# THE WELFARE STATE AND POVERTY IN FINLAND AND SWEDEN FROM THE MID-1960s TO THE MID-1980s

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Using poverty lines representing the fixed basket of goods and services, the development over time of poverty in Finland and Sweden are compared. In both countries, poverty decreased rapidly between the mid-1960s and the mid-1970s, after which changes have been less dramatic. During the first part of the 1980s poverty continued to decrease in Finland, but increased in Sweden. Comparisons for age-groups showed large reductions in poverty rates among the aged in both countries. Poverty has shifted from the permanent old age poverty towards a more temporary poverty in young adulthood.

International comparisons show that in the early 1980s both Finland and Sweden had poverty rates below the average of the affluent Western nations. Furthermore, these comparisons suggest that cross-national variations in poverty rates are partly explained by the size of the welfare state. Also, time series analysis shows that income transfers have taken an increasing number of people out of poverty in both countries.

## 1. Introduction: Welfare State and Poverty

The welfare state has broad responsibility concerning the welfare of the citizens. It provides a number of health, educational and social services free of charge or at nominal fees, and guarantees basic security in the form of cash transfers for old age, sickness, unemployment, disability and certain family situations. The promise of the welfare state has been to mitigate if not eliminate poverty, at least in its harshest form.

Undeniably, the development of the welfare state has been one of the most significant institutional changes in Western countries after the World War II. Although social security was conceived even earlier, the post-war years witnessed a wave of reforms so that by the late 1950s, in many countries social security covered most of the working population. The GDP-share of social expenditure first started to grow faster in the 1960s. During the recession in the mid-1970s this growth accelerated, not because social security improved rapidly but rather because of the modest economic development. However, there are considerable

Note: We thank Jan Selén for helping us to use the Swedish Level of Living Survey, Mohsen Zamanian-Bakhtayari for the programming, Seppo Laaksonen for his assistance that made it possible to complement our analysis for the 1985 Finnish household survey data and Nanak Kakwani for comments. The research of Björn Gustafsson was supported by a grant from the Delegation for Social Research of the Swedish Ministry of Health and Social Affairs. Hannu Uusitalo received a research grant from the Academy of Finland and the Helsinki School of Economics for this research.

cross-national variations: some countries have managed "the crisis" better than others (see Alber, 1988, pp. 181-203).

Unemployment and poverty have become important issues in many countries. Signs of increased poverty have been observed, and it has been claimed that the welfare state has failed to decrease poverty. More systematic research to measure and quantify poverty in affluent societies has been carried out since the mid-1970s. In this paper we look at poverty in Finland and Sweden to see how it has changed from the mid-1960s to the mid-1980s. We report efforts to conceptualize and measure poverty in the two countries, and compare trends. We do not have harmonized concepts and measurements for the two countries; consequently, the comparison of poverty rates in the two countries can only be made occasionally.

The paper is organized as follows: In section 2 we provide an overview of economic changes and changes of the welfare state in the two countries. Conceptions and operationalizations of poverty are discussed in section 3, and our data is described in section 4. Some cross-sectional international comparisons are reported in section 5. Development of poverty is discussed in section 6, and the effects of public sector transfers and income taxes are discussed in section 7. The changed socio-demographic profiles of poverty are reported in section 8. In section 9 the conclusions of the paper are summarized.

## 2. CHANGES IN ECONOMIC POLICY AND THE WELFARE STATE

Since the mid-1960s, Finland and Sweden have experienced many economic, political and social changes which may have had effects on poverty. The patterns of economic growth have been fairly similar, although the growth has been higher in Finland and the gap in GDP per capita between the countries has narrowed so that in 1986 the Finnish level was 92 percent of the Swedish one. Traditionally, the rate of unemployment has been much lower in Sweden than in Finland, except in 1971-74 when unemployment in Finland was even lower than in Sweden. In subsequent years a dramatic difference appeared: in Finland unemployment rates increased from 1.9 percent in 1974 to 7.3 percent in 1978, after which it went down to approximately 5 percent where it has roughly remained. Due to active employment policies, the unemployment rate remained low in Sweden. However, when measures to bring down the governmental budget deficit came into effect at the beginning of the 1980s unemployment peaked at 3.5 percent in 1983.

The size of the welfare state, as measured by public outlays and receipts, is much larger in Sweden than in Finland. Another and perhaps a more adequate measure of the size of the welfare state, i.e. the GDP-share of social expenditure, tells essentially the same story: Sweden expends much more on cash transfers and services for the households than Finland. In both countries, the trend has been upwards, and in relative terms, the difference between the countries has slightly decreased during the last decade of observation.

In another paper, the present authors compared the trends of income distribution from the mid-1960s to the mid-1980s in Finland and Sweden. More precisely, the analysis focused on the distribution of equivalent disposable income between individuals, i.e. on the disposable income of families adjusted to account for the

variation in needs between families. The results showed that inequality of equivalent disposable income decreased considerably in both countries from the mid-1960s to mid-1970s. Since then inequality has diminished only moderately, and in Sweden we could observe increased inequality at the end of the period. However, in both countries equivalent income is now distributed much more equally than twenty years ago.

In both countries, the welfare state, i.e. public sector transfers as well as income taxes have made the distribution of economic possibilities more equal. Measured by an index based on the Gini-coefficient, public sector transfers proved to have a larger redistributive effect than income taxes. In both countries, the redistributive effects of public sector transfers increased considerably until the late 70s or early 80s, after which the increase has been much more modest.

The conclusion is that the joint effect of public sector transfers and income taxes is the major explanatory factor for the changes in equivalent income distribution in the two countries during the two decades studied. The results also indicated that changes in the volume of transfers and taxes are more important for the understanding of the changes in redistribution than the changes in their redistributive profile (Gustafsson and Uusitalo, 1990).

If the welfare state affects equivalent income inequality, it probably affects the level of poverty as well. It can be expected that in both countries poverty rates have been reduced by the expansion of the welfare state.

#### 3. Conceptions and Operationalizations of Poverty

Poverty means severe material deprivation. Beyond that, researchers disagree about the concept of poverty. One of the issues has been the controversy of absolute and relative definitions. Proponents of absolute definition maintain that poverty can be defined once and for all, whereas proponents of relative definition claim that a person can be poor in relation to the standards of his/her society. We agree with Amartya Sen (Sen, 1981) that poverty has both an absolute and relative aspect. To develop operationalizations consistent with this starting point is less obvious; it is much easier to define poverty either in absolute or in relative terms.

The solution imparts important empirical consequences, especially as regards developments over time. For example, if economic growth is rapid, but the poverty line is regarded as an absolute one, as is the case with the official poverty line in the U.S., poverty might be erased (Danziger and Gottschalk, 1986). In contrast, if the poverty line is continuously redefined, which is the case in the definition applied by the European Community (Commission of the European Communities, 1981; also Pichaud, 1988), the development of poverty might be quite different. In this case, only changes in the distribution of income affect the size of poverty, while income level is insignificant.<sup>1</sup>

Another problem refers to the way in which poverty lines are decided upon. One option is to let experts define what is the minimum income needed to keep

<sup>&</sup>lt;sup>1</sup>For a survey of various poverty lines suggested in the literature and their sensitivity to income changes, see Hagenaars, 1986.

people above the poverty line. This method is typically connected with the absolute definition of poverty. Another option is to use socially prevailing definitions of poverty by surveying how the population (implicitly) defines the poverty line.<sup>2</sup> The third possibility is to define poverty in the way which corresponds to the decisions of political bodies or authorities. Such a political administrative poverty line has been used in several recent British studies.

As conceptualizations differ, it might be appropriate to use various alternatives to investigate their implications. Firstly, we apply a purely relative poverty line, defined as 50 percent of the median equivalent income. This operationalization is used in a cross-sectional comparison of 1980 poverty rates in several industrialized countries. This operationalization is also used as one of the alternatives for Finland.

Secondly, we measure poverty absolutely, i.e. in terms of a fixed amount of purchasing power. In this case, the poverty line has been defined by the political administrative procedure, although details vary for Finland and Sweden.

Thirdly, for the Finnish data we also apply current poverty lines fixed by the political administrative procedure. It is interesting to examine how such a relative, but political-administrative poverty line has changed over time, as income levels have generally improved.

Poverty, defined in the above outlined ways, can be measured in various ways. The most common measure is the head count index, which counts the number of persons, or families, below the poverty line, and relates this to the size of the population.<sup>3</sup>

As important as the head count index is, it has limitations. If one of the poor loses resources, this does not show up as increased poverty. One of the monetary measures which does not have this weakness is the poverty gap.<sup>4</sup> It complements the head count index by introducing monetary aspects of poverty by describing the amount of money needed to eliminate poverty, i.e. how much money is required in order to lift all families/individuals under the poverty line to that line. Here the poverty gap is related to the GDP.

If the poverty gap measures the income transfer necessary to eliminate poverty, the income gap ratio tells how far below the poverty line the average poor family/individual falls.<sup>5</sup> Here it is expressed as a percentage of the poverty line.

The poverty gap and the income gap ratio also have weaknesses. No attention is paid to the distribution of income among the poor. Sen (1976) has introduced a measure of poverty which integrates the head count measure, the poverty gap and the distribution of income among the poor in the same index, called S.<sup>6</sup>

<sup>2</sup>This approach has been thoroughly discussed in a recent issue of *Journal of Social Policy* (see Veit-Wilson, 1987; Walker, 1987, who suggest a method other than survey), and in *Journal of Human Resources* (see Kapteyn, Kooreman and Willemse, 1988; Hartog, 1988).

<sup>3</sup>The head count index H = q/n, where q = number of families/individuals below the poverty line and n = number of families/individuals in the population.

<sup>4</sup>Poverty gap:  $G = \sum g_i = \sum (z - y_i)$  where z = poverty line;  $y_i =$  income of household/individual i below the poverty line;  $g_i =$  the distance of household/individual i from poverty line.

<sup>5</sup>Income gap ratio I = G/q \* z.

<sup>6</sup>If the number of poor is sufficiently large, it can be written as

$$S = H * [I + (1 - I) * G_n],$$

where  $G_n$  is the Gini index for income distribution among the poor.

While S is technically a good overall measure of poverty, it is hard to interpret, because it merges quite different aspects of poverty into one figure. In the literature, S has several other followers.

## 4. DATA

The Finnish data is based on household budget surveys for 1966, 1971, 1976, 1981 and 1985 carried out by the Central Statistical Office of Finland. These surveys cover the population outside institutions. The sample size has varied from 4,400 to 8,200. Non-response rates have varied between 24 and 34 percent, and an effort has been made to correct the biases due to non-response by using corrective weights (see Laaksonen, 1988).

These surveys do not represent the poorest of the population adequately. For example, those who do not have a permanent address—perhaps the poorest group of the Finns—are not reached. People living in institutions are outside the sampling frame. It is likely that even the rest of the poor are underrepresented.<sup>8</sup>

On the other hand, the problem of this study is the change of poverty, not its exact levels or numbers. There are reasons to believe that the temporary changes of poverty are adequately presented by the analysis. The number of the institutional population and people without firm address have not changed to a degree which would hamper the comparisons.

Most income data of household budget surveys is taken directly from tax returns and other official registers. Information about family structure, sociodemographic and socioeconomic position is given by interviews. The comparability of the surveys is good, although the 1966 survey is of somewhat lower quality than the later ones. Results for the surveys of 1966-81 are based on Rautio's study (Rautio, 1987), while analyses for 1985 have been made by us.

Most of the Swedish data come from the Household Income Survey, which has been conducted annually since the middle of the 1970s. We have used the surveys for 1975, 1978, 1980 and each subsequent year until 1985. Other surveys are less comparable to these. The degree of comparability between the years can be judged as relatively high. These estimates are taken from Gustafsson (1987).

To obtain a longer time series, we link these estimates to new ones for 1967 based on the Level of Living Survey. This is a panel study of individuals based on a simple random design. The sample consists of about 6,000 individuals. This microdata makes it possible to define a family unit and income variables similar to those used in the Household Income Survey. In both data sets income information comes from tax returns and other official registers. One problem is, however, that the best income information is for 1967 while family composition data refer to 1968. Due to some differences between the two data sets the comparability is less satisfactory between 1967 and 1975 than between 1975 and later years. Poverty in 1967 might be somewhat overestimated because of less coverage in income data, a phenomena also applicable to the earliest estimate for Finland.

<sup>&</sup>lt;sup>7</sup>For a recent and penetrating survey, see Seidl, 1988.

<sup>&</sup>lt;sup>8</sup>Paananen, 1988 has more thoroughly discussed the possibilities and limitations of these data for poverty research.

#### 5. International Comparisons

The Luxembourg Income Study (LIS) has considerably improved the possibilities of making international comparisons of income formation of households, income distribution and poverty. It has put together and harmonized household income data from about ten countries. The data refer to 1979-82 (Rainwater and Smeeding, 1988). Finland is not included, but for the following analysis the household budget survey data of 1981 has been adapted to the definitions used in LIS (Uusitalo, 1989). In the following, the poverty line has been defined as follows: individuals who live in families having equivalent income less than 50 percent of the median equivalent income are counted to be poor. In order to achieve equivalent income levels for different types of households, the following equivalence scale, commonly used in several studies based on LIS-data, is adapted: the first adult has the weight 1.0 the next individuals 0.5. As a matter of fact, this scale is the mean of per household and per capita scales.

In Chart 1 we display the share of the poor by the size of the welfare state (as measured by the GDP-share of cash benefits) in eight countries. Norway and Sweden have low poverty rates, while Finland has a somewhat higher rate, close to the level of the Federal Republic of Germany. Great Britain displays slightly higher poverty rates, while in countries outside Europe poverty is even more common: in the United States as much as 17 percent of the population have equivalent incomes below half of the median (Ringen and Uusitalo, 1989). For our purposes, three aspects of the chart need to be emphasized. First, of our two cases Sweden reveals lower poverty rates than Finland. Second, both of our cases are countries with less poverty than is typical for advanced Western nations.

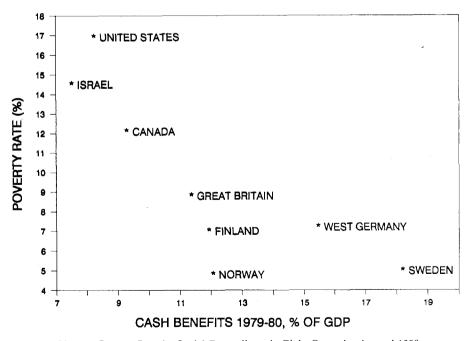


Chart 1. Poverty Rate by Social Expenditure in Eight Countries Around 1980

Third, the size of the welfare state is an important factor explaining the cross-national variations in poverty rates as shown in Chart 1.9 The bigger the welfare state the smaller is the poverty rate.

#### 6. POVERTY RATES AND POVERTY GAPS

When analyzing changes in poverty, we use definitions established in each of the countries. Thus estimates for one point of time are a function not only of the income situation at the lower tail of the income distribution, but also of the political-administrative definition of the poverty line.

As regards Finland, two (or three) operational definitions of poverty lines are used. The first one is based on the political-administrative poverty line: it is set to a full national pension for an old person who has no other income. A comparison with the poverty line derived from the guidelines of public assistance (Sailas, 1987; Paananen, 1988) show that these definitions are fairly close to each other.

The political-administrative poverty line is used in two ways. First, we apply the 1966 poverty line as an absolute definition, i.e. we assume that the definitions of poverty had not been changed since 1966.

Second, we apply the current political-administrative poverty line for each of the years studied. The comparison with the fixed 1966 poverty line shows the impact of the changed definition of poverty. As a third poverty line, 50 percent of the median equivalent income is used. <sup>10</sup> It is interesting to see how this line compares with the political-administrative line.

Equivalent income levels for different types of families are achieved by applying a consumption unit scale used by OECD. In this scale, the first adult has a value of 1.0, other adults 0.7 and children 0.5.11

The three poverty lines are presented in Chart 2 for one-person households (or, alternatively, per one consumption unit). Of course, the temporary change is exactly the same in other types of households as well. The poverty line based on the fixed real level of national pension in 1966 is naturally represented by a straight line. The other two poverty lines have become considerably more liberal. The political-administrative poverty line has increased by 66 percent, while half of the median has doubled. Using this definition in 1985 one becomes classified as poor with the income which in 1966 would have given roughly an average economic position.

 $<sup>^9</sup>$ The regression equation is POV = 21.1 - 1.01SOC,  $R^2 = 66.5$  percent, standard error of coefficient = 0.29. Based on the same data base Buhmann et al., 1988 report poverty rates estimated for various equivalence sales. They show that results on the proportion recorded as poor and therefore rankings of countries to some extent depend on the scale used. However, a statistically significant relationship between cash transfers as percentage of GDP is obtained for all these alternative poverty rates.

<sup>&</sup>lt;sup>10</sup>Median income = disposable household income per consumption unit, below which 50 percent of individuals are found.

<sup>&</sup>lt;sup>11</sup>Most of the calculations have also been made by using the equivalence scale developed by the Economic Planning Centre of Finland (see Hagfors and Koljonen, 1984). The results presented here did not prove to be very sensitive to the equivalence scale. One would find greater sensitivity if the question "Who are the poor?" would be the major one.

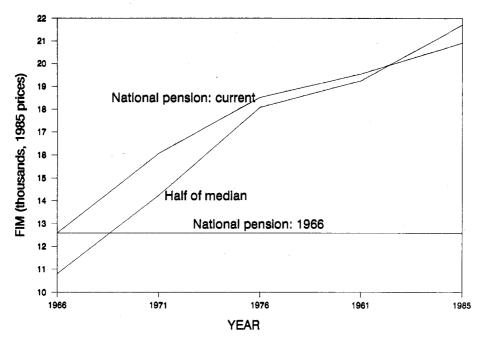


Chart 2. Poverty Lines in Finland 1966-85 for One-Person Households

Perhaps the most interesting finding in Chart 2 is that the (current) political-administrative poverty line and the 50 percent of median equivalent income are fairly close to each other. However, the median-based poverty line has increased more rapidly. The poverty line based on national pensions was more generous in 1966, when it exceeded half of the median income by 16 percent. Since then it has developed less generously, and has actually fallen somewhat below the 50 percent of the median in the 1980s, probably because of the changes in indexing the national pension benefits (see Alestalo and Uusitalo, 1986, pp. 266-269).

The applications of the three poverty lines to empirical data are displayed in Chart 3. It shows that poverty has declined dramatically during the 20 years according to all operationalizations. In 1966 every fifth Finn had equivalent income less than the minimum national pension, and every seventh fell below 50 percent of the median. Between 1966-76, poverty declined rapidly to about the five percent level, and the decline continued after 1976, although less rapidly. Between 1976-81 the proportion remained relatively stable, but declined again slightly in the early 1980s. If the poverty line had been fixed to the level of 1966, poverty would have disappeared almost totally.

In table 1 we show that the decline of poverty between 1966 and 1976 was roughly the same as the head count measure, poverty gap and Sen's measure of poverty: a rapid decline to about one-fourth of the level in 1966. The income gap ratio (the average distance of the poor from the poverty line), declined much less, however.

The development between 1976 and 1981 has been much more modest. The share of individuals in poverty declined only marginally, while their average

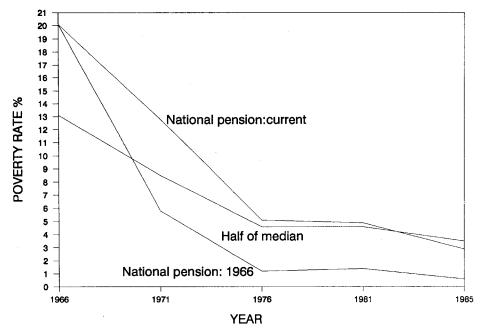


Chart 3. Poverty Rates in Finland 1966-85

TABLE 1
POVERTY IN FINLAND 1966-85

					1005
	1966	1971	1976	1981	1985
Head count ratio	20.1	12.8	5.1	4.9	2.9
Poverty gap, percent of GDP	1.8	1.0	0.4	0.4	0.2
Income gap, percent of poverty-line	24.8	23.0	21.8	26.4	27.4
Sen's measure of poverty $(S)$	0.071	0.042	0.017	0.019	

*Note*: Figures are based on the current poverty lines defined by the minimum national pension. Individuals whose disposable household income per OECD consumption unit is under this line are defined as poor.

income gap actually increased. Consequently, the poverty gap and Sen's measure hardly changed at all. Between 1981 and 1985, the poverty gap declined again, due to the decreased share of the poor. However, the income gap continued to increase in the 1980s. Although the share of the poor has declined, the poor became poorer. This is due to the changed sociodemographic structure of the poor, analyzed in greater detailed in section 8.

As regards Sweden, the political administrative poverty line is based on guidelines directing the allocation of Social Assistance. Similar to the British Supplementary Benefits/Income Support, social assistance is the last "safety net" in the provision of income maintenance. Applications are typically reviewed by social workers who also make most of the decisions by using guidelines which may vary from one municipality to another. However, the Social Welfare Board

has presented suggestions for appropriate guidelines.<sup>12</sup> These guidelines are used here in order to construct the poverty line.

One of the problems with the guidelines established by the Social Welfare Board is that housing costs are not covered. In practice, the actual housing costs of the applicants are added to the sum set forth in the guidelines as long as they are not unreasonably high. This could not be done with the available data, because no information on housing costs are present. The following estimation procedure was used: Each family was allocated a flat of the size that was not deemed overcrowded according to the norms used in the housing policy. Rent information for the size of each flat was obtained from a housing survey annually conducted by Statistics Sweden. In the survey, the country is divided into four regions. Consequently, regional variations in housing costs are considered.

As the guidelines of social assistance take the number of persons as well as age of children into consideration, they imply an equivalence scale. For example, a couple without children is regarded as having needs equal to 159 percent of a single adult, and a couple with a child less than four years of age is assumed to need 203 percent of the income of a single adult.

The Swedish political-administrative poverty line is based on the recommendations for guidelines for 1985. In 1985, the poverty line for one person was 75 percent and 58 percent of the average equivalent disposable income per capita. The poverty line is absolute in the sense that it is also applied to earlier years. This means that we estimate the Swedish poverty rates for example, in 1967, by using the guidelines of 1985. 13

In Chart 4 we display estimates for poverty rates separately for families and for individuals. The risk for families to fall in poverty are somewhat higher than for individuals. This means that small families (or households) have a higher probability to be poor than larger families.

In addition to the estimate for families based on the political-administrative poverty line (families, 100 percent), we also display in Chart 4 two alternatives: a more and a less liberal one, the former being 25 percent above the poverty line, and the latter 25 percent below it, describing a more severe poverty.

The importance of the definition of the poverty line is obvious: the more liberal the definition, the greater the share of the population in poverty, and vice versa.

Our main interest is in the development over time, however. In this respect, all curves presented in Chart 3 behave fairly similarly. When applying the 1985 social assistance guidelines backwards, we find that about 40 percent of families would have been poor in 1967! However, poverty declined very rapidly until 1975, and continued to decline although with a somewhat slower pace until 1980, when it was at its lowest level, 8.0 percent of individuals and 9.1 percent of families. In the beginning of the 1980s, poverty rates increased, except for 1985, when there was a decrease.

<sup>&</sup>lt;sup>12</sup>The public opinion on the levels have been investigated by Aguilar and Gustafsson (1988). The results show the public sets the guidelines to a somewhat higher level. Furthermore, it was found that public opinion is more homogeneous concerning the income needs of adults than to those of children.

<sup>&</sup>lt;sup>13</sup>In the Finnish case the poverty line is based on 1966 and is applied forwards. It should be remembered that poverty rates cannot be compared across countries, but trends can be compared.

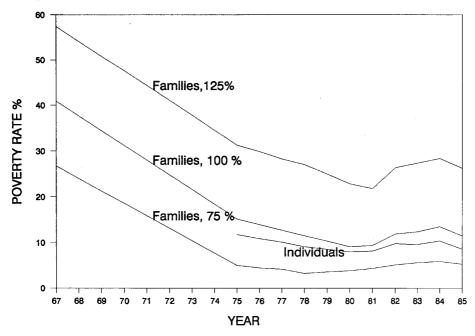


Chart 4. Poverty Rates in Sweden 1967-85

TABLE 2
POVERTY IN SWEDEN 1967-85

~	Head Count Ratio Percent		.75	verty Gap Un 100	125
	Persons	Families		the Poverty Line Percent of GDP	
1967		40.9	2.9	5.6	10.0
1975	11.8	15.2	0.4	0.9	2.5
1978	9.1	11.5	0.3	0.8	2.0
1980	8.0	9.1	0.3	0.7	1.7
1981	8.2	9.4	0.5	0.9	1.9
1982	9.8	11.9	0.5	1.0	2.2
1982	9.6	12.4	0.4	0.9	2.2
1984	10.4	13.5	0.5	1.0	2.3
1985	8.6	11.5	0.4	0.8	1.9

Figures on poverty gaps in Table 2 tell essentially the same story as the head count index. The major change took place between 1967 and 1975, when the gap declined from 5.6 percent of GDP to 0.9 percent. The lowest figure, 0.7 percent of GDP, is reported for 1980, after which some increase has taken place, although not monotonically. Calculations of gaps based on 75 and 125 percent of the poverty line give the same picture of the development.

A comparison of the Swedish and the Finnish political-administrative poverty lines for 1985 shows that the Swedish definition is much more liberal. If transformed into a common currency by exchange rates, the Swedish poverty line for one person proves to be 26 percent above the Finnish one. The difference is much larger than motivated by the difference in GDP between the countries.

When the Swedish and the Finnish results are compared, some similarities and differences emerge. First, it is clear that the Swedish political-administrative poverty line is much more liberal than the Finnish one. This is why poverty rates reported above are on a higher level in Sweden than in Finland. Second, the temporal development shows quite considerable similarities. In both countries, poverty declined very rapidly from the mid-1960s to the mid-1970s, after which changes have been less dramatic. Third, the development of the 1980s has been different: in Finland poverty rates have continued to decline, while in Sweden this is not the case; in some years poverty has increased.

### 7. Effects of Public Sector Transfers and Income Taxes

What are the causes of the above observed trends in poverty in Finland and Sweden? Obviously, many factors may contribute to the development. Changes in the family structure and age composition of the population might be of importance; they are examined in the next section. Economic growth plays an obvious role, particularly when poverty is measured by a fixed poverty line. For example, the development of the Swedish poverty rates in the 1980s reflects clearly the real income development of the households (Gustafsson, 1987, 13–15). Here we focus on the role of public sector transfers and income taxes.

The point of departure is the different income concepts summarized:

Factor income + Received Public Sector Transfers

- = Gross income Income taxes
- = Disposable income.

By measuring poverty in the first and last phases of this income formation process of households we can get an estimate of the direct effects of transfers and taxes. The development of poverty according to factor income shows the joint effect of the development of market rewards and demographic changes. Comparison of the results based on factor income and disposable income give information on the role played by public sector transfers and taxes. However, only first order effects of the welfare state are identified in this comparison; all behavioural responses to transfers and taxes are neglected.

In Chart 5 we show, first, that poverty (poverty line: national pension) would have declined in Finland even without the welfare state between 1966 and 1976, but increased somewhat between 1976 and 1981. This is accounted for by the similar change in factor income distribution during this period: it became more equal between 1966 and 1976 and slightly more unequal between 1976 and 1981 (Uusitalo, 1989). Second, in Chart 5 we display how transfers remove more people from poverty than taxes place there: in each year the proportion of poor is higher if factor income rather than disposable income is considered. Third,

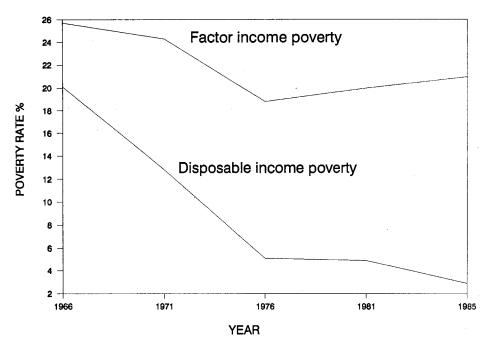


Chart 5. Poverty Rates in Finland 1966-85 According to Factor and Disposable Income

the welfare state has increased its poverty-decreasing effect: in 1966 it brought about 5.6 percent of individuals out of poverty, while the respective figure is 20.4 percent in 1985. The development of the welfare state is clearly the major, if not the only reason for the declined poverty rates in Finland.

The increase of factor income poverty is largely due to changes in demographic structure. The aging of the population, and the development of pension benefits have created opportunities to withdraw from the labour market, which leads to low factor income levels. Among young adults, the lengthening of education has tended to decrease factor incomes as well. If we look at the core of the labour force, families the head of which is between 25 and 54 years of age, we find that in 1985 7.3 percent of individuals living in such families were below the poverty line on the basis of their equivalent factor income, while the respective share was 2.4 percent if equivalent disposable income is observed.

In Chart 6 we display factor income poverty rates for Sweden. The pattern resembles the Finnish one: first there is a declining trend, but in the 1980s an increase is observed. The comparison of disposable income and factor income poverty shows that the major reason for change in poverty is the increased poverty-reducing effect of the welfare state. In 1967, more families were pushed into poverty by income taxes, than removed by transfers, while income taxes and public sector transfers reduced the poverty gap to 1.3 percent of GDP. In 1975, about 20 percent of the Swedes were removed from poverty by the welfare state, and the effect of income taxes and transfers had increased to 5.6 percent of GDP. The reduction of poverty by the welfare state continued to rise until 1978, but

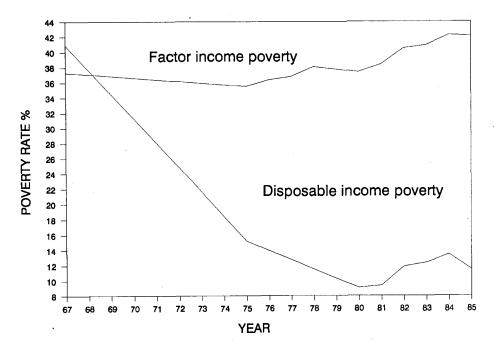


Chart 6. Poverty Rates in Sweden 1967-85 According to Factor and Disposable Income

thereafter the changes have been irregular and vary depending on the measure of poverty. In 1985, more than 30 percent of the Swedish population was removed from poverty by the welfare state.

In both countries, the poverty-reducing effect of the welfare state increased dramatically from the late 1960s to the latter part of 1970s. Compared with this effect, the changes in factor income have had smaller impacts. It is also clear that income transfers and taxes have a larger impact on poverty rates in Sweden than in Finland. This is largely due to the differences in the age structures: in Sweden the share of old people is much higher than in Finland.

## 8. THE CHANGED PROFILE OF POVERTY

In his classical study of poverty in the city of York in 1899 Seebohn Rowntree observed that poverty varies with the life cycle: the probability of poverty increased in childhood, during early middle-aged years and during old age. However, poverty risk according to the phase of the life cycle is not constant, but varies over time, as our results for Finland and Sweden display.

In Chart 7 we show how "the poverty cycle" has changed in Finland from 1966 to 1985. In 1966 the poverty risk increased with the age, being at its highest among the elderly population. In 1985 the differences have become quite small. Improved pension security has decreased the poverty risk of the aged to the level of the active age population.

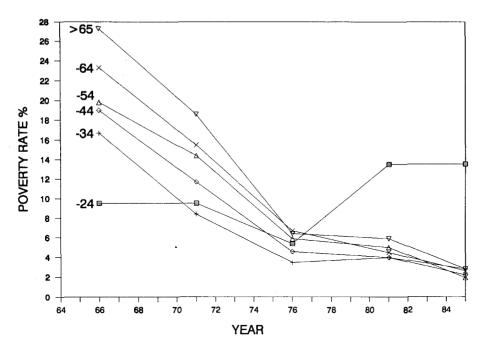


Chart 7. Poverty Rate in Finland 1966-85 by the Age of the Head of the Household

Households of the young are an exception. Their risk of dropping below the poverty line has even increased, while it has dramatically decreased in other age groups. Has the Finnish welfare state failed to diminish poverty among the young? To answer this question, it is important to observe that the concept of disposable income does not include study loans, which are subsidized by the state. This means that an important part of the poor among the youngest age group has consumption level which is above the poverty line. However, it is unlikely that this explains completely the deviant development of the poverty risk among the young. The development of the welfare state has not only implied increased benefits, but also a change in the life-cycle profile for them: an increased share goes to the older population, while support in the early phases of the life cycle has not developed as favourably. In any case, the results suggest that the profile of poverty has changed from permanent old age poverty to life-cycle poverty of a more temporary nature during the early adulthood.

Also in Sweden the age profile of poverty has changed. In the late 1960s, the risk of poverty was highest among the elderly. In the late 1970s, it was lower in all age groups, but the youngest and the oldest age groups had the highest risk. As pension benefits continued to increase, poverty among the aged decreased dramatically until 1980. In the 1980s, poverty rates have tended to increase especially among the young, but also slightly among the elderly. As in Finland, the current poverty rates are clearly highest among the young.

In the Swedish case, study loans are included in the concept of disposable income, and therefore we cannot explain the upward trend by the omission of

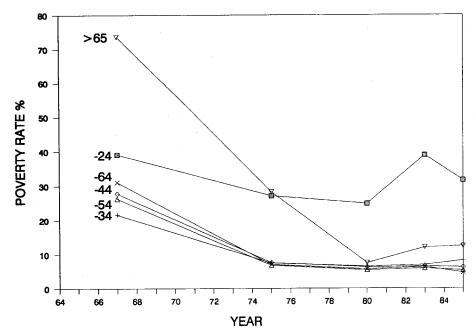


Chart 8. Poverty Rate in Sweden 1967-85 by the Age of the Head of the Household

this income type. However, it should be remembered that young adults who live with their parents are regarded as a household of their own, irrespective of their actual membership in their parents' family and household. We cannot know to what extent this could explain the rising poverty trend of the youth. In any case, transfers from parents, such as free lodging and meals, are not included in the data.

Similarities in the age-poverty relationship in Finland and Sweden are apparent. In both countries, the welfare state has developed pension security, and consequently poverty among the aged has declined most dramatically. While poverty has decreased in most other age groups as well, this is not the case for the young. In both countries, the risk of poverty is now much higher among the young than among others. It should be observed, however, that among this group measurement problems are much more acute than in other age groups.

## 9. Conclusions

We have reported efforts to conceptualize and measure poverty in Finland and Sweden from the mid-1960s to the mid-1980s. We have asked how poverty has changed, analyzed some causes of the changes, and shed light on the question of how the profile of poverty has changed during the two decades of observation.

Conceptual and methodological considerations are vital in every effort to discuss and measure poverty. How should poverty be defined? If defined in purely relative terms, i.e. the poverty line is regarded as a certain point in the distribution of income, in our case 50 percent of the median equivalent income, both Finland and Sweden are identified as countries of relatively low poverty,

and Sweden has even lower rates than Finland. It also seems that cross-sectional variations in poverty rates among advanced industrial countries are to some extent explained by the size of the welfare state: the greater the share of social expenditure in GDP, the less poverty.

However, if poverty is defined on the basis of social policy norms prevailing in our two countries, the picture is different. In Finland the poverty line based on the minimum national pension—or, for that matter, on guidelines of social assistance—is much lower than the Swedish poverty line based on guidelines of social assistance. This is just one indication of the more developed welfare state in Sweden.

Changes in time can be compared using poverty lines based on social policy norms prevailing in each country. However, one additional methodological problem emerges: should one use a fixed norm or the current norm of each year? In the Swedish case, we used a fixed norm, while in the Finnish case we used both fixed and current norms.

In the case of the fixed norms, when the poverty line is defined by a constant basket of goods and services throughout the two decades of observation, we found a very rapid decrease of poverty rates and gaps in both countries between the mid-1960s and the mid-1970s, after which changes have been less drastic. In the 1980s, the development has been different, however: poverty continued to decrease in Finland, but increased in Sweden.

The comparison of the fixed and current poverty lines in Finland showed that current poverty lines have been raised at a slightly slower pace than the average real income level has grown. Consequently, when applying the current poverty line of each year, poverty rates have declined much less than in the case of the fixed poverty line, but otherwise the picture is similar.

In addition to comparing the trends of poverty in Finland and Sweden, our second major task was to examine the impacts of the welfare state to development. This was done by counting poverty rates on the basis of factor income, and comparing these results with the ones based on disposable income. The conclusion is that the expansion of the welfare state is a very important explanation for the reduction of poverty in both countries.

The age profile of poverty has changed considerably and in a similar fashion in both countries. In the mid-1960s, the risk of becoming poor was highest for the elderly. Two decades later their risk was much smaller, being fairly close to the level of the population in the economically active age. However, poverty rates among young adults—those under 25 years of age—was approximately as high in the mid-1980s as it was two decades earlier. It is likely that the high risk of poverty among young adults is partly an indication of methodological problems of measuring poverty among this group. In any case, there are reasons to believe that poverty has tended not only to diminish but also to change character from a chronic situation, to a more temporary period in the early phase of the life cycle.

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