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INCREASING INCOME INEQUALITY in the Nordics

Nordic Economic Policy Review 2018

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Rolf Aaberge, Christophe André, Anne Boschini, Lars Calmfors, Kristin Gunnarsson, Mikkel Hermansen, Audun Langørgen, Petter Lindgren, Causa Orsetta, Jon Pareliussen, P-O Robling, Jesper Roine, Jakob Egholt Søgaard

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Introduction

Lars Calmfors[1] *and Jesper Roine*[2]

In recent years income distribution issues have received increased attention in most economically advanced countries both in the public debate and in academic circles. This reflects an international trend towards increased income inequality, a trend which has also affected the Nordic countries long associated with far-reaching egalitarian ambitions. As the inequality increases in the Nordics have been among the largest in the OECD area over the past decades, developments here have received particular attention internationally (see, e.g., OECD 2011, OECD 2015 and Morelli et al. 2015). This, in turn, has led to an on-going debate between those who see the rising income disparities as a threat to the Nordic welfare model and those who emphasise that inequality has increased from historically low levels and that the Nordics still remain among the countries with the most even income distribution.

The inequality debate is sometimes difficult to follow for a very simple reason: it is not always specified what kind of inequality is referred to. Typically it is even less clear exactly which mechanisms that are thought to be at work when statements about negative (or positive) consequences of inequality are made. Inequality is a genuinely complex and multidimensional concept. There is no one obvious measure that would capture the "true inequality" in society.

Should we, for example, care more about inequality in income or in wealth or in consumption, or perhaps in some other dimension? Should we consider inequality between households or individuals or perhaps some other division of the population? Does it matter if inequality is driven by the poor falling behind or the rich becoming even richer? Should we measure income inequality at a fixed point in time or consider lifetime incomes? To further complicate matters, consequences of income inequality

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take on many forms, over different time spans and, importantly, they also interact with how society is organised. In particular, depending on the role of government in providing different goods and services, the link between disposable income and well-being may be very different.

This issue of the *Nordic Economic Policy Review* brings together a number of contributions dealing with various aspects of inequality in the four countries of Denmark, Finland, Norway and Sweden. Throughout, the articles focus on cross-sectional *yearly* data on *income* inequality between *individuals.* The income concept, however, varies both between and within the different papers. The analysis sometimes focuses on earnings or total market incomes before taxes and transfers, sometimes on equivalised disposable incomes (incomes after taxes and transfers taking household size into account) and sometimes even on extended income also considering public in-kind transfers. Recurring themes in the papers are how inequality may differ across these dimensions, how such differences may give important information about what causes changes in inequality, but also – somewhat paradoxically – how *trends* in inequality often look similar regardless of what measures are used: individual top income shares before taxes and transfers, Gini coefficients for (conventional or extended) equivalised disposable incomes or relative poverty rates using the same income measures. Another finding is that, while there are many similarities in general inequality trends as well as in levels among the Nordic countries, there are also often important differences, highlighting the importance of individual country studies.

The articles in the volume

The volume contains five papers with associated comments which were originally delivered at a conference in Copenhagen on 26 October 2017.

The Nordics in an international perspective

The first article by *Jon Pareliussen, Mikkel Hermansen, Christophe André and Orsetta Causa* gives an international perspective on the inequality developments in the Nordic countries. The authors show how inequality, as measured by equivalised disposable incomes, has indeed increased substantially in the Nordic countries since the early 1990s, especially in Sweden and Finland. But it is also pointed out that inequality levels were historically very low in the 1980s and that the levels remain below the OECD average.

The paper emphasises that inequality increases have been driven by other factors in the Nordic countries than in the U.S. and other Anglo-Saxon countries. There, large increases in the dispersion of earnings and market incomes have taken place, probably caused to a large extent by skill-biased technological change and globalisation. This has not been the case in the Nordics. Tendencies towards increased wage dispersion have been relatively weak. This can be explained by strong trade unions and collective bargaining institutions, and education systems which have expanded the supply of skilled labour. Large increases in employment have also helped counteract tendencies towards increased dispersion of market incomes (see, e.g., Barth and Moene 2013).

Pareliussen and his coauthors instead stress weakened redistribution as a major cause of the increased dispersion of disposable incomes (especially in the lower end of the income distribution). Such weaker redistribution is partly an automatic consequence of the strong employment rise since the early 1990s (in Denmark, Finland and Sweden), but the reduction in redistribution is larger than can be explained by this mechanical effect. It is mainly associated with reductions in redistributive cash transfers, in particular unemployment and sickness benefits. These reductions may, however, have contributed to the favourable employment developments through strengthening of work incentives.

In addition, higher, and more unevenly distributed capital incomes, have been of large importance, especially for the widening of the income distribution at the top. Finally, demographic factors have contributed to the increase in measured income inequality in all the four Nordic countries studied.

Top-income shares

One of the reasons for the increased inequality identified by Pareliussen and his coauthors, the increased income share going to top earners, is the topic of the paper by *Jacob Søgaard*. The development of top incomes has received a lot of interest in recent years, especially after the publication of Thomas Piketty's (2014) *Capital in the Twenty-First Century.* Søgaard surveys the strand of research – the so called top-income literature – that underlies much of this debate. This literature focuses on taxable income, which makes it possible to construct long time series for incomes of high-income earners, since tax records for them are often available since the beginning of the twentieth century.

Historically, it appears that overall disposable income inequality and top-income shares have usually moved in the same direction. This is also the case in the Nordic countries where both the Gini coefficients (for disposable incomes) and the shares of (taxable) income going to the top one percent of the income distribution have both increased since the 1980s. The increases in the top income share have been smaller than in the U.S. and other Anglo-Saxon countries, but they still account for 2–3 percentage points of the increase in the Gini, which is a substantial contribution.

Søgaard shows that higher capital incomes for the top one per cent are an important reason for the increase in the share of total incomes going to this group in Finland and Sweden, whereas this is not the case in Denmark and Norway. An important point made in the paper is that a change in the composition of capital incomes for top income earners may also have been important for the rises in top income shares. Søgaard documents how the share of dividends in capital income has increased in the Nordics at the expense of interest income. Since dividends are much more concentrated to the top one per cent group than interest income, this has increased the group's share of total incomes. The article finds support for this hypothesis especially for Finland and Norway, but also for Sweden for the period after 1995.

Gender inequality

Anne Boschini and Kristin Gunnarsson study another dimension of inequality that has also received much attention in recent years: that between men and women. This is an aspect where the Nordic countries are also often seen as global leaders, typically coming out on top in various rankings. Conventional analysis of income distribution assumes that incomes are split equally among the members of a household. However, to the extent that this is not true (and consumption levels of individual household members are instead linked to who earned the income), it is also relevant to measure inequality at the individual instead of at the household level.

Boschini and Gunnarsson discuss the relationship between aspects of the Nordic welfare state and gender, and then study how this dimension of inequality has developed over the period when overall inequality has increased. They find that, while overall gender inequality has decreased, there still remains inequality between men and women at all levels of the income distribution. Labour income differences between men and women follow a U-pattern with the largest differences at the bottom and the top of the distribution. In terms of disposable incomes, the differences are largest at the top. The authors also document that inequality in disposable income is smaller among women than among men in all the four studied Nordic countries.

The article also decomposes the changes in the overall income distribution into a within-gender and a between-genders effect. For labour income the between-genders effect tends to reduce overall inequality, whereas the within-gender effect tends to reduce it in the four Nordic countries studied. The between-genders effect also works in the direction of reduced disposable income inequality in the four countries, whereas the within-gender effect varies among them.

Finally, Boschini and Gunnarsson note that the representation of women in the very top income groups has increased over time, but remains far from equal. Interestingly, they point to the fact that in an international comparison the Nordic countries have fewer women in the very top of the income distribution than countries that we typically consider less gender equal. This points to the possibility that some aspects of the Nordic model may contribute negatively to women's possibilities to reach the economic elite.

Demographic changes

The study of gender and the potential changes in inequality that may result from differences in how men and women sort into different households illustrates a more general point: the composition of the population matters for income distribution. There are many dimensions of this: how large a share of the population belongs to different age groups, how many are students, how many are immigrants, etc. The impact of such compositional changes on measures of inequality is the topic of the contribution by *Jon Pareliussen and Per Olof Robling*.

By trying to answer the counterfactual question "What would be the level of inequality if the structure of the population was unchanged (at the level of the starting year) but everything else was as today?" the authors analyse the contribution of such compositional changes to the rise of inequality. The finding is that a significant part of the increased inequality in the Nordic countries is a result of changes in the population structure. In general, an older population and more single households are the most important factors, but there are also important differences across countries.

Interestingly, the contribution from immigration is relatively modest according to the analysis. It should be emphasised, however, that data do not cover the most recent immigration wave and also that the method used does not directly take into account heterogeneity in the immigrant group (with an increasing share of low-educated non-European immigrants over time). When trying to consider this, the impact is larger (especially in Norway and Sweden), although still surprisingly small. This raises methodological questions for future research.

Public consumption

An important feature (some would say the most important feature) of the Nordic welfare model is the generous provision of welfare services at low or zero cost to the individual. This obviously has an impact on the link between individual disposable income and individual well-being. How does the picture of inequality and poverty change if we include (the value of) these government-provided services in the measures used? This is the question posed in the article by *Rolf Aaberge, Audun Langørgen and Petter Lindgren*.

Relying om methods previously developed by the authors themselves they add the value of public services (such as child care services, education and health care) according to how these services are used depending on household characteristics and age, and recalculate measures of inequality and poverty across OECD countries using this extended income measure. Inequality and relative poverty levels are substantially reduced when adding these services. The effects are broadly similar among the OECD countries studied, implying that the inequality rankings remain more or less the same.

However, when looking at the impact for different groups the importance of this perspective becomes very clear. Standard measures of inequality, using unadjusted equivalised disposable income, underestimate the relative living standards for some groups while overestimating them for others. Relative poverty rates are not much affected among childless single adults by taking the provision of welfare services into account, whereas there are substantial reductions among single adults with children and elderly households. The results highlight the importance of this kind of analysis before singling out certain groups as particularly disadvantaged.

Possible policy conclusions

The authors in the volume are cautious regarding policy conclusions. The focus is mainly on documenting and explaining how inequality has developed rather than on prescribing various policy measures to influence the income distribution. This is understandable given the importance that subjective value judgements must play when assessing inequality and the various goal conflicts involved in any policy to affect it. These problems are likely to be much more important for income distribution policy than for other policies such as stabilisation, employment or growth policies, although they exist there as well.

No recommendations regarding income distribution policies can be given in the context of the Nordic countries without taking a stand on the degree of inequality in the 1980s. It is not necessarily the case that the increase in equality since then should be regarded as a problem. One could have the opinion that the *level* of income equalisation was then excessive in the Nordics, giving too weak incentives for employment, effort, growth, etc. Or one could have the view that it is instead the *increase* in inequality over the last three decades that is excessive. The conclusion depends on political preferences. We do not take a stand on these issues. Instead, we give some *conditional* policy recommendations. *If* one wants to counteract the increase in income inequality that has occurred in the Nordic countries and counterbalance further developments in this direction, what conclusions can be drawn on the basis of the analyses in this volume?

We draw six such policy conclusions:

1. Less redistribution has been an important cause of more relative poverty in the Nordics. This has been a consequence mainly of a reduction in redistributive cash transfers following from a slow up-rating of such benefits in line with wages. Reductions in unemployment benefit and sickness benefit replacement rates have strengthened the incentives for employment, but the overall effects are likely to have increased inequality. If one wants to prioritise equity objectives, it is important to prevent further downward slides in benefit replacement ratios. This could involve difficult trade-offs with efficiency objectives. Such trade-offs are, of course, less severe with general cash transfers not directly linked to non-activity, such as child or housing allowances. Although lack of indexation of various social benefits to wages may be advantageous from the point of view of long-run fiscal

sustainability, it may be problematic for income distribution developments (see, e.g., Swedish Fiscal Policy Council 2011).

2. Public in-kind transfers through the provision of government welfare services at low or zero costs have been shown to decrease income inequality substantially. At the same time, there is an ongoing discussion on the long-run sustainability of public finances against the background of an ageing population and (likely) increased demand for welfare services as incomes grow (the Wagner effect; see, e.g. Bergh 2016 and *Ekonomiska vårpropositionen 2017*). It is often argued that this will put public finances under increased strain and that more welfare services must therefore in the future be financed through user charges. According to the analysis in the volume, such changes are likely to have large inequality-increasing effects. They should be avoided if one places a large weight on income distribution objectives.
3. Pensions are generally lower than incomes from work. An ageing population will therefore tend to increase income inequality as measured by the distribution of yearly incomes. It is not obvious that this should be seen as a problem as lower pensions relative to work incomes do not change the distribution of lifetime incomes. At the same time, we know, at least from Sweden, that income inequality is larger among pensioners than in the rest of the population (see *Ekonomiska vårpropositionen 2017)*. Indexation of the retirement age to longevity might be a way of mitigating problems with very low pensions, although, of course, other trade-offs will be involved. In addition, for pensioners the generous provision of public in-kind transfers makes an important contribution to reducing negative welfare consequences from having low cash income, as discussed above. Maintaining the level and quality of these in-kind transfers may be at least as important as reducing income inequality for this group.
4. Increased top-income shares have made significant contributions to the overall increase in income inequality in the Nordic countries. The cause has been a larger importance of capital incomes, which are more unevenly distributed than labour incomes, and a widened distribution of capital incomes. If one wants to counteract the increase in the top-income share, this would seem to require changes in the taxation of capital income and wealth. The tax reforms in the 1990s in the Nordics involved the introduction of dual income tax systems with lower (nominal) tax rates for capital income than for labour income. Effective tax

rates on real (inflation-adjusted) capital incomes have subsequently fallen through lower inflation. Corporate tax rates have been decreased. Inheritance and wealth taxes have been abolished or reduced. Current real estate taxes are low in all the Nordic countries. It follows that changes in these various taxes should be contemplated if one wants to counteract the increases in top income shares. This may indeed be quite important if one wants to promote social mobility, as inherited wealth may lower such mobility. In addition, the introduction of the dual tax system (and other related tax rules) have created incentives to convert labour income into capital income (see, e.g., Pirttilä and Selin 2011, and Alstadsæter and Jacob 2016). Restricting the possibilities to do this would likely contribute to a more even income distribution.

When contemplating changes in wealth taxation, and especially real estate taxation, it is, important to consider the "cash-flow restriction" of households. The increases in asset values (in particular real estate values) imply that many households have substantial wealth, whereas their income flow consists mainly of labour income (often taxed at a high marginal rate). Taxing assets more heavily, including in particular housing, may therefore force sales of assets in a disruptive way. If the balance is shifted from taxation of labour income to taxation of capital, these risks need to be addressed.

5. Education and training efforts (including for adults) may be crucial for the integration of immigrants in the labour market and this way help alleviate poverty among this group. Successful education efforts have the advantage that they can alleviate potential equity-efficiency trade-offs by contributing both to growth through investment in human capital and to decreased inequality (to the extent that they target weak groups and are efficient). Education policy is not, however, likely to have much effect on top-income shares, since they are not strongly related to differences in education (see, e.g. Björklund et al. 2013).
6. Finally, the analysis of gender aspects of income distribution in the volume suggests that policies reducing gender differences are likely also to contribute to reductions in overall income inequality. The analysis also points to the possibility that some features common to the Nordic welfare states may have adverse effects on the possibilities for women to reach the top of the distribution. Research shows that much of remaining gender differences relate to women having children (see, e.g., Angelov and Karimi 2012, and Kleven et al. 2018).

Policies that reduce these "child penalties" for women are likely to reduce the gender gap. Such policies could, for example, include making parental leave less generous (thereby lowering employers' expectations of career disruptions) or equalising (expected) parental leave between men and women by dividing these rights more equally between the parents.

The above items do not necessarily represent policy recommendations as income distribution goals must be weighed against other objectives relating to, for example, incentives for innovation, entrepreneurship and (human and real) capital investment, employment and fiscal sustainability. But the options should be considered if one wants to put more emphasis on equity goals than has been the case recently.

References

Angelov, N. and Karimi, A. (2012). Mothers' Income Recovery after Childbearing. IFAU Working Paper 2012:20.

Alstadsæter, A. and Jacob, M. (2016), Dividend Taxes and Income Shifting. *Scandinavian Journal of Economics*, 118, 693–717. doi:10.1111/sjoe.12148

Barth, E. and Moene, K. (2013), Why Do Small Open Economies Have Such Small Wage Differentials?, *Nordic Economic Policy Review*, 139–171.

Bergh, A. (2016), The Future of Welfare Services: How Worried Should We Be About Baumol, Wagner and Ageing? *Nordic Economic Policy Review*, 197–218.

Björklund, A., Roine, J. and Waldenström. D. (2012), Intergenerational Top Income Mobility in Sweden: Capitalist Dynasties in the Land of Equal Opportunity?, *Journal of Public Economics*, 96(5–6), 474–484.

Ekonomiska vårpropositionen 2017, Regeringens proposition 2016/17:100, Sveriges Riksdag, Stockholm.

Kleven, H., Landais, C. and Søgaard, J.E. (2018), Children and Gender Inequality: Evidence from Denmark, NBER Working Paper No. 24219.

Morelli, S., Smeeding, T. and Thompson, J. (2015), Post-1970 Trends in Within-Country Inequality and Poverty: Rich and Middle-Income Countries, in Atkinson, A. and Bourguignon, F. (eds.) *Handbook of Income Distribution*, Vol. 2, North-Holland.

OECD (2011), *Divided We Stand: Why Inequality Keeps Rising*, OECD Publishing, Paris, http://dx.doi.org/ 10.1787/9789264119536-en

OECD (2015), *In It Together: Why Less Inequality Benefits All*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264235120-en

Piketty, T. (2014), *Capital in the Twenty-First Century*, Harvard University Press.

Pirttilä, J. and Selin, H. (2011), Income Shifting within a Dual Income Tax System: Evidence from the Finnish Tax Reform of 1993, *Scandinavian Journal of Economics*, 113(1), 120–144.

Swedish Fiscal Policy Council (2011), *Swedish Fiscal Policy*, Stockholm.