The Nordic Income Equality Model in Health Promotion

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We highlight and analyze an important channel for redistribution of income in the Nordic countries, often underemphasized in the scholarly literature that analyze the relationship between income equality and public health. We show how coordinated wage bargaining and solidaristic wage policy lead to wage compression, and thereby to low market income inequality in the Nordic countries. We also show that there are important spillovers between the distribution of wages decided in the labor market and the political support for a universal and comprehensive welfare state. Furthermore, we argue that small differences in income have not only contributed to good public health, but also to good economic performance in the Nordic countries.

1. Introduction

According to the Ottawa Charter (1986), the most important aims of health promotion are to fight inequity and promote health for all citizens by building a healthy public policy. To build a healthy public policy means to address the social determinants of health (Commission on the Social Determinants of Health (CSDH), 2008) such as work, education and health and social services. In a comparative perspective, the Nordic countries have managed to achieve low income inequality (OECD, 2020) and good health profiles in terms of important health indicators such as life expectancy, infant mortality and mental health (Drobnič, Beham, & Präg, 2010; Huijts, Stornes, Eikemo, Bambra, & HiNews, 2017; Eurofound, 2016). The Nordic countries are therefore regarded as rather successful in promoting public health (Marmot, 2018; Raphael, 2014).

Low income inequalities are regarded as prerequisites for good public health (Marmot, 2015; Norwegian Ministry of Health and Care Services, 2006; Wilkinson & Pickett, 2011). For future health promotion, it is important to understand which policies and mechanisms that have contributed to the low income inequality in the Nordic countries, and thereby be aware of political and economic trends challenging the positive equality and health measures seen in the Nordic countries.
The international scholarly literature that has looked at the relationship between equality and public health in the Nordic countries has mostly focused on the welfare state and its role in reducing income and health inequality (e.g. Fosse, Helgesen, Hagen, & Torp, 2018; Raphael, 2014). In this article, we will focus on another key channel for redistribution of income in the Nordic countries; coordinated wage bargaining and solidaristic wage policy.

In the 1950s, equal pay for equal work and equalization of wage differentials was adopted as an important goal of the unions in the Nordic countries. The wage policy was branded under the title “solidaristic wage bargaining”, and over the years, this wage policy has created the most egalitarian distribution of wages among all industrialized countries (Barth et.al. 2014; OECD, 2015; Barth and Moene, 2016).

The aims of this article are to:

1. show that solidaristic wage bargaining has a direct effect on wage compression and an indirect effect related to the support for a comprehensive and universal welfare state.
2. highlight how the institutions that have contributed in producing low inequality in the Nordic countries also have contributed in producing good economic performance.

We will explain these two points in more detail and discuss what we can learn from them. We conclude that a major lesson from the Nordic income equality model is that low income inequality, social security and good public health is possible to achieve without sacrificing economic efficiency and prosperity.

2. Escaping the equality-efficiency trade-off

We start with the last point noted above, that the Nordic countries have managed to combine social equality and good economic performance. The traditional picture of the Nordic model has been one of a generous welfare state offering social protection and delivering publicly provided services such as free health care and education. But the Nordic model has also delivered high levels of prosperity and income growth. The economic growth in the Nordic countries has been on par with, for instance, the US, but without the wide social inequalities that characterizes the American society.

We think this is worth emphasizing, since the traditional wisdom, particularly among economists, is that there is an inherited conflict between equality and efficiency. Redistribution of income from the relatively well-off to the relatively poor distorts market forces and weakens the incentives to innovate, save and work hard – and hence reduce the overall economic pie. But the Nordic experiences
show that this does not apply universally. Equality and efficiency can indeed go hand-in-hand. Table 1 presents data that illustrates this further. Below we will also analyze some of the mechanisms behind the picture that emerge from Table 1.

Table 1 includes the Nordic countries as well as a selection of other European countries and the US. It shows that the Nordic countries have the lowest income inequality of all countries, measured both by the Gini coefficient and the poverty rate. Denmark, Iceland and Norway have the lowest Gini coefficients while Denmark, Finland and Iceland have the lowest poverty rates among all countries. The UK and the US have the highest Gini coefficients, while the US has a particularly high poverty rate.

Table 1: Dimensions of economic and social performance.

<table>
<thead>
<tr>
<th></th>
<th>Gini Coefficient¹</th>
<th>Poverty Rate²</th>
<th>GDP per capita³</th>
<th>GDP per hour worked⁴</th>
<th>Competitiveness⁵</th>
</tr>
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<tr>
<td><strong>Nordic countries</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
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<td>5.5</td>
<td>55 138</td>
<td>122.2</td>
<td>80.6</td>
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<td>6.3</td>
<td>48 248</td>
<td>97.6</td>
<td>80.3</td>
</tr>
<tr>
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<td>5.4</td>
<td>57 453</td>
<td>103.9</td>
<td>74.5</td>
</tr>
<tr>
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<td>0.26</td>
<td>8.4</td>
<td>65 603</td>
<td>131.9</td>
<td>78.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.28</td>
<td>9.3</td>
<td>52 766</td>
<td>102.7</td>
<td>81.7</td>
</tr>
<tr>
<td><strong>Continental Europe</strong></td>
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<td>9.3</td>
<td>52 240</td>
<td>111.8</td>
<td>77.6</td>
</tr>
<tr>
<td>Austria</td>
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<td>9.8</td>
<td>55 529</td>
<td>106.8</td>
<td>76.3</td>
</tr>
<tr>
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<td>9.7</td>
<td>50 442</td>
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<tr>
<td>France</td>
<td>0.29</td>
<td>8.3</td>
<td>45 149</td>
<td>111.5</td>
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</tr>
<tr>
<td>Germany</td>
<td>0.29</td>
<td>10.4</td>
<td>53 752</td>
<td>114.8</td>
<td>82.8</td>
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<tr>
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<td><strong>Southern Europe</strong></td>
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<td>14.0</td>
<td>35 990</td>
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<tr>
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<td>29 592</td>
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<td>Italy</td>
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<td>Portugal</td>
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<td>59.1</td>
<td>70.2</td>
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<td>15.5</td>
<td>39 908</td>
<td>87.6</td>
<td>74.2</td>
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<tr>
<td><strong>UK</strong></td>
<td>0.35</td>
<td>11.1</td>
<td>45 505</td>
<td>88.5</td>
<td>82.0</td>
</tr>
<tr>
<td><strong>USA</strong></td>
<td>0.39</td>
<td>17.8</td>
<td>62 480</td>
<td>115.4</td>
<td>85.6</td>
</tr>
</tbody>
</table>

¹ Gini coefficient, disposable household income distribution. The Gini coefficient can take on values between zero (all households have the same income) or one (all income goes to only one household) (OECD, 2017).
² The number of people (in percent) whose income falls below half the median household income of the total population. OECD, 2017
³ Gross domestic product (GDP) per capita in US dollar, converted to international dollars using purchasing power parity rates (OECD, 2018).
⁴ GDP at current process per hour worked, EU-15 = 100 (Ameco, 2019).
⁵ Measures the microeconomic and macroeconomic foundations of national competitiveness, which is defined as the set of institutions, policies, and factors that determine the level of productivity of a country (World Economic Forum, 2019).
Table 1 also shows that the Nordic countries as a group achieve better results than all the other nations except the US in terms of gross domestic product (GDP) per capita. Labor productivity measured as GDP per hour worked is particularly high in Norway and Denmark, and higher than in all other countries listed in Table 1. This explains why Denmark and Norway together generate a GDP per capita almost on par with that of the US, in spite of working less. The annual labor input per employee in 2018 in Denmark and Norway is 1392 and 1416 hours, respectively, while the corresponding figure in the US is 1786 hours.

Various international organizations regularly compare and rank the competitiveness of countries by constructing an index of several economic factors. The Nordic countries often rank high in these comparisons, as also Table 1 confirms.

Another noticeable characteristic of the Nordic countries is the high degree of organizational and technological change. Figure 1 shows the percentage of employees reporting that they had been subject to substantial organizational and technological changes in their workplace and the percentage of employees reporting that they work with computers, laptops, smartphones, etc. We see that the Nordic countries rank high on both measures. The figure indicates that either because of the high reorganization in the Nordic countries Nordic enterprises have to make use of high-technology equipment, or that Nordic companies making use of high-tech are the ones that survive in the labor market. Regardless of the causal direction, the results indicate that Nordic companies’ use of high-tech, together with reorganization, may be one reason why they are highly competitive in an international perspective.

Figure 1: Organizational change and new technology.

Note: Substantial reorganization is defined as dismissals, reorganization of business units, closing of branch etc. Source: European Working Condition Survey (2015)
To sum up: The experiences of the Nordic countries speak against the traditional economists view that there is a trade-off between efficiency and equality. The Nordic countries are among the richest countries in the world. At the same time, the Nordic countries form a well-defined group when it comes to low income inequality and low poverty rates. What have contributed to this rather extraordinary combination of capitalist dynamics and egalitarian redistribution?

3. Coordinated wage bargaining creates wage compression

As noted, it is difficult to understand the low income inequality in the Nordic countries without an understanding of the highly coordinated wage-setting system in these countries. The union movement in the Nordic countries has always been shaped by an ideal of equality, especially the demand for equal pay for equal work. Trade unions thus try to contribute to reducing wage inequality whenever they have an influence on the determination of wages (Barth et al, 2014). When wage negotiations are carried out at company level, the trade unions compress wages among the employees of each company. When wage negotiations are carried out at the sector level, the trade unions compress wages among the employees of different companies within the same sector. When wage negotiations are carried out at the national level, the trade unions compress wages between companies, sectors and occupational groups – and this has historically been the situation in the Nordic countries. As a result, the Nordics have the most compressed wage structure among all industrialized countries (OECD, 2015; Barth and Moene 2016).

However, it is important to notice that the original motivation for coordinated wage bargaining in the Nordic countries was more closely linked to the need for efficiency than to considerations of equality (Moene and Wallerstein, 1995; Erixon, 2018). Non-coordinated or local wage bargaining ties wages to local conditions. Wages increase in sectors and companies with high productivity and an ability to pay high wages, whereas wages remain low in sectors and companies with low productivity. As a result, local wage bargaining does not only produce high wage differentials, it also tends to preserve too much old technology while too little is invested in modern businesses with high productivity. Coordinated wage bargaining and equal pay for equal work, pushes up wages in less productive companies while keeping wages in highly productive ones lower, compared to a system with local wage bargaining. This ensures good operating conditions and high profits in highly productive companies that apply modern technology, whereas less productive companies are forced out of the market. In this way, creative destruction in the economy is stimulated by moving labor and resources away from less productive and less efficient companies to more efficiently operated ones. The overall economic performance and the pace of
modernization of business and industry thus increase.\textsuperscript{1}

Such effects of coordinated wage bargaining is just one example of how efficiency and equality can go well together. Another key element in the Nordic coordinated wage bargaining system is that companies exposed to international competition are the first to negotiate, thus establishing a norm for the wage settlement in the remainder of the economy (Andersen et.al. 2014; Müller et.al. 2018). The aim is to ensure that wage growth in the overall economy does not exceed the maximum wage level that can be tolerated by enterprises competing on the world market. Coordinated bargaining thus contributes to securing export-oriented companies’ long-term international competitiveness. Yet another example of how equality and efficiency can go hand-in-hand.

4. Wage compression, social trust and the welfare state

The distribution of wages created in the labor market has consequences for overall welfare spending. Data from OECD countries clearly show that social spending tends to be higher in countries with small wage differentials (Barth and Moene (2016). What can explain this pattern? We will argue that social trust is an important variable linking small income differences to the expansion of the welfare state.

Just as wage inequality and social spending vary across countries, so does the level of social trust. Data for social trust usually draws on responses to survey questions such as “Generally speaking, would you say that most people can be trusted, or that you can’t be too careful when dealing with others?” On top of the list we find three Nordic countries (Denmark, Norway and Sweden) and the Netherlands with scores between 74\% and 64\%. The United States has a trust score of 38\%, France and Spain have a score around 18\%, while Turkey and Romania are down at 12\% and 7\% respectively (Holmberg and Rothstein, 2017).

Why this considerable variation in the level of trust? Many scholars have noted the close correlation between trust and income inequality (Uslaner, 2002; Rothstein and Uslaner, 2005; Bjørnskov, 2008; Bergh and Bjørnskov, 2014; Barone and Mocetti, 2016). Countries with low income inequality tend to have much higher levels of social trust compared to countries with less income inequality. Low inequality reduces the distance between individuals at different points on the income distribution, making the psychological distinction between those in “my group” and “the others” less noticeable. Hence, it becomes easier to identify with and trust others. In contrast, high income inequality generates

\textsuperscript{1} Moene and Wallerstein (1997) analyze these mechanisms in greater detail within the context of a formal economic model.
hierarchies, social distance, and suspicion – thereby eroding trust (Payne, 2017; Hastings, 2018; Wilkinson and Picket, 2018).²

Others, however, claim that the relationship between inequality and trust runs the other way around – that trust creates low income inequality (e.g. Berg and Bjørnskov, 2011; Rothstein et al., 2012; Bjørnskov and Svendsen, 2013). The argument is that trust makes citizens more willing to support public policies for welfare spending and redistribution. The welfare state is a large and complex collective action dilemma (Rothstein 2001; Nannestad, 2008). The welfare state is financed by taxes, and citizens are probably only willing to accept high taxes if they believe that the tax system is reliable and fair, and that the government uses the tax revenues to set up welfare state arrangements in an unbureaucratic and efficient way. Perhaps equally important, people need to feel assured that their fellow citizens also pay their taxes and do not exploit the welfare system for their own personal gain.

There are strong reasons to believe that both perspectives outlined above are important, that is, social trust is both a cause and a consequence of equality in the Nordic countries. Low wage inequality created through solidaristic wage bargaining produces social trust, and high social trust creates political support among wage earners (voters) for welfare state expansion. The equality created by the welfare state (together with an egalitarian wage policy) feeds back on even higher trust, and higher trust helps to generate even stronger political support for the welfare state, and so on. Over the long run, this feedback process has created a situation in which the Nordic countries have ended up with low wage inequality, strong welfare states and high levels of social trust. In other countries (e.g. the United States), the feedback process between trust and equality has gone the other way around, producing a situation of smaller welfare states, higher income inequality and lower levels of social trust.

However, the welfare state is not only a system for redistribution of income (and hence a producer of social trust), but also a social arrangement that provides basic goods and services. Many of these are related to income insurance. The welfare state protects people against unforeseen loss of income, for instance due to restructuring, unemployment, sickness and accidents. Since income and demand for insurance is closely linked, it is possible to identify yet another relationship (in addition to trust) between the distribution of wages decided in the labor market and the political support for the welfare state (Moene and Wallerstein, 2001). Solidaristic wage policy and wage compression raise the income of the majority of workers – that is, workers with below-average incomes. When

² Other factors besides income inequality that appear to affect social trust are discussed in Nannestad (2008).
people’s income is lifted, they want to buy more of everything, also insurance. When social trust is there, voters turn to parties with an ambition to expand the welfare state. With higher income, people (voters) are willing to pay higher taxes to get more social insurance that the welfare state provides. Political parties adjust their programs to voters’ preferences by offering a policy that entails more social insurance and thereby an expansion of the welfare state.

This mechanism adds to the explanation for why some countries (typically the Nordics) have low wage differentials and high social spending while others (e.g. the UK and the US) have relatively high wage differentials and lower levels of social spending – a double dissimilarity that can be observed in most OECD countries (Barth and Moene, 2016).

5. The welfare state makes economic restructuring easier

The Nordic countries are small open economies with a huge proportion of their GDP related to import and export (Calmfors, 2014). The Nordic countries have always been deeply integrated into the international economy, and this places strong demands on continuous restructuring and modernization in order to remain competitive.

Economic restructuring usually means that jobs disappear, and new ones are created, perhaps requiring a different set of skills. This could easily create severe social unrest and opposition. However, a strong welfare state implies that people’s incomes are relatively well secured, also when people are temporarily without a job. Together with public funded retraining programs, lifelong learning, help to find job vacancies and so on, this makes people more willing to accept the pressure for constant restructuring – which in turn benefits society in the long run (Katzenstein, 1985, Rodrik, 1998; Moene, 2014). This is yet another example of how equality and efficiency can go hand in hand and support each other.

Openness and international trade have brought about considerable benefits for the Nordic countries. At the same time, experiences from other countries show that increasing economic globalization will not be readily accepted, even if it does benefit society as a whole. If the benefits of globalization accrue to a small group at the top of the income distribution, while the majority loses out, globalization will not be political viable in the long run (Goodhart, 2017; Collier, 2018; Rodrik, 2018). This is where the welfare state comes in yet again. Openness and international trade increase the overall economic pie, and the welfare state (together with solidaristic wage bargaining) helps to distribute these benefits to the majority of the population – again illustrating that redistribution helps in securing long-term economic performance.
6. Income inequality and public health

Income and wealth inequality in most industrialized countries are higher now than they have been in generations, thus reflecting that most of the gains from economic growth in recent years have gone to those at the top of the income distribution. Those at the bottom of the income distribution have seen their incomes stagnate or even decrease (Piketty, 2014; OECD, 2015; Alvaredo et al. 2017). Many observers and commentators are concerned about this trend. OECD (2015) warns, for example, that a continued increase in income inequality represents an important threat to the whole social fabric. High income inequality produces social conflicts and political polarization. It erodes trust and solidarity and it makes social mobility more difficult. High income inequality also fosters an us-versus-them division, encouraging political reactions in which voters close ranks behind strong leaders and populist political movements that claim to speak for the people against the elites, often opposing liberal political and economic ideas (Collier, 2018; Rodrik, 2018).

Given all these dire societal consequences it is not surprising that high income inequality has deep impact on health and wellbeing. It is now well documented that inequality is associated with poorer public health. Countries with greater levels of income inequality tend, for example, to have lower life expectancy, more mental illness, higher infant mortality rates, higher obesity scores, more drug and alcohol addiction and so on (see e.g. Wilkinson and Picket, 2009; 2018; Marmot, 2015; Payne, 2017, and the references given therein).

Cycles of inequality and poverty are often thought about as driven by material scarcity. Recently, it has become increasingly clear that inequality also affects us in ways that are related to our relative standing in the income and status hierarchy. People are generally very sensitive to where they stand compared to others. Therefore, feeling poor matters, not just being poor (Marmot, 2004; Marmot, 2015; Payne, 2017). Societies with high income inequality have more visible status hierarchies, and health and longevity are intimately related to position in the social hierarchy.

Inequality affects the way we think and make choices. Research in experimental economics, psychology and neuroscience show for example that inequality leads to more shortsighted and risky behavior, which in turn are strong predictors of poor health and economic problems (Mullainathan and Sharif, 2013; Payne, 2017). Inequality affects our behavior, and differences in behavior can magnify inequality.
7. Conclusion

Several lessons follow from the above analysis. One lesson is that coordinated wage bargaining and solidaristic wage policy has been an important part of the Nordic income equality model. Another central lesson is that there are important spillovers between the distribution of wages decided in the labor market and the welfare state. Small wage differentials increase social trust which in turn leads to stronger political support for higher welfare spending. Yet another lesson is that social equality does not necessarily harm economic performance. Equality may even enhance economic efficiency. Coordinated wage bargaining and wage compression have stimulated the movement of labor and capital from less productive to more productive enterprises, and it has helped export-oriented companies to stay competitive on the world market. Simultaneously, the welfare state has helped in sustaining long-term political support for openness, international trade and economic restructuring. Finally, we know that income inequality is clearly associated with poorer public health. Taken together, a major lesson from the Nordic income equality model is that low income inequality, social security and good public health is possible to achieve without sacrificing economic efficiency and prosperity.

Inequality should be viewed as a public health problem. It is our view that if enough people come to accept this, they may be more ready to take steps to reduce income inequality. In order to move society in this direction, we need to understand the forces that shape the distribution of income. We hope we have contributed to an understanding in that direction.

References


