see e.g. Sullström and Riihelä, 1996; Suoniemi, 1993). All types of income and consumption used in this study are calculated on annual basis. Households also differ in size and composition, and so a simple comparison of aggregate household consumption could be quite misleading about the well-being of individual members of a given household. The OECD equivalence scale is used in order to make comparable households with different size and composition. The OECD scale is calculated as follows. The first adult in each household has a weight of 1 and each additional adult a weight of 0.7. Each child under 18 years old gets a weight of 0.5. We also make comparisons with the so called modified OECD-scale, shortly MOECD. In this scale the first adult in each household has a weight of 1 and each additional adult a weight of 0.5. For the children, aged 0–13, the weight is 0.3. Members aged over 13 are adults. The EU standard for

poverty is determined by 60 per cents from median income (see Atkinson, 2000).

Figure 1 shows the trends in the relative poverty between 1971 and 2004 when a poverty line is set equal to 50 per cent of either median or mean income of the year concerned. The picture reveals that relative poverty declined until the mid 1990s. It rose, thereafter, sharply during the latter part of the 1990s. The relative income poverty rate defined in terms of having low income relative to a contemporaneous standard, a poverty line set at 50 per cent of median (mean) income, was in 1971 8.3 per cent (11.4), in 1995 2.4 per cent (3.9) and in 2004 5.0 per cent (8.9).

Figure 2 shows that over the period from 1971 to 2001 there were actually more people living below the spending based poverty lines than below income based ones. Figures 1 and 2 also show clearly the seemingly perverse effect that the recession had on purely relative poverty measures. In the recession of the early 1990s, the poverty head count actually fell, whether it is income or consumption that is used in assessment. This shows that the middle and high incomes must have been worse hit by the recession than the low incomes. Similarly, in

Figure 2. Percentage of the population below 50 per cent of mean and median consumption, 1971–2001.

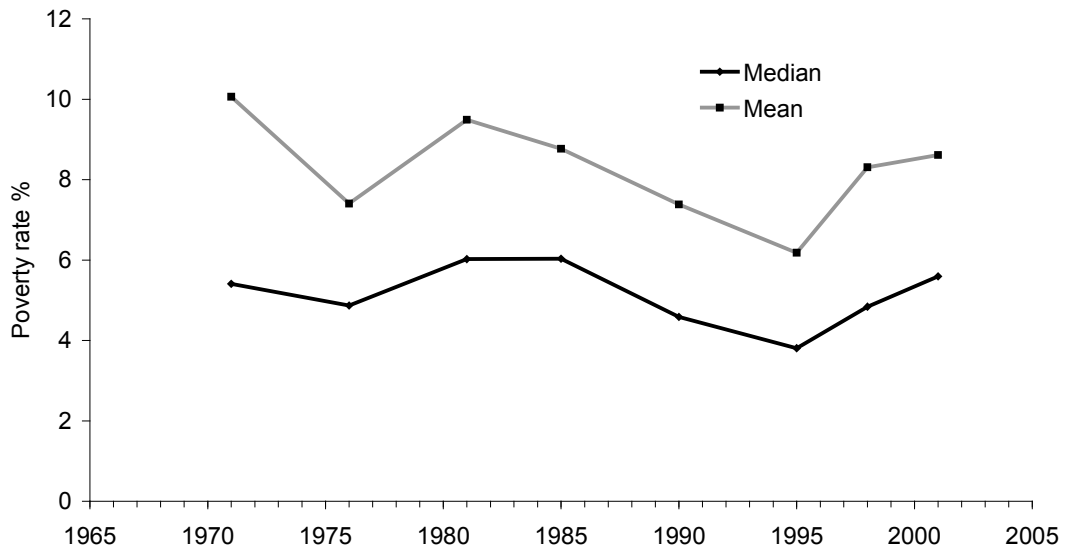
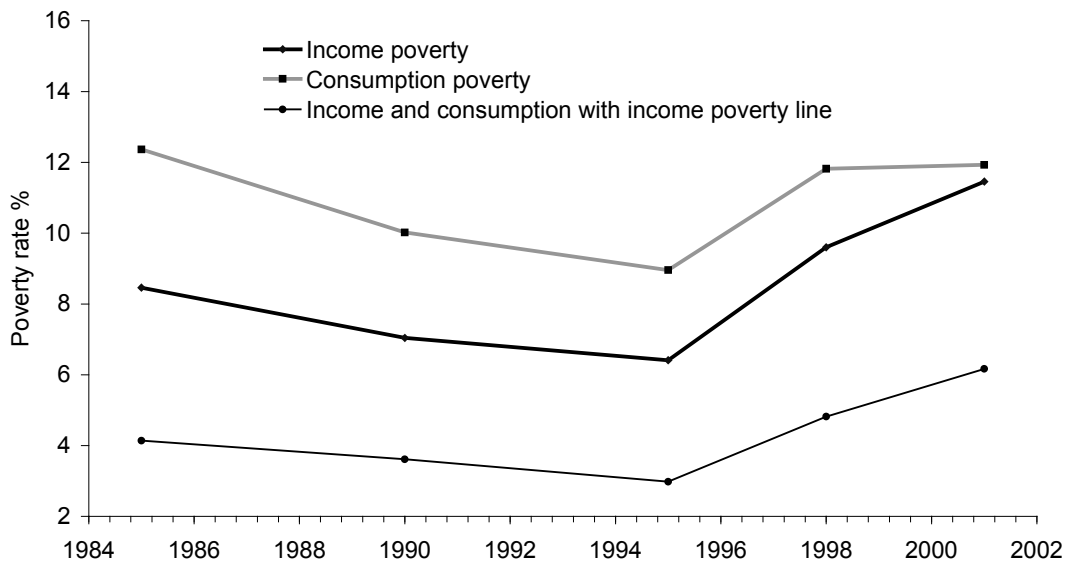


Figure 3. Percentage of the population below 60 per cent of median income, median consumption or both.

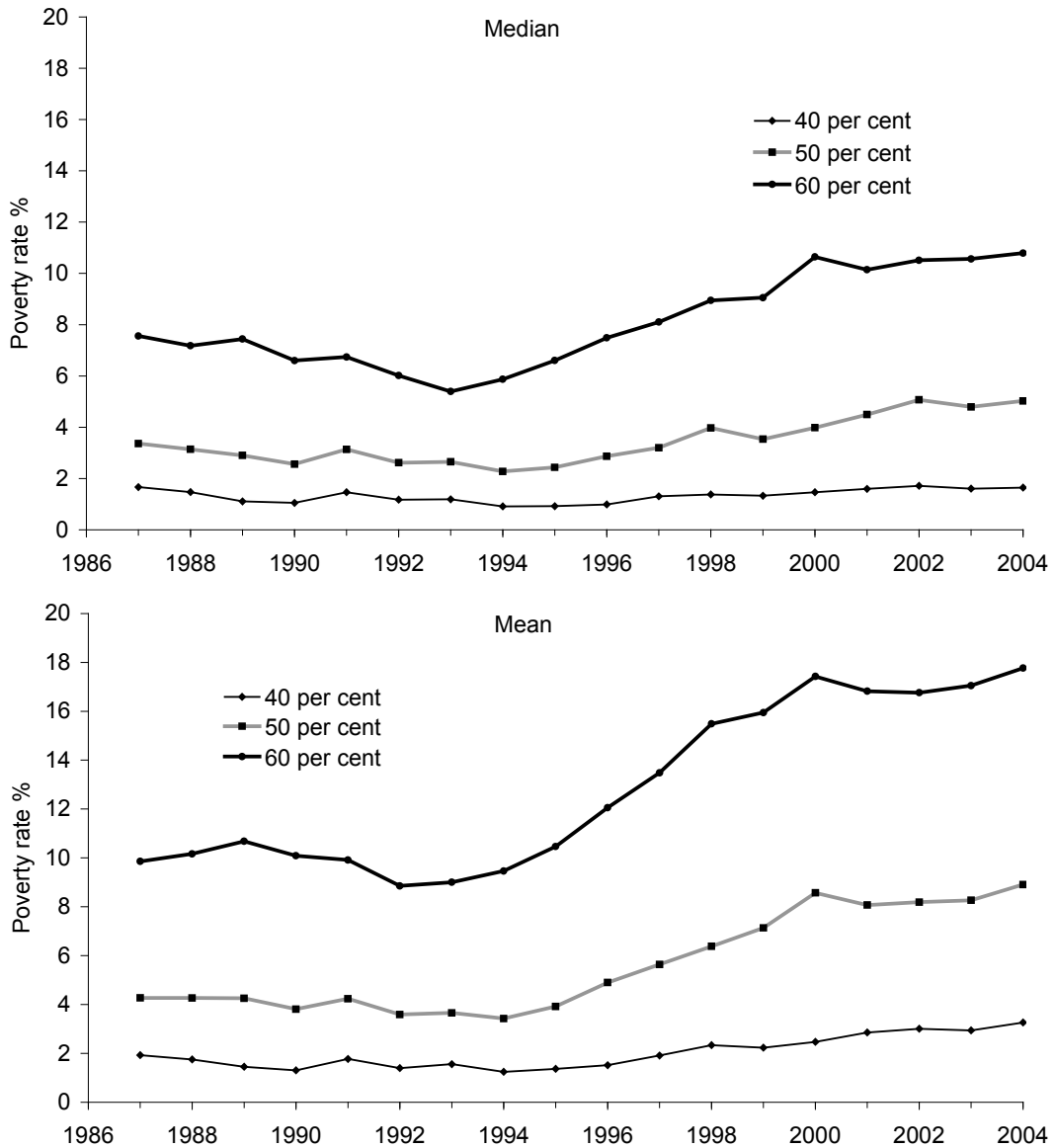


the latter part of the 1990s, a period of rapid economic growth, large gains for those at the top along with smaller gain for other can result in a very rapid rise in head count poverty.

Correspondingly Figure 2 shows the trends in the relative poverty of consumption.⁷ We can

⁷ The length of the bookkeeping period in consumption (in CES) was a month in 1971 and 1976 and after that two weeks. Income variables in the samples were always the length of one year. As pointed out by the referee one would expect that a shorter bookkeeping period in consumption data leads to higher variance and higher poverty *ceteris paribus*.

Figure 4. Percentage of the population below 40, 50 and 60 per cent of median and mean disposable income, 1987–2004.



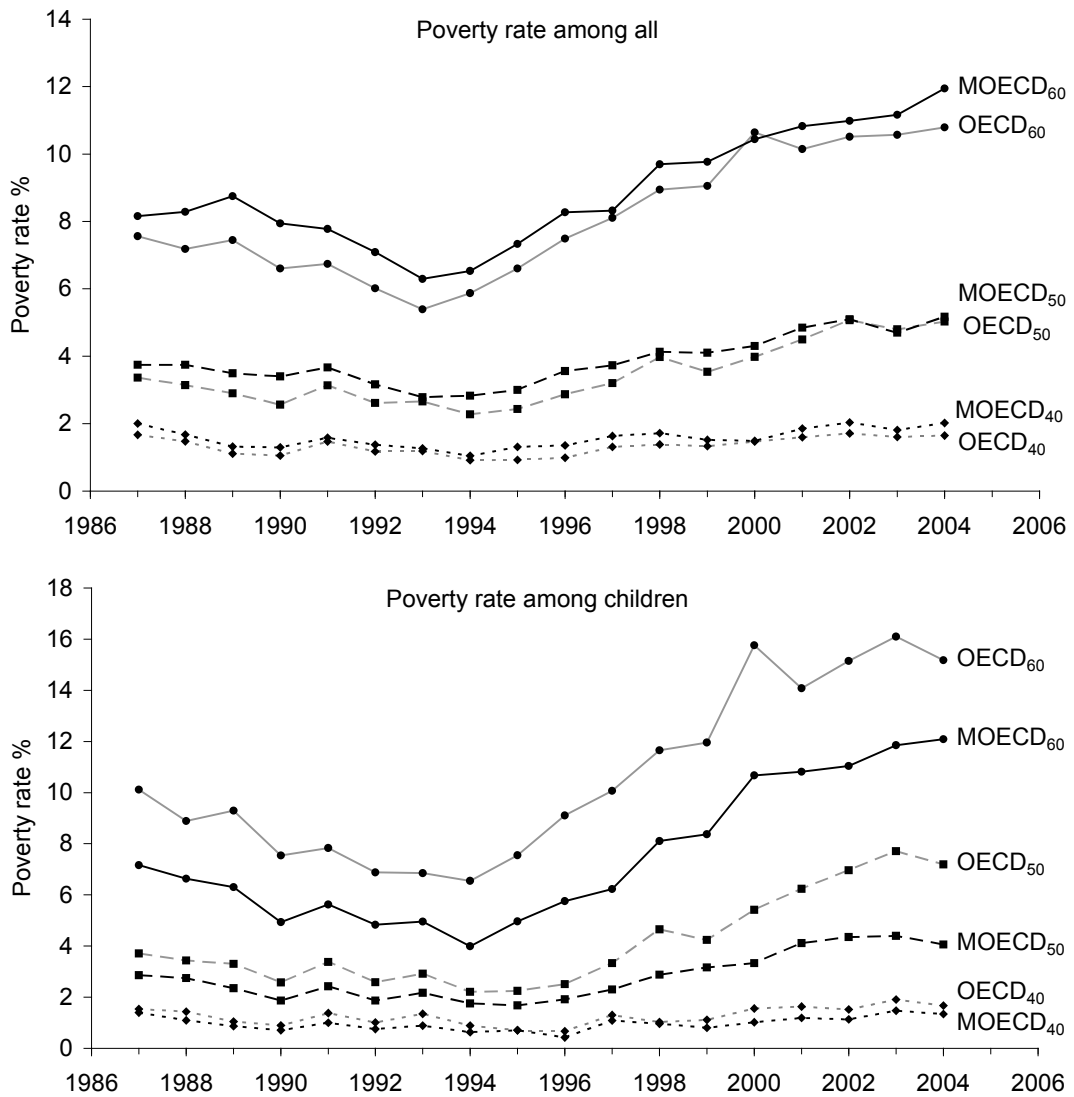
see that in this case relative poverty declined from year 1985 to the mid 1990s. However, the trends of income and consumption poverty are in the direction with the same tendency in the latter part of 1990s.

Figure 3 shows poverty rates when these rates are based on both income and spending. Person is poor if his consumption and income are be-

low the 60 per cent of median income. Now poverty rates are lower than based on either spending or income. We find that also in this case poverty rate is the U-shaped curve over the period 1985–2001.

In Figure 4 we show the proportion of the population below 40 per cent, 50 per cent and 60 per cent of median and mean disposable in-

Figure 5. Poverty rates by OECD- and MOECD-scales modified incomes as a proportion of median disposable income.



scales affects not only the level of poverty, but also the composition of poverty. The level-effect of adopting the modified OECD scale (MOECD) is shown in Figure 5 (see also Tables A1–A2 in Appendix). Figure 5 displays poverty rates among children. We find the U-shaped pattern of rate of child poverty. The rate of child poverty based on household income has also risen since the mid 1990s with all three poverty lines and different equivalence scales.

One problem with the poverty measure based on a proportion of the mean is that the mean may be skewed upwards by some very high incomes at the very top of the distribution. This may be a reason why the poverty measures based on a proportion of the mean deviates from those based on the proportion of the median income during the latter part of the period considered. It is also reasonable to argue that what is happening at the top of distribution should not

Table 1. Aggregate poverty measures (poverty line %) in 1990, 1995, 2001 and 2004, per cent of median income (IDS) and consumption (CES).

| Index | 1990 | | | 1995 | | | 2001 | | | 2004 | | |
|--------------------------|------|------|-------|------|------|------|------|------|-------|------|------|-------|
| | 40 % | 50 % | 60 % | 40 % | 50 % | 60 % | 40 % | 50 % | 60 % | 40 % | 50 % | 60 % |
| Income | | | | | | | | | | | | |
| H | 1.05 | 2.56 | 6.60 | 0.92 | 2.44 | 6.61 | 1.60 | 4.50 | 10.15 | 1.65 | 5.02 | 10.79 |
| HI | 0.27 | 0.54 | 1.19 | 0.22 | 0.48 | 1.09 | 0.42 | 0.90 | 1.95 | 0.39 | 0.94 | 2.08 |
| P2 | 0.13 | 0.23 | 0.41 | 0.10 | 0.19 | 0.36 | 0.19 | 0.35 | 0.67 | 0.16 | 0.33 | 0.68 |
| Consumption ¹ | | | | | | | | | | | | |
| H | 1.37 | 4.59 | 10.02 | 1.09 | 3.81 | 8.96 | 1.76 | 5.60 | 11.93 | | | |
| HI | 0.23 | 0.74 | 1.80 | 0.16 | 0.60 | 1.54 | 0.31 | 0.94 | 2.22 | | | |
| P2 | 0.06 | 0.20 | 0.52 | 0.05 | 0.16 | 0.42 | 0.09 | 0.27 | 0.66 | | | |

¹ In the CES-data the year 1995 is the weighted years 1994, 1995 and 1996.

Source: Income Distribution Surveys in 1987–2004, Consumption Expenditure Surveys in 1966–2001, Statistics Finland.

affect the measurement of poverty. A poverty measure less sensitive to such effects is one based on a proportion of the median, the point in the middle of the distribution.

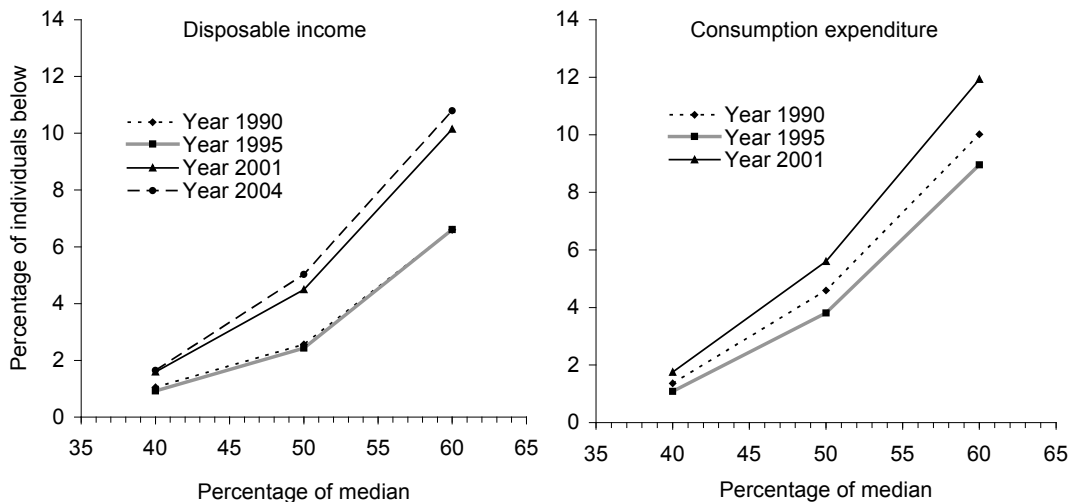
Table 1 gives our estimates of income poverty in Finland for various poverty measures and for different poverty lines (40 per cent, 50 per cent and 60 per cent of median income). All three measures and three poverty lines indicate a significant increase in income poverty between 1990 and 2004. We find that the headcount index of poverty increased from 2.6 per cent to 5.0 per cent by 2004 poverty line being 50 per cent of median and from 6.6 to 10.8 per cent poverty line being 60 per cent of median. Thus the rise in headcount index indicates that there were more poor people in 2004 than there had been in the beginning of 1990s. The poverty gap measure in turn indicates that the aggregate income shortfall of the poor increased 66.7 per cent (poverty line being 50 per cent of median). What is striking about Table 1 is that whether the poverty line is set at 40, 50 or 60 per cent of national median income, not only the number below the line have risen dramatically since the mid-1990s. In addition, the aggregate poverty gap grew by proportionately slightly less than the head count index (66.7 per cent versus 77.2 per cent poverty line being 50 per cent of median). Finally, the 52.2 per cent (63.4 per cent) rise in P_2 (poverty line being 50 per cent (60 per cent) of median) suggests that

poverty among the poor were became more severe.

Are our quantitative results on the change in poverty over this period robust to the choice of an indicator of the standard of living? An alternative yardstick is to use expenditure as the measure of standard of living. Spending as a measure of standard of living may better capture the longer-term aspects of households' well-being. From Table 1 we see that the number of households with spending below 40, 50 and 60 per cent of the median expenditure in 1990, 1995 and 2001 was more than the number whose disposable incomes were below 40, 50 and 60 per cent of the median. In other words over the whole of the 1990s, there were actually more people living below the spending consumption-based poverty lines than below income-based ones. The rise in consumption based P_2 measure during the latter part of the 1990s tells that poverty among the poor, measuring consumption expenditures, has also become more severe. Both the income and consumption expenditure measures showed a similar rate of growth over the 1990s and the early years of the 2000s.

Are the quantitative results robust to the choice of poverty line and measure? The application of the dominance test is illustrated in Figure 6 where the range of possible poverty lines is taken from 40 to 60 per cent of the median. The curve for 2004 is everywhere above

Figure 6. First-order dominance (FOD) from median (OECD-scale).



that for 1990. Thus we can agree on the direction of the change – economic (income and consumption expenditure) poverty has increased – even if we do not agree where in that range the poverty line is located. In other words the first-order dominance conditions hold, and so one can conclude that all well-behaved poverty measures and all possible poverty lines will show an unambiguous increase in aggregate poverty between two dates.

4. Who are the poor?

It may also be of interest to explore the socio-economic status composition of those in the poorest group. For this purpose we can use the decomposable property of P_a . In other words we can decompose aggregate poverty into its constituent parts. First, we consider the population split into 9 socio-economic subgroups in Tables 2, 3 and 4. There are different ways to present a poverty profile. In Table 2 the contribution of a group to overall poverty is a function of that group's population share and the incidence of poverty in the group. Using the head count measure, H , we look at those with below 40, 50 and 60 per cent of median income and consumption in years 1990, 1995, 2001 and 2004.⁸ The changes between these dates are the most

interesting in terms of composition. Using consumption based measure the two most over-represented subgroups among poor in 1990 were pensioners and workers. Over the period since 1990, the biggest change was the major deterioration in the position of unemployed households. The contribution of unemployed to income and consumption poverty rose markedly from 1990 to 2004.

The most common method of presenting poverty data is to give poverty measures for various groups (see Tables 3, 4, A3, A4 and A5). The incidence of poverty is on a rather different set of people under the consumption measure (see Table 2 and 4). Using spending as the living standard, measure leads to many more pensioners and workers being classified as poor. Amongst pensioners this is because pensioners' spending tends to be low compared with the average. On the other hand, there are a considerable number of low-income non-pensioner households whose spending is relatively high. Pensioner relative poverty has fallen with all poverty line since 1995 when measured using household spending but has risen when measured using income, again with all poverty lines (see Tables 2, 3 and 4). Table 3 does appear to

⁸ For consumption we have data until the year 2001. Next CES-data for the year 2006 is under preparation.

Table 2. Poverty contributions by socio-economic status for income and consumption, head count measure H, (Poverty line, %).

| Population group | 1990 | | | 1995 | | | 2001 | | | 2004 | | |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 40 % | 50 % | 60 % | 40 % | 50 % | 60 % | 40 % | 50 % | 60 % | 40 % | 50 % | 60 % |
| Income | | | | | | | | | | | | |
| Farmers | 16.9 | 16.5 | 11.8 | 8.7 | 7.2 | 7.3 | 6.1 | 6.0 | 5.7 | 4.9 | 8.1 | 5.5 |
| Entrepreneurs | 24.2 | 16.5 | 11.8 | 22.3 | 18.9 | 13.5 | 24.1 | 18.1 | 11.4 | 14.5 | 9.7 | 7.6 |
| White collars | 0.0 | 1.5 | 2.6 | 0.0 | 0.0 | 1.1 | 2.3 | 0.9 | 2.2 | 0.0 | 1.8 | 1.8 |
| Blue collars | 3.6 | 3.6 | 6.3 | 4.2 | 6.4 | 5.6 | 1.5 | 5.6 | 8.6 | 1.6 | 4.0 | 7.6 |
| Workers | 7.4 | 13.2 | 20.4 | 3.0 | 3.9 | 9.0 | 0.7 | 7.8 | 14.1 | 5.0 | 9.3 | 14.4 |
| Students | 24.1 | 18.0 | 10.4 | 19.8 | 21.0 | 13.4 | 34.5 | 24.2 | 17.0 | 31.8 | 21.2 | 15.8 |
| Pensioners | 11.5 | 17.7 | 27.9 | 3.0 | 5.1 | 11.6 | 4.9 | 6.8 | 12.5 | 2.7 | 6.4 | 14.9 |
| Unemployed | 5.8 | 4.3 | 3.5 | 31.7 | 32.9 | 30.5 | 13.0 | 23.7 | 22.5 | 22.9 | 27.5 | 24.5 |
| Others | 6.4 | 8.6 | 5.3 | 7.5 | 4.8 | 8.0 | 13.1 | 7.0 | 6.0 | 16.6 | 12.0 | 7.9 |
| Totals | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Consumption¹ | | | | | | | | | | | | |
| Farmers | 7.0 | 6.0 | 9.1 | 15.2 | 8.7 | 7.6 | 1.5 | 2.8 | 4.6 | | | |
| Entrepreneurs | 0.7 | 2.0 | 3.4 | 2.8 | 2.1 | 3.0 | 5.4 | 3.6 | 3.7 | | | |
| White collars | 0.2 | 0.5 | 2.3 | 0.0 | 1.3 | 3.4 | 2.2 | 2.0 | 2.7 | | | |
| Blue collars | 3.9 | 5.8 | 8.3 | 6.8 | 3.6 | 7.5 | 1.2 | 6.7 | 7.8 | | | |
| Workers | 17.9 | 25.0 | 25.0 | 8.6 | 16.7 | 16.9 | 19.3 | 22.5 | 24.9 | | | |
| Students | 2.1 | 1.5 | 2.3 | 3.5 | 2.2 | 3.4 | 6.5 | 4.2 | 4.7 | | | |
| Pensioners | 61.2 | 53.2 | 44.7 | 43.4 | 40.3 | 36.8 | 34.6 | 35.5 | 35.3 | | | |
| Unemployed | 3.9 | 1.8 | 1.3 | 17.9 | 23.1 | 19.2 | 23.7 | 18.0 | 12.7 | | | |
| Others | 3.2 | 4.3 | 3.5 | 1.8 | 2.1 | 2.4 | 5.5 | 4.7 | 3.7 | | | |
| Totals | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | | |

¹ In the CES-data the year 1995 is the weighted years 1994, 1995 and 1996.

² We call shortly Employers and own account workers in agriculture as Farmers, Other entrepreneurs and own-account workers as Entrepreneurs, Upper-level salaried employees as White collars and Lower-level salaried employees as Blue collars.

Source: Income Distribution Surveys, Consumption Expenditure Surveys, Statistics Finland.

indicate that entrepreneurs and students are two groups most at risk of poverty, measured in terms of income. Using income as the living standard may lead misleading conclusions with those groups. Particularly, this is problematic with students because the IDS and CES data sets don't provide information on the extent of income and other support students received from their parents. As expected on the basis of Table 2 we find in Table 4 that the poverty rates, measured in terms of consumption, are much lower for farmers, entrepreneurs and students than measured in terms of income.

The breakdown by socio-economic group is only one of numerous possible way of decomposing the population to reveal its constituent parts and their contribution to the overall picture of poverty. If we divide the population into 10-year age-groups, divided according to the

age of the head of the households, we can see very little variations in the level of contribution to aggregate poverty over the period 1987–2000 (see Table A3). We find that from 1990 to 2000 an increase in the contribution to aggregate poverty is remarkable only among those households with the head in the age group 45–54. The high rate of unemployment among this age group is the main reason for this trend. Interestingly there is a quite remarkable rise in poverty rate with poverty line 50 per cent of the median income amongst the three youngest age groups (less than 25, 25–34 and 35–44) between 2000 and 2004 (see Table A3). It is not clear to us what may explain this rise. At least to some extent the long term unemployment is one factor.

The breakdown by socio-economic group is only one of numerous possible way of decomposing the population to reveal its constituent

Table 3. Poverty profile by the socio-economic status of the household head in the IDS based in income.¹

| Population group | Year | OECD-scale (50 %) of median | | | | | Modified scale (60 %) of median | | | | |
|---|------|-----------------------------|-------|-------|--------|-----------|---------------------------------|-------|--------|-----------|--|
| | | v_k | H_k | s_k | HI_k | $P_{k,2}$ | H_k | s_k | HI_k | $P_{k,2}$ | |
| Employers and own-account worker in agriculture (Farmers) | 1987 | 8.0 | 10.6 | 25.1 | 2.5 | 1.0 | 18.6 | 18.2 | 4.3 | 1.7 | |
| | 1990 | 5.7 | 7.4 | 16.5 | 1.8 | 0.8 | 12.5 | 9.0 | 2.9 | 1.3 | |
| | 1993 | 4.8 | 5.9 | 10.6 | 1.0 | 0.4 | 9.5 | 7.2 | 1.8 | 0.6 | |
| | 1997 | 4.1 | 8.1 | 10.3 | 1.6 | 0.6 | 12.0 | 5.9 | 2.6 | 1.0 | |
| | 2000 | 3.3 | 8.0 | 6.6 | 1.1 | 0.4 | 12.9 | 4.1 | 2.3 | 0.7 | |
| | 2004 | 3.1 | 13.0 | 8.1 | 1.9 | 0.5 | 16.4 | 4.3 | 2.9 | 0.9 | |
| Other entrepreneurs and own-account workers (Entrepreneurs) | 1987 | 6.9 | 8.6 | 17.5 | 2.8 | 1.4 | 12.9 | 10.8 | 3.9 | 2.0 | |
| | 1990 | 7.4 | 5.7 | 16.5 | 1.8 | 0.9 | 9.1 | 8.5 | 2.6 | 1.2 | |
| | 1993 | 6.6 | 9.4 | 23.4 | 3.2 | 1.9 | 13.0 | 13.6 | 4.4 | 2.4 | |
| | 1997 | 7.0 | 5.5 | 12.1 | 1.6 | 0.8 | 8.1 | 6.9 | 2.3 | 1.1 | |
| | 2000 | 6.8 | 7.0 | 11.8 | 2.2 | 1.1 | 11.4 | 7.4 | 3.3 | 1.6 | |
| | 2004 | 7.2 | 6.7 | 9.7 | 1.8 | 0.8 | 11.3 | 6.8 | 2.8 | 1.3 | |
| Upper-level salaried employees (White collars) | 1987 | 15.0 | 0.1 | 0.5 | 0.0 | 0.0 | 0.3 | 0.6 | 0.1 | 0.0 | |
| | 1990 | 16.2 | 0.2 | 1.5 | 0.0 | 0.0 | 1.0 | 2.0 | 0.1 | 0.0 | |
| | 1993 | 15.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | |
| | 1997 | 15.5 | 0.3 | 1.4 | 0.1 | 0.0 | 0.6 | 1.2 | 0.1 | 0.0 | |
| | 2000 | 17.9 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.4 | 0.0 | 0.0 | |
| | 2004 | 19.5 | 0.5 | 1.8 | 0.0 | 0.0 | 0.7 | 1.2 | 0.1 | 0.0 | |
| Lower-level salaried employees (Blue collars) | 1987 | 19.3 | 1.0 | 5.5 | 0.1 | 0.0 | 2.8 | 6.6 | 0.4 | 0.1 | |
| | 1990 | 19.4 | 0.5 | 3.6 | 0.1 | 0.0 | 2.0 | 5.0 | 0.3 | 0.1 | |
| | 1993 | 19.9 | 0.6 | 4.4 | 0.1 | 0.0 | 1.3 | 4.1 | 0.2 | 0.1 | |
| | 1997 | 19.1 | 0.8 | 4.7 | 0.2 | 0.1 | 3.2 | 7.3 | 0.4 | 0.1 | |
| | 2000 | 18.7 | 0.8 | 3.9 | 0.1 | 0.0 | 2.9 | 5.2 | 0.4 | 0.1 | |
| | 2004 | 18.8 | 1.1 | 4.0 | 0.1 | 0.0 | 3.5 | 5.5 | 0.4 | 0.1 | |
| Workers | 1987 | 31.2 | 1.3 | 12.5 | 0.3 | 0.1 | 3.9 | 15.1 | 0.6 | 0.2 | |
| | 1990 | 30.1 | 1.1 | 13.2 | 0.1 | 0.0 | 3.1 | 11.6 | 0.4 | 0.1 | |
| | 1993 | 22.3 | 0.5 | 3.8 | 0.0 | 0.0 | 1.6 | 5.6 | 0.2 | 0.0 | |
| | 1997 | 23.7 | 0.4 | 2.9 | 0.0 | 0.0 | 2.7 | 7.8 | 0.3 | 0.1 | |
| | 2000 | 24.3 | 0.9 | 5.8 | 0.1 | 0.0 | 5.5 | 12.8 | 0.5 | 0.1 | |
| | 2004 | 22.4 | 2.1 | 9.3 | 0.3 | 0.1 | 5.4 | 10.1 | 0.7 | 0.2 | |
| Students | 1987 | 1.4 | 52.4 | 21.9 | 14.6 | 5.6 | 72.8 | 12.5 | 28.4 | 13.8 | |
| | 1990 | 1.2 | 37.3 | 18.0 | 8.7 | 3.5 | 63.9 | 9.9 | 20.3 | 8.9 | |
| | 1993 | 1.9 | 27.4 | 19.8 | 8.4 | 3.9 | 50.6 | 15.4 | 15.8 | 7.7 | |
| | 1997 | 2.6 | 34.5 | 27.8 | 8.0 | 3.2 | 63.7 | 19.8 | 18.0 | 7.6 | |
| | 2000 | 2.3 | 35.0 | 20.5 | 7.9 | 3.0 | 62.6 | 14.0 | 17.4 | 7.0 | |
| | 2004 | 2.4 | 43.6 | 21.2 | 10.8 | 4.4 | 76.8 | 15.7 | 23.2 | 10.0 | |
| Pensioners | 1987 | 15.9 | 1.5 | 7.3 | 0.3 | 0.2 | 14.1 | 27.6 | 1.9 | 0.5 | |
| | 1990 | 18.4 | 2.5 | 17.7 | 0.4 | 0.1 | 20.1 | 46.5 | 2.9 | 0.7 | |
| | 1993 | 19.8 | 0.4 | 2.8 | 0.0 | 0.0 | 6.7 | 21.0 | 0.5 | 0.1 | |
| | 1997 | 21.0 | 2.0 | 12.9 | 0.2 | 0.1 | 7.7 | 19.5 | 1.1 | 0.3 | |
| | 2000 | 20.3 | 1.8 | 8.8 | 0.2 | 0.1 | 11.8 | 23.0 | 1.5 | 0.4 | |
| | 2004 | 20.6 | 1.6 | 6.4 | 0.2 | 0.1 | 14.7 | 25.3 | 1.8 | 0.4 | |
| Unemployed | 1987 | 0.9 | 23.3 | 6.2 | 3.9 | 0.9 | 38.7 | 4.3 | 10.8 | 4.1 | |
| | 1990 | 0.6 | 17.7 | 4.3 | 4.3 | 1.6 | 40.2 | 3.2 | 10.2 | 3.8 | |
| | 1993 | 8.0 | 9.1 | 27.4 | 1.5 | 0.5 | 20.0 | 25.5 | 3.9 | 1.3 | |
| | 1997 | 5.9 | 11.0 | 20.3 | 1.9 | 0.6 | 38.9 | 27.5 | 6.3 | 1.8 | |
| | 2000 | 5.0 | 23.2 | 29.1 | 3.6 | 1.1 | 52.3 | 25.1 | 9.9 | 2.9 | |
| | 2004 | 4.5 | 30.5 | 27.5 | 5.0 | 1.5 | 63.8 | 24.2 | 13.2 | 4.0 | |
| Others | 1987 | 1.4 | 8.6 | 3.6 | 1.6 | 0.4 | 25.0 | 4.3 | 4.9 | 1.7 | |
| | 1990 | 0.9 | 25.5 | 8.6 | 4.6 | 2.1 | 39.6 | 4.3 | 9.2 | 4.0 | |
| | 1993 | 1.8 | 11.6 | 7.8 | 3.8 | 1.8 | 25.8 | 7.3 | 6.7 | 3.1 | |
| | 1997 | 1.2 | 21.0 | 7.7 | 4.7 | 1.7 | 30.1 | 4.2 | 8.4 | 3.4 | |
| | 2000 | 1.3 | 42.2 | 13.3 | 8.4 | 3.5 | 66.1 | 7.9 | 13.0 | 5.4 | |
| | 2004 | 1.5 | 41.7 | 12.0 | 9.0 | 3.1 | 56.9 | 6.9 | 14.4 | 5.4 | |

¹ H_k = Headcount ratio, s_k = Subgroup contribution to aggregate poverty ($s_k = 100 \cdot v_k \cdot (H_k/H)$), HI_k = Average normalized poverty gap, $P_{k,2}$ = Average squared normalized poverty gap, v_k = population share by household type ($k = 1, 2, \dots, 9$).

Source: Income Distribution Surveys in 1987–2004.

Table 4. Poverty profile by the socio-economic status of the household head in the CES based on consumption.¹

| Population group | Year | OECD-scale (50 %) of median | | | | | Modified scale (60 %) of median | | | | |
|---|------|-----------------------------|-------|-------|--------|-----------|---------------------------------|-------|--------|-----------|--|
| | | v_k | H_k | s_k | HI_k | $P_{k,2}$ | H_k | s_k | HI_k | $P_{k,2}$ | |
| Employers and own-account worker in agriculture (Farmers) | 1990 | 6.1 | 4.5 | 6.0 | 0.7 | 0.2 | 11.4 | 6.3 | 1.7 | 0.4 | |
| | 1995 | 4.3 | 7.7 | 8.7 | 1.8 | 0.6 | 14.5 | 6.4 | 2.9 | 1.0 | |
| | 1998 | 3.1 | 5.2 | 3.3 | 0.7 | 0.3 | 9.6 | 2.5 | 1.6 | 0.5 | |
| | 2001 | 3.5 | 4.5 | 2.8 | 0.4 | 0.1 | 13.1 | 3.6 | 1.4 | 0.3 | |
| Other entrepreneurs and own-account workers (Entrepreneurs) | 1990 | 6.9 | 1.3 | 1.9 | 0.1 | 0.0 | 3.6 | 2.3 | 0.5 | 0.1 | |
| | 1995 | 6.6 | 1.2 | 2.1 | 0.2 | 0.1 | 4.1 | 2.8 | 0.5 | 0.1 | |
| | 1998 | 6.9 | 2.6 | 3.8 | 0.6 | 0.2 | 5.5 | 3.3 | 1.0 | 0.3 | |
| | 2001 | 7.7 | 2.6 | 3.6 | 0.4 | 0.1 | 4.6 | 2.8 | 0.7 | 0.2 | |
| Upper-level salaried employees (White collars) | 1990 | 16.7 | 0.1 | 0.5 | 0.0 | 0.0 | 1.0 | 1.5 | 0.1 | 0.0 | |
| | 1995 | 15.2 | 0.3 | 1.3 | 0.0 | 0.0 | 1.4 | 2.2 | 0.1 | 0.0 | |
| | 1998 | 16.9 | 0.6 | 2.2 | 0.1 | 0.0 | 1.4 | 2.0 | 0.2 | 0.0 | |
| | 2001 | 19.6 | 0.6 | 2.0 | 0.1 | 0.0 | 1.9 | 2.9 | 0.2 | 0.0 | |
| Lower-level salaried employees (Blue collars) | 1990 | 19.3 | 1.4 | 5.7 | 0.2 | 0.0 | 4.1 | 7.1 | 0.5 | 0.1 | |
| | 1995 | 18.5 | 0.7 | 3.6 | 0.1 | 0.0 | 3.2 | 6.0 | 0.4 | 0.1 | |
| | 1998 | 17.3 | 1.1 | 3.9 | 0.2 | 0.0 | 3.8 | 5.6 | 0.6 | 0.1 | |
| | 2001 | 17.0 | 2.2 | 6.7 | 0.2 | 0.1 | 4.8 | 6.5 | 0.6 | 0.1 | |
| Workers | 1990 | 29.2 | 3.9 | 25.0 | 0.6 | 0.2 | 8.4 | 22.3 | 1.4 | 0.4 | |
| | 1995 | 22.6 | 2.8 | 16.7 | 0.4 | 0.1 | 6.0 | 13.8 | 0.9 | 0.2 | |
| | 1998 | 26.7 | 4.8 | 26.6 | 0.5 | 0.1 | 9.7 | 22.2 | 1.3 | 0.3 | |
| | 2001 | 24.6 | 5.1 | 22.5 | 0.8 | 0.2 | 10.4 | 20.5 | 1.7 | 0.4 | |
| Students | 1990 | 1.1 | 6.4 | 1.5 | 1.2 | 0.3 | 25.6 | 2.5 | 5.0 | 1.6 | |
| | 1995 | 2.1 | 4.0 | 2.2 | 1.1 | 0.6 | 19.2 | 4.1 | 3.5 | 1.2 | |
| | 1998 | 2.5 | 12.9 | 6.6 | 3.0 | 0.9 | 26.8 | 5.7 | 6.5 | 2.5 | |
| | 2001 | 2.4 | 10.0 | 4.2 | 2.0 | 0.6 | 28.1 | 5.4 | 6.2 | 1.9 | |
| Pensioners | 1990 | 19.1 | 12.7 | 53.2 | 2.1 | 0.6 | 30.9 | 53.6 | 6.8 | 2.2 | |
| | 1995 | 20.3 | 7.5 | 40.3 | 1.2 | 0.3 | 22.2 | 46.1 | 4.2 | 1.2 | |
| | 1998 | 19.9 | 7.8 | 32.0 | 1.6 | 0.6 | 24.0 | 40.9 | 4.7 | 1.5 | |
| | 2001 | 19.8 | 10.0 | 35.5 | 1.7 | 0.5 | 26.0 | 41.2 | 5.6 | 1.8 | |
| Unemployed | 1990 | 0.6 | 13.9 | 1.8 | 4.7 | 2.0 | 27.3 | 1.4 | 7.6 | 3.3 | |
| | 1995 | 8.4 | 10.5 | 23.1 | 1.5 | 0.3 | 19.6 | 16.7 | 3.7 | 1.0 | |
| | 1998 | 5.1 | 14.3 | 15.0 | 2.0 | 0.5 | 30.3 | 13.2 | 5.8 | 1.7 | |
| | 2001 | 4.0 | 25.2 | 18.0 | 5.2 | 1.7 | 42.5 | 13.5 | 10.5 | 3.6 | |
| Others | 1990 | 0.9 | 21.6 | 4.3 | 2.9 | 1.0 | 35.9 | 3.0 | 6.1 | 2.3 | |
| | 1995 | 2.0 | 4.1 | 2.1 | 0.6 | 0.3 | 8.9 | 1.8 | 1.7 | 0.6 | |
| | 1998 | 1.7 | 19.0 | 6.6 | 4.5 | 1.3 | 32.5 | 4.7 | 7.2 | 2.5 | |
| | 2001 | 1.4 | 18.9 | 4.7 | 3.4 | 1.5 | 31.5 | 3.5 | 6.6 | 2.5 | |

¹ H_k = Headcount ratio, s_k = Subgroup contribution to aggregate poverty ($s_k = 100 \cdot v_k \cdot (H_k/H)$), HI_k = Average normalized poverty gap, $P_{k,2}$ = Average squared normalized poverty gap, v_k = population share by household type ($k = 1, 2, \dots, 9$).

Source: Consumption Expenditure Surveys in 1990–2001.

parts and their contribution to the overall picture of poverty. If we divide the population into 10-year age-groups, divided according to the age of the head of the households, we can see very little variations in the level of contribution to aggregate poverty over the period 1987–2000 (see Table A3). We find that from 1990 to 2000 an increase in the contribution to aggregate poverty is remarkable only among those households with the head in the age group 45–54. The high rate of unemployment among this age group is

the main reason for this trend. Interestingly there is a quite remarkable rise in poverty rate with poverty line 50 per cent of the median income amongst the three youngest age groups (less than 25, 25–34 and 35–44) between 2000 and 2004 (see Table A3). It is not clear to us what may explain this rise. At least to some extent the long term unemployment is one factor.

Similar analysis dividing the population according to family types will be presented in Table A4. Perhaps surprisingly we see relatively

little variation in the contribution to aggregate poverty of different family types from 1990 to 2000. But again the relative poverty has risen markedly between mid 1990s and 2004 amongst the group couple with children, youngest seven years old. Figure A2 compares poverty rates among children and in the population as a whole. They show that since the mid 1990s the poverty rate among children has risen much faster than the poverty rate in the whole population. Table A5 shows that poverty rates vary markedly by regions. It is highest in Eastern Finland and lowest in Southern Finland and Åland.

5. Conclusions

We have examined trends in the economic poverty in Finland using two data sources, the IDS and the CES. We have drawn on the recent literature on poverty analysis to analyse a range of poverty measures, using dominance conditions to rank the distributions of living standards. As regards trends in poverty over time, the long-run perspective available from the CES indicates that from the early 1970s to the beginning of 1990s, the relative poverty rate has declined. The latter part of the 1990s and the early years of 2000s were clearly different. We find that relative poverty rose over the period 1995–2004 for a very broad class of poverty measures and a wide range of poverty lines. At the same time poverty has become more severe. We also found that since the mid 1990s the poverty rate among children has risen much faster than the poverty rate in the whole population.

Whilst the total numbers in poverty during the 1987–2004 on these various definitions have risen markedly, the composition of the poor has also changed significantly. There is little doubt that unemployed households are the most vulnerable group of the population. Another vulnerable group has been families with youngest children less than seven years.

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Appendixes

Figure A1. Mean of poverty gaps and mean of disposable income amongst the poor and Sen index (poverty line 50 per cent of median disposable income).

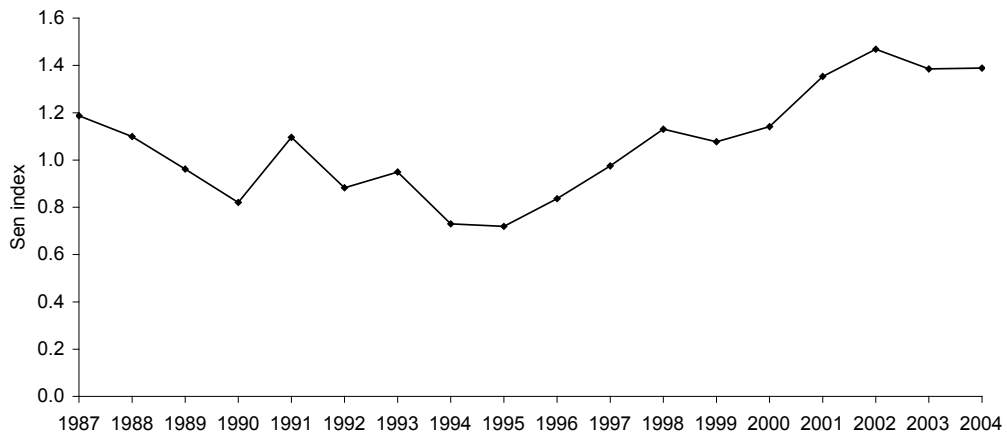
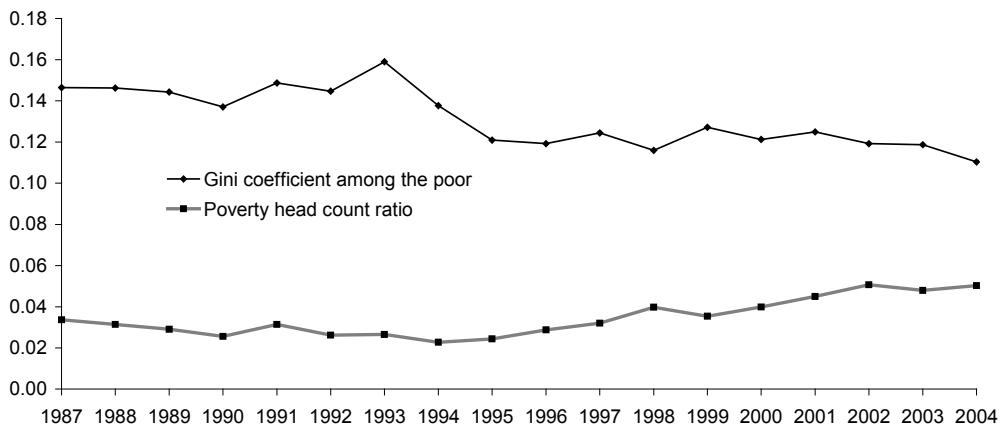
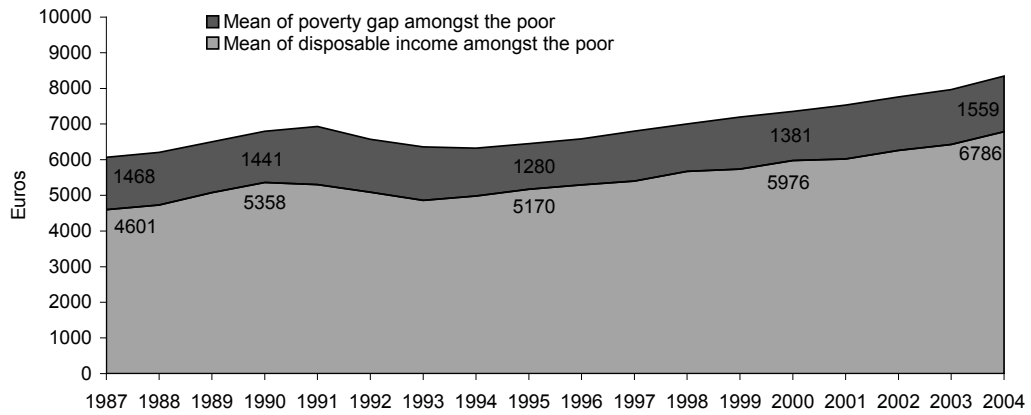


Figure A2. Poverty rates for all and among children (OECD-scale and modified OECD-scale).

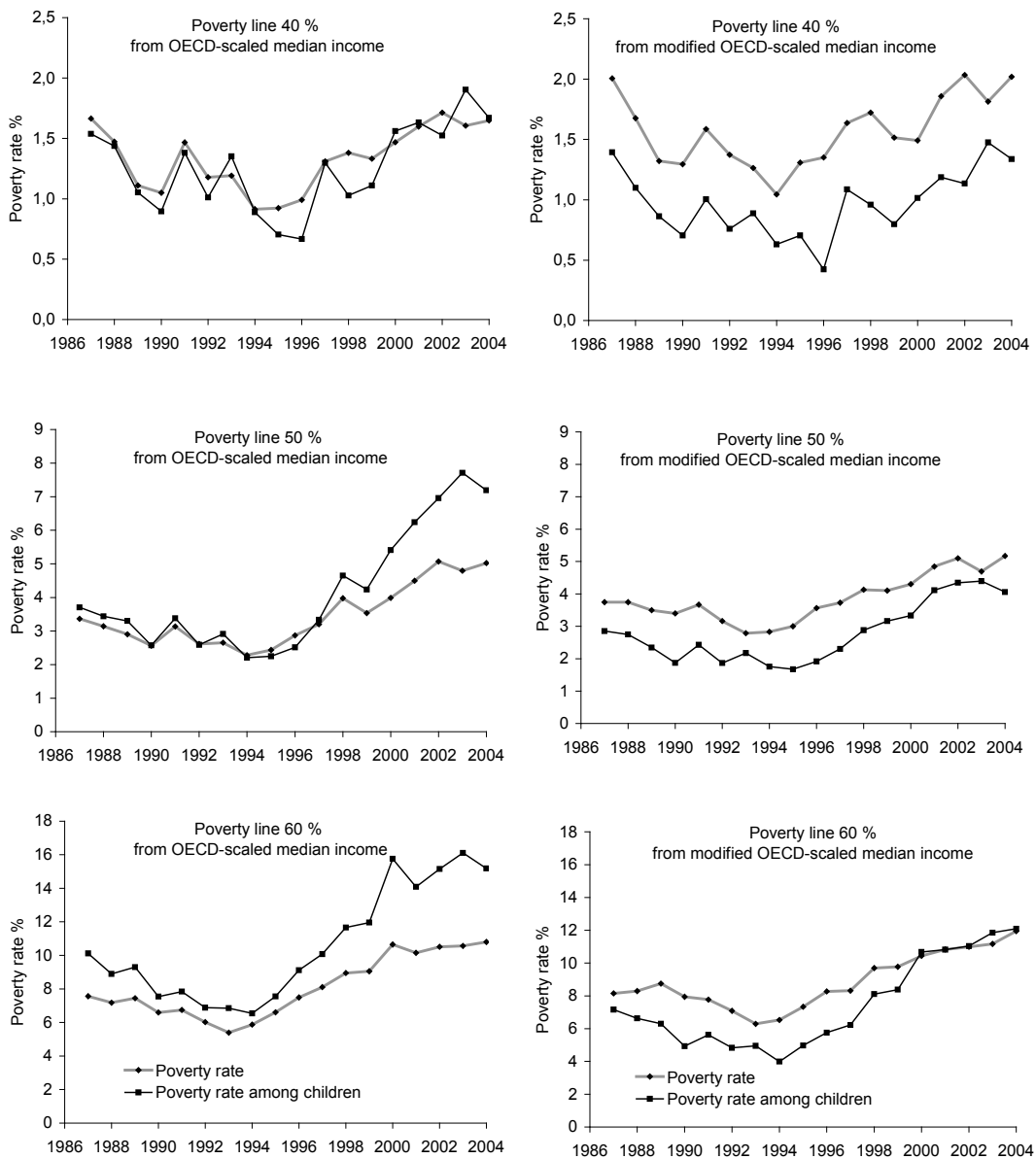


Table A.1. Poverty rates of H, HI and P2 from median by using OECD-scale in 1987–2004.

| Poverty rate % from median | Poverty measure | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|-------------------------------|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 40 | H | 1.67 | 1.47 | 1.11 | 1.05 | 1.47 | 1.18 | 1.19 | 0.91 | 0.92 | 0.99 | 1.31 | 1.38 | 1.33 | 1.47 | 1.60 | 1.71 | 1.60 | 1.65 |
| | <i>std.</i> | 0.14 | 0.12 | 0.10 | 0.10 | 0.12 | 0.11 | 0.14 | 0.12 | 0.11 | 0.12 | 0.16 | 0.15 | 0.15 | 0.15 | 0.17 | 0.17 | 0.16 | 0.14 |
| | HI | 0.42 | 0.38 | 0.33 | 0.27 | 0.39 | 0.31 | 0.35 | 0.24 | 0.22 | 0.25 | 0.30 | 0.33 | 0.34 | 0.34 | 0.42 | 0.44 | 0.41 | 0.39 |
| | <i>std.</i> | 0.05 | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 | 0.05 | 0.05 | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | 0.04 | 0.05 | 0.06 | 0.05 | 0.04 |
| | P2 | 0.20 | 0.19 | 0.20 | 0.13 | 0.19 | 0.15 | 0.19 | 0.13 | 0.10 | 0.17 | 0.15 | 0.15 | 0.16 | 0.15 | 0.19 | 0.21 | 0.19 | 0.16 |
| | <i>std.</i> | 0.03 | 0.02 | 0.04 | 0.02 | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 | 0.07 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.02 |
| 50 | H | 3.37 | 3.14 | 2.90 | 2.56 | 3.14 | 2.62 | 2.65 | 2.28 | 2.43 | 2.87 | 3.20 | 3.97 | 3.54 | 3.98 | 4.50 | 5.07 | 4.79 | 5.02 |
| | <i>std.</i> | 0.21 | 0.18 | 0.17 | 0.16 | 0.18 | 0.17 | 0.19 | 0.18 | 0.18 | 0.22 | 0.23 | 0.29 | 0.26 | 0.27 | 0.30 | 0.32 | 0.30 | 0.27 |
| | HI | 0.81 | 0.75 | 0.64 | 0.54 | 0.74 | 0.59 | 0.63 | 0.48 | 0.48 | 0.56 | 0.66 | 0.76 | 0.72 | 0.75 | 0.90 | 0.98 | 0.93 | 0.94 |
| | <i>std.</i> | 0.06 | 0.05 | 0.05 | 0.04 | 0.05 | 0.05 | 0.06 | 0.06 | 0.05 | 0.05 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 | 0.08 | 0.07 | 0.06 |
| | P2 | 0.34 | 0.32 | 0.29 | 0.23 | 0.32 | 0.25 | 0.29 | 0.21 | 0.19 | 0.25 | 0.26 | 0.28 | 0.29 | 0.28 | 0.35 | 0.38 | 0.35 | 0.33 |
| | <i>std.</i> | 0.04 | 0.03 | 0.04 | 0.02 | 0.03 | 0.03 | 0.04 | 0.04 | 0.03 | 0.06 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | 0.03 |
| 60 | H | 7.56 | 7.18 | 7.44 | 6.60 | 6.74 | 6.02 | 5.39 | 5.87 | 6.61 | 7.49 | 8.11 | 8.94 | 9.05 | 10.64 | 10.15 | 10.51 | 10.57 | 10.79 |
| | <i>std.</i> | 0.33 | 0.29 | 0.29 | 0.27 | 0.27 | 0.26 | 0.28 | 0.31 | 0.34 | 0.38 | 0.38 | 0.41 | 0.41 | 0.46 | 0.44 | 0.44 | 0.42 | 0.39 |
| | HI | 1.54 | 1.45 | 1.35 | 1.19 | 1.42 | 1.18 | 1.16 | 1.02 | 1.09 | 1.29 | 1.44 | 1.63 | 1.60 | 1.80 | 1.95 | 2.08 | 2.02 | 2.08 |
| | <i>std.</i> | 0.08 | 0.07 | 0.07 | 0.06 | 0.07 | 0.07 | 0.08 | 0.07 | 0.07 | 0.08 | 0.09 | 0.10 | 0.09 | 0.10 | 0.11 | 0.11 | 0.11 | 0.09 |
| | P2 | 0.59 | 0.55 | 0.50 | 0.41 | 0.55 | 0.44 | 0.47 | 0.37 | 0.36 | 0.44 | 0.49 | 0.55 | 0.54 | 0.57 | 0.67 | 0.72 | 0.68 | 0.68 |
| | <i>std.</i> | 0.05 | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 | 0.05 | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.04 |

Table A2. Poverty rates of H, HI and P2 from median by using modified OECD-scale in 1987–2004.

| Poverty rate % from median | Poverty measure | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | |
|-------------------------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 40 | H | 2.01 | 1.68 | 1.32 | 1.29 | 1.59 | 1.37 | 1.26 | 1.04 | 1.31 | 1.35 | 1.64 | 1.72 | 1.52 | 1.49 | 1.86 | 2.04 | 1.81 | 2.02 | |
| | <i>std.</i> | <i>0.15</i> | <i>0.12</i> | <i>0.10</i> | <i>0.10</i> | <i>0.12</i> | <i>0.11</i> | <i>0.13</i> | <i>0.11</i> | <i>0.13</i> | <i>0.13</i> | <i>0.16</i> | <i>0.16</i> | <i>0.15</i> | <i>0.14</i> | <i>0.17</i> | <i>0.17</i> | <i>0.16</i> | <i>0.16</i> | <i>0.15</i> |
| | HI | 0.52 | 0.46 | 0.38 | 0.33 | 0.45 | 0.37 | 0.39 | 0.28 | 0.28 | 0.28 | 0.32 | 0.36 | 0.41 | 0.42 | 0.38 | 0.48 | 0.51 | 0.46 | 0.46 |
| | <i>std.</i> | <i>0.05</i> | <i>0.04</i> | <i>0.04</i> | <i>0.03</i> | <i>0.04</i> | <i>0.04</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.04</i> | <i>0.04</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.06</i> | <i>0.05</i> | <i>0.04</i> |
| | P2 | 0.24 | 0.22 | 0.21 | 0.15 | 0.22 | 0.18 | 0.21 | 0.21 | 0.15 | 0.12 | 0.18 | 0.16 | 0.18 | 0.20 | 0.17 | 0.23 | 0.24 | 0.21 | 0.19 |
| | <i>std.</i> | <i>0.03</i> | <i>0.03</i> | <i>0.04</i> | <i>0.02</i> | <i>0.03</i> | <i>0.03</i> | <i>0.03</i> | <i>0.03</i> | <i>0.04</i> | <i>0.03</i> | <i>0.06</i> | <i>0.03</i> | <i>0.03</i> | <i>0.04</i> | <i>0.03</i> | <i>0.03</i> | <i>0.04</i> | <i>0.03</i> | <i>0.02</i> |
| 50 | H | 3.75 | 3.75 | 3.50 | 3.40 | 3.67 | 3.16 | 2.79 | 2.83 | 3.00 | 3.56 | 3.73 | 4.13 | 4.10 | 4.30 | 4.85 | 5.10 | 4.70 | 5.17 | |
| | <i>std.</i> | <i>0.20</i> | <i>0.19</i> | <i>0.17</i> | <i>0.17</i> | <i>0.18</i> | <i>0.17</i> | <i>0.19</i> | <i>0.19</i> | <i>0.20</i> | <i>0.23</i> | <i>0.24</i> | <i>0.26</i> | <i>0.27</i> | <i>0.26</i> | <i>0.29</i> | <i>0.29</i> | <i>0.26</i> | <i>0.26</i> | <i>0.24</i> |
| | HI | 0.96 | 0.87 | 0.76 | 0.70 | 0.88 | 0.72 | 0.72 | 0.59 | 0.63 | 0.72 | 0.79 | 0.88 | 0.84 | 0.83 | 1.00 | 1.06 | 0.97 | 1.04 | |
| | <i>std.</i> | <i>0.07</i> | <i>0.06</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.06</i> | <i>0.06</i> | <i>0.06</i> | <i>0.06</i> | <i>0.07</i> | <i>0.07</i> | <i>0.07</i> | <i>0.06</i> | <i>0.07</i> | <i>0.08</i> | <i>0.07</i> | <i>0.06</i> | |
| | P2 | 0.41 | 0.37 | 0.33 | 0.27 | 0.37 | 0.31 | 0.33 | 0.33 | 0.25 | 0.24 | 0.30 | 0.31 | 0.34 | 0.34 | 0.32 | 0.40 | 0.43 | 0.39 | 0.38 |
| | <i>std.</i> | <i>0.04</i> | <i>0.03</i> | <i>0.04</i> | <i>0.03</i> | <i>0.03</i> | <i>0.04</i> | <i>0.04</i> | <i>0.04</i> | <i>0.04</i> | <i>0.03</i> | <i>0.05</i> | <i>0.04</i> | <i>0.04</i> | <i>0.04</i> | <i>0.04</i> | <i>0.04</i> | <i>0.05</i> | <i>0.04</i> | <i>0.03</i> |
| 60 | H | 8.15 | 8.29 | 8.75 | 7.94 | 7.77 | 7.09 | 6.29 | 6.53 | 7.33 | 8.27 | 8.32 | 9.69 | 9.77 | 10.44 | 10.83 | 10.99 | 11.17 | 11.95 | |
| | <i>std.</i> | <i>0.31</i> | <i>0.28</i> | <i>0.28</i> | <i>0.26</i> | <i>0.27</i> | <i>0.27</i> | <i>0.29</i> | <i>0.29</i> | <i>0.32</i> | <i>0.37</i> | <i>0.35</i> | <i>0.41</i> | <i>0.40</i> | <i>0.42</i> | <i>0.42</i> | <i>0.43</i> | <i>0.41</i> | <i>0.39</i> | |
| | HI | 1.74 | 1.66 | 1.61 | 1.48 | 1.64 | 1.42 | 1.30 | 1.23 | 1.32 | 1.53 | 1.60 | 1.82 | 1.80 | 1.86 | 2.11 | 2.19 | 2.11 | 2.27 | |
| | <i>std.</i> | <i>0.09</i> | <i>0.07</i> | <i>0.07</i> | <i>0.06</i> | <i>0.07</i> | <i>0.07</i> | <i>0.08</i> | <i>0.08</i> | <i>0.08</i> | <i>0.07</i> | <i>0.08</i> | <i>0.09</i> | <i>0.10</i> | <i>0.10</i> | <i>0.09</i> | <i>0.10</i> | <i>0.11</i> | <i>0.10</i> | <i>0.09</i> |
| | P2 | 0.69 | 0.64 | 0.58 | 0.51 | 0.64 | 0.53 | 0.53 | 0.44 | 0.45 | 0.54 | 0.57 | 0.64 | 0.63 | 0.62 | 0.74 | 0.78 | 0.72 | 0.75 | |
| | <i>std.</i> | <i>0.05</i> | <i>0.04</i> | <i>0.04</i> | <i>0.03</i> | <i>0.04</i> | <i>0.04</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.04</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.05</i> | <i>0.06</i> | <i>0.05</i> | <i>0.04</i> |

Table A3. Poverty profile by the age of the household head.¹

| Population group | Year | OECD-scale (50 %) of median | | | | | Modified scale (60 %) of median | | | |
|------------------|------|-----------------------------|-------|-------|--------|-----------|---------------------------------|-------|--------|-----------|
| | | v_k | H_k | s_k | HI_k | $P_{k,2}$ | H_k | s_k | HI_k | $P_{k,2}$ |
| Under 25 years | 1987 | 5.7 | 14.9 | 25.4 | 3.7 | 1.3 | 25.5 | 17.9 | 7.7 | 3.5 |
| | 1990 | 5.3 | 10.9 | 22.4 | 2.6 | 1.0 | 21.2 | 14.1 | 6.1 | 2.6 |
| | 1993 | 4.7 | 14.8 | 26.2 | 4.4 | 2.1 | 29.7 | 22.2 | 8.8 | 4.2 |
| | 1997 | 4.9 | 20.0 | 30.5 | 4.8 | 1.7 | 42.9 | 25.1 | 11.4 | 4.5 |
| | 2000 | 5.1 | 18.5 | 23.8 | 4.5 | 1.9 | 38.4 | 18.9 | 9.8 | 4.1 |
| | 2004 | 5.0 | 27.0 | 26.9 | 6.5 | 2.5 | 47.5 | 19.9 | 13.4 | 5.6 |
| 25–34 years | 1987 | 23.0 | 3.3 | 22.4 | 0.9 | 0.4 | 6.0 | 16.8 | 1.5 | 0.7 |
| | 1990 | 22.6 | 2.5 | 22.2 | 0.4 | 0.1 | 5.2 | 14.8 | 0.9 | 0.3 |
| | 1993 | 21.0 | 3.1 | 24.3 | 0.6 | 0.3 | 5.5 | 18.2 | 1.2 | 0.4 |
| | 1997 | 19.0 | 4.0 | 23.6 | 0.7 | 0.3 | 9.0 | 20.5 | 1.6 | 0.5 |
| | 2000 | 17.6 | 4.8 | 21.4 | 0.7 | 0.2 | 11.3 | 19.1 | 1.6 | 0.4 |
| | 2004 | 16.4 | 6.7 | 21.9 | 1.3 | 0.5 | 12.7 | 17.4 | 2.5 | 0.9 |
| 35–44 years | 1987 | 30.6 | 2.7 | 24.9 | 0.6 | 0.3 | 5.6 | 20.9 | 1.1 | 0.4 |
| | 1993 | 29.5 | 2.2 | 24.2 | 0.4 | 0.2 | 4.8 | 22.6 | 0.8 | 0.3 |
| | 1997 | 27.5 | 2.1 | 17.6 | 0.4 | 0.1 | 5.5 | 18.2 | 0.9 | 0.3 |
| | 2000 | 26.9 | 3.8 | 25.5 | 0.6 | 0.2 | 8.5 | 21.9 | 1.4 | 0.4 |
| | 2004 | 25.8 | 5.4 | 27.7 | 0.8 | 0.2 | 9.2 | 19.8 | 1.6 | 0.4 |
| 45–54 years | 1987 | 17.6 | 2.7 | 14.0 | 0.7 | 0.3 | 5.8 | 12.5 | 1.3 | 0.6 |
| | 1990 | 16.9 | 1.8 | 11.9 | 0.4 | 0.2 | 4.4 | 9.4 | 0.9 | 0.3 |
| | 1993 | 20.7 | 2.3 | 18.0 | 0.6 | 0.3 | 4.0 | 13.1 | 1.1 | 0.5 |
| | 1997 | 23.6 | 1.9 | 14.1 | 0.5 | 0.3 | 5.8 | 16.4 | 1.1 | 0.4 |
| | 2000 | 23.9 | 3.0 | 17.9 | 0.5 | 0.2 | 7.1 | 16.2 | 1.3 | 0.4 |
| | 2004 | 22.4 | 2.8 | 12.4 | 0.5 | 0.2 | 8.4 | 15.6 | 1.4 | 0.4 |
| 55–64 years | 1987 | 11.6 | 2.5 | 8.6 | 0.6 | 0.2 | 7.4 | 10.5 | 1.5 | 0.5 |
| | 1990 | 10.8 | 2.8 | 11.6 | 0.7 | 0.3 | 9.9 | 13.5 | 1.9 | 0.6 |
| | 1993 | 10.8 | 1.4 | 5.6 | 0.4 | 0.2 | 5.5 | 9.3 | 0.9 | 0.4 |
| | 1997 | 10.9 | 1.4 | 4.9 | 0.2 | 0.1 | 5.6 | 7.4 | 0.9 | 0.3 |
| | 2000 | 12.0 | 1.7 | 5.2 | 0.5 | 0.2 | 7.5 | 8.6 | 1.3 | 0.4 |
| | 2004 | 15.3 | 2.3 | 7.1 | 0.5 | 0.2 | 7.7 | 9.8 | 1.5 | 0.5 |
| 65–74 years | 1987 | 7.0 | 1.5 | 3.1 | 0.2 | 0.1 | 12.1 | 10.4 | 1.6 | 0.4 |
| | 1990 | 7.5 | 1.6 | 4.8 | 0.3 | 0.1 | 15.6 | 14.7 | 1.9 | 0.5 |
| | 1993 | 8.1 | 0.6 | 1.7 | 0.0 | 0.0 | 4.8 | 6.1 | 0.4 | 0.1 |
| | 1997 | 8.3 | 1.5 | 3.9 | 0.1 | 0.0 | 5.1 | 5.1 | 0.7 | 0.2 |
| | 2000 | 8.2 | 0.7 | 1.4 | 0.2 | 0.1 | 7.6 | 6.0 | 0.9 | 0.2 |
| | 2004 | 8.4 | 0.6 | 0.9 | 0.1 | 0.0 | 9.5 | 6.7 | 1.0 | 0.2 |
| Over 74 years | 1987 | 4.4 | 1.2 | 1.6 | 0.2 | 0.1 | 20.0 | 10.9 | 2.3 | 0.5 |
| | 1990 | 4.9 | 2.2 | 4.2 | 0.3 | 0.1 | 28.1 | 17.5 | 3.9 | 0.9 |
| | 1993 | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 8.5 | 0.8 | 0.1 |
| | 1997 | 5.9 | 3.0 | 5.4 | 0.3 | 0.3 | 10.4 | 7.3 | 1.5 | 0.5 |
| | 2000 | 6.1 | 3.1 | 4.8 | 0.4 | 0.1 | 15.7 | 9.2 | 2.3 | 0.6 |
| | 2004 | 6.8 | 2.3 | 3.1 | 0.2 | 0.0 | 18.9 | 10.7 | 2.4 | 0.5 |

¹ H_k = Headcount ratio, s_k = Subgroup contribution to aggregate poverty ($s_k = 100 * v_k * (H_k/H)$), HI_k = Average normalized poverty gap, $P_{k,2}$ = Average squared normalized poverty gap, v_k = population share by household type ($k = 1, 2, \dots, 7$).

Source: Income Distribution Surveys in 1987–2004.

Table A4. Poverty profile by the household's stage of life cycle.¹

| Population group | Year | OECD-scale (50 %) of median | | | | | Modified scale (60 %) of median | | | | |
|--|------|-----------------------------|-------|-------|--------|-----------|---------------------------------|-------|--------|-----------|--|
| | | v_k | H_k | s_k | HI_k | $P_{k,2}$ | H_k | s_k | HI_k | $P_{k,2}$ | |
| One-person household (Household's head under 65 years old) | 1987 | 9,6 | 11,6 | 33,1 | 3,1 | 1,2 | 21,2 | 25,1 | 7,0 | 3,2 | |
| | 1990 | 9,6 | 7,2 | 27,0 | 1,8 | 0,8 | 20,6 | 25,0 | 5,2 | 2,1 | |
| | 1993 | 10,6 | 8,4 | 33,8 | 2,3 | 1,3 | 19,2 | 32,4 | 5,4 | 2,5 | |
| | 1997 | 11,5 | 8,3 | 29,8 | 1,9 | 0,8 | 25,2 | 35,0 | 6,0 | 2,3 | |
| | 2000 | 11,7 | 8,3 | 24,3 | 2,2 | 1,1 | 25,8 | 28,9 | 6,2 | 2,5 | |
| | 2004 | 11,8 | 10,8 | 25,4 | 2,7 | 1,2 | 28,3 | 28,1 | 7,5 | 3,0 | |
| Single-parent household (Household's head under 65 years old) | 1987 | 3,3 | 2,0 | 2,0 | 0,8 | 0,4 | 9,9 | 4,0 | 1,6 | 0,6 | |
| | 1990 | 3,7 | 5,7 | 8,2 | 0,9 | 0,2 | 10,2 | 4,8 | 2,0 | 0,6 | |
| | 1993 | 4,4 | 7,7 | 12,7 | 1,5 | 0,4 | 12,9 | 9,1 | 2,8 | 0,9 | |
| | 1997 | 4,4 | 5,8 | 7,9 | 1,4 | 0,5 | 10,5 | 5,5 | 2,3 | 0,9 | |
| | 2000 | 4,6 | 9,1 | 10,5 | 1,7 | 0,8 | 24,2 | 10,6 | 3,9 | 1,3 | |
| | 2004 | 4,2 | 10,6 | 8,8 | 2,1 | 0,8 | 26,6 | 9,3 | 4,7 | 1,4 | |
| Childless couple (Household's head under 65 years old) | 1987 | 13,4 | 1,3 | 5,1 | 0,4 | 0,2 | 4,4 | 7,3 | 0,9 | 0,3 | |
| | 1990 | 15,2 | 1,5 | 9,1 | 0,4 | 0,2 | 4,6 | 8,8 | 0,9 | 0,4 | |
| | 1993 | 16,1 | 2,0 | 12,1 | 0,5 | 0,3 | 4,4 | 11,3 | 1,0 | 0,4 | |
| | 1997 | 17,1 | 2,0 | 10,8 | 0,5 | 0,2 | 6,2 | 12,7 | 1,1 | 0,4 | |
| | 2000 | 18,8 | 1,9 | 8,7 | 0,4 | 0,1 | 5,9 | 10,7 | 1,0 | 0,3 | |
| | 2004 | 19,4 | 3,0 | 11,5 | 0,6 | 0,2 | 6,6 | 10,7 | 1,4 | 0,5 | |
| Couple with children, all children under 7 years old (Household's head under 65 years old) | 1987 | 12,1 | 2,7 | 9,6 | 0,5 | 0,2 | 4,8 | 7,1 | 0,8 | 0,3 | |
| | 1990 | 12,3 | 1,8 | 8,7 | 0,2 | 0,1 | 3,5 | 5,5 | 0,5 | 0,1 | |
| | 1993 | 11,9 | 1,8 | 7,9 | 0,2 | 0,1 | 2,7 | 5,2 | 0,4 | 0,1 | |
| | 1997 | 11,7 | 4,9 | 17,7 | 0,7 | 0,2 | 7,5 | 10,5 | 1,2 | 0,3 | |
| | 2000 | 10,7 | 6,8 | 18,2 | 0,9 | 0,2 | 10,5 | 10,8 | 1,6 | 0,4 | |
| | 2004 | 10,3 | 7,3 | 14,9 | 1,1 | 0,3 | 10,5 | 9,0 | 1,8 | 0,5 | |
| Couple with children, youngest children under 7 years old (Household's head under 65 years old) | 1987 | 12,1 | 4,7 | 16,9 | 1,0 | 0,5 | 7,4 | 11,0 | 1,4 | 0,6 | |
| | 1990 | 11,6 | 3,1 | 14,0 | 0,7 | 0,3 | 5,7 | 8,3 | 1,0 | 0,4 | |
| | 1993 | 9,6 | 2,0 | 7,2 | 0,5 | 0,3 | 3,4 | 5,1 | 0,7 | 0,3 | |
| | 1997 | 9,4 | 2,1 | 6,3 | 0,4 | 0,1 | 3,4 | 3,9 | 0,5 | 0,2 | |
| | 2000 | 9,3 | 5,2 | 12,1 | 0,8 | 0,2 | 9,3 | 8,3 | 1,2 | 0,3 | |
| | 2004 | 8,6 | 10,7 | 18,2 | 1,3 | 0,2 | 13,2 | 9,4 | 1,8 | 0,4 | |
| Couple with children, youngest children 7–12 years old (Household's head under 65 years old) | 1987 | 10,1 | 2,7 | 8,1 | 0,6 | 0,2 | 5,2 | 6,4 | 1,0 | 0,4 | |
| | 1990 | 11,0 | 1,7 | 7,3 | 0,4 | 0,1 | 2,8 | 4,0 | 0,6 | 0,2 | |
| | 1993 | 9,9 | 2,8 | 10,6 | 0,5 | 0,1 | 5,2 | 8,1 | 0,9 | 0,3 | |
| | 1997 | 9,9 | 0,6 | 1,8 | 0,2 | 0,1 | 3,6 | 4,2 | 0,3 | 0,1 | |
| | 2000 | 9,7 | 1,9 | 4,5 | 0,2 | 0,0 | 4,7 | 4,4 | 0,5 | 0,1 | |
| | 2004 | 9,4 | 1,8 | 3,3 | 0,4 | 0,1 | 4,2 | 3,3 | 0,8 | 0,3 | |
| Couple with children, youngest children 13–17 years old (Household's head under 65 years old) | 1987 | 4,7 | 1,6 | 2,2 | 0,6 | 0,4 | 5,2 | 3,0 | 1,3 | 0,6 | |
| | 1990 | 4,6 | 1,7 | 3,0 | 0,5 | 0,2 | 3,4 | 2,0 | 0,9 | 0,4 | |
| | 1993 | 5,0 | 1,6 | 3,1 | 0,5 | 0,4 | 4,1 | 3,3 | 0,9 | 0,5 | |
| | 1997 | 4,6 | 2,9 | 4,1 | 0,6 | 0,3 | 6,5 | 3,6 | 1,3 | 0,5 | |
| | 2000 | 4,4 | 1,9 | 2,1 | 0,5 | 0,2 | 6,0 | 2,6 | 1,1 | 0,4 | |
| | 2004 | 4,6 | 1,6 | 1,5 | 0,6 | 0,3 | 6,9 | 2,7 | 1,3 | 0,5 | |
| Other household (Household's head under 65 years old) | 1987 | 23,2 | 2,7 | 18,3 | 0,6 | 0,2 | 5,2 | 14,8 | 1,1 | 0,4 | |
| | 1990 | 19,4 | 1,8 | 13,8 | 0,4 | 0,1 | 3,9 | 9,5 | 0,7 | 0,2 | |
| | 1993 | 19,0 | 1,5 | 10,9 | 0,4 | 0,2 | 3,6 | 11,0 | 0,7 | 0,3 | |
| | 1997 | 17,4 | 2,3 | 12,3 | 0,6 | 0,3 | 5,9 | 12,3 | 1,1 | 0,4 | |
| | 2000 | 16,5 | 3,2 | 13,3 | 0,5 | 0,2 | 5,4 | 8,6 | 1,0 | 0,3 | |
| | 2004 | 16,6 | 3,7 | 12,4 | 0,6 | 0,2 | 7,3 | 10,1 | 1,3 | 0,4 | |
| Household's head over 64 years old | 1987 | 11,4 | 1,4 | 4,7 | 0,2 | 0,1 | 15,2 | 21,3 | 1,9 | 0,4 | |
| | 1990 | 12,4 | 1,8 | 9,0 | 0,3 | 0,1 | 20,5 | 32,2 | 2,7 | 0,6 | |
| | 1993 | 13,4 | 0,3 | 1,7 | 0,0 | 0,0 | 6,8 | 14,6 | 0,6 | 0,1 | |
| | 1997 | 14,2 | 2,1 | 9,3 | 0,2 | 0,1 | 7,3 | 12,4 | 1,0 | 0,3 | |
| | 2000 | 14,4 | 1,7 | 6,2 | 0,3 | 0,1 | 11,0 | 15,2 | 1,5 | 0,4 | |
| | 2004 | 15,2 | 1,3 | 4,0 | 0,2 | 0,0 | 13,7 | 17,4 | 1,6 | 0,3 | |

¹ H_k = Headcount ratio, s_k = Subgroup contribution to aggregate poverty ($s_k = 100 * v_k * (H_k/H)$), HI_k = Average normalized poverty gap, $P_{k,2}$ = Average squared normalized poverty gap, v_k = population share by household type ($k = 1, 2, \dots, 9$).

Source: Consumption Expenditure Surveys in 1990–2001.

Table A5. Poverty profile by the region (NUTS2).¹

| Population group | Year | OECD-scale (50 %) of median | | | | | Modified scale (60 %) of median | | | | |
|----------------------------|------|-----------------------------|-------|-------|--------|-----------|---------------------------------|-------|--------|-----------|--|
| | | v_k | H_k | s_k | HI_k | $P_{k,2}$ | H_k | s_k | HI_k | $P_{k,2}$ | |
| Southern Finland and Åland | 1987 | 46,9 | 2,7 | 38,1 | 0,5 | 0,2 | 6,6 | 38,1 | 1,3 | 0,5 | |
| | 1990 | 47,5 | 2,1 | 39,0 | 0,4 | 0,2 | 6,0 | 35,9 | 1,2 | 0,4 | |
| | 1993 | 47,7 | 2,3 | 41,5 | 0,5 | 0,2 | 5,2 | 39,5 | 1,1 | 0,4 | |
| | 1997 | 48,9 | 2,7 | 41,6 | 0,6 | 0,2 | 6,8 | 39,7 | 1,4 | 0,5 | |
| | 2000 | 49,8 | 3,0 | 37,6 | 0,6 | 0,2 | 8,6 | 41,0 | 1,4 | 0,5 | |
| | 2004 | 49,6 | 4,0 | 39,2 | 0,8 | 0,3 | 9,9 | 41,0 | 2,0 | 0,7 | |
| Western Finland | 1987 | 26,7 | 3,4 | 27,1 | 1,0 | 0,5 | 9,1 | 29,8 | 2,0 | 0,9 | |
| | 1990 | 26,0 | 2,9 | 29,3 | 0,7 | 0,3 | 8,8 | 28,7 | 1,7 | 0,6 | |
| | 1993 | 25,6 | 2,8 | 27,4 | 0,7 | 0,4 | 7,0 | 28,4 | 1,4 | 0,6 | |
| | 1997 | 25,7 | 3,2 | 25,4 | 0,7 | 0,3 | 8,5 | 26,2 | 1,6 | 0,6 | |
| | 2000 | 25,6 | 4,8 | 31,0 | 1,0 | 0,4 | 11,2 | 27,4 | 2,2 | 0,8 | |
| | 2004 | 25,3 | 4,6 | 23,2 | 0,8 | 0,3 | 12,4 | 26,3 | 2,3 | 0,7 | |
| Eastern Finland | 1987 | 13,8 | 4,5 | 18,3 | 1,2 | 0,5 | 10,2 | 17,2 | 2,4 | 1,0 | |
| | 1990 | 14,2 | 3,8 | 20,7 | 0,7 | 0,3 | 11,9 | 21,2 | 2,1 | 0,7 | |
| | 1993 | 13,9 | 3,8 | 19,8 | 1,2 | 0,6 | 8,9 | 19,8 | 2,0 | 1,0 | |
| | 1997 | 13,0 | 3,9 | 16,0 | 0,9 | 0,4 | 11,3 | 17,7 | 2,1 | 0,8 | |
| | 2000 | 12,4 | 5,3 | 16,5 | 1,0 | 0,3 | 13,5 | 15,9 | 2,6 | 0,8 | |
| | 2004 | 12,8 | 8,0 | 20,3 | 1,4 | 0,5 | 17,0 | 18,2 | 3,2 | 1,1 | |
| Northern Finland | 1987 | 12,7 | 4,4 | 16,6 | 0,9 | 0,3 | 9,6 | 14,9 | 1,9 | 0,7 | |
| | 1990 | 12,4 | 2,3 | 11,0 | 0,6 | 0,2 | 9,1 | 14,1 | 1,6 | 0,5 | |
| | 1993 | 12,7 | 2,3 | 11,3 | 0,6 | 0,2 | 6,1 | 12,3 | 1,1 | 0,4 | |
| | 1997 | 12,5 | 4,3 | 16,9 | 0,7 | 0,3 | 11,0 | 16,4 | 1,9 | 0,6 | |
| | 2000 | 12,2 | 4,8 | 14,9 | 0,7 | 0,3 | 13,4 | 15,7 | 2,1 | 0,6 | |
| | 2004 | 12,3 | 7,1 | 17,3 | 1,3 | 0,4 | 14,1 | 14,5 | 2,6 | 0,8 | |

¹ H_k = Headcount ratio, s_k = Subgroup contribution to aggregate poverty ($s_k = 100 \cdot v_k \cdot (H_k/H)$), HI_k = Average normalized poverty gap, $P_{k,2}$ = Average squared normalized poverty gap, v_k = population share by household type ($k = 1, 2, \dots, 4$).

Source: Income Distribution Surveys in 1987–2004.