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# LIS

## Working Paper Series

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Income Inequality and Poverty:  
Do the Nordic Countries Still Constitute a Family of  
their Own?

Johan Fritzell, Olof Bäckman and Veli-Matti Ritakallio

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# Income inequality and poverty: do the Nordic countries still constitute a family of their own?

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## Introduction

The comparatively low degrees of income inequalities and relative poverty rates have long been a salient feature of the Nordic countries. Low inequality and low poverty rates are commonly viewed as key ingredients of what constitutes the Nordic welfare model (eg Kautto et al, 1999), with strong influences from institutional characteristics and welfare state redistribution systems (eg Brandolini & Smeeding, 2007; Bäckman, 2009; Fritzell & Ritakallio, 2010). A fundamental dimension of these social schemes – and of the Nordic model in general – is universalism (Kildal & Kuhnle, 2005). No doubt, there is abundant evidence that the Nordic countries have been at the top of the equality league and that they actually form a family of their own when it comes to poverty and income inequality. As one of us concluded in an earlier study of income inequality in a number of European countries, analysing whether the Nordic countries were becoming more like other European countries: ‘Yes, the Nordic countries ... still have a low degree of inequality in the distribution of income and No, we find no support for a convergence’ (Fritzell, 2001).

Moreover, more recent publications by supra-national organisations suggest that the Nordic countries are among those with the lowest income inequality and relatively low poverty rates (OECD, 2008; Eurostat, 2010). The thorough OECD report ‘Growing Unequal’ (2008) concludes that the countries with the most compressed income distributions are Denmark and Sweden, placing Finland, Iceland and Norway in a group of European countries with similar degrees of income inequality. However, after having examined time trends, national official documents and reports in most of the Nordic countries conclude that inequality is on the rise. Thus the basic question in this chapter is whether the Nordic countries are different in terms of income inequality and poverty. In other words, do they still constitute a family of their own?

## **Welfare regimes and poverty and inequality**

The concept of welfare regimes provides the broad framework for this volume. Given the three types of welfare capitalism — the Liberal, the Conservative-Corporatist, the Social democratic — (Esping-Andersen, 1990), we see that basic principles differ amongst regimes. Although the examination of welfare state typologies can certainly be seen as obsessive (Abrahamson, 1999), we nonetheless must understand welfare state variation not as a one-dimensional element but as differences in kind (and not merely degrees) (Titmuss, 1974).

From the perspective of the outcomes highlighted in this chapter, we see that regime theory expects countries to follow certain patterns. Poverty and income inequality are probably the two outcome measures that have lent the most support to the idea that countries tend to cluster along certain dimensions. Hence, Nordic countries have welfare state schemes with institutional characteristics that in turn appear to support low poverty rates and fairly compressed income distributions. In contrast, Anglo-Saxon countries, following the logic of the Liberal regime type, with more emphasis on market solutions and residual schemes, tend to have much higher poverty rates and higher income inequality. Many continental European countries have for historical reasons followed another logic, in which social policies often constitute insurance relationships formed on the basis of employment contracts. Such a country cluster also puts more emphasis on the family as a welfare provider. Esping-Andersen (1990), in his welfare state typology, views Germany as an archetype of this Conservative-Corporatist model.

However, as Esping-Andersen (1990) paid little attention to the welfare regimes of Southern Europe, whether these countries have another specific model or whether they are simply at an earlier stage of developing a model that Esping-Andersen identified is a subject of much discussion. Whatever the final answer, Southern European countries tend towards an

even higher degree of familialism and less developed social security programmes than, for example continental European and Nordic countries (Ferrera, 1996).

While our analyses obviously emphasise the Nordic countries, to answer our research questions we need comparisons. We chiefly use Germany, Italy, the Netherlands and the UK as our primary comparison countries, because earlier research has identified them as belonging to welfare regimes different from those of the Nordic countries. Germany and Italy are often described as belonging to the Conservative-Corporatist regime type, whereas the UK belongs to the Liberal regime. The Netherlands is often regarded as a special hybrid case, with certain characteristics following the logic of the Nordic model. In addition, to discover whether the Nordic countries still differ from the Western average, we also present averages using data from other Western countries. To present a comprehensive picture of change, we study change from different angles and with different data.

Our empirical analyses and results are divided into four subsections. The first section shows time trends in overall income inequality, concentrating on all the Nordic countries, including Iceland, and giving yearly estimates covering around 20 years. We use national data sources that most likely give the most accurate time trends within each country but perhaps have less comparability across countries.

As such an approach cannot answer the question of whether the Nordic countries have become more or less similar to non-Nordic countries, we therefore shift our focus in the second section to a comparison with other European countries – and the United States. We present data not only on inequality but also on overall poverty rates. Although our time perspective is about the same as in the first empirical section, we rely here on the most reliable comparative source for income and poverty analysis, the Luxembourg Income Study (LIS) database. We present three time snapshots: from around the mid-1980s, the mid-1990s

and the mid-2000s. We both focus on changes and levels for the question of convergence versus divergence.

The third section considers change from a different angle, relying on cross-sectional, cross-national micro-data for the study of poverty rates and poverty profiles in a number of European countries. Focusing on risk categories rather than on the overall levels and their differences, we contrast ‘new’ and ‘old’ social risk groups. The discussion of new and old social risks is often framed within a discussion of societal transformation from industrialism to post-industrialism (Taylor-Gooby, 2004), and earlier research has shown that the Nordic universalistic, service-oriented welfare states are especially well-suited to handle some of these risks (Timonen, 2004).

In terms of poverty, although what one should regard as new social risk categories is not totally clear-cut, certain population groups, such as immigrants, are obviously more central to the social policy discussion today than in the golden age of welfare capitalism. When the first comprehensive studies were performed over 100 years ago (Rowntree, 1901), they showed that the elderly were at particular risk for poverty. The elderly are a good example of an ‘old’ social risk category that was in focus during the early period of welfare state reforms, and Kangas and Palme (2000) show that the Nordic countries have been particularly successful in mitigating the classical life cycle of poverty that Rowntree outlined. Our analysis here aims at revealing whether the comprehensive Nordic welfare model, which is well-suited for dealing with old social risks, might have more difficulties handling some of the newer ones, particularly immigrants.

The fourth section focuses on income variation or, more specifically, the persistence of poverty. As we have good reason to expect that the persistence of poverty is particularly harmful for people’s living conditions and life chances, preventing longer spells of poverty and creating possibilities for exiting poverty constitute crucial aspects of any political attempt

to combat poverty. When the European Union in 2001 decided to put a stronger emphasis on developing common European indicators on social inclusion and poverty, a key product was the 2002 recommendations of Atkinson, Cantillon, Marlier and Nolan (2002). They state that the longer an individual lives in poverty, the greater the risk of his or her permanently remaining there. We use one of their suggested indicators of persistent poverty risk: the proportion below the 'at risk of poverty' rate in one year and in at least one of the two preceding years. Thus when looking at poverty from a dynamic perspective we here investigate whether the Nordic welfare states are successful in mitigating long-term poverty or not.

### **Poverty, income and income inequality – definitions and measurements**

Out of the ongoing discussion of and extensive literature on how poverty should be theoretically defined and empirically measured, we use an income poverty approach (Jäntti & Danziger, 2000). In line with EU definitions, we set the poverty threshold at 60% of current median income. This income measurement is equivalent to disposable income and, unless otherwise stated we use the modified OECD scale, which sets a weight of 1.0 for the first adult, of 0.5 for any additional person aged 14 or older, and of 0.3 for children under the age of 14. In other words, to reach the equivalent disposable income of one adult, a household consisting of two adults and two children needs to have a disposable income 2.1 times higher. As it is well known that poverty measures are sensitive to both the choice of poverty threshold and the equivalence scale (Jäntti & Danziger, 2000; Ruggeri Laderchi et al, 2003), we therefore conduct sensitivity analyses with alternative definitions. We report these results only when they deviate from earlier findings.

Our inequality measure is most often the traditional Gini coefficient. Because the Gini coefficient is more sensitive to differences in the middle of the income distribution (eg



Atkinson, 1970), we sometimes supplement it with measures better suited for capturing change and differences in the bottom and top of the income distribution, such as the relation between the top and bottom 10%.

That the 60% of median income poverty threshold is merely a proxy for a more profound poverty concept is common knowledge. That the EU has chosen the term ‘at-risk-of-poverty rate’ indicates that people with incomes below this threshold should be treated as being *at risk of* poverty rather than being *in* poverty. Several indicators have been suggested for capturing a deeper or more serious poverty risk. The EU standard definition of persistent poverty is the equivalent disposable income below 60% of median income in the current year and in at least two out of the three preceding years. This definition – one of the Laeken indicators set by the European Council in 2001 as part of the Lisbon agenda – was developed from the recommendations of Atkinson et al (2002).

While Atkinson and colleagues stress the importance of a persistency indicator, they also discuss the limitations of using panel data. One such limitation occurs when panels suffer from attrition, as the character of the attrition can bias results in various directions. Thus researchers have to find a balance between the number of panel waves necessary for achieving an appropriate persistency measure and the need for minimizing attrition. Atkinson et al suggest either a three- or four-year indicator. In the three-year indicator those who are poor and have been so for at least one of the two preceding years are considered permanently poor. The four-year indicator constitutes the Laeken indicator just described. The reason for allowing for one year above the poverty threshold is to minimize the effect of measurement errors. An occasional year out of poverty (according to data) may be the result of measurement error. But even in cases when a measurement error is not involved, one could argue that such temporal transitions should not be treated as true transitions out of poverty.

For our analysis of poverty persistency rates, we use the 2008 EU-SILC longitudinal data set. To construct the Laeken indicator, we need to go as far back as 2005 for the necessary four years. Unfortunately, the 2005 data set contains much smaller samples for most countries, thereby producing some peculiarities in outcomes. For this reason we have chosen to use the three-year indicator suggested by Atkinson et al. We calculate the poverty thresholds from the cross-sectional data sets, using the conventional weight variables.

## **Data**

The first empirical part is based on *national* data sources from within the Nordic countries. The data come from national statistical offices, material either presented in earlier national reports or acquired from national statistical agencies (for details, see fig 1). We see a four-fold reason for our choice of using national data in this section: first, by using national sources we can use yearly data points. Second, we are able to include the most recent estimates. Third, we are able to more fully include realised capital gains, capital income and taxation of capital income, which according to some have been the main drivers of inequality, especially at the top of the income distribution (Riihelä, Sullström & Suoniemi, 2008). Fourth, we focus on the time trends and the within-country trends have a high degree of reliability in the annual national sources.

The second part uses the LIS data. We mainly use waves two, four and six, corresponding approximately to the years 1985, 1995 and 2005 (for a thorough presentation of the database see Atkinson, Rainwater & Smeeding, 1995). LIS is commonly regarded as the best source for cross-national comparisons of poverty and income inequality. Countries to be analysed in this section are Denmark, Finland, Norway, Sweden, Germany, Italy, the Netherlands, the UK and the US. Moreover, we present the average for all EU-15 countries, plus Norway and the US, as they have available data in LIS (n=15).

The third and fourth empirical parts are based on data from EU Surveys on Income and Living Conditions (EU-SILC). The EU-SILC is the main source for the compilation of comparable indicators on social cohesion used for policy monitoring at the EU level in the framework of the Open Method of Co-ordination. Every year the EU-SILC collects comparable multidimensional micro-data on income, poverty, social exclusion and living conditions – both cross-sectionally and longitudinally. The EU-SILC was launched in 2003 with six EU-15 countries plus Norway and re-launched in 2004 with 12 EU-15 countries. In 2005 the rest of the EU-25 countries joined the EU-SILC (Eurostat 2010). While our study primarily uses the 2007 cross-section, we also use longitudinal data from 2006 to 2008. For our purposes EU-SILC is unique because it contains pre-harmonized data from all five Nordic countries. Another strength of the EU-SILC is its extensive sample size, as it allows detailed analysis even at rather small subpopulation levels. That the EU-SILC does not cover non-European countries and covers only relatively short periods are the main drawbacks of using these data for cross-national comparative welfare research.

## **Results**

### **Income inequality trends in the Nordic countries**

Figure 1 shows the trends of inequality in the distribution of disposable household income for the Nordic countries between the mid-1980s and 2008 (or the latest possible time point). Our inequality measure is the Gini coefficient. As mentioned earlier we have deliberately chosen to report the changes as reflected in national sources. The drawback of this choice is that these trends are based on less comparable measurements of income across countries. Within each country, however, the trends are more reliable than in any cross-national source.

For these methodological reasons we present the trends in relatives. For each country we have set the inequality to 100 in 1995. Our series also have slightly different starting and ending points.<sup>1</sup>

FIGURE 1 ABOUT HERE

Figure 1 makes some patterns immediately obvious. The trends of increasing inequalities are more evident in the later period than in the earlier period. The trends in Finland and Sweden are roughly similar throughout the observed period (1985-2008). These trends relate to macroeconomic circumstances, as in the early 1990s both countries experienced a severe economic recession in which unemployment skyrocketed to figures totally unthinkable before the crisis and with negative growth for three consecutive years (see Kautto, 2000, for a thorough comparison of Sweden and Finland during the 1990s). However, while the median income fell dramatically during the crisis years, income inequality hardly changed at all (Palme et al, 2002). If, for example, one considers the changes of the Gini in the series in Figure 1, comparing the changes from 1991-95 with the changes from 1995-99, one sees that it is both in the aftermath of the recession and during the economic recovery that income inequality grew. Whereas the changes were small in the first of these two periods, the Gini grew by more than four percentage points in Finland and close to four percentage points in Sweden. Such marked increases of the Gini coefficient in a four-year period are indeed uncommon, including from an international perspective.

Danish data also suggest a similar trend, with only minor changes between the mid-1980s and the mid-1990s but a steady increase thereafter. Norway has a much more volatile income distribution in the 2000s, driven mostly by taxation changes but perhaps also by more households having much higher incomes than in the other Nordic countries. The overall

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<sup>1</sup> We thank Stefán Ólafsson, Axel West Pedersen, Niels Ploug and Jarl Quitzau for help in constructing these series.

increase in Norway is very modest, given the sharp decline since 2005. Even though Norway appears remarkably volatile, it is stable indeed by comparison with Iceland. Income inequality in Iceland skyrocketed from 1995 to 2007. Between those years it increased by an astonishing 65%, followed by a dramatic drop in 2008, and it appears most likely that this drop continues in 2009, when the Icelandic crisis reaches its peak.

Thus income inequality in the Nordic countries is higher today than in the mid-1980s or mid-1990s. In percentages, instead of percentage points, the increase between 1995 and the latest time point is the same in Finland and Sweden – 29% – and in Denmark 24%. In Norway the increase was above 38% until 2006 but dropped remarkably thereafter, so that it is only 5% higher in 2008 than in the mid-1990s. In contrast, the increase in Iceland from 1995 to 2008 is 40%. Thus we find a considerable widening of income distributions in the Nordic countries.

### *Explaining the widening income distributions in the Nordic countries: capital and top incomes*

The trends just described have many similarities, and Nordic national reports and publications on income distribution trends reveal even more. First, a substantial part of the increase is due to realised capital gains and capital income; second, the changes are driven by what is happening in the upper part of the distribution. A decomposition analysis of the changes of the income distribution in Finland shows that these changes were almost completely the result of capital income (Riihelä, Sullström & Suoniemi, 2008): Finland, in line with the other Nordic countries, introduced a dual-income tax model in its 1993 tax reform, which gave strong incentives for high income earners to shift earnings to capital incomes. In Denmark the tax reforms took place in 1994 in Norway in 1992 and in Sweden in 1991. The dual-income tax model was a key topic in these reforms (Sørensen, 1994).

Analyses of top income have lately become a key issue in distributional research (see especially Atkinson & Piketty, 2007), where changes are most marked among the highest earners. In Sweden the top 1% had a total income share of 4% in 1995, more than doubling in 2007 and nearly doubling in 2008 to 7% (Statistics Sweden, 2010). This trend of sharply increasing income shares among the top earners since the mid-1990s is also evident in Finland (Riihelä, Sullström & Suoniemi, 2008) and Norway (NOU 2009:10; Aaberge & Atkinson, 2008), with the magnitude appearing roughly similar to that of Sweden.

In Iceland, the change at the top is even more dramatic. For example, Olafsson and Kristjansson (2010) show that among the top decile, which had a marked increase of their total income share, the increase is almost totally driven by the top 1%. This share of the population gradually increased their total income share from around 4% in 1995 to almost 20% in 2007, then decreasing to around 11% in 2008. Consequently, if one measures the change of inequality by the coefficient of variation, which is very sensitive to the top of the distribution, it indicates almost a four-fold Icelandic increase between the mid-1990s and 2007 – a much steeper increase than what the Gini coefficients in Figure 1 show. Nonetheless, although the top is the key driver of the inequality increases, we should not make the mistake of arguing that nothing of importance is happening at the bottom. For example, a substantial erosion of the purchasing power of minimum social benefits in the Nordic countries has taken place over this same period (Kuvalainen & Nelson, this volume). These changes at the lower end of the income distribution constitute an issue to which we shall return.

### ***More like others?***

Although income inequality in the Nordic countries has grown, national trends clearly cannot answer the question of whether the Nordic countries have become more similar to other Western countries. It is to this issue we now turn, using data from the LIS to study income

inequality and relative poverty rates in nine countries. As Iceland is not part of the LIS, we have four Nordic countries that we compare with Germany, Italy, the Netherlands, the UK and the US.

Figure 2 gives income inequality at three different time points for the nine countries at around the mid-1980s, mid-1990s and mid-2000s. Grand means in addition to these nine countries also include Austria, Belgium, France, Ireland, Luxembourg and Spain. A look at the changes over the first 10 years clearly shows that the difference between the Nordic countries and the other countries becomes more marked. In one country, Denmark, the distribution of income first becomes more compressed and then increases only slightly, thereby reaching about the same level of inequality of the other Nordic countries.<sup>2</sup> In three countries – Italy, the UK and the US – we see a clear change towards higher inequality, and the average Gini for all the fifteen countries increases.

A somewhat different picture emerges when we focus on changes over the second 10-year period. Here, partly echoing the changes that appear in Figure 1, we find increases of inequality in all four Nordic countries but not the comparison countries. Whilst we find a continuation of the trend in the US, the degree of inequality is unchanged, for example, in the UK; in both instances this result confirms findings from national studies (Hills et al, 2010; US Census Bureau, 2010). During the second period, which largely coincides with the Blair governments, we find that the widening of income differential stopped but not reverse the earlier trend. In the Netherlands we find almost no changes over the two decades. A comparison of the inequality increases from the mid-1990s in the Nordic countries to our ‘grand mean’ of 15 countries shows clearly that the Nordic countries deviate. On average the Gini coefficient among these 15 countries hardly changes at all, whilst it increases substantially in the Nordic countries.

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<sup>2</sup> One observes a rather different time trend in Denmark when comparing national data (fig 1) to the data in the LIS. -

FIGURE 2 ABOUT HERE

The overall inequality increases in the Nordic countries are more modest in Figure 2 than in Figure 1. The major reason for this discrepancy is the treatment of capital income in particular, realised capital gains. Realised capital gains are not included in the LIS data and, as discussed earlier, capital income is a major driver of the inequality increase in the Nordic countries.

### **Poverty trends**

Figure 3 shows relative poverty rates from the LIS for the Nordic countries (excluding Iceland) and the same five other countries (Germany, Italy, the Netherlands, the UK and the US). The poverty trends in the LIS data differ slightly from those in other national and international sources. The drop in Denmark between the mid-1980s and mid-1990s is not evident in the OECD report 'Growing Unequal' (pp 127-29), which instead reports a relatively flat time trend. Although relative poverty rates in Finland and Sweden increase between the two latter time periods in Figure 3, this increase is greater in national data sources (Statistics Sweden, 2010).

FIGURE 3 ABOUT HERE

As figure 3 shows, the relative poverty rate in Finland declined from the mid-1980s to the mid-1990s. For those familiar with the great depression in Finland in the early 1990s, this decline may appear paradoxical, but the explanation is the strong decline of median incomes during the recession years. Many beneficiaries of social benefits, typically pensioners, suddenly were no longer 'poor', despite no change in their absolute income. This peculiarity of the relative poverty approach also supports the necessity for developing complementary methods for measuring poverty, especially during economic crises (Kangas & Ritakallio, 1998).



On average the Nordic poverty rates are lower than in most other countries at almost all time points. The exceptions are Germany and the Netherlands in 1985. In an earlier study Ritakallio (2002) found that from 1980 to 1995 cross-national variation in poverty more clearly began corresponding with the respective models of social policy. But now, comparing the trends in the Nordic countries with those in the others, we find that between 1995 and 2005 the Nordic countries became slightly less of a family of their own. The increase in poverty rates that we find in the Nordic countries, except for Norway, is not totally followed by the non-Nordic countries. In the UK the rate declines slightly between 1995 and 2005 while remaining stable in the US. All together this result means that the difference between the Nordic countries and these other countries was reduced between 1995 and 2005.

However, according to the coefficient of variation, the cross-national variation within the Nordic countries is nearly eradicated during this second period, indicating that the Nordic countries have become more equal to one another in this respect. However, calculating the coefficient of variation on four countries is open to question and must therefore be interpreted with caution.

### **Poverty in new and old risk groups**

#### ***Poverty rates***

Although the overall income inequality and poverty estimates presented thus far indicate that the Nordic countries are less unique in the midst of the first decade of the 2000s than in the final decades of the twentieth century, inequality and poverty rates nonetheless remain lower than in the comparison countries. We now turn to a more in-depth, up-to-date analysis of cross-national differences in poverty. We use two approaches: first, we analyse poverty among both old and new social risk categories. While the Nordic countries appear especially successful at combating poverty among the old risk categories (Kangas & Palme,

2000; Fritzell & Ritakallio, 2010), whether this success also applies to newer social risk categories is less certain. Second, we analyse poverty dynamics, presenting cross-national differences in the persistence of poverty. For both these analyses we use data from the EU-SILC<sup>3</sup>.

Table 1 shows poverty rates among certain old and new risk groups of poverty in the Nordic countries, in four other selected European countries and in the unweighted EU-17<sup>4</sup> country mean in 2007. In line with our earlier analysis of the LIS data the Nordic average rate is much lower than the EU average, and the variation between the Nordic countries is rather small. Thus the Nordic countries in that sense constitute a family. From the standpoint of overall poverty the Netherlands appears to belong to the Nordic group, whilst the German rate is above the Nordic but clearly below the British and Italian (whose figures are almost twice the Nordic ones). Nonetheless, 11.5% of the population in the Nordic countries are living ‘at risk of’ poverty according to the EU definition given earlier.

TABLE 1 ABOUT HERE

We defined seven population categories for our analysis of the prevalence of poverty. Children, large families, and the elderly constituted traditional social risk groups of poverty at high risk in the nineteenth and early twentieth centuries before the evolution of welfare state systems (Rowntree, 1901). We analyse families and children in more detail, we separately count children (all children, no adults), large families (at least three children in a family) and single parents (mostly mothers, because the numbers of single fathers are very small). Our ‘elderly’ category comprises those whose age at the time of data collection is at least 65.

One new social risk is immigration. The nature and volume of immigration in the past three decades justifies our examining it here, even though comparing immigrant populations cross-nationally is notoriously difficult. Altogether, the country of origin, the reason for

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<sup>3</sup> We thank Saara Hämäläinen for excellent research assistance in the analyses of the EU-SILC.

<sup>4</sup> Countries included in the EU17 mean are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden and the UK.

migration and time spent in the new country vary (Gerdes & Wadensjö, this volume). Although we cannot control for all these factors, we separate immigrants into those born inside and outside the EU. We assume that people born in EU countries (more often labour migrants) are on average in a better economic and social position than those born outside the EU (more often refugees).

Another new social risk group in our analysis is young single adults (16-34 years old). The transition to adulthood and the possibility for young single adults to obtain a secure livelihood has declined (Danziger & Ratner, 2010). The nature of the interdependence between life course and living conditions has changed comprehensively in many Western countries, as a result of what Airio (2008) argues is a change of norms: one income is no longer enough for a family to make ends meet. As a dual-earner family model now defines the norm, including the housing price level, by definition single people, single parents and male breadwinner families are disadvantaged. Moreover, prolonged years in education and the increased difficulty of labour market entry also deteriorate the relative position of young adults.

Our table clearly shows that the Nordic countries succeed much better at handling the old social risks than the new ones. Children on average and large families have a below-average poverty rate in the Nordic countries while the opposite applies to the other EU-17 members. Germany is the one exception, with its Nordic-level low poverty rate for large families. Single parents have a relatively high poverty risk both inside and outside the Nordic countries, with a poverty rate that is on average twice that of the respective population as a whole. For single parents the Nordic countries are much like the others.

While poverty among the elderly still exists, the poverty rates typically deviate only slightly from the population average figures – a finding common to all the countries we studied. Moreover, we have made sensitivity analyses using 50% of median income as the poverty threshold in parallel to the mainstream 60% operationalisation in all the analyses. The

results are about the same except for the elderly: both inside and outside the Nordic countries their poverty rate is slightly higher than the population average (table 1). With a less generous poverty line (50% of median) poverty among the elderly is no longer a key social issue in either the Nordic countries or Western Europe. Except for the UK, the poverty rate of the elderly is now below the national average in all the countries in this study. Whilst in the Nordic countries poverty rates tend to be much higher amongst the new risk groups than amongst the traditional ones, this difference is not as pronounced in the other countries. Young single adults have more than three times the risk of being poor relative to the population average in the Nordic countries, and immigrants born outside the EU have between two and three times the risk. The absolute poverty risk for immigrants born outside the EU is about the same in the Nordic countries and the EU-17.

### ***Poverty profiles***

What is the composition of the poor population in each country? To what extent is poverty occupied by new or old social risk groups? Table 2 shows these poverty profiles, with the same categories as earlier. These poverty profiles constitute the share of old and new social risk population categories of the total poverty in a country.

TABLE 2 ABOUT HERE

In Table 2 these categories clearly overlap. For that reason the rows do not add up to 100%. In all the countries about 20% of the poor are children. For the elderly the result again very much depends on the poverty threshold. When we use the 60% poverty threshold, around 25% of the poor are elderly in all the studied countries. However, when we use a 50% poverty threshold, we find that the share of the elderly in total poverty notably diminishes to around 17% in the Nordic countries, while remaining the same or even increasing in the other European countries. When we divide the poverty population into the old and new risk groups,

the old risk groups now comprise less than half of the total poverty population in the European countries.

The role of our new social risk groups in the total picture of poverty should not be exaggerated. Again, for young single adults and immigrants the selection of poverty indicator crucially affects the research outcome. A 60% poverty threshold puts their combined share at around 33% in the Nordic countries and 10% to 20% in the non-Nordic countries. Finland, with much lower shares, clearly deviates from the other Nordic countries – not (as seen earlier) from lower risks but primarily from the smaller size of its immigrant population. In contrast, a 50% poverty threshold places the new social risk groups in a more central position. In particular, the share of young single adults now increases profoundly, as about 50% of the poor in Denmark and Norway are young single adults. In Sweden their share is also high, as is the role of immigrants, as 25% of the poor in Sweden are immigrants, most of them born outside Europe. In all the other countries the role of immigrant poverty is smaller than in Sweden.

In analyses of poverty amongst immigrants, different factors (eg illegal migration) may weaken the comparability across countries. Likewise, patterns of childhood home-leaving behaviour also differ from country to country, with the differences possibly influencing our results on young single adults. In the Nordic countries children tend to leave the parental home earlier (Isoniemi, 2009), many when starting vocational education. Comparatively generous study allowances makes this home-leaving possible. As a further sensitivity test we therefore analysed young single adults, separating students from others, but the result did not change. Both groups had poor positions in the Nordic countries.

### **Poverty persistency**

This section examines the persistence of poverty, defining those with incomes below 60% of median income in 2008 and in at least one of the two preceding years as persistently poor (Atkinson et al, 2002). To calculate this measure, we utilize the panel in the EU-SILC.

As we need longitudinal data for three consecutive years, we must use the EU-SILC 2008 longitudinal data set, which unfortunately entails some restrictions on both which countries we can include and which risk groups we are able to construct. In comparison with our earlier cross-sectional analysis of the EU-SILC, we are forced to exclude Denmark, Germany and Iceland from this analysis, as they are not included in the longitudinal part of the 2008 wave of the EU-SILC. Moreover, as the analysis is restricted to the following subgroups – children, young adults, and elderly – the only ‘new’ risk group included is young adults.

Table 3 reports the persistence of poverty both aggregately and separately among these groups. The Nordic countries show a distinct pattern of comparatively low rates for the persistence of poverty among children, with slightly higher rates in Finland than in Norway and Sweden. However, the Netherlands is the most successful at combating persistent child poverty, whilst the Italian child poverty persistence rate is more than four times greater than that of Norway and Sweden. The UK rate is also markedly higher than those for the Nordic countries.

TABLE 3 ABOUT HERE

Poverty persistency rates among the elderly are also lowest in the Netherlands, followed closely by Sweden and Norway. The Finnish rate is higher, and the highest rates are in Italy and the UK. The exception of Finland in the Nordic cluster reported in Table 1 with regard to the risk of poverty among the elderly is thus repeated here.

For young adults Sweden and the Netherlands have comparably low rates, with slightly higher rates in Finland and Norway. The UK has about the same rate as those of Finland and Norway, while Italy's is much higher. Thus the high poverty rates among young single adults in the Nordic countries (table 1) are not repeated here. Even though young people in the Nordic countries run a higher risk for low income in one single year (table 1), the chance of their escaping that situation appears greater, especially in Sweden. However, the Dutch situation, with low risks both for entering and for remaining in poverty, is clearly a better achievement. In contrast, Italy shows a comparably low risk rate among young single adults whilst showing the highest persistency rates for young adults. While this finding could indicate that a high risk of being *trapped* in poverty is higher in Italy, the groups are not perfectly comparable, in that unlike Table 1, Table 3 cannot identify young *single* adults. Because young Italians in general tend to remain at home longer than young adults in most other countries (eg Rossi, 1997), the groups of young adults and young single adults might differ significantly in Italy.

The far right column of Table 3 presents the overall poverty persistence rates. We find a low risk cluster for Norway, Sweden, the Netherlands and (to some extent) Finland, whilst the UK and Italy lag behind.

When we use the 50% poverty threshold, the pattern remains fairly stable, although of course at a lower level. The only substantial deviation from the results in Table 3 is that the poverty persistency rate among the elderly in Finland comes closer to that in Norway, the Netherlands and Sweden.

The overall impression from Table 3 as compared to Table 1 is that the Nordic countries fare much better than the other countries in terms of a more severe state of poverty. Again the Finnish poverty rate among the elderly deviates from the Nordic cluster, and the Netherlands stands out as in the most successful at combating poverty among both old and new risk

groups. The Nordic countries do not appear as a family of their own when it comes to poverty among young adults, as the UK fares as well as Finland and Norway. The Netherlands and Sweden do less well, with Italy standing out as the worst performing country in this respect among those in Table 3. For the old risk groups, children and the elderly, the Nordic countries appear more as a family of their own – but only if the Netherlands is included.

### **Concluding discussion**

Discussions of the Nordic model and its differences from other countries or welfare state types often focus on historical similarities, institutional arrangements (in relation to either social or labour market policies). This chapter instead examined *outcomes* both in terms of distributions of income and in terms of poverty. Although welfare state schemes at best fulfil many needs, the issue of poverty has always been at the root of welfare state activities.

A relatively equal distribution of income and comparatively low poverty have long been regarded as central dimensions of the Nordic model. Therefore, our research questions was embedded in the overall topic of whether the Nordic countries constitute a family of their own in terms of income inequality and poverty. To answer such a question, we needed an eclectic approach that allowed us to study income inequality and particularly poverty from several different angles and perspectives. Our findings, which we discuss here, are as follows:

The Nordic countries have definitely not been immune to the overall surge in income inequality in many countries around the globe. Not only do the Nordic income inequality trends have some commonalities with other Western countries but in particular we note a marked increase of income inequality from around the mid-1990s in all five Nordic countries. Nonetheless, our comparison of income distribution statistics across the Western world in the mid-2000s shows that the Nordic countries still have lower income inequality, albeit less distinctly so than in earlier decades.



In our title we framed the study in terms of whether or not the Nordic countries belong to one family of nations. Looking at both income inequality and relative poverty rates, we find no evidence to refute such a claim. Some of our admittedly crude indicators on cross-national variation suggest a greater similarity within the Nordic family of nations than earlier.

For poverty trends in the Nordic countries, a clear increase is evident in Finland. Finland also deviates from the Nordic cluster in the cross-sectional case because the poverty risk among the elderly in Finland is significantly higher. Otherwise, the cross-sectional analysis shows that the Nordic countries manage well at combating poverty risks among the traditional risk groups. However, when we look at the new risk groups – immigrants and young single adults – a completely different picture emerges. Poverty risks among immigrants born outside the EU are fairly similar in all the countries we study, that is the Nordic countries fare neither better nor worse for this subgroup. For young single adults the Nordic countries perform even worse than the others, and in Denmark the poverty risk for this group is particularly high. In all the countries the new risks challenge social policies – a finding particularly evident in the Nordic countries.

In contrast, our analysis of poverty persistency – defined as being poor in the latest year and in at least of the two preceding years – showed that the Nordic countries overall perform better than most countries, especially for young adults. Nonetheless, the Netherlands outperform the Nordic countries in that the rate of poverty persistency is lower in the Netherlands.

But what about our results relative to the overall issue of the ‘Nordic family’? In so far as Iceland is concerned, it belongs to the Nordic region but not to the Nordic model. As Ólafsson (2005) states, while Iceland shared some commonalities with the other Nordic countries in the early post-war period, it then began deviating in many respects. Thus whilst

the Icelandic experience is of great interest in its own right, we cannot take its experience as proof of whether or not the Nordic model is falling apart.

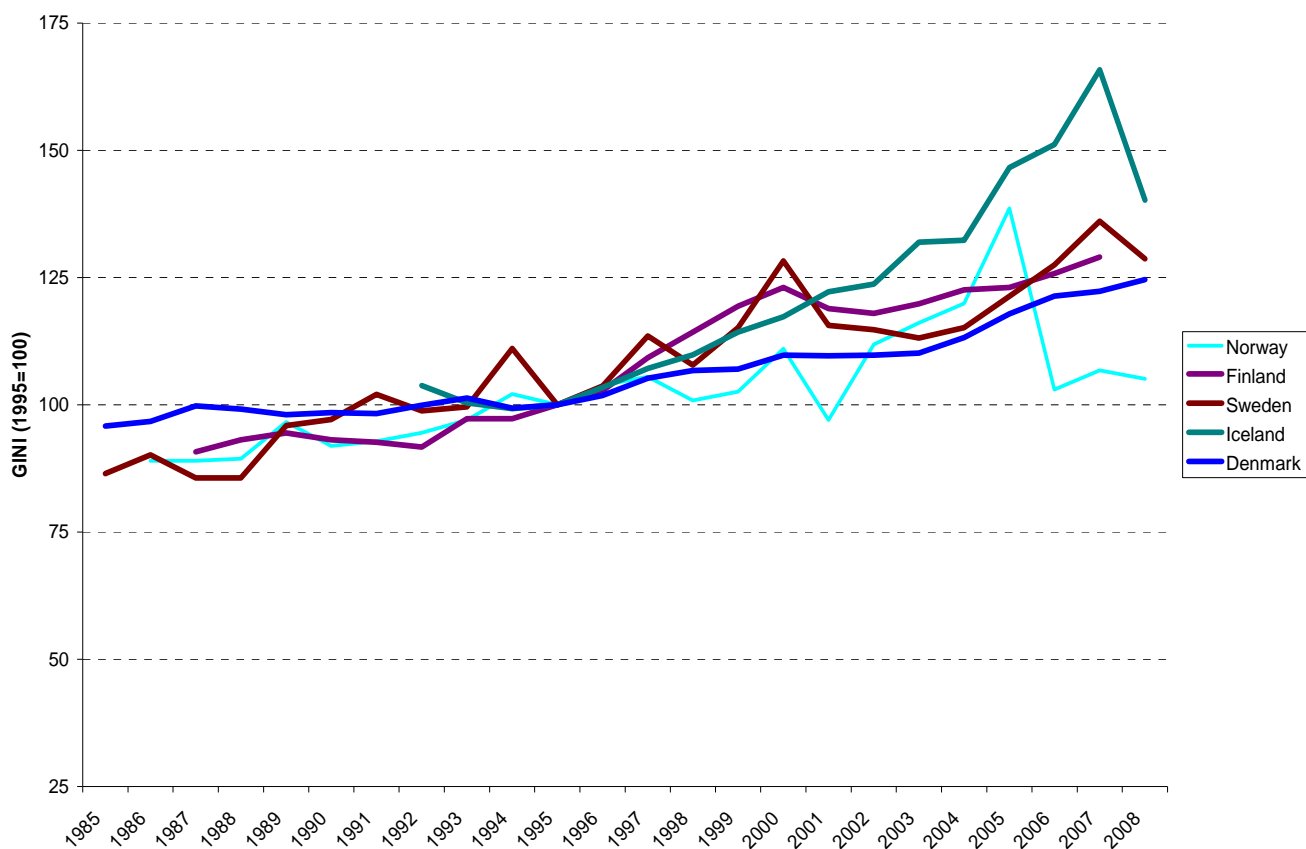
Our three questions were, first, whether our analysis supports the belief that the Nordic countries are a family of their own through being very similar in terms of poverty and income inequality. Second, we asked whether the Nordic countries deviate – for the dimensions we study – from other relatively wealthy Western countries to a higher or lower degree than in earlier decades. Third, we asked whether the results are congruent with the usual characteristics of the Nordic model, that is basically low income inequality and low poverty rates.

As to the first question ('family' or not?), the outcomes show a high degree of similarity. Thus income inequality has increased in the Nordic countries, especially from the mid-1990s – a difference from many other countries. Poverty rates according to the LIS are very similar, even more so than earlier, and persistent poverty rates are largely low. Moreover, our analyses of new and old social risk categories also show many similarities. The Nordic countries are largely good performers in alleviating poverty risks among old social risks, but they perform equally poorly or even worse when it comes to new social risks.

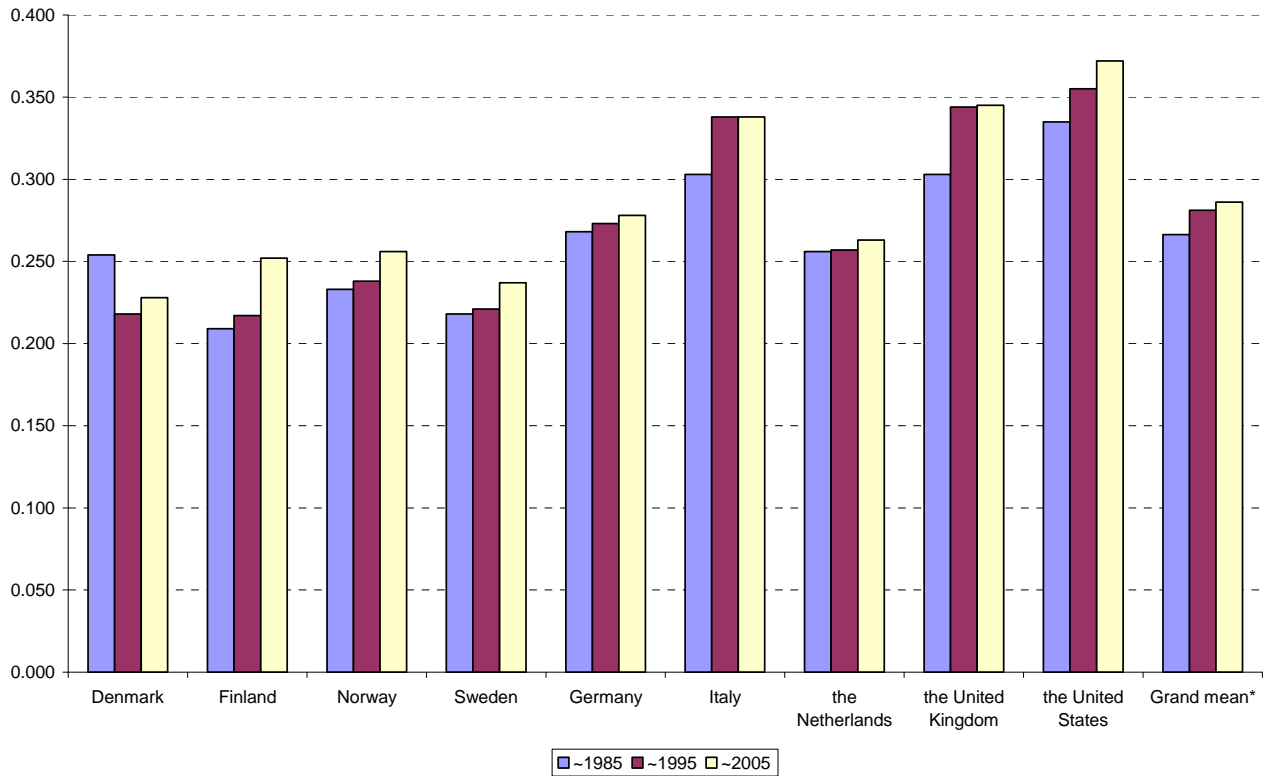
For the second question (more or less like other Western countries?) the Nordic countries still outperform most of the other countries in our analysis. Nonetheless, a look at recent trends and new social risks clearly shows that the Nordic countries are less distinct than they were 10 to 15 years ago. The high 'at risk of poverty' rates among young single adults and immigrants in the Nordic countries are particularly discouraging for advocates of the Nordic model.

The real challenge, however, lies in answering the third question (congruence of results with usual characteristics of the Nordic model?). Income inequality has obviously increased, especially in Finland and Sweden, a result that in itself is at odds with the Nordic model.

Moreover, poverty risks have increased, and that more than 10% of the Nordic populations are living at risk of poverty does not mesh well with the classic features of the Nordic welfare model. Obviously, the fruits of the economic growth of the last two decades have not been as evenly distributed as during the golden age of the welfare state. Perhaps even more troublesome is the situation for the new social risk categories of immigrants and single young adults. Although we can offer many caveats for our admittedly crude analysis of poverty risks, our notable findings about young adults and immigrants definitely differ from – and are indeed at odds with – the characteristics of the universal Nordic model. Such differences, in addition to any continuation of the overall widening of income differentials, will ultimately erode the legitimacy of the Nordic model.



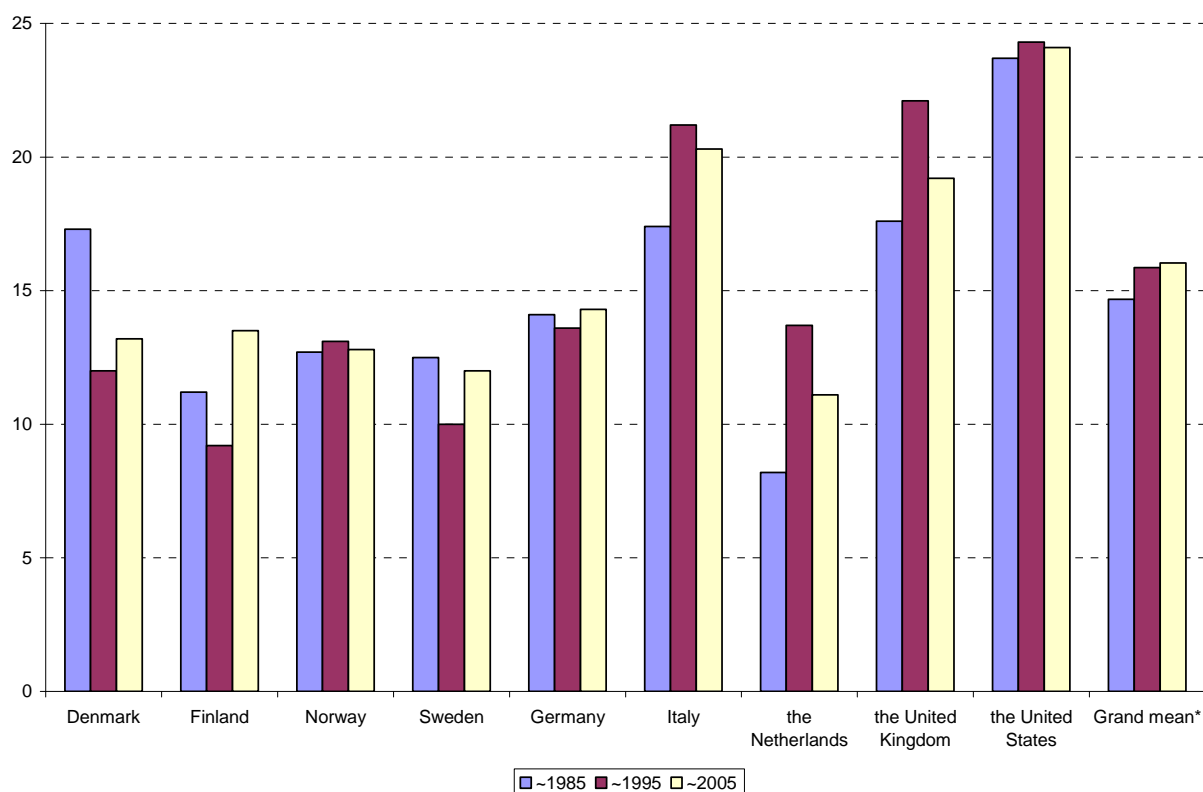
**Figure 1.** Relative changes of income inequality according to the Gini coefficient in the Nordic countries from around 1985 to 2008. The value of the Gini coefficient has been set to 100 in 1995 for each country. Sources: Own calculation of Statistics Finland Income distribution survey; Statistics Sweden, 2010; Olafsson & Kristjansson, 2010; Statistics Denmark, 2011; NOU, 2009.



Cross-national variation: Coefficient of variation					
Nordic countries			All fourteen* countries		
1985	1995	2005	1985	1995	2005
0.086	0.044	0.054	0.156	0.184	0.145

\* Grand mean includes the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Spain, Sweden, the United Kingdom and the United States.

**Figure 2.** Income inequality (Gini coefficient) around 1985, 1995 and 2005, and cross-national variation of these inequality estimates. Source: Luxembourg Income Study



Cross-national variation: Coefficient of variation					
Nordic countries			All fourteen* countries		
1985	1995	2005	1985	1995	2005
0.199	0.162	0.050	0.284	0.306	0.259

\* Grand mean includes the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Spain, Sweden, the United Kingdom and the United States.

**Figure 3.** Relative poverty rates (%) (60 % of median equivalent disposable income) and cross-national variation in these rates, by coefficient of variation around 1985, 1995 and 2005.

Source: Luxembourg Income Study.

**Table 1.** Poverty rates of old and new risk groups in Europe in 2007, %. Source: EU-SILC

	Children <sup>a</sup>	Large families	Single parents	Elderly <sup>b</sup>	Young single adults <sup>c</sup>	Immigrants born inside EU	Immigrants born outside EU	Total population
Denmark	9.4	14.6	16.6	17.0	50.0	23.9	24.7	11.7
Finland	9.8	11.3	22.5	21.1	38.2	15.0	34.8	12.9
Iceland	12.4	10.6	17.6	14.5	29.7	-	-	9.9
Norway	11.3	7.1	26.2	14.2	43.3	13.9	27.4	12.4
Sweden	11.3	12.8	22.6	11.2	38.3	14.2	28.1	10.8
Nordic mean	10.8	11.3	21.1	15.6	39.9	16.8	28.8	11.5
Germany	13.7	10.6	31.6	16.9	39.8	- <sup>d</sup>	- <sup>d</sup>	15.2
Italy	25.4	40.8	29.2	21.7	24.5	27.0	29.5	19.8
the NL	14.2	17.7	22.8	10.1	24.7	9.8	23.0	10.2
the UK	23.3	30.0	40.7	30.0	18.0	26.0	24.8	19.1
EU 17 mean	16.7	28.1	28.1	18.8	26.9	18.3	27.9	14.8

a) 16 years of age and younger

b) 65 years of age and older

c) 17-34 years of age

d) data not available

**Table 2.** Poverty profiles of old and new risk groups in Europe in 2007, %. Source: EU-SILC

	Children <sup>a</sup>	Large families	Single parents	Elderly <sup>b</sup>	Young single adults <sup>c</sup>	Immigrants born inside EU	Immigrants born outside EU
Denmark	16,1	6,5	6,1	28,6	25,4	2,7	6,6
Finland	14,2	5,5	5,5	32,9	12,5	1,3	3,9
Iceland	29,2	10,3	8,8	24,6	7,6	-	-
Norway	19,2	3,7	11,5	21,9	24,5	2,5	8,0
Sweden	21,3	6,8	9,5	23,2	17,5	4,9	14,9
Nordic mean	20,0	6,6	8,3	26,2	17,5	2,9	8,4
Germany	13,7	2,6	8,4	26,6	8,0	- <sup>d</sup>	- <sup>d</sup>
Italy	20,2	6,8	3,2	28,4	0,8	1,2	6,3
the NL	27,9	13,3	6,7	20,2	9,1	1,2	7,9
the UK	24,2	6,7	8,6	32,6	1,4	1,4	10,2
EU 17 mean	21,2	7,5	7,3	26,1	7,5	4,8	8,7

a) 16 years of age and younger

b) 65 years of age and older

c) 17-34 years of age

d) data not available



**Table 3.** Poverty persistency 2008\*. Source: EU-SILC.

	Children**	Old age***	Young adults <sup>†</sup>	Total
Finland	5.7	14.3	8.6	7.5
Norway	3.9	6.2	11.0	5.0
Sweden	4.2	4.7	5.3	3.8
Italy	17.6	18.0	14.3	14.5
Netherlands	2.8	4.0	3.1	2.4
UK	15.2	21.1	9.6	12.6
EU-10 <sup>††</sup>	13.1	13.8	10.2	11.0

\* Below 60 % of median disposable income in 2008 and in at least one of the two preceding years

\*\* ≤ 16 years of age in 2008

\*\*\* ≥ 68 years of age in 2008

<sup>†</sup> 18-34 years of age in 2008

<sup>††</sup> Finland, Norway, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, the UK.

## References

- Aaberge, R, Atkinson, A.B. (2008) Top Incomes in Norway, Discussion Paper 552, Oslo: Statistics Norway.
- Abrahamsson, P. (1999) 'The welfare modelling business', *Social Policy & Administration*, vol 33, pp 394-415.
- Airio, I. (2008) Change of Norm? In-Work Poverty in a Comparative Perspective. Studies in social security and health no. 92. The Social Insurance Institution Finland.
- Atkinson, A.B. (1970) 'On the Measurement of Inequality', *Journal of Economic Theory*, vol 2, pp 244-263.
- Atkinson, T., Cantillon, B., Marlier, E., Nolan, B. (2002) *Social Indicators. The EU and Social Inclusion*. Oxford: Oxford University Press.
- Atkinson, A.B., Piketty, T. (eds.) (2007) *Top incomes over the twentieth century: A contrast between Continental European and English-speaking countries*, Oxford: Oxford University Press.
- Atkinson, A.B., Rainwater, L., Smeeding, T.M. (1995) *Income Distribution in OECD Countries*. OECD Social Policy Studies No. 18. Paris: OECD
- Bäckman, O. (2009) 'Institutions, Structures and Poverty. A Comparative Study of 16 Countries, 1980-2000', *European Sociological Review*, vol 25, pp 251-264.
- Brandolini A, Smeeding TM (2007). Inequality Patterns in Western-Type Democracies: Cross-Country Differences and Time Changes. Luxembourg Income Study, Working Papers, No. 458.
- Danziger, S., Ratner, D. (2010). 'Labour market outcomes and the transition to adulthood', *The Future of Children*, vol 20, pp 133-158.
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Cambridge: Polity Press.
- Eurostat (2010), Statistics in focus 9/2010. Population and social conditions, Eurostat: Luxembourg.
- Ferrera, M. (1996) "The 'southern model' of welfare in social Europe", *Journal of European Social Policy*, vol 6, pp 17-37.

- Fritzell, J. (2001) 'Still different? Income distribution in the Nordic Countries in a European Comparison', in Kautto, M., J. Fritzell, B. Hvinden, J. Kvist and H. Uusitalo (eds.) *Nordic Welfare States in the European Context*. London: Routledge, pp 18-41.
- Fritzell, J., Ritakallio, V-M. (2010) 'Societal shifts and changed patterns of poverty', *International Journal of Social Welfare* vol 19, pp S25-S41.
- Hills, J, Brewer M, Jenkins S, Lister R, Lupton R, Machin S, et al. (2010) *An Anatomy of Economic Inequality in the UK*. Report of the National Equality Panel, London: CASE.
- Isoniemi, H. (2009) The role of economic factors in young adults' home leaving process. A comparative longitudinal analysis of ECHP data, in Koistinen, P. & Mosesdottier, L. & Serrano Pascual, A. (eds.) *Emerging Systems of Work and Welfare*. Brussels: Peter Lang, pp 255-73.
- Jäntti, M, Danziger S (2000). Income poverty in advanced countries. In: Atkinson AB, Bourguignon F, eds. *Handbook of Income distribution*. North Holland: Elsevier.
- Kangas, O. Palme J (2000). 'Does Social Policy Matter? Poverty Cycles in the OECD Countries.' *International Journal of Health Services*, vol 30, pp 335–352.
- Kangas, O., Ritakallio V-M. (1998). 'Different Methods - Different Results. Approaches to Multidimensional Poverty', in Andress, H-J (ed), *Empirical Poverty Research in a Comparative Perspective*. Ashgate, Aldershot, pp 167-203.
- Kautto, M. (2000), *Two of a Kind? Economic crises, policy responses and well-being during the 1990s in Sweden and Finland*, Report to the Swedish Welfare Commission (Kommitté Valfärdsbokslut), SOU 2000: 83, Stockholm: Fritzes.
- Kautto, M., Heikkilä, M., Hvinden, B., Marklund, S., Ploug, N. (eds.) (1999) *Nordic Social Policy: changing welfare states*. London: Routledge.
- Kildal, N. and Kuhnle, S (eds) (2005) *Normative Foundations of the Welfare State: The Nordic Experience*, London: Routledge.
- NOU 2009:10 *Fordelningsutvalget*, Oslo: Departementenes Servicesenter.

- OECD (2008) *Growing Unequal? Income Distribution and Poverty in OECD Countries*. Paris: OECD.
- Ólafsson, S. (2005) 'Normative foundations of the Icelandic welfare state: on the gradual erosion of citizenship-based welfare rights', in N. Kildal and S. Kuhnle (eds.) *Normative Foundations of the Welfare State: The Nordic Experience*, London: Routledge, pp 214-236.
- Ólafsson, S., Kristjansson, A.S. (2010) 'Income Inequality in a Bubble Economy – The Case of Iceland 1992-2008', presented at the LIS Conference 2010, University of Iceland.
- Palme, J., Bergmark, Å., Bäckman, O., Estrada, F., Fritzell, J., Lundberg O. et al, (2002) 'Welfare trends in Sweden: balancing the books for the 1990s', *Journal of European Social Policy*, vol 12, pp 329-34.
- Pena-Casas, R., Latta, M. (2004) *Working Poor in the European Union*. European Foundation for Improvement of Living and Working Conditions, Dublin.
- Riihelä, M., R. Sullström, Suoniemi, I. (2008), Tax progressivity and recent evolution of the Finnish income inequality. Helsinki: Labour Institute for Economic Research, Working papers, 264.
- Ritakallio, V-M. (2002) 'Trends of Poverty and Income Inequality in Cross-National Comparison'. *European Journal of Social Security*, vol 4, pp 151-177.
- Rossi, G. (1997), 'The Nestlings. Why Young Adults Stay at Home Longer: The Italian Case', *Journal of Family Issues*, vol 18, pp 627-644.
- Rowntree S (1901). *Poverty: A Study of Town Life*. London, Macmillan.
- Ruggeri Laderchi, C., Saith, R., Stewart, F. (2003). 'Does it matter that we don't agree on the definition of poverty? A comparison of four approaches', *Queen Elizabeth House Working Paper Series 107*, Oxford: University of Oxford.
- Statistics Sweden (2010). *Inkomstfördelningsundersökningen 2008*. Statistiska meddelanden HE21SM1001, Örebro: Statistics Sweden.

- Sørensen, P. B. (1994) 'From the Global Income Tax to the Dual Income Tax', *International Tax and Public Finance*, vol 1, pp 57-80.
- Taylor-Gooby, P. (2004) 'New Risks and Social Change', in Taylor-Gooby, P. (ed.) (2004) *New Risks, New Welfare The Transformation of the European Welfare State*. Oxford: Oxford University Press, pp 1-28.
- Timonen, V. (2004) 'New Risks – Are They still New for the Nordic Welfare States?', in Taylor-Gooby, P. (ed.) (2004) *New Risks, New Welfare The Transformation of the European Welfare State*. Oxford: Oxford University Press, pp 83-110.
- Titmuss, R. M. (1974) *Social policy: An introduction*. New York: Pantheon Books.
- U.S. Census Bureau (2010), *Income, Poverty, and Health Insurance Coverage in the United States: 2009*. Current Population Reports, P60-238. *Washington*: U.S. Government Printing Office.