The Nordic Model
Assessing its robustness and the effects of the Global Financial Crisis

Master Thesis
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November 2013
Abstract

It is sometimes said the Nordic countries of Denmark, Finland, Norway and Sweden have found a magic way of combining high taxes and lavish welfare systems with fast growth and unemployment. Some credit this to the triumph of social democracy, others to open markets and free trade tempered by a comprehensive security net. And many have in the past, and still do, predicted the end of the Nordic Model because there is no such thing as magic, and even the Nordic countries must sooner or later face the world’s harsh realities. The goal of this thesis is to investigate the traits of the Nordic Model and assess its robustness in the face of the Global Financial crisis and the years to come. To achieve this end, a Nordic Model is constructed based on the earlier work of Erling Barth, Kalle Moene and Michael Wallerstein that finds centralised wage setting processes and the resulting wage compression to form an institutional equilibrium that is at the base of the Nordic Model. This study finds that with a possible exception of Denmark, the institutional equilibrium is still robust in the Nordic countries, and has not been affected by the Global Financial crisis. The findings also call the exact nature of the hypothesised relationship between centralised wage setting processes and wage compression into question.
**Forord**


Tiden min her på UiB har ikke bare brukt vært brukt på studier, og jeg vil derfor takke det Akademiske Kvarter og alle de som har vært mine kollegaer, bekjente og venner der og andre steder gjennom studietiden. Uten dem ville studielivet blitt en kjedelig affære og denne oppgaven sannsynligvis ikke skrevet.

Til slutt rettes stor takk til mine foreldre som har vært til stor støtte og motivert meg til å jobbe videre når ting har gått trått og oppgaven virket uoverkommelig. Sist men absolutt ikke minst er jeg svært takknemlig for all støtten og tålmodigheten fra min kjære Tonje som har holdt ut med meg i denne litt for lange skriveperioden.
Table of contents

1. Introduction ........................................................................................................................................... 6
   1.2 The Welfare State and its many challenges. ....................................................................................... 8
   1.3 Financial crises in the North .............................................................................................................. 9
       1.3.2 Denmark .................................................................................................................................. 11
       1.3.3 Finland .................................................................................................................................... 11
       1.3.4 Norway ................................................................................................................................... 12
       1.3.5 Sweden ................................................................................................................................... 14
       1.3.6 Summary .................................................................................................................................. 15

2. The Nordic model .................................................................................................................................... 15
   2.1 What is the Nordic model? .............................................................................................................. 16
   2.2 Conceptualizing the Nordic Model .................................................................................................. 17

3. The Nordic traits as variables ............................................................................................................. 19
   3.1 Wage compression ............................................................................................................................ 19
   3.2 Trust and Legitimacy of the welfare state ......................................................................................... 21
   3.3 Unemployment and poverty ............................................................................................................ 23
   3.4 Centralized Wage Setting ............................................................................................................... 25
   3.5 Union and employer organisation density ...................................................................................... 31
   3.6 Partisan positions ............................................................................................................................ 33
   3.7 Summary ......................................................................................................................................... 36

Kap 4: Data and Research design ........................................................................................................... 36
   4.1 Scope and general use ....................................................................................................................... 36
   4.2 Research design ............................................................................................................................... 37
   4.3 Data .................................................................................................................................................. 42
   4.4 Defining a crisis ................................................................................................................................ 42

5. Analysis .................................................................................................................................................. 44
   5.1 Wage setting ..................................................................................................................................... 44
       5.1.1 Adding together ......................................................................................................................... 49
   5.2 Wage compression ........................................................................................................................... 51
   5.3 Unemployment and poverty .......................................................................................................... 54
   5.4 Union and employer organisation density ...................................................................................... 57
   5.5 Trust and legitimacy ....................................................................................................................... 60
Table of figures and tables

Figure 4.1: GDP growth 1986-2012. OECD ........................................ 43
Figure 5.2 Denmark 1980-2011, ICWTSS 2013 .............................. 45
Figure 5.3 Finland 1980-2011, ICWTSS 2013 ............................... 46
Figure 5.4 Norway 1980-2011, ICWTSS 2013 .............................. 47
Figure 5.5 Sweden 1980-2011, ICWTSS 2011 .............................. 49
Figure 5.6 Centralized Wage Setting all countries 1980-2011, ICWTSS 2013 ......................................................... 50
Figure 5.7 S80/s20 rate 1995-2012. Eurostat ................................. 52
Figure 5.8 Gini coefficients 2000-2012. Eurostat ............................ 53
Figure 5.9 Harmonised Unemployment Rates 2004-2012. OECD ...... 54
Figure 5.10 Risk of Poverty (RoP) rates 2004-2012. Eurostat ........... 55
Figure 5.11 Union density 1985-2012. ILO ...................................... 57
Figure 5.12 Employer organisation density, 1989-2010. ICTWSS ...... 60
Figure 5.13 People can be trusted (6-10) ESS ................................. 61
Figure 5.14 People can be trusted (7-10), ESS ............................... 62
Figure 5.15 Government should reduce difference in income. ESS ...... 63
Figure 5.16 Government should not reduce difference in income. ESS .......................... 64
Figure 5.17 People treated equally/have equal opportunities. ESS ...... 65
Figure 5.18 Trust in the state. ESS ................................................. 66
Figure 5.19 Partisan positions on welfare state expansion 1987-2012. MRG ....................... 69
Figure 5.20 Market economy orientation 1987-2012. MRG .............. 72
Figure 5.21 Welfare state limitation, 1987-2012. MRG ...................... 73
Figure 5.22 Gini Coefficient and Centralised Wage Setting in 2011. Eurostat, ICTWSS ..... 76

Table 1 Comparing National and Eurostat RoP levels ......................... 24
Table 2 Countries, parties and elections ....................................... 35
Table 3 Four tests of causation ..................................................... 39
Table 4 Correlation Wage Setting, HUR, GDP. OECD,MRG ................. 51

6. Conclusions ............................................................................ 83

Literature .................................................................................... 86

5.6 Partisan positions ........................................................................ 68
5.6.1 Welfare state expansion ......................................................... 69
5.6.2 Market economy orientation ................................................... 71
5.6.3 Welfare state limitation ........................................................ 73
5.7 Summary ................................................................................ 74
5.7.1 The robustness of the institutional equilibrium ......................... 75
5.7.2 The Global Financial crisis ..................................................... 78
1. Introduction

The Nordic Model, known under many names, is a peculiar model of society that combines free trade, a generous welfare state and good governance in a way that has defied economic textbooks since the Second World War. Many scholars have taken an interest in the phenomena, and the professions of economics, political science, sociology, history and anthropology have all made contributions and debated just how this model is possible and why it still works. And perhaps mostly in the economics and political science profession, why it will not work for much longer and how its demise will come about. So far, these predictions have not come true and the Nordic Model has persisted despite economic crises and change in the political landscape in the past thirty years.

Will this time be different? Since 2008, the world has been embroiled in the worst economic downturn since the Great depression in the 1930’s, and as open economies who have embraced globalization the Nordic countries are especially vulnerable. And they have been hit hard, with Norway as the sole exception who has yet to experience a severe economic downturn. Despite having experienced sharper falls in GDP and higher rise in unemployment that the OECD average, the Nordic countries still seem to do well in terms of not falling into a poverty traps or having to dismantle the generous welfare benefits that keeps the population with free education, health care and pensions. So far, inequality does not seem to have risen much, and the Nordic model remains secure as a policy goal for political parties of all colours.

But can it be that the crisis has affected the model, or its foundation in some way? Just how secure is it? Could it be that this time will indeed be different? Or will the Nordic countries once again successfully reform the Model in a way that retains its ability to distribute wealth and pool risks like it has since the Second World War while adapting to new conditions?

In this thesis, I hope to find the answer to these questions. Given the short time that has passed since 2008, merely five years, I doubt that decisive evidence for a change in the fundamentals of the model will be found, but signs of change may be there. By identifying signs of change, should they be there, and comparing them with the experience from the last crisis, I believe much can be garnered about the possible future of the Nordic model. Another goal of this paper is to establish an analytical framework that can later be used to revisit the analysis made now when more time has passed and more data is available.
This paper then aims to answer two questions: “How robust is the institutional equilibrium that upholds the Nordic Model?” and “Has the Global Financial Crisis disturbed this institutional equilibrium?”

The theoretical framework of this thesis is in large part the analysis of the Scandinavian (and more specifically Norwegian) model of redistribution by Erling Barth, Kalle Moene and the late Michael Wallerstein (2003), “Equality under pressure”, written during the Norwegian “Power and democracy Study” 1998-2003. The authors construct a comprehensive framework for understanding the foundations of the institutional equilibrium that supports and reinforces the Nordic model, as well as considering the risks that globalization and the model’s own success reputedly pose to the model’s long term survival. In light of the recent crisis and reform suggestions that have been aired (Korkman, Holmström, Honkapohja, Torben, Vartiainen og Söderström 2007), I believe their analysis is more relevant than ever and can be put to good use in this paper.

By drawing upon other sources of both theory and empirical evidence in addition to their book I aim to investigate the most critical traits of the Nordic Model as it is today, and come to preliminary conclusions about the future of the model as a fundament for Scandinavian society. Due to language barriers and limits on time and resources, I will only include Norway, Sweden, Finland and Denmark in the analysis and regrettably omit Iceland from this study. Ever the outlier in geographical and linguistic terms, Iceland has never received much attention from students of political science, and there is thus little for me to build upon. Also, like Barth et al, Norway will receive the most attention, both because of my greater knowledge of the country and because it has so far avoided most of the hardships seen in Denmark and Sweden.

While “Equality under pressure” is the fundament of this study, I have strived to include perspectives on the Nordic Model that is not given much attention in that book. For that reason, variables that represent perspectives often offered by economists and those social scientists who study trust in and legitimacy of political institutions have been included. The theoretical framework provided in “Equality under pressure” does not omit these perspectives, but puts somewhat less emphasis on their importance compared to the necessity of wage compression that leads to less income inequality and a generous welfare state. It therefore follows that these two traits of the Nordic Model will receive more attention and emphasis.
also in this study, and in the spirit of driving research forward, the period since “Equality under pressure” and to date will be the main time frame of interest.

The rest of this chapter will give an overview of the context from which the ideas for this paper came from, namely the debate regarding the survivability and indeed desirability of the Scandinavian type welfare model of society and the much touted warning that globalisation and economic crisis would spell the end of it. While the prosperity (in Norway in particular) of late 2000’s may have slowed our memory of earlier economic crises, they are neither new or unheard of in Scandinavia, and a forceful reminder was given in the form of the Global Financial Crisis of 2008 with spectacular the implosion of the Icelandic economy at its peak.

To put this study in context, I will therefore include accounts of both the Nordic Banking crisis of the 1990’s and the recent financial crisis. The latter will receive the most attention, including an overview of the individual countries economic performance sin the years leading up to the crisis, during and after. Coupled with analysis of the development in variables through descriptive statistics, this should provide a good opportunity to test the robustness of the Nordic Model in face of economic crisis.

1.2 The Welfare State and its many challenges.

The death of the Nordic model has been predicted at more or less regular intervals over the past thirty years, often in conjugation with worries over future fiscal obligations given the large pensions owed to future cohorts of retirees and less working age adults to support them, or mass unemployment following sudden international economic shocks (Korkman et al. 2007), (Andersen 1997). What merits do these worries and predictions have? The short answer seems to be that the Nordic model has so far made it through all crises to this date more or less intact, something the Economist claim is due to the utter determination of politicians to push through reform where it is needed (Economist 2013). It should be noted however that the same newspaper has been among the critics of the welfare arrangements in the Nordic countries and welfare states in general, and did not without some smugness proclaim that belief in a special Nordic model, a third way, would crumble further in 2007 (Pete 2006). Other critics have claimed a generous welfare state will cause economic disincentives to individuals which will eventually destroy the welfare state itself (Lindbeck 1995).

The criticism can roughly be divided in two categories: One that worries about the future costs and thus sustainability of the welfare state, and one of more normative character that
sees the welfare state along with state intervention in the free market as a problem in itself. Often the two go hand in hand however, as criticism of costs are usually made with the normative assumption that high taxes, economic redistribution, a bloated public sector and generous welfare regimes harm economic growth, reward complacency and opposition to necessary reform, and causes the national economy to be uncompetitive on the world market.

This view is largely credited to the rise of neoliberalism as it became an economic orthodoxy after Keynesian economics fell out of favour in the 1970’s and was replaced with Thatcherism and Reaganomics. Neoliberalism has undergone both transformation and evolution since then (O’Hara 2010), and its influence worldwide today is undeniable. As will be evident in the next sections, both the OECD and other international organisations concerned with economic development has acquired a habit of consistently proposing reform suggestions that aim to reduce government expenses. This advice is also often given to the Nordic countries in spite of their apparent success a high tax - high growth economies.

It is against this backdrop that I wish to investigate the Nordic Model and the institutional equilibrium that it rests on so that a better understanding of how it has developed since the time of Bath et als study and how it may be affected by the Global Financial crisis and uncertain future that follow can be achieved.

1.3 Financial crises in the North

For the purpose of a better analysis, a brief look-back at the last financial crisis to affect the Nordic countries could be helpful. Several similarities to the crisis of 2008 can be seen in the build-up to the Nordic Banking crisis, and a much discussed question is whether the economic policy of the Nordic countries during the recent crisis has been informed by the lessons learned during and after the Banking crisis.

The Nordic Banking crisis came as much as a surprise as the recent crisis on economists, policy-makers and the public of the Nordic countries. Why should such a crisis take place in advanced Nordic welfare states with long records of combining egalitarian societies with strong economic performance? (Jonung, Vartia og Kiander 2009). Steigum (2011) and Jonung et al all point to the rapid financial liberalization that took place in the Nordic countries during the 1980s combined with pegged exchange rates and an external shock in the form of high German interest rates following the unification as the cause of the crisis that brought the financial institutions of Norway, Sweden and Finland to their knees. That it was not inevitable that a crisis would happen can perhaps explain why the crisis when it came was met with such
astonishment and surprise. Steigum for example, states that had it not been for rising real interests in Germany, the Norwegian banking crisis in 1991-92 would probably not have happened. For Finland and Sweden, the crisis also had far reaching consequences of permanently higher unemployment rates, made even worse by the collapse of the exports to the Soviet Union as it dissolved in the case of Finland. At least in terms of how taken by surprise politicians, economists and the public were by the Nordic Banking crisis, we can draw some parallels to recent financial crisis.

An extensive literature has analysed the causes of the financial crisis that rocked the world in 2008 (Jonung et al. 2009), and while everything from too lax to too tight regulation of the financial markets has been blamed, it is generally agreed that the Nordic countries were for the most part innocent bystanders this time. While the possible effect of Global Financial Crisis on the Nordic Model is one of the questions investigated in this thesis, the crisis itself is not the central puzzle to be explained here and will therefore not be analysed to any significant extent. While the causes and ultimate consequences of the financial are still hotly debated, economists and political scientists alike now seem to converge on a general account of what happened, if not why.

The starting date of the Global Financial Crisis is usually set to the failure of Lehman Brothers in 2008 that caused widespread financial panic, first in the USA where the sup-prime market collapsed and quickly spread to Europe and the rest of the world as the intra-bank lending the world’s financial system depended on was effectively suspended. However, some hold that the first signs of trouble appeared in early 2007 in the ABX market for synthetic mortgage-backed securities (Thorvaldur 2010). Others look to accumulated trade imbalances in the world economy and large budget deficits in the US economy in particular as possible explanations (Szyszka 2011). Some economists exemplified by Krugman (2009) holds the view that the Global Financial Crisis was a classic liquidity trap in Keynesian terminology and that it carried some resemblance to and was foreshadowed by the East-Asian crisis and its consequences for Russia and Latin America. He also emphasises, like the others mentioned, the role of the shadow banking system and how it came to be as a consequence of the era of financial deregulation of which also the Nordic Banking crisis was a result of.

While the crisis originated in the USA, its consequences were quickly felt throughout the world as panic spread, and ultimately the Nordic countries were also affected. The following sections give an chronological overview of how the situation developed year for year in the
four countries seen through the eyes of the Organisation for Economic Coordination and Development (OECD) and their economic outlook reports. I have chosen to present this view not only to show how the financial crisis affected each country, but also to illustrate the inherent uncertainty of economic predictions and to provide a contrast to the social democratic narrative that is present in the greater part of this thesis.

1.3.2 Denmark
The Danish economy was in risk of overheating as it entered 2008 after years of substantial growth, and while the OECD projections suggested a somewhat lower growth than its neighbours in the Euro zone, the organisation maintained that the trend was a positive one (OECD 2008a). Their next report was less optimistic and noted that the Global Financial Crisis had hit the Danish economy hard and caused the greatest fall in the country’s GDP seen in the past forty years. The result was a deep recession. Denmark shared a similarity with the USA in that the financial crisis coincided with the end of a period with rapidly rising real estate prices, though unique among the Nordic countries in that respect. While this probably deepened the recession, the organisation argued that the stability of Denmark’s political system strengthened the country’s ability to combat the crisis and that the fiscal and monetary policies employed in reaction to the crisis were sufficient for the time being. The OECD also predicted higher unemployment in the foreseeable future and expressed some concern for the competitiveness of the Danish economy because of rising wages (OECD 2009). The Global Financial crisis and the consequent Euro crisis proved disastrous for the export industry in particular, and exports fell by 13,5 % in the second quarter of 2009 compared to 2008. In spite of this, the organisation predicted a gradual improvement of the Danish economy from 2010 and onward.

At the time of the latest OECD report in January 2012, Denmark had only partially recovered from the economic slowdown following the financial crisis, as well as the unwinding of the property boom. The report noted that Denmark’s fiscal position is relatively sound, but falling productivity and competitiveness are eroding potential growth, and the financial sector is still vulnerable. The government’s stimulus packages will boost economic activity in 2012, but fiscal consolidation will dampen recovery well into 2013 (OECD 2012a).

1.3.3 Finland
OECD find in their 2006 report on Finland that the country has experienced among the best growth performances of its member states in the past few years, underpinned by strong
innovation and high educational attainment. The short term macroeconomic outlook is found to be promising, especially in regard to a surprisingly strong increase in employment that is expected to continue into the following years (OECD 2006). Two years later, in June 2008, the finish economy was still in good shape and lauded as performing very well over the last decade by the following OECD report. Finland is found to have good chances of benefitting from the opportunities of globalization, but the report also finds many areas with room for improvement, among them labour markets, and calls for education and tax reform to meet the challenges ahead (OECD 2008b).

By the time of the next OECD report in April 2010, the macroeconomic situation was reversed, and report noted that while a well regulated and well run financial sector had insulated the country from the direct effects of the global financial crisis, the worldwide recession and collapse in trade hit Finland harder than most other OECD countries. Exports were down by almost a third compared to 2008, GDP fell by 9 %, and recovery has been slower than in most other OECD countries. Furthermore, a sizeable budget surplus of 5.2 % in 2007 is expected to swing to a similar deficit in 2011. To counter the recession, several budget stimuli have been enacted, mostly as tax cuts and reduced social security contribution. While the budget stimuli are at average OECD level, it is somewhat unique in being mostly permanent in nature. On the positive side, the government’s fiscal policy and lowered interest rates by the ECB has cushioned fall in employment levels, and negative growth in GDP has come to a halt (OECD 2010a).

In early 2012, the world economy went into a new slump, and the Finnish macroeconomic outlooks continued to be bleak. GDP had contracted for a total of 10 % peak-to-through despite resilient domestic demand and a sound financial sector. Furthermore, exports were still 20 % lower than 2008 peak and unemployment had peaked at 9 % in early 2010, only retracting slowly since. Finally, GDP remains at 3% below 2008 level. In addition to the already experienced consequences of the financial crisis, Finland now faces challenges in the areas of stagnating labour markets falling inflation and reduced international demand for its main exports. On the positive side of things, Finland’s financial sector remains solid, as is its long-term fiscal position if addressed now (OECD 2012b).

1.3.4 Norway
The apparent resilience of the Norwegian economy in the face of the global financial crisis is interesting in itself, but a look back at past financial crisis during the last 100 years provides
even more food for thought. The Institute for Research in Economics and Business Administration at NHH produces several reports on the financial crisis in collaboration with Norwegian authorities under the project title “SNF project no 1306: Crisis, Restructuring and Growth”. In one report dealing with the macroeconomic perspective, Norway’s experience with past financial crisis was briefly mapped out (Almås, Doppelhofer, Haatvedt, Klovland, Molnar og Thøgersen 2010). Here it is shown that in relative terms, Norway escaped lightly also from the Great Depression. And while the interwar period was one of many economic crisis for many countries of the world, Norway’s growth record in that period was remarkably good, almost as good as the post-war period up to the 1970’s, and better than the periods before 1910 and in the 70s and 80s. Adding to this, Norway experienced an economic downturn and crisis while the rest of the world was riding a wave of economic growth in the early to middle 1920’s, and was one of the countries engulfed by the Nordic Banking Crisis though the country least affected, once again. The apparent novel behaviour of the Norwegian economy in relation to past crisis is interesting in itself, but once again outside the scope of this paper.

Turning back to the recent global financial crisis, it too was shorter and more shallow than in most OECD countries, arriving two quarters later, ending one quarter earlier, and causing a contraction in GDP of less than half the OECD average between mid-2008 and mid-2009 (OECD 2010b). Previous reports from the OECD underline Norway’s favourable fiscal position before the onset of the crisis, citing a period of strong economic growth where low levels of unemployment, inflation and improving terms of trade have produced large gains in real income for Norwegian households. In addition, prudent management of petroleum revenues have contributed to the sound public finances (OECD 2007a), (OECD 2008c). The reports however, also express concern over the long term effects of the high wages in the petroleum sector on the “mainland economy”, as well as rising pension and healthcare costs in the future due to an aging population. When the global financial crisis did hit Norway in mid-2008, the Norwegian government enacted expansive fiscal stimulus and Norges Bank cut interest rates aggressively.

By the end of 2011, fiscal stimulus had been reined back somewhat from the expansion in 2009-2010, and the monetary policies were beginning to return to normal as financial markets had calmed and the extraordinary measures were no longer needed (OECD 2012c). The report further notes that Norway had weathered the financial crisis well, and focused its attention on how to sustain growth in the coming years, a topic not seen in many other OECD reports of
that year. Improved terms of trade and prudent management of the petroleum wealth which lead to a very strong fiscal position is stated explain much of the resilience of the Norwegian economy during and after the recession.

1.3.5 Sweden
In its 2007 report, the OECD lauds Sweden for an excellent macroeconomic performance with high rates of growth, low unemployment, structural budget surplus and stable inflation while voicing concerns about the fact that employment levels have not reached the heights of before the Nordic banking crisis in the early 1990’s, and that especially immigrants and young people experience considerable levels of unemployment. Furthermore, the OECD warns against distortions in the housing market, especially in urban areas. The report concludes that Sweden’s macroeconomic outlook is sound, and lists combating exclusion in the labour market and price distortions in the housing market as key challenges for the Swedish economy (OECD 2007b). In their next report from late 2008, OECD notes that Sweden’s solid economic institutions and fundamentals makes the country well prepared to cope with the consequences of the global financial crisis. During the summer of 2008, inflation hiked to over 4 %, and the Swedish Central Bank promptly raised the repo-interest rate to 4,75 %. Following a worsening of the crisis and thus lowered inflation forecasts, the rate was lowered to 3,75 % in October 2009. The report adds that the rates might be cut further as growth slows further (OECD 2008d).

The strength of Sweden’s fiscal positions is further highlighted in the OECD report from early 2011 where Sweden is experiencing a strong recovery after a deep, but short recession. Aggressive cuts in interest rates by the Riksbank, unconventional monetary policies and automatic stabilizers helped mitigate the downturn, and Sweden is now in a enviable position of recovery compared to much of the OECD countries. Despite its strong fiscal position before the crisis, Sweden experienced a sharp contraction in output by around 7,5 %, largely because of external factors such as drop in export. The rebound was similarly strong, with real GDP growing by 4,5 % from 2009 to 2010, and close to 7% in the third quarter of 2010. By fall of 2010, total GDP was still 1% lower than pre-crisis level. Following the growth in output, employment levels have also started to rise, though only modestly as of late 2010 (OECD 2011b).

In their latest report on Sweden in December 2012, the OECD once again lauds Sweden’s
strong fiscal position and how it has enabled the country to withstand the global crisis. Even though growth in real GDP slowed from 3.8% in 2011 to 1.2 in 2012, the organization expects both domestic consumption and exports to pick up in 2014, and projects a growth of 3% for the Swedish economy in 2014. Though the Swedish outlooks remain substantially better than for most OECD countries, the report notes several challenges. Among them are rising long-term unemployment for some groups, rising income dispersion, high household and corporate debt, a large and concentrated banking system that may prove vulnerable to further external shocks, maintaining financial stability an upholding fiscal prudence while preserving the welfare system (OECD 2012d).

1.3.6 Summary
To summarise, while the Global Financial Crisis may have originated in the US economy, it quickly spread to Europe and the rest of the world through an interconnected and interdependent financial system. All of the Nordic countries were affected by the crisis but not equally. Denmark and Finland took the heaviest blow in terms of fall in GDP and rise in unemployment while Norway escaped relatively unscathed. Sweden was hard hit as well. Fiscal stimulus packages were enacted to combat the crisis in all of the Nordic countries, and vigorously so in Norway in particular where the fiscal stimulus to the 2009 budget revision was estimated to 2.3% of GDP (Finansdepartementet 2009). Whether this stimulus was the reason for Norway’s quick way out of the crisis is still under debate.

More relevant to this thesis however is the question of whether the Global Financial Crisis had an effect on the Nordic Model, which will be conceptualised in the next chapter.

2. The Nordic model
To the students and scholars of economics, sociology and political science the countries of the Scandinavia have usually been seen as a category of their own, something quite different than their southern neighbours in continental Europe, western Britain and the eastern Baltics together with Russia. The difference lies in both the economic, social and political dimension, and scholars of all three professions have conceptualized models with titles such as “The Nordic Model” (Korkman et al. 2007), “The Scandinavian Distribution Model” (Barth et al. 2003) or “the Scandinavian Welfare Model” (Andersen 1997) to name a few of the many labels that have followed extensive research by a broad range of scholars into the phenomena.

While different professions and scholars, including the author of this thesis, have studied different aspects of the phenomena in the tradition of his field, it can with little degree of
uncertainty be argued that the Scandinavian countries all share a collection of unique traits in all three dimension that can be fruitfully conceptualized as a model that with some cross-country variation gives an accurate representation of the Scandinavian countries. There is now a broad consensus that a Nordic or Scandinavian Model exists although there are critics who argues on the contrary (Alestalo, Hort og Kuhnle 2013).

The fundamental assumption of this paper is that a Nordic/Scandinavian model exist, that this model is valid for all three countries in question, and that its defining traits have been identified and change to them can be measured over time. What this concept is called is more a matter of research question and field of study than definition, and while every scholar tends to adjustments to better highlight what is important to his research. For the sake of simplicity I will in this thesis make use of the label “the Nordic Model”, though other labels may occur when references are made to other works on the subject, and should be understood as interchangeable with the Nordic Model.

2.1 What is the Nordic model?
Given the existence and validity of a Nordic Model is assumed in this paper, its unique traits and characteristics, as well as cross country variations will be presented in the following pages. I will first start with outlining the broadest characteristics that constitute the fundamentals of today’s model, and then go more into detail at where the countries diverge and to what extent.

Starting at the contributions from the economics profession, Korkman et al concludes that there exists a social and economic system that can usefully be referred to as the Nordic Model, and lists the principal features of the model as the following: A comprehensive welfare state financed by taxes on income and consumption, high public spending on investments in education and child care, and a set of labour market institutions that includes strong unions and employer association, wage coordination, active labour market policies and generous unemployment benefits. The economists further emphasize the success of the Nordic Model in the past noting the good economic performance of the Scandinavian countries despite neoclassical economic textbooks and conventional wisdom suggesting that generous welfare benefits and high public spending hampers growth instead of enhancing it, hence making the Nordic Model an example of the “bumble-bee that can fly” (Korkman et al. 2007). Korkman et al gives an in-depth account of the Nordic Model from an economist’s point of view, and gives several recommendations for reform at the end of their book.
Interestingly much in the spirit of neoclassical economics rather than the more Keynesian variant that could be expected. These recommendations will be picked up again later in the chapter when the challenges of the Nordic Model in face of economic downturns, the research question of this thesis, are discussed.

Moving on to the political dimension, Barth et al presented an analysis of what they call the Scandinavian Distribution Model as a part of the second Norwegian Power Study conducted between 1998 and 2003. Their research focused more on the institutional arrangements in the labour market and the welfare state. In particular, they emphasize on distribution of income through taxes, central wage bargaining that results in wage compression and the universal character of the welfare state. These arrangements together form what the authors call ‘the institutional equilibrium’, which is necessary for the model to perform well. The authors find that the greatest challenges to the Nordic Model is any change that would disturb this equilibrium, such as opposition to wage compression from the highly educated white collar employees or reduction in the importance of centralized wage bargaining that in turn would weaken the support to and legitimacy of the universal and generous welfare state. An interesting finding in their book is that the Nordic model did not make the institutions of the labour market and the welfare state, but that these institutions made the Nordic Model possible. Furthermore, the Model is a result of social experiments with uncertain outcomes, a cumulative process of trial and error which resulted in what can be called an institutional equilibrium, and not a planned or foreseen development. (Barth et al. 2003). I will expand more on this later in the chapter.

Another analysis of the political dimension is offered by Alestalo et al, who argues that three “master statements” about the Nordic Model can be drawn from the contemporary literature: A deep trust in and extensive prevalence of the State in society, the universal character of the welfare state, and a high degree of income equality for the societies as a whole. The authors give a detailed account of the historical conditions that were unique to Scandinavia, much in line with Barth et al, and give consideration to the future of the model in the face of globalization, immigration and interestingly a possible de-globalization.

In conceptualizing the Nordic Model for this paper, I will mainly draw on the characteristics identified in the three papers discussed above.

2.2 Conceptualizing the Nordic Model

In the previous section I have presented some of the most recurring traits of the Nordic Model
as found by scholars of different professions. In this section I will conceptualize the Nordic Model for this thesis by drawing on the literature already presented, and some articles not yet included.

As pointed out earlier, there are about as many conceptualizations as there are authors writing about it, and I have no intention to end this tradition for a number of reasons. First, a model is exactly that, a model to simplify reality so that generalizations may be made. A model must therefore be conceptualized around the question we wish to investigate. This thesis is concerned with the effect of economic crisis on a phenomena that has at least three dimensions; economic, political and social, and therefore requires a somewhat different conceptualization of the Nordic model than one concerned only with labour markets or class struggle.

Second, this thesis is concerned with four countries over time and across three dimensions, and must therefore be more general than one concerned with fewer countries. It must also be tailored to catch the difference between the countries while still being relevant for all four. In other words, compromises must be made to balance the need for generalization with accuracy, and the inclusion of another country (say Iceland) or exclusion (say Norway) would require adjustments that would make for a slightly different model.

In short, different research question result in different definitions and conceptualisations. That different models carry different names does not mean that they are essentially about something else however. As such I do not find it problematic to draw from different models to conceptualize a Nordic Model specified for this particular thesis, considering that the similarities far outnumber the differences.

The financial crisis’s effects on economic growth, unemployment, public spending and other macro-economic indicators have been the subject of substantial research since it began, and is therefore not the subject of this thesis. Instead, this thesis is concerned about if, how and to what degree the crisis has affected the Nordic Model in itself, broken down to a set of key variables. Broadly speaking, what makes the Nordic Model “Nordic” is the combination of economic openness, extensive social protection based on universal principles, and encompassing collective bargaining coordination (Dølvik 2013). But a more detailed description of the Nordic model, in which change can be measured, there are other traits to consider. Drawing on the literature presented so far, the next section will present six variables
that represent the defining traits of the Nordic model, and will be the subject of testing in the remainder of the thesis.

On the basis of the reviewed literature, the Nordic model is in this paper is conceptualized as follows: *The Nordic model is one of three dimensions: economic, political and social. The institutional arrangements that are found within these three dimensions are mutually reinforcing both within and across dimensions, and maintain the institutional equilibrium that takes a similar shape across the Nordic countries.* The three dimensions can be thought of as three master traits: A comprehensive welfare state that emphasizes on human development and risk sharing, a system of central wage setting that results in wage compression and low income inequality, and a high level of trust in government, public institutions and one’s fellow citizens.

Underneath these “master traits”, we find of course more distinct traits as we apply a finer level of analysis. For the purpose of answering the questions posed earlier in this thesis, six variables have been found relevant to the analysis and are presented in the section. For greater conceptual clarity, they can all be grouped under the headings of political, economic and social traits: Partisan positions, centralised wage setting and union and employer organisation density can all be thought of as political traits of the Nordic Model. Under the economic heading we can place wage compression and unemployment and poverty, while trust and legitimacy of the welfare state represents the model’s social dimension. Of course, most, if not all traits can be argued to belong under other headings as well, and this underlines the point that the traits of the Nordic Model are mutually reinforcing.

### 3. The Nordic traits as variables

The goal of this thesis is to identify where change in the Nordic model has or has not occurred, and to conclude whether causal links to the financial crisis can be established. To that end, I will consider six variables as representing the defining traits of the Nordic Model that could be affected by the financial crisis. Together, observed change in the variables or lack thereof should give sufficient grounds on which to conclude what, if any, effect the financial crisis has had on the Nordic Model. The variables have all been considered independently in previous research, but to the author’s knowledge not together as variables for a broader model.

#### 3.1 Wage compression

Income inequality has increased across the whole of OECD since the 1980's according to a
recent paper (OECD 2011a) which also employ both the gini coefficient and decile comparison, though comparing the top 10 with the lowest 10 percent instead of the more common 20 to 20 comparison used later in this paper. There are in particular two observations of immediate interest in the papers introduction. One is the great difference in inequality across the OECD, with the top 10 % earning 14 times more than the bottom 10 in USA, Turkey and Israel compared to the 9 to 1 OECD average. The Nordic countries and much of continental Europe is far below this average again. Second, the gini average for the OECD area has increased from 0,29 in the mid 1980's to 0,316 in the late 2000's. The increase in inequality did not follow a uniform pattern however. Inequality started to increase some English speaking countries, namely the UK and USA already in the 1970's, with continental Europe and the Nordic countries following suit in the 1980's and 2000's respectively. Quite interestingly, differences grew faster in the Nordic countries than anywhere else in the 2000's according to the paper.

The paper cites several possible explanations for the rise in income inequality; globalization, increased part-time work, single-person households, lower tax rates for the top brackets and more (mer her). It furthermore problematize the concept of inequality and globalization, urging researchers to be clear on what kind of inequality they study and what kind of “globalization” they explain rise in inequality with. (++ mer her)

The observation that the Nordic countries feature a low degree of income inequality due to wage compression has been made by many scholars studying the Nordic countries. Among others, Barth et al and Alesto et al consider this one of the defining traits of the Nordic model, and will therefore be included here. This variable carries with itself the advantage of being less difficult to test by measuring change by simply being a numerical variable. It carries with it the challenge of definition however, and I will therefore use the most common operationalization, that is comparing the income of the top decennial with the bottom decennial in the same manner as Barth et al. If a change towards more income inequality and/or less wage compression can be linked to the financial crisis, this would indicate that the crisis has had an effect on the model in short or long term.

To measure wage compression and inequality I have made use of the Eurostat measure of income distribution and gini coefficient. These two means of measures have a high degree of correlation between them as they measure related numbers but are conceptually somewhat different. A quick correlation analysis show a correlation of 0,92 in the dataset used here.
The gini coefficient is a score between 0 and 100, where 0 is perfect equality (everyone has exactly the same income) and 100 is perfect inequality (one person receives all the income) (Danmarks statistik 2011). It should be noted that the gini coefficient is usually reported as a number between 0 and 1, but has in this case been multiplied by 100 to convert it to a percentile measure for clarity. In other words, the lower the gini coefficient, the lower is inequality in the group measured. The group here being the population of Norway, Sweden, Finland and Denmark. For example, the gini coefficient of the whole Danish population was 28.0% in 2011, when the gini coefficient is converted to percentiles.

The other mean of measure used here is the s80/s20 rate. This rate measures the ratio of income between the top and bottom 20% in a given group by dividing the former on the latter. The result then show how many more how much more the top 20 earn compared to the bottom twenty. To once again use Denmark as an example, the s80/s20 rate in 2011 was 4.36, meaning that the top 20% had an income 4.36 times that of the bottom 20% (Danmarks statistik 2011).

Data availability is a challenge when considering inequality in the Nordic countries. For all countries except Denmark where data is provided by the ministry of law, the national statistic bureaus conduct surveys each year and have continues time series with starting dates from 1966 (Finland) to 1986 (Norway). This creates some uncertainty on how comparable the data is, and the fact that neither OECD nor Eurostat provide times series for the whole period cautions against using data gathered separately from each national database. I will therefore rely on the datasets provided by Eurostat since their data have few missing years, albeit only available for all countries from 1997 and 2003 in the case of the s80/s20 rate and the gini coefficient respectively.

3.2 Trust and Legitimacy of the welfare state

Whether a product of or a precondition for the Nordic model, a high level trust in ones fellow citizens, government and public institutions is a defining feature of the Scandinavian countries. While trust alone can hardly explain the success or failure of the Nordic model, it can fruitfully be used as an indicator for change in other fundamental premises of the Nordic model. If trust is a result of income equality, generous welfare schemes and job security, a change here would imply change in one or more of the concerned variables. Conversely, if trust is a precondition for the Nordic Models success, a downward change here would imply poorer prospect of the current state of affairs. Trust is of course an inherently difficult feeling
to conceptualize into a variable, and its validity may be questioned, but for this purpose I believe the European Social Survey data has been obtained with required rigor.

The third dimension, the social dimension, in the Nordic model is perhaps one of the most difficult to measure as it concerns individual perception of and feeling towards both other people and society in all its complexity. The European Social Survey (ESS) has made asked respondents in 36 countries a wide range of questions on many topics regarding politics, values, society, religion and more. Among these I have found four to be of particular use in this study, as they combined measure the level of trust towards ones fellow citizens, the stance towards income redistribution, trust in the state and general stance on egalitarianism. Together, I believe these four variables are able to capture the essential traits of the social dimension: Trust in ones citizens and the state, support for income redistribution (wage compression) and the legitimacy of a universal welfare state.

The legitimacy of and public support for the welfare state is another factor stressed by several authors, in particular Barth et al who finds it a necessary, but not sufficient condition as the institutional arrangements must also garner support from powerful actors on both sides of Capital and Labour. The support from both sides to centralized wage setting, so called solidary wage setting, is possible because of the benefits received by the bottom of the wage pyramid and the wage restraint at the top that benefits employers. Consequently Barth et al see the welfare state and central wage setting as mutually reinforcing, financially, politically and in terms of power balance. ((se også Alesto, p 24-)). Bo Rothstein and Eric Uslaner (2005) link income equality and social trust with support for universal rather than means-tested welfare policy. Their findings suggest that income equality leads to higher general trust, that is trust across groups and not just within, which they see as essential for the legitimacy of a universalistic welfare state. This variable can be measured by using survey data from the European Social Survey, and will be operationalized by the following indicators:

- **Government should reduce difference in income levels.** This indicator measures the level of support for the idea that differences in income levels should be reduced and that the government has a responsibility to make it happen. The indicator has been constructing by adding the categories “Agree strongly” and “Agree” together.
• **Government should not reduce difference in income levels.** As above, but measuring the opposite sentiment. Constructed by combining the categories “Disagree strongly and Disagree”

• **People can be trusted** measures how trustworthy people consider their fellow human beings to be in general. It is thus both an indicator of trust both within and across social groups that does not discriminate on any cleavage. This variable comes in two versions: *(All)* and *(Reduced)* where the former is constructed by combining all categories above “neutral” (6-10) and the latter by omitting category 6, thus including category 7-10. This is done to show the between country variation at higher levels of trust. Following Rothstein and Uslaner, there should be a noticeable correlation between this variable and income equality.

• **People should have equal opportunities/be treated equally** represents a more general egalitarian sentiment beyond that of income equality.

• **Trust in the state** is an indicator constructed by combining the positive answers (6-10) in the ESS variables “Trust in the legal system” and “Trust in the country’s parliament” to represent a general trust in the state independent of government. The Nordic countries do in general show a high level of trust in its state institutions in stark contrast to for example the United States. This trust, it is argued by Rothstein and Uslaner, stems from the Nordic countries stable record of good governance, low levels of corruption and lack of repression.

Change over time in negative direction in the scores of either statement could indicate a possible challenge to the Nordic model, and if connected to the time of financial crisis could suggest the effect on the latter on the former.

### 3.3 Unemployment and poverty

“Work for everyone” was the parole of the social democratic governments who rose to power in Norway and Sweden during the Great Depression in the 1930’s (Barth et al. 2003), and has remained a policy goal for the social democratic parties to this time, if somewhat toned down with economic realism. It is times of rising and persistent high levels of unemployment in Denmark, Sweden and Finland that has attracted critics of the Nordic model in particular, foreseeing the eventual doom of the model as it fails to keep employment rates up and public expenditure down (Andersen 1997). However, as shown by Andersen, the ability to keep the unemployed out of poverty even in times of economic hardship is one of the achievements of the Nordic model. As an indicator then, if rising levels of unemployment is observed without
a significant increase in the number of people living in relative poverty, the Nordic model could be said to weather the crisis. And vice versa, if both unemployment rates and the number of people living in relative poverty increase, the model could be said to not cope with the effects of the financial crisis in its current form.

The data used to investigate this relationship are collected from the OECD and Eurostat databases to provide data on unemployment and poverty respectively. From the OECD data I make use of the Harmonised Unemployment Rate (HUR) which is available for most OECD countries in the entire period. The data are based on household surveys, which is widely agreed upon to be the most reliable source of data on labour market key statistics (OECD 2013). As always, there is an inherent risk in comparing what is essentially national data across countries, but probably less so with unemployment than with other indicators such as poverty in the section below. I do however not believe there to be any reasons to question OECD’s methodology in comparing and harmonising unemployment rates, and the data should therefore be comparable.

While comparing unemployment across the Nordic countries is relatively unproblematic, that is not the case when it comes to levels of poverty. Constructing comparable rates of poverty across countries is very difficult for a number of reasons: The numbers are heavily influenced by the definitions used, which vary in each country due to difference in tax and redistribution systems, household income distribution, the coverage and costs of public and social services and various cash benefit schemes to name a few of the many methodological problems, in addition to difference in data collection (Kirkeberg, Epland og Normann 2012). In addition, OECD and Eurostat operate with different definitions of poverty, 50 % and 60 % of median income respectively. The latter is the most widely used, also by national statistical bureaus and will therefore also be used here.

To create comparable data on poverty, Eurostat has made use of both ex-ante and post-ante harmonisation (Eurostat 2013). This has produced numbers that are quite different from the numbers reported by national statistical bureaus, illustrated in the table below.

<table>
<thead>
<tr>
<th>Table 1 Comparing National and Eurostat RoP levels</th>
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<tbody>
<tr>
<td>Finland</td>
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<tr>
<td>Norway</td>
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Sources: Eurostat, SSB (2013), Statistics Finland (2013)
As we can see in table 1, there is a difference in the average RoP levels between Eurostat and national statistics of 4,1 % and 5,8 % in the case of Finland and Norway respectively. The EU 60 % of median income definition of poverty has also come under attack in recent public debate in Norway, when it was revealed that Norway had a higher percentage of its population in relative poverty than Bulgaria (Slettholm 2013 ). Exactly how those calculations were made is not detailed in the article, but by comparing the RoP rates of Norway and Bulgaria, we can quite clearly see that this is not the case in the Eurostat database where the average RoP rate of Bulgaria in the period 2008-2012 is 47,71 % compared to 14,68 % in Norway. That a family with four children, one parent at home and a yearly income of 685 000 NOK (roughly 9100 Euro) would be considered poor with the EU definition is used as another example of flawed definition in the article. Patriotic indignation aside, the fact that median income levels in Norway are only second to Luxemburg in the OECD also translates into a poverty line threshold that is much higher than in the other Nordic countries, whose poverty line thresholds are between 70 % and 80 % of that of Norway (Kirkeberg et al. 2012). This of course further complicates comparison across countries.

Despite the striking difference in RoP levels between national bureaus and the Eurostat database, I consider the latter to have an acceptable level of reliability through its harmonisation of RoP levels between countries. It therefore remains the best source of data for a cross country comparison of the relationship between unemployment and poverty at this time. The data from the Income and living conditions table cover the period 2004 - 2012, with the exception of Sweden where data is not available for 2012 (Eurostat 2013).

3.4 Centralized Wage Setting

A precondition for wage moderation and wage compression is the institution of collective bargaining or centralized wage setting. Barth et al points out that internationally and also in Scandinavia, economists think of strong unions as synonymous with monopoly and protectionism. However, they note, this view would lead to a poor understanding of the European labour market institutions and the distinctiveness of the Scandinavian model. A central point is that the Scandinavian institutions have not primarily redistributed income from Capital to Labour, but rather between employees themselves.

Barth et al identifies three important consequences stemming from the institution of central wage setting that was introduced in the 1930’s in all Nordic countries: First, work conflicts were practically eliminated. From being the countries in the world with the highest number of
work conflicts in the interwar period, Norway and Sweden had the lowest number of conflicts after the Second World War. Second, what determined the setting of wages were the conditions facing the export industry, as the unions here were the most powerful within LO (Norway). The labour market institutions were thus adjusted to meet a system of international free trade. And third, centralized wage setting lead to gradual wage compression that over time generated the most egalitarian income distribution in the capitalistic world. Wage compression became an explicit goal of the labour unions in Norway and Sweden in the 1950’s, but Barth et al point out that wage compression is closely connected with central wage setting in all advanced economies, regardless how it comes about, or whether it is an explicit policy goal or not.

Measuring change in wage setting has been attempted by several scholars and received much attention in the comparative political literature, but has been plagued by conceptual challenges and sensitivity of empirical findings to the choice of wage setting measure (Kenworthy 2001). Several measures have been developed since the 1980's with somewhat different focus and conceptualization of wage setting. Kenworthy emphasise that conceptualization is of critical importance to construct good measures. For example, when considering wage centralization, Kenworthy stresses that there are three principle elements: One is the level at which bargaining is made, with peak/central (or national), sector/industry and company/plant as the three most salient levels. Second, the coverage of the bargaining is important. If only 10% of the workforce is covered by the central wage agreement, it does not make much sense to consider it a highly centralized wage-bargaining process. And third, one must establish the degree of horizontal centralization, that is whether a union covers employees (and employers) across firms/plants (and sometimes across sectors) which is the norm for Scandinavia, or if bargaining is more decentralized where only groups of employers negotiate within each firm (as in Great Britain) or unions represent all employees at each firm or plant as has been the tradition in Japan.

Other researchers argue that wage centralization should not be the focus of analysts interested in the effects of wage setting, among them David Soskice who suggests that one should rather look at wage coordination (Kenworthy 2001). Wage coordination, it is argued, is fundamentally a behavioural concept that refers to the degree of intentional harmony in the wage setting process, in Kenworthys example when minor players deliberately follow along with what the major players decide. This concept, that of wage coordination, is highly
relevant for the Scandinavian case, where the export-oriented industries who are vulnerable to international competition negotiate first and set the frame for the following negotiations in the rest of the private and the public sector.

A considerable part of Kenworthys paper is devoted to comparing the different measures, and demonstrating the sensitivity of empirical findings generated by different measures. Graphs for several countries including the four Nordics show a striking difference in empirical results between the six measures tested for each country. The lesson learned is thus that empirical results obtained from any study of wage setting must be considered in the context of the measure employed. Analysing the effects of wage setting is therefore inherently more difficult and the results more uncertain than analysis employing more standardized and defined concept such as GDP growth and Risk of Poverty levels. That is not to say that these and other concepts are beyond contestation, as have been and will be discussed in their respective sections, but greater care must be taken when interpreting the results from an analysis of wage setting, and conclusions will necessarily be less certain.

Kenworthy found in his paper the newer measures available at the time (in particular those of Iversen and Traxler-Blaschke-Kittel) more developed and better suited for such an analysis than the earlier ones of Cameron and Calmfors-Driffil. Since then, other measures have been developed, and in this paper I will make use of the ICTWSS database. This database includes entries for 34 countries from 1960 to 2011 as of version 4, and builds in part on the earlier works of Traxler and Kenworthy (Visser 2013). The great advantage of this database in my opinion is its vast number of variables that together represent nearly every spectre of wage setting discussed in Kenworthys article, as well as providing much information on many more aspects of government involvement, legal provisions and the relative power of unions and employer organisation in each country. This makes it a suitable source of data for this thesis and data on employer organisations will be used in the section on work conflicts later in this chapter.

To explore the development in wage setting in the four Nordic countries I will make use of four indicators in the ICTWSS dataset: *Coordination*, *Type of coordination*, *Government Intervention* in wage bargaining, and the predominant *Level* at which wage bargaining takes place. Together, these indicators cover the most relevant aspects of the wage setting in the Nordic Model studied here. Other aspects such as union and employer organisation density and coverage will be explored later in this chapter, while legal provisions such as the right to
strike and minimum wages (where applicable) will not be considered here. Finally, in addition to examining and comparing each indicator, I will construct a fifth indicator by summarising the score of all four indicators for each country and year as a “general wage setting” indicator to represent the overall centralization of wage setting. In the following paragraph I will a short description of each indicator to operationalize them as variables.

**Coordination of wage setting** consists of an annual score from 1 to 5 that measures the degree of coordination in the wage setting. Each score has a set of conditions detailed in the codebook. I will here refer the conditions for the scores relevant to the Nordic case in the period covered, which is 3-5.

- **5** = a) centralized bargaining by peak association(s), with or without government involvement, and/or government imposition of wage schedule/freeze with peace obligation.
  b) informal centralisation of industry-level bargaining by a powerful and monopolistic union confederation.
  c) extensive, regularized pattern setting and highly synchronized bargaining coupled with coordination of bargaining by influential large firms.
- **4** = a) centralized bargaining by peak associations with or without government involvement, and/or government imposition of wage schedule/freeze, without peace obligation.
  b) informal (intra-associational and/or inter-associational) centralisation of industry and firm level bargaining by peak associations (both sides).
  c) extensive, regularized pattern setting coupled with high degree of union concentration.
- **3** = a) informal (intra-associational and/or inter-associational) centralisation of industry and firm level bargaining by peak associations (one side, or only some unions) with or without government participation.
  b) industry-level bargaining with irregular and uncertain pattern setting and only moderate union concentration.
  c) government arbitration or intervention.

**Type of Coordination** refers to how coordination in wage setting is achieved, and consists of a scale from one to six in the codebook:

- **6** = State-imposed bargaining (incl. statutory controls in lieu of bargaining)
• 5 = State-sponsored bargaining (this includes pacts)
• 4 = Inter-associational by peak associations
• 3 = Intra-associational (“informal centralisation”)
• 2 = Pattern bargaining
• 1= Uncoordinated bargaining

*Government Intervention* describes to which degree the government actively intervenes in the wage setting process. Government intervention differs between the countries to a surprisingly high degree. While activist states by many measures, the Nordic countries do not as a rule intervene in interest conflicts between the parties in the wage setting process other than providing means of arbitration. However, the power of these state provided mediators vary greatly between the countries: In Denmark and Norway, the mediators can order delays in strikes and lockouts and force referenda on proposed solutions in a way that can override minorities. On the other end of state mediator power lies Sweden, where both the labour and employer organisation jealously guard their prerogatives and responsibility to the maintenance of labour peace against any form of government intervention. Finland occupies an intermediate position where the state mediators can delay strikes like in Denmark and Norway, but cannot force referenda (Elvander 1974). Furthermore, the governments may also intervene more actively through compulsory arbitration and forced compliance with the resulting settlement. Such compulsory arbitration has been very rare in Sweden and Finland for a number of ideological, organisational and historical reasons, while more frequent in Denmark and especially Norway where in the latter case it exists as more or less institutionalised tool for wage setting on part of the state to this day.

In the ICTWSS codebook, government intervention is measured on a scale from one to five detailed below:

• 5 = the government imposes private sector wage settlements, places a ceiling on bargaining outcomes or suspends bargaining.
• 4 = the government participates directly in wage bargaining (tripartite bargaining, as in social pacts).
• 3 = the government influences wage bargaining outcomes indirectly through priceceilings, indexation, tax measures, minimum wages, and/or pattern setting through public sector wages.
- 2 = the government influences wage bargaining by providing an institutional framework of consultation and information exchange, by conditional agreement to extend private sector agreements, and/or by providing a conflict resolution mechanism which links the settlement of disputes across the economy and/or allows the intervention of state arbitrators or Parliament.

- 1 = none of the above

*Level* refers to the predominant level at which wage bargaining takes place. A level is predominant if it accounts for two thirds or more of the total bargain coverage rate for a given country and year.

- 5 = bargaining predominantly takes place at central or cross-industry level and there are centrally determined binding norms or ceilings to be respected by agreements negotiated at lower levels.
- 4 = intermediate or alternating between central and industry bargaining;
- 3 = bargaining predominantly takes place at the sector or industry level;
- 2 = intermediate or alternating between sector and company bargaining;
- 1 = bargaining predominantly takes place at the local or company level

Finally, the *Centralized Wage Setting* variable is constructed through addition of scores on the other variables for each country and year. The score is then divided by three for ease of comparison. This variable is to represent the general level of centralized wage setting in the Nordic countries, and should be seen as a tool for comparison and not a variable conceptualized in detail.

With these five variables, we should be able to identify changes in the wage setting process in the Nordic countries that may have large consequences for the institutional equilibrium that serves as the fundament for the Nordic Model. Should the wage setting process become less centralized over time, then we should see a corresponding decrease in wage compression. This may not happen, and could then be a result of either that the relationship between wage compression and centralized wage setting is not as theorised, or that change in wage compression as a result of recused centralisation in the wage setting process takes time to come into effect, and that the results may not be visible yet.
One of the hallmarks of labour institutions the Nordic countries is that of general agreements between labour and employer organizations that impose labour peace between negotiations. That is, most types of strikes and lockouts are outlawed in the duration of an agreement, which are typically made for one or two years depending on country and sector. These agreements came about both due to the high number of work conflicts in pre-war Scandinavia and to limit government intervention.

The approach used here is one that measures the stability of the already existing centralized wage setting system indirectly by comparing income distribution and work conflicts across time and country. The logic of this approach is that wage compression is a result of centralized wage settings and that the number of work conflicts is directly related to how well the system works given that it should reduce the amount of said conflicts. In other words; if the income distribution remains stable or moves in more egalitarian direction while labour conflicts remain stable or decrease, the system of centralized wage setting must be said to work as intended. If either variable increase the other direction, more inequality or increase in labour conflicts or both, something has changed. Observations of intensified or continued wage setting as a result of the financial crisis could then indicate the resilience of the Nordic Model, while a move towards more local negotiations and away from collective bargaining could signal a change in the Nordic Model faced with the effects of the financial crisis. No change either way would suggest that the financial crisis has not had a significant effect on this aspect of the Nordic Model.

3.5 Union and employer organisation density

The Scandinavian countries have traditionally had a significantly higher percentage of the workforce organized in unions than continental Europe or USA, and has according to one narrative (Labour vs Capital) considered by Barth et al been of critical importance for the subsequent rise of the Nordic Model. While they are not convinced of the narrative, Barth et al still see trade unions as a part of the power constellation that maintains the institutional equilibrium that brought forth and sustains the Nordic Model. Union density has gone down in all the Nordic countries since its heydays in the inter- and post war periods, often in conjugation to changes in social insurance policies or the Ghent system (Dølvik 2013). Another political development that may well be relevant here is the acceptance of neo-liberal now widespread in the capitalist system that the Nordic countries are so intertwined in.
The other part of that power constellation is of course the employer organisations. As emphasised by Barth et al, the solidarity between employers is just as vital to the wage setting process and tripartite cooperation between Capital, State and Labour that is so essential in Denmark and Norway in particular. Without strong, centralised employer organisations that ensures solidarity between its members and hinders individual employers from breaking out and bargain with Labour locally, the employers as a collective would not be able to achieve the collective gains that come from reducing income inequality, namely a reduced average wage.

We see here then that labour unions and employer organisation have a common interest in reducing income equality through wage compression: Labour unions achieve their goal of raising the real wage for the majority of its members (who on average earn less than the median wage (Barth et al. 2003)) and ensuring near full employment, and employers benefit from the resulting lower wages on highly qualified labour than what would be the case without the wage compression that comes with solidarity in centralised wage setting processes. Therefore, both strong union and employer organisations could be argued to be both a visible trait and important condition for the centralised wage setting process, and thus also the Nordic Model. Considering this, an increase or decline in Union or employer organisation density over time could indicate that there has been some institutional re-arrangement that may the wage setting process and thus wage compression in the future. If change here is observed after the financial crisis, then it may be a sign of its effect on the future of the Nordic Model. Some studies have also proposed a correlation between union and employer density; when union density decrease, so do membership in employer organisations (Croucher, Tyson og Wild 2006).

Labour unions have been studied in detail on many aspects over many years, and data is thus readily available on union density in most industrialised countries, among others from the International Labour Organisation (ILO 2013). Union density is here defined as workers organised in unions as a percentage of the total labour force.

In contrast to labour unions, employer organisations have received less attention and there is very limited data available on their density. This is partly because employer organisations are often reluctant to publish membership figures and often lack data on how many people their members employ (Hayter og Stoevska 2011). The ICTWSS database contain some observations, ranging from 1989 to 2010, but with as few as three observations for one
country, Denmark, and no more than six observations at the most, as is the case for Finland. It can therefore not serve as anything else than a weak indicator, but may still yield some insights into the relative strength of employer organisations in the Nordic countries over time. Since there is only one observation of employer organisation density after the financial crisis (Finland in 2010), it is not of much relevance to the question of whether the financial crisis has had an impact, but will hopefully say something about the employer unions in the time before the crisis. Employer organisation density is here defined as workers employed in companies/firms that are members of an employer organisation, as a percentage of the total work force (Visser 2013).

3.6 Partisan positions

Despite a better climate for economic liberalization in the 1980’s, the political Right in Scandinavia have come to identify with the Nordic Model, acknowledging that the road to power goes via cautious reform and acceptance of the Nordic Model (Dølvik 2013). The Social democratic parties are unsurprisingly supportive of the model to the degree that they sometimes claim ownership of it. In other words, there seem to be little difference between party positions on the question of whether the principles of the Nordic Model should endure, but rather on what adjustments need to be made to sustain its viability. This has been the situation since the 1990’s and the banking crisis, and a sudden change in sentiment on part of the Political Right in the aftermath of the financial crisis could indicate that the crisis may have disturbed the Right’s assessment that the model should endure, and that there is movement in the electorate in another direction.

The position of parties in a country towards integral parts of the institutional equilibrium that is the Nordic Model can tell us something about the political and ideological legitimacy of the model. This can be measured in a number of ways, from only considering the political programs of the parties to take into account every speech, remark and legislative act of each party, both by themselves in opposition and together as ruling coalitions. This is of course very detailed work that requires time and resources not readily available to all, but has fortunately been done in the past by Nygård (2006) who made use of the data collected and codes by the Manifesto research Group (MRG). Nygård tracked the partisan support for Welfare expansion, welfare limitation and market orientation in all four Nordic countries from 1970 to 2003.
His conclusion was that partisan positions on the welfare state have remained quite stable and positive, although the parties on the right have over the years adopted a somewhat less intensive stance on welfare expansion and become more positive to market based solutions. Furthermore, neither globalisation, economic conjunctures or de-industrialisation have resulted in abandonment of traditional Nordic welfare state values, even if more emphasis have been put on market related solutions to social problems. His findings are in other words in line with one of the mains findings of Barth et al, namely that globalisation and exogenous shocks such as international economic slowdown do not by themselves threaten the institutional equilibrium that upholds the Nordic Model.

From the time of Nygård's study up until now, there have been a total of ten elections in the Nordic countries, as well as the global financial crisis that engulfed three of them. I will therefore replicate Nygård's study with a slightly different timeframe, namely from 1985 to 2011, which is the endpoint for the data available at the MRG (Volkens, Lehman, Merz, Regel og Werner 2013). Unfortunately, there is no data coded for the 2005 election in Norway, which nets us eight new data points since Nygård's study in 2003.

The MRG data are however not without problems, as Nygård details in his study. In addition, this replication faces the potential problem of omitting an increasingly important party from the Norwegian election data, the populist-right Progress Party (FRP). FRP has enjoyed growing electoral support during the last decade with 22,1 % and 22,9 % of the votes and thus becoming the second largest in parliament in the 2005 and 2009 elections respectively. In the most recent election of September this year, FRP was reduced to 16,3 % but entered government for the first time in its forty-year history together with the Conservatives (Høyre). It can therefore be argued that FRP should be included in the sample to better represent the positions of major Norwegian parties on the welfare state. However, while FRP may be an outlier in its enthusiasm for privatization of public services it does not exhibit any radical position on welfare limitation. On the contrary, FRP is one of the more vocal proponents of expanding the welfare state, in particular in regards to better the accommodation of seniors, increasing pensions and reducing the waiting time for patients in line for treatment (FRP 2013). Where the party leaves the conventional socialist policy welfare state expansion is in the area of financing. Where the Left wish to finance the welfare state by taxation and the Conservatives by gradual privatization and reduction of benefits overall, FRP argues that the services themselves should be privatised as far as possible, but still fully financed by the state. In other words, FRP is an outlier only in the question of welfare state financing, and much
less so in the question of expansion or limitation. I therefore argue that it is not a major problem to replicate Nygård’s study and thus omit FRP as long as its diverging views on welfare financing is kept in mind during the analysis.

Table 2

Countries, parties and elections

<table>
<thead>
<tr>
<th>Country</th>
<th>Party</th>
<th>Elections (First-last)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Socialist People’s Party</td>
<td>1981 – 2011</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Social Democratic Party</td>
<td>1981 – 2011</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Radical Liberals</td>
<td>1981 – 2011</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Liberal Party</td>
<td>1981 – 2011</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Conservative People’s Party</td>
<td>1981 – 2011</td>
<td>9</td>
</tr>
<tr>
<td>Finland</td>
<td>VL/Left Wing Alliance</td>
<td>1983 – 2011</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Social Democratic party</td>
<td>1983 – 2011</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Centre Party</td>
<td>1983 – 2011</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Swedish People’s Party</td>
<td>1983 – 2011</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>National Coalition Party</td>
<td>1983 – 2011</td>
<td>8</td>
</tr>
<tr>
<td>Sweden</td>
<td>Left Communists Party/Left Party</td>
<td>1982 – 2010</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Social Democratic Labour Party</td>
<td>1982 – 2010</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Centre Party</td>
<td>1982 – 2010</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Liberal People’s Party</td>
<td>1982 – 2010</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Moderate Coalition Party</td>
<td>1982 – 2010</td>
<td>8</td>
</tr>
</tbody>
</table>

A larger issue is the lack of data for the 2005 Norwegian election which can reduce the explanatory power of the variable. This cannot be helped as far as I am aware, and must therefore be kept in mind when the data are analysed. Table 3.1 above show the parties, time frame and observations included in the analysis, in line with Nygård’s earlier study.
Considering both Keynesian and more orthodox political economic theory, one could expect both decrease and increase in partisan positions on all three variables in the wake of an economic crisis.

3.7 Summary
Of the traits presented here, I consider wage compression, legitimacy, unemployment and poverty, collective bargaining and union density as the most promising variables. Alone, they each say something about changes in specific institutional arrangements that make up the Nordic Model. Together, they may help us conclude whether the financial crisis has brought about significant changes in the Nordic Model, or if it has once again weathered the storm of economic downturn. There are of course methodological challenges associated with each of the variables, but by applying a solid analytical framework, these should be avoided or mitigated to an acceptable degree.

Kap 4: Data and Research design
This chapter presents data used and research design applied in this study. The first section will elaborate on the scope of the research and its general applicability. Second the research design itself will be discussed, and finally the data presented in section three.

4.1 Scope and general use
This thesis has been motivated by two desires: To assess the strength of the Nordic model in the face of the current economic crisis and to construct an analytical framework that can carry out the former at any time period. Considering that the crisis began to unfold only five years ago, it will quite likely be difficult to observe any major change yet. Structural changes are normally slow by nature and the crisis may have had consequences for the model that have yet to be set in motion. Conversely, the lack of data further back in time severely limits our ability to compare the current crisis with similar crises in the past. It is my hope and goal that when more data is available both for the past and the future, the analytical framework constructed here can be of use to analyse the new data, with or without modifications that new insights and eventual revisions of this paper undoubtedly will make necessary. It is also with future studies in mind that the research design has been developed. The aim has been to build a framework that can incorporate other variables than those studied here should they be more relevant for a related research question.

Finally, while I have strived to conceptualize the Nordic Model as a relative neutral model that could theoretically be used on related systems in other countries with minor or major
adjustments, there may be a natural bias towards the social democratic notion of the welfare state. In this study, consisting of four distinctly social democratic countries it is strength rather than a weakness, but may be more problematic if used on cases other than the Nordic countries. Still, I believe the conceptualization to be general enough to capture the most important traits of the Nordic model that all the Nordic countries share, and the research design suitable both for this and eventual future studies.

4.2 Research design

The research design for this paper is a diachronic comparative study, much in the tradition of comparative politics started by Arend Lijphart (1971) and Stein Rokkan (Rokkan, Alldén og Hagtvet 1987). Since his article in 1971, the comparative method has been both praised and heavily criticized, the latter especially focusing on the problem of small N (King, Verba og Keohane 1994). Charles Ragin (1987) on the other hand demonstrate the strength and limitations of the comparative method, both as a classic qualitative case study and a more statistical variable oriented approach. Ragin goes on to exemplify three studies that have combined the two methods, that is using quantitative techniques to buttress the findings of a case study, or to apply case study “closeness” to data and deviant cases to expand on the statistical analysis. Ragin lauds the former in particular, but in the end makes the case for Boolean algebra as a superior approach to combine the best of two worlds. Boolean algebra is however not suited for this study because one of its requirements is the use of binary data with the great loss of information this entails, contrary to Ragins argument that this is often not of great consequence in comparative studies. Ragin further argues that the number of cases in a study defines the type of the research design: A study of up to five cases is in the world of comparative case studies, a study from five to fifty cases belong in the domain of Qualitative Comparative Analysis (QCA) while research with fifty cases and above should apply statistical methods. In this thesis there are four cases (countries) that are studied over time, making this a comparative diachronic study.

In Ragins terminology, this study is one of combined strategies, using four cases and time-series data for each variable included. While it may be true as Ragin writes that time-series data is not of much use when looking at variables that do not vary much over time, the indicators used as variables here do. Thus it is both possible and fruitful to track the change in the value of the variables over time to identify trends that can be compared both across country and variable.
Where this research design departs from normally employed classification is in the combination of quantitative data and qualitative analysis. Data is collected in large amounts from available sources and then analysed through a classical comparative framework including the dimension of time. This, I believe, enhances the strength of the analysis and should yield more precise results. Earlier studies using this kind of research design include Rudolf Andorka who to my knowledge pioneered the use of time-series data in comparative research in his study of the social development of Finland and Hungary (Øyen 1990). The greatest obstacle to the use of time series in comparative studies is the same today as Andorka noted twenty three years ago; the lack of internationally comparable statistical data on many indicators. This problem has been mitigated to some degree through the work of international organization and several projects, but for many interesting indicators there is still not enough data to make comparisons further back in time.

Another central element of the research design is the acknowledgement that not all data are created equal. That is, some indicators and some findings may be more important than others. This insight is an important aspect of Process Tracing, detailed by Andrew Bennet (Brady og Collier 2010). In his examples, process tracing involves the examination of “diagnostic” pieces of evidence within a case that contribute to supporting or overturning alternative explanatory hypotheses. In this mode of analysis, one will often examine evidence at a finer level of detail or on a lower level of analysis than relevant theory initially indicate. The goal is to establish whether the events or processes within the case fit those predicted by alternative explanations, and are thus analogous to a detective looking for clues and piecing together convincing explanations to solve a crime, or a doctor trying to diagnose an illness by considering the patients history and symptoms.

Process tracing can provide inferential leverage on two problems of causal inference; establishing causal direction and the challenge of potential spuriousness. In the first, careful process tracing focused on sequencing of who knew what, when and what they did in response can help address the question of whether X did cause Y or the other way around. Second, process tracing can help establish whether there is a causal chain of steps connecting X to Y, and whether there is evidence that other variables may have caused both X and Y. Furthermore, process tracing backwards from observed outcomes, as well as forward from hypothesized causes to subsequent outcomes, allows researchers to uncover variables they have not previously considered. Much like a detective can work forward from suspects or backwards from clues about a crime.
Critics, Bennett writes, have raised concerns about infinite regress and degrees of freedom problems about process tracing. In the first it is interjected that an exceedingly fine-grained level of detail may lead to infinite regress backwards that will not get the analysis anywhere but further down the causal chain. Second, critics worry that research on a small number of cases with a large number of variables suffers from a degrees of freedom problem that is especially problematic in statistical studies where the number of cases or observations must be far greater than the number of variables to obtain statistically significant results.

Bennett’s answer to both points of critique is that not all data are created equal, and a researcher does not need to examine every line of evidence in equal detail. It is possible for one piece of evidence to strongly support one explanation or strongly weaken others, while numerous other pieces of evidence at the same time might not discriminate between explanations at all. More concretely, there are four empirical tests formulated by Van Evar that contributes to confirming or eliminating potential explanations. They are illustrated graphically below.

Table 3:

<table>
<thead>
<tr>
<th>Necessary to establish causation</th>
<th>Sufficient to establish causation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Straw in the wind</td>
<td>Smoking Gun</td>
</tr>
<tr>
<td>Hoop</td>
<td>Doubly decisive</td>
</tr>
</tbody>
</table>

*Straw in the wind* tests provide useful information that may favour or call into question a given hypothesis, but are not decisive themselves being neither necessary nor sufficient criterions for accepting or rejecting a hypothesis.

A *hoop test* can eliminate an alternative hypothesis but do not give direct support to a support that is not eliminated, being a necessary but not sufficient criterion for accepting an explanation. An hypothesis must “jump through the hoop” to remain under consideration, but doing so does not strongly affirm the hypothesis. Van Evaras example of a hoops test is the question “was the accused in the state on the day of the murder?”
A *smoking gun test* strongly supports a given hypothesis, but does not eliminate an explanation that fails the test as it is a sufficient but not necessary criterion for confirmation. A smoking gun in the suspects hand right after a murder strongly implicates him, but the absence of a gun does not exonerate him of the crime.

A *doubly decisive test* on the other hand confirms one hypothesis and eliminates all others, as it provides both a necessary and sufficient criterion for accepting the hypothesis. One such piece of evidence may be enough where many *straw in the wind tests* may be indecisive. Van Evaras example here is a bank camera that catches the faces of robbers, thus implicating them caught on tape while exonerating all others. Such tests are naturally quite rare in the context of social science but a hoop test and a smoking gun test together accomplishes the same analytical goal. Bennet then illustrates these tests by a several cases, among them why the Fashoda crisis did not result in war between Britain and France, the expansion of war goals of the German Empire during WW1 and the peaceful end of the Cold War.

This case is admittedly somewhat different than the examples used by Bennett, considering not competing explanations but rather investigating if the premises of an explanatory theory hold over time, and whether a single defined event has changed the fundament of those premises. Nor is the search for causation so emphasised in this thesis, and is limited to looking at preliminary evidence of the effects of the Global Financial Crisis on the Nordic Model and its future. Still, the research design bears considerable resemblance. In this paper it is not expected that any of the variables will provide decisive evidence one way or the other as they all represent only a smaller part of a larger model. Furthermore, some of them can only provide indirect evidence depending on change or lack thereof in other variables. In other words, like Bennett’s examples, this thesis will look at diagnostic pieces of evidence, judge them by applying appropriate tests and piece them together to assess the change or lack thereof in several traits that together constitute the Nordic Model. For this purpose, the Hoop test provides a useful analytical tool to judge evidence. None of the traits investigated in this study are sufficient for the model as defined here, but two are necessary conditions, namely Wage Setting and Wage Compression. The other traits all fall somewhere between being straws in the wind and Hoops, but for analytical clarity I will reserve the Hoop test for those two traits.

The matter of deciding what constitute a significant deviation is not an easy one. One could argue that there are two ways to measure this: Either by looking at relative deviation from the
norm that the mean of the Nordic countries represent. Or, one could measure against an OECD or EU average on these scores and see whether a country has left the «Nordic cluster», thus deviating from the norm. I have decided to employ both in the case of wage setting and wage compression variables. The reason for this is the wish to capture both relative deviation between the Nordic countries, and compared to an OECD or EU average. It is not unlikely that a country may deviate sharply from the other Nordic countries on one or two variables, but still remain within a clear «Nordic cluster» compared to an EU or OECD average. Since we are mainly interested in the robustness of the Nordic model today, I will test for these deviations using the 2011 scores for wage setting and wage compression in a scattergram and table. The first will show if there is a distinct Nordic cluster and to what degree the countries stay within. The latter will show the score for the Nordic countries and the average for the 17 countries in the Euro area. Finland is included in the Euro area, so the difference between Euro area and the Nordic countries may be larger than reported there.

Conclusions about causal chains must therefore be made with caution and a great deal of consideration of all the evidence together while emphasizing that some pieces of evidence are more important than others. Some variables will therefore be given more attention than others because they are thought of as more central to the model or expected to give more decisive evidence. As this thesis builds on Barth et al’s model, Wage Compression and Centralised Wage Setting are the two most important variables that will be given the most weight in the analysis. That is not to say that the other variables considered here are less important, and one should not discount the possibility that the empirical findings may urge adjustments to the model in favour of emphasising other variables.

Discrimination along these lines makes the analysis more manageable and finds support in the theoretical and empirical literature on the subject. In short, some variables are considered more important than others here and will receive the most attention, but any conclusion must be drawn from the big picture that includes all the variables.

I should underline though, that while quantitative data (and to a certain extent techniques) are used, this thesis is still qualitative in its way of drawing inference. By comparing different indicators over time across the countries, we may find that a country “moves away” from the model in one area but firmly embraces the model on another and variations in which variables are embraced or discarded in which country may also be observed.
4.3 Data
The data used in this paper come in three main categories: annual time-series at country-level, biannual survey data in waves and partisan position data at election dates. The first category is straightforward to use as they are coded with a single country and year, while the latter two consist of survey data at the individual level and policy position at party level respectively. The survey data has therefore been aggregated to country level by calculating the percentage of respondents who agree, disagree or are neutral to the claims presented in the survey. These aggregated data can then be used as regular time-series on country level, and thus enabling us to chart the trends from 2002 to 2010. For the sake of continuity and comparison, the data from the GRM have been recoded from party to country level by calculating the mean score of each variable in the same manner as Nygård did in his study.

The data do unfortunately have a few shortcomings. First, with the exception of GDP growth rates and labour conflicts (number and days), data seldom covers the whole period from 1985-2012 that is of interest. Usually, data is only available from the early 2000's, and not always for the last year of the study, 2012. In addition, the last wave of 2012 for the ESS survey data is at the time of writing not available, somewhat hampering our ability to draw precise conclusion on the long term effects these may have on the model.

While these shortcomings of the data narrow the scope of analysis somewhat, they can be overcome. The use of time-series data means that missing data for a year or period is not critical as it is trends over time, not cross-sectional data that is of interest. While a direct comparison with the Nordic banking crisis is not feasible for several of the variables because of lacking data, the main point of interest, the recent financial crisis can be studied in detail in all three dimensions.

The data are collected mainly from the databases of OECD, Eurostat, and ILO, and from the national statistical bureaus where databases are incomplete, as in the case of labour conflicts. Data collected and coded by the Manifesto research Group (GRM) has been used to measure the trends in partisan positions towards three indicators of the model.

4.4 Defining a crisis
The first question that surfaces when one seeks to investigate the effects of a financial crisis is naturally just what constitutes a financial crisis? Where do we draw the line between recession, depression and financial crisis? These questions are not new, and those who have previously written on the subject have come to find that there is no straightforward answer to
these questions, as there is neither a commonly accepted definition nor a common theory of crisis (Jonung et al, 2009). To avoid a futile struggle in an attempt to settle the debate and introduce a definite definition, I will follow the lead of Jonung et al who define a crisis as “an exceptionally sharp decline in economic activity”. In other words, the larger the decline in real income (GDP) growth, the deeper the crisis. Jonung et al summarizes economic crisis for Finland and Sweden from 1877 and up to the Nordic banking crisis of the 1990's, and thus provides a helpful framework for classifying the economic downturn in 2007-8. Among the crisis that Jonung et al identifies is naturally the Nordic banking crisis. The graph below show the growth rates in GDP of the four Nordic countries since 1985.

Figure 4.1: GDP growth 1986-2012. OECD

Quite clearly, we see that the downturn of 2008 was even sharper, even more severe than that of the late 80's and early 90's across all four countries. Therefore, there should remain no doubt that the downturn of 2008 can be safely defined as a crisis for three of the countries in question; Denmark, Finland and Sweden. The Norwegian case is more ambiguous in the sense that the fall in GDP growth was more limited both in magnitude and time than its neighbours, falling only to -1.8 at the height of the crisis, compared to -6, -6.8 and -8 for
Sweden, Denmark and Finland respectively. However, the fall was sharper and steeper than in 1988 and the slump of 1998 and thus constitutes a crisis in accordance to the definition of “an exceptionally sharp decline in economic activity”.

5. Analysis

In this chapter I will analyse the empirical data that has been collected. For most variables I have included graphs that show the change in values over time for each country. For some variables I have also included tables where further examination is required. The variables have been organized into groups that correspond with the characteristics of the Nordic model for consistency. Each group of variables will first be considered independently, but the general analysis will connected the threads and give a more generalized overview.

5.1 Wage setting

As one of the two main variables in this thesis, change over time in the indicators of this variable is of great importance to the conclusion to be reached later. To give an overview of the development of these indicators over time, I have organized them in graphs by country for the first four indicators, and a direct comparison between the countries on the general wage setting variable.

Graph 5.2 below show the development in Denmark in the period 1980-2011. Evident from the graph is the sometimes sharp increase and decrease in all variables but coordination from year to year during the 1980’s, with a final spike in 1998, again with the exception of coordination which dropped in that year.

From 1986 and onward, a clear trend emerges for all indicators: Coordination of wage setting stabilizes on a high level that involves bargaining at peak levels with labour peace in the agreement duration (though ICWTSS place this at level 5). At the other end, we find government intervention quite stable at level 2, much as expected given the reluctance of the Danish state to intervene, and the responsibility of both labour unions and employer organisations to reach solutions through negotiations and maintain labour peace. On the same level we also find the type of coordination, despite its high volatility in the early 1980’s.

Its low score reflect again the independence of the labour unions and employer organisations from the state, and their preference to reach settlements through negotiations on different levels. Finally, the level at which bargaining takes place remains stable from 1987 at the intra-
associational level, or “informal centralisation”, with a somewhat peculiar decrease in 1998 in contrast to the other indicators.

![Graph showing trends in wage setting in Denmark](image)

**Figure 5.2 Denmark 1980-2011. ICWTSS 2013.**

This spike in all indicators was due to workers for the first time in 42 years refusing to support a joint mediation proposal in a ballot, eventually prompting state intervention to end the conflict (EIRO 1998). Considering that the Nordic Banking crisis took place in the early 90’s and the Global Financial crisis from 2008 and onward, the graph suggests that these crises has not had any noticeable effect on the centralisation of wage setting in Denmark.

Turning to Finland, we see a rather different picture with indicators showing sharp increase and decreases at 3-4 year intervals. Trends here are less stable, but all indicators stay operate on a score between 3 and 5 until 2006 where the type of coordination drops sharply from 5 (state sponsored bargaining) to 2 (pattern bargaining) in the period 2006-2010 before returning to the previous level in 2011. Of note here is also that Coordination of wage setting is perfectly correlated with (hidden behind) Type of coordination 1983-1988 and with Level of Bargaining 1988-2011.
Government intervention varies between score 3 and 4 during the period covered, that is between influencing outcomes indirectly through indexation, price ceilings, public sector wages of other means, and tripartite bargaining respectively. We can also see that wages are bargained at a higher level than in Denmark, in most years either at peak/national level (5) or at the sector/industry levels (3), with something in between (4) in the period 1984-87. We also note a fall in all indicators both around the time of the Nordic Banking crisis and the Global Financial crisis. Whether this fall is fully or in part caused by the economic crises is difficult to tell without looking at other indicators as well.

In the case of Norway we see a trend of relative stability from 1995 and onwards where all indicators but government intervention remain at their 1995 levels except in the year 2000 when there is a spike in all indicators except government intervention due to a strike in the private sector involving some 80,000 workers after a joint proposal was rejected by LO members in a ballot (EIRO 2000). The type of coordination is the indicator that has the largest change over time in Norway, falling from the highest level (6) in five of the 11 years from 1980 to 1990, which implies state imposed bargaining in those years, to stabilize at level 2 (pattern bargaining) from 1994 until present day with the exception of the year 2000 when it reached 4.
The level of bargaining also receives a lower score on average from 1995 and onward than in the preceding 15 year period, moving from “intermediate or alternating between central and industry bargaining” (4) on average to a level of bargaining that “predominantly takes place at the sector or industry level” (3). Contrary to the type of coordination and the level of bargain, the coordination of wage setting is in general at a higher level after 1994 than in the preceding years, stabilising at “centralised bargaining by peak associations with government involvement” where the government in Norway represented by the National Mediator (Riksmekleren 2013).

Finally, government intervention in Norway deserves special attention. The Norwegian government is in the literature known to intervene more often than its counterparts in any of the other Nordic countries (Elvander 1974). As we can see from the graph, intervention in the wage setting process was frequent in the 1980’s, with compulsory arbitration in 1981, 1982 and 1984, as well as wage law based on NHO/LO agreement in 1988 and government imposed wage and price freeze in 1989 (Visser 2013). Since 1998, government intervention has stabilised at 3, meaning indirect government influence over the bargaining outcomes through price ceilings, indexations, pattern setting etc. Of note is that the large strike in the year 2000 did not prompt more direct government intervention. The last year of which there is
data is 2011, but it should be noted that the government intervened with compulsory arbitration in a relatively small-scale strike in the petroleum sector in 2012 when the employer organisations threatened with lockout against all organised workers. As a consequence, the trade unions in question have though their confederal associations LO and YS taken action and brought a case against the Norwegian state to ILO, who have in earlier verdicts on cases regarding compulsory arbitration in the petrol sector concluded that the Norwegian state has violated labour conventions of which it is a legal signatory country (Jøndtvedt 2013). From this we can conclude that the frequency of direct government intervention in the wage setting process has been lower in the past 13 years on average than in the period before them, it will still take active part in the process, and intervene when it deems it necessary, even if in conflict with ILO conventions. As with Denmark, we find no evidence to suggest that the recent financial crisis has had any effect on any of the indicators.

Continuing to Sweden in figure 5.5, we also find that all indicators stabilise from 1997 and onwards, with government stabilising two years later. We see no increase or decrease in any indicator from 1999 to 2011. As for general trends, we note the same volatility in the 1980’s and early to mid-1990s as in Denmark and Norway respectively. As expected from the literature, government intervention has stayed at low levels throughout the greater part of the period, with some notable exceptions on the mid-1980’s and early 1990’s. This stands quite in contrast to the more interventionist state in Norway. The type of coordination has also stabilised at the same low levels of pattern bargaining as in Denmark and Norway since 1998. The coordination of wage setting too follow roughly the same trajectories in the late 1990’s as in Denmark and Norway, stabilising at the relatively high level “of centralised bargaining by peak associations with government involvement” (4) from 1997 and onwards. Finally the most noticeable trend is that the level of bargaining has decreased from the highest of level (5) meaning that “bargaining predominantly takes place at central or cross-industry level and there are centrally determined binding norms” at several years in the 1980s and early 90’s to stabilising at the level where “bargaining predominantly takes place at the sector or industry level” (3).

Similar to the cases of Denmark and Norway, we cannot see any increase or decrease in any indicator in the time period of the financial crisis, and thus find no reason to suggest that the financial crisis may have had an effect on centralised wage setting in Sweden.
5.1.1 Adding together

By adding the scores of all four indicators together we can construct an overall score for central wage setting. The scores are then divided by three to reduce the scores evenly for a better fit within graph parameters. The result is a directly comparable measure of wage setting centralisation in the four Nordic countries, and one trend is immediately evident: With the exception of Finland, the overall centralisation of the wage setting process has decreased in all four countries from the early 1980’s in the case of Denmark, late 80’s in Sweden and the middle 90’s for Norway. Finland remains quite volatile and generally alternates between scores of 4 and 6,3 with some exception, once again pointing towards more or less stable intervals at which the degree of centralisation in the wage bargaining increase or decrease.

An interesting observation to be made here, as well as in the country specific graphs, is what seems to be a developing convergence between Denmark, Norway and Sweden on all indicators except government intervention.
This convergence becomes clear in this graph where we can see that Denmark and Sweden achieve the exact same score from 1994 to 2011 with the exception of 1998. From 1994 we see that Norway approaches the scores of Denmark and Sweden, and after the spike in 2000 stabilises at only 0.3 points higher for the rest of the period.

An effect of either financial crisis is not apparent from the graph. That is somewhat surprising, considering what looked like a possible correlation between indicators and the two crises in the case of Finland (maybe Norway too). Furthermore, from the literature we might expect that centralization would either increase in times of economic hardship if unions, employer organization and the state realized a mutual interest in reaching quick and moderate wage settlements to mitigate the effects of such an external shock. Or, we could expect a decrease in centralization if the crises increased incentives for certain employer organization and trade unions to break away from the coordinated wage settings to realize individual advantages. The table below show the correlation between the centralized wage setting indicator, a one-year lag of the same indicator, and rates of economic growth and unemployment. Unemployment and GDP are chosen as to represent economic crises as they are both sensitive to economic downturn. This correlation table provides a measure of the general relationship between centralised wage setting processes (CWS) and economic activity.
and not strictly economic downturns. But if GDP growth (or loss) and unemployment rates do not have an effect on the wage setting process in general, then there is little reason to expect it to have any effect during a financial crisis either.

Table 4 Correlation Wage Setting, HUR, GDP, OECD, MRG

<table>
<thead>
<tr>
<th>Country</th>
<th>HUR</th>
<th>GDP</th>
<th>Std. dev HUR</th>
<th>Std. dev GDP</th>
<th>Std. Dev. CWS/lag 1</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark: CWS</td>
<td>-0.06</td>
<td>0.3</td>
<td>1.616</td>
<td>2.120</td>
<td>2.210 / 2.576</td>
<td>29</td>
</tr>
<tr>
<td>CWS lag 1</td>
<td>0.002</td>
<td>0.2</td>
<td>1.616</td>
<td>2.120</td>
<td>2.210 / 2.576</td>
<td></td>
</tr>
<tr>
<td>Finland: CWS</td>
<td>0.02</td>
<td>0.07</td>
<td>3.734</td>
<td>3.679</td>
<td>2.581 / 3.500</td>
<td>24</td>
</tr>
<tr>
<td>CWS lag 1</td>
<td>0.05</td>
<td>0.17</td>
<td>3.734</td>
<td>3.679</td>
<td>2.581 / 3.500</td>
<td></td>
</tr>
<tr>
<td>Norway: CWS</td>
<td>0.56***</td>
<td>0.1</td>
<td>1.053</td>
<td>1.704</td>
<td>2.484 / 2.906</td>
<td>23</td>
</tr>
<tr>
<td>CWS lag 1</td>
<td>0.58***</td>
<td>0.13</td>
<td>1.053</td>
<td>1.704</td>
<td>2.484 / 2.906</td>
<td></td>
</tr>
<tr>
<td>Sweden: CWS</td>
<td>-0.32</td>
<td>-0.51</td>
<td>2.642</td>
<td>2.421</td>
<td>2.596 / 2.685</td>
<td>29</td>
</tr>
<tr>
<td>CWS lag 1</td>
<td>-0.15</td>
<td>-0.28</td>
<td>2.642</td>
<td>2.421</td>
<td>2.596 / 2.685</td>
<td></td>
</tr>
</tbody>
</table>

Significance levels: p=<0.05** p=< 0.01***

In the table we see that only a correlation of statistical significance between centralised wage setting and economic activity is only found in Norway where wage setting is relatively highly correlated with unemployment. Since unemployment did not increase much during the Global Financial Crisis in Norway, it stands that this crisis has had little if any effect on the degree of centralisation of the wage process in Norway. Finland gives us some reason to pause, since one could argue that judging by the graph, the centralisation of wage setting fell remarkably a year before the financial crisis and stayed low throughout the crisis, to rise again in 2011. The correlation table on the other hand suggests no general relationship between economic activity and wage setting centralization in the country.

From the graphs and correlation table we must therefore conclude that while there may have been an increase in wage setting centralization during the Nordic Banking crisis in the 1990’s in the three countries affected, the latest financial crisis does not seem to have had any effect on the degree of centralization in the wage setting process in either of the four Nordic countries, with a possible exception of Finland of which evidence remain ambiguous.

5.2 Wage compression

To measure wage compression and inequality I have made use of the Eurostat measure of
income distribution and gini coefficient. The graph below shows the evolution of the s80/s20 rate in the four countries since 1995 until 2012.

![Graph showing s80/s20 rate from 1995 to 2012 for four countries: Norway, Denmark, Sweden, and Finland.](image)

**Figure 5.7 s80/s20 rate 1995-2012. Eurostat**

As we can see, the s80/s20 rate was between 2.5 and 3.5 in all countries in 1997, then to increase markedly as the economic conditions improved up to 2001 where it stabilized in the case of Sweden and Finland. Norway on the other hand experienced a sharp increase from 2004 to a record 4.8 in 2006, then to fall sharply and come down to 3.2 in 2012 as the lowest among the Nordic countries. The sharp increase and decrease will be elaborated in when discussing the gini coefficient in the next paragraph. Denmark in contrast has the lowest ratio among the Nordic countries in 1997, but rose steadily from 2001 and reached its highest level in 2009 until the effects of the financial crisis brought the ration down to 4.4 in 2011 as the highest among the Nordic countries. Unfortunately we lack data to look further into the past, but it can be reasoned that among the causes of the relatively low s80/s20 rations in the middle 90’s and the drop in 2009 is the Nordic banking crisis and the Global Financial crisis respectively. This is because economic turmoil generally inflicts greater losses on high income individuals as stocks and other assets fall sharply in value (Danmarks statistik 2011).
The graph above shows the evolution of the gini coefficient for the four countries between 2000 and 2012. While the timespan is shorter, it exhibits in general the same trend as the s80/s20 rate: The coefficient is stable in the case of Sweden and Finland, while it significantly increases and decreases from the early 2000’s to 2011 in the case of Denmark and Norway respectively. Where the gini coefficient differs from the s80/s20 rate is that it does not seem to be much affected by the Great depression in 2008/9. The sharp increase and decrease in both the s80/s20 in Norway between 2004 and 2007 must be commented. While no final explanation exists, it is quite likely that we here see the effect of what was dubbed a “utbyttefest”, or “dividend pay-out feast” as companies paid out substantial dividends to its shareholders at effectively 0% tax in 2005 before a tax reform in 2006 would close this loophole (de Flon 2007), (Finansdepartementet 2008).

In the case of Finland and Sweden there is a slight fall in the period 2009-2010 before increasing slightly towards current date. In Denmark it merely flattens between 2009 and 2010 before continuing its steady increase, while the fall in Norway starts in 2007, that is before the Great depression could have any noticeable effect on the Nordic countries. It is therefore more likely to be a general trend independent of the Great depression. In all, both the s80/s20 ratio and the gini coefficient have remained generally stable for Finland and
Sweden, while it has increases and decreased for Denmark and Norway respectively. The Global Financial Crisis does not seem to have had more than temporary effects on the longer trend for any of the countries.

5.3 Unemployment and poverty

By using the framework of Andersen (1997) we can compare the development of unemployment and risk of poverty trends in the four Nordic countries. The graph above shows the evolution of the HUR (Harmonized Unemployment Rate) in the four countries for the period 2000-2012.

![Harmonised Unemployment Rates 2004-2012. OECD](image)

**Figure 5.9** Harmonised Unemployment Rates 2004-2012. OECD

The HUR rate develops as we might expect, with a clear increase in the period of 2008 to 2010 where it stabilizes and falls somewhat for all countries. As detailed in the previous chapter, the Great Recession has caused a significant economic slowdown in all the Nordic countries except Norway, where the rise in unemployment levels far less than among its neighbours, and to this day remains below the higher levels seen in 2005. Denmark has here seen the sharpest and largest raise in unemployment of all the Nordic countries, reinforcing the perception of it being among the hardest hit countries in the OECD. One curious observation to be drawn from this graph is that the unemployment rates of Denmark, Finland
and Sweden converges almost uncannily in 2011 at between 7.5 and 8 %, and remains relatively convergent to this day.

The risk of poverty rate on the other hand is less telling on the outset. As shown in the graph below, Finland’s ROP rate stays remarkably stable during the time frame, while the ROP rate of Sweden fluctuates wildly. Denmark and Norway follow a roughly similar trajectory, but start to diverge in equal direction on 2008/9: Where the Danish ROP rate increases significantly, that of Norway falls sharply between 2007 and 2008, increases slightly towards 2009, and then falls through the crisis to the lowest level of all countries in 2012.

![Risk of Poverty (RoP) rates 2004-2012. Eurostat](image)

**Figure 5.10 Risk of Poverty (RoP) rates 2004-2012. Eurostat**

Of interest to note here is also that the ROP rate in Denmark and especially Norway follow a trajectory quite similar to that of the wage compression. As the inequality increases sharply in Denmark around 2008-2009, the ROP rate follows suite immediately. Similarly in Norway but in the opposite direction, when income inequality falls sharply from its peak in 2006, the RoP rate follows a similar path with a one year delay.

When we compare the two graphs there are two particularly interesting observations that can be made. First, the HUR and ROP rate of Denmark follow an almost identical pattern, quite contrary to what was expected from the findings of Andersen. Second, there does not seem to
be a pattern in the case of the other Nordic countries. To illustrate the differences between countries further, the table below show the correlation between ROP and HUR for each country. As gleaned from the graph, the case of Denmark is one of almost perfect match with a correlation of 0.9151 while the other countries vary between 0.4 in the case of Finland and a mere 0.17 in the case of Norway. The sample is unfortunately very small, only nine observations for each country, with the exception of Sweden of which we only have eight observations of both HUR and RoP rates in the same year. Normally this would imply a high chance of observing only random variation, but since the fit between the HUR and RoP rates in the case of Denmark is so striking, I have also tested for statistical significance for the correlation in each country.

Table 5 Correlation HUR-ROP

<table>
<thead>
<tr>
<th>Country</th>
<th>Corr HUR/ROP</th>
<th>Std. Dev. HUR</th>
<th>Std. Dev. ROP</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>0.9151***</td>
<td>1.695</td>
<td>1.032</td>
<td>9</td>
</tr>
<tr>
<td>Finland</td>
<td>-0.4053</td>
<td>0.764</td>
<td>0.305</td>
<td>9</td>
</tr>
<tr>
<td>Norway</td>
<td>0.1706</td>
<td>0.67</td>
<td>1.005</td>
<td>9</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.3433</td>
<td>0.905</td>
<td>1.032</td>
<td>8</td>
</tr>
</tbody>
</table>

Significance levels: p=<0.05** p=< 0.01***

The correlation between unemployment and poverty rates in Denmark is statistically significant at 1%, while the correlation in the other countries is not remotely statistically significant, as one would expect from the low correlation. In the case of Denmark we then see both a strong substantive and statistical significance, that is both a high degree of correlation (very high in this case) and a confirmation that the chance of this being a spurious correlation is almost certainly zero (Acock 2010)

This does first of all tell us that there are important differences in how unemployment and poverty interact in the Nordic countries. From both the graph and table, we could draw the conclusion that the welfare scheme in Denmark that previously ensured that those unemployed did not face a drastically higher chance of economic exclusion is no longer works as that way. And in contrast, that the welfare scheme in the other Nordic countries achieve a high degree of success in preventing the unemployed from facing economic exclusion through poverty. While these conclusions seem reasonable with the data available to us at this moment, one should always retain a healthy dose of scepticisms towards broad conclusions based only on such a short period. There may very well be other factors that
contribute to the apparent correlation between unemployment and poverty that cannot be uncovered within the framework of this thesis. However, it is clear that the relationship between unemployment and poverty takes on a different character in Denmark than in its Nordic neighbours. And based on the available data, we must conclude that the consequence of unemployment measured in risk of economic exclusion is likely to be more severe in Denmark than in the other Nordic countries.

5.4 Union and employer organisation density
From the literature it is expected a stable or decreasing union density, and according to one train of thought, also a corresponding decrease in employer organisation density. In the graph below we can make two immediate observations. One is that Norway is an outlier at a significantly lower level of union density than the other three countries, who all occupy a band of now more than 12 % apart at the most, and that they converge at just below 70 % in 2008. The trend is a steady decline since 1993, and the three countries follow a very similar trajectory that seems to follow the unemployment rate to some degree until the mid-2000’s, and flattens out at the time of the Global Financial crisis, with a small increase in Finland from 2008 to 2010.

![Figure 5.11 Union density 1985-2012. ILO](image)

Figure 5.11 Union density 1985-2012. ILO
Second, the union density in Norway follow the development of its neighbours, but from a much lower starting point of 57\% against 82\% in Sweden, and its decline is much milder, no more than around 5\% from the highest point in 1991 to its lowest in 2008.

The difference in union density between countries is often explained by the benefits that unions offer the unemployed. Norway is the only country among the Nordic in which does not employ the Ghent system, and where workers thus have less incentive to join trade unions because unemployment benefits are not dependant on trade union membership. We call also see in the graph that the decline in union density ends in 2008, after which there is a slight increase in Finland and Norway in the next two years before flatting out. In Denmark and Sweden there is no increase after 2008, but the union density seems to have stabilised in those two countries in the period after the Global Financial crisis, with a minor decrease in Sweden from 2010 to 2011. Immediately then, we could suspect that the financial crisis of 2008 may have had an effect on union density in slowing the or even reversing the decline in union membership.

The link between unemployment and union membership is broadly speaking presented in two different narratives with opposite causal links: The narrative of “Labour market rigidities” holds that union density has a negative effect on unemployment, that is to say high union density increased unemployment rates by contributing to the inflexibility of the labour market. However, when unions contribute to coordination in the wage setting process, the negative effects are largely cancelled out (Nickell 1997). The other narrative specialized for the Nordic countries of Denmark, Finland and Sweden hold that rising unemployment increases union density, as the three countries employ the so called Ghent-system where unions are strongly involved in the provisions of unemployment insurance (Van Rie, Marx og Horemans 2011). Workers therefor have strong incentives to unionise, in particular when unemployment is on the rise.

Table 6 Correlation HUR-Union 1985-2012.

<table>
<thead>
<tr>
<th>Country</th>
<th>Corr HUR/Union</th>
<th>Std. Dev. HUR</th>
<th>Std. Dev. Union</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>0.586***</td>
<td>1.618</td>
<td>3.431</td>
<td>28</td>
</tr>
<tr>
<td>Finland</td>
<td>0.796***</td>
<td>3.734</td>
<td>4.016</td>
<td>24</td>
</tr>
<tr>
<td>Norway</td>
<td>0.914***</td>
<td>1.047</td>
<td>1.621</td>
<td>33</td>
</tr>
<tr>
<td>Sweden</td>
<td>-0.239</td>
<td>2.623</td>
<td>5.347</td>
<td>30</td>
</tr>
</tbody>
</table>

Significance levels: p=<0.05** p=< 0.01***
Conversely, we may therefore expect that union rates may drop when unemployment goes down, though there may be other explanations of the decline, such as the reform of the Ghent system in Sweden that may account for its sharp drop since 2006 (Kjellberg 2009). Table 6 show the result of a list wise correlation analysis between the Harmonized Unemployment Rates and Union density.

As expected in the case of Denmark and Finland, union density and unemployment rates are positively correlated and statistically significant at 1%. Unemployment and union density is also highly correlated and statistically significant in Norway, more so than in any other country, but it is unclear why this is the case as membership in Norwegian trade unions offer no immediate benefits to the unemployed. Since Norway also has the lowest unemployment rate of the Nordic countries, it would be far-fetched to argue that the opposite causal relationship is true here, that unions cause unemployment. Sweden is the only country where there is neither statistically or substantive correlation between unemployment and union density in the time period, though that may be the result of an already high unionisation arte and the reform of the Ghent-system. A correlation analysis of a different period may yield other results; though dropping the years since 2006 only changed the direction of the correlation, but did not increase its statistical significance.

When we turn to employer organisation density, we unfortunately have less data to work with, barely enough to plot trends for one or two decades in each country, as displayed in figure 5.12 below.

One striking observation here is that the organisation rate among employers is exceptionally high in Sweden, on par with union density at its peak in the early 1990’s. The same historical reasons that partly explain high unionisation rates in Sweden also explain employer organisation density: As mentioned in the section on the centralised wage setting process, unions and employer organisations jealously guard their prerogatives to bargain without interference from the state, and thus depend on a very high rate of organisation and centralisation on both sides. In contrast to the union density, the employer organisation density does not fall much in Sweden during the period, and rises notably in Denmark, Finland and Norway. Literature on the subject suggests that as union density decreased, so would employer organisation density as employers would come to question the viability of sectorial agreements (Croucher et al. 2006). While this may be one of the factors explaining the reduction in union density in Germany, it seems unlikely to be a mechanism present in the
Nordic countries as union density in all countries except Sweden has increased while union density has fallen.

![Graph showing employer organisation density from 1989 to 2010 for Nordic countries](image)

**Figure 5.12 Employer organisation density, 1989-2010. ICTWSS**

Given the very limited data that leaves the majority of years unaccounted for and the sparse literature on the subject, it is difficult to suggest factors that contribute to seemingly increasing employer organisation density in the Nordic countries. Since we only have one data point after the Global Financial crisis, Sweden in 2010, it is not possible to say whether the crisis has had any effect on employer organisation density in the Nordic countries.

### 5.5 Trust and legitimacy

We first look at the level of trust between citizens in the Nordic countries. As mentioned in the section on variable operationalization, the trust variable has been measured in two ways; by including all positive scores after the median (6-10), and by skipping the first positive score after the median (7-10). This is done to illustrate the difference in trust levels at higher scores by excluding scores close to the median, which is the segment that only trusts others “a little”.
The two most striking observations in the first graph that includes all positive scores is that 1), the level of trust in Denmark, Finland and Norway are particularly high, with Denmark at the top in average, while Finland and Norway converge at almost 75% in 2012. And 2), that Sweden starts at 10% lower than Finland in 2002 and ends at only a slightly higher score in 2012, now 12% behind Finland. In other words, Sweden is here a clear outlier with a lower level of trust between its citizens than its Nordic neighbours. We also note a sharp decline in Sweden from 2010 to 2012.

Figure 5.13 People can be trusted (6-10) ESS

The next graph (figure 5.14) that omits the positive score closest to the median show a similar pattern, but also reveals a more clear cut difference between the Nordic countries, with Denmark as the country with the highest level of trust, followed by Norway and Finland with Sweden at the bottom. The difference between Sweden and Finland is somewhat less dramatic here, but the distance up to Denmark is roughly the same. The sharp decline in the level of trust in Sweden from 2010 to 2012 is also clearly visible here.

This stark difference between Denmark, Finland and Norway at the upper band of trust to Sweden at a distinctly lower level is something of a puzzle that to my knowledge has not been given much attention.
Figure 5.14  People can be trusted (7-10), ESS

One paper that studies the determinants of social trust in general finds that exogenous factors like protestant religion and ethnic homogeneity are statistically have a significant effect on generalised trust, as do endogenous factors like income equality, good governance and government social spending. It also notes that there is a Nordic exceptionalism at work, where the Nordic countries are in a group of their own at the very top of the generalised trust scale (Delhey og Newton 2005).

As all the Nordic countries are protestant and Sweden has a lower income inequality in Denmark, we are left with ethnic homogeneity and good governance as possible explanations. Sweden has a tradition for a less strict immigration policy than Norway and Denmark with, a considerably higher percentage of its population that are non-western immigrants or their descendants (Green-Pedersen og Krogstrup 2008). However, the same study shows that immigration is higher on the political agenda in Denmark than in Sweden, where it is next to ignored by the major parties. When we later look at the levels of trust in the state in the Nordic countries and employ this as a proxy for good governance, we also find that Sweden scores lower than its neighbours here as well up until 2010 and falls sharply in 2012 again. One could speculate that less ethnic homogeneity together with less trust in the state could partially explain the lower level of trust in Sweden than its neighbour countries, but it remains
a speculation at best. Especially the observation that Swedish public discourse does not give this matter much attention compared to Norway and Denmark speaks cautions against such a conclusion, in addition to the short period of time the ESS survey covers.

Since the level of income inequality is the indicator of wage compression, we would expect that the low level of income inequality in the Nordic countries corresponds with a high level of support for income redistribution by the state. The graph below show the percentage that “Agree strongly” and “Agree” that the government should reduce income difference.

![Graph showing percentage of support for income redistribution by the government in Nordic countries from 2002 to 2012.](image)

**Figure 5.15** Government should reduce difference in income. ESS.

Not surprisingly given its relatively high degree of income inequality among the Nordics, Denmark has the lowest score of the Nordic countries on this variable. More surprising perhaps is that Norway, with the lowest level of income inequality among the Nordic countries, except in the 2006 round, is well behind Sweden and Finland in support for income redistribution by the state. It appears then that there is not necessarily a direct relationship between the public support for income redistribution and the actual extent of income redistribution. A correlation analysis shown in table 7 below offers no support for a direct relationship between these two variables for any of the countries. There seems to be a substantial correlation in the case of Finland, but it is not statistically significant, not even at 10 %. 

63
Table 7 Correlation Governor Distribution 2002-2012.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>0.073</td>
<td>1.504</td>
<td>0.476</td>
<td>4</td>
</tr>
<tr>
<td>Finland</td>
<td>0.673</td>
<td>3.567</td>
<td>0.105</td>
<td>6</td>
</tr>
<tr>
<td>Norway</td>
<td>-0.057</td>
<td>5.743</td>
<td>0.599</td>
<td>6</td>
</tr>
<tr>
<td>Sweden</td>
<td>-0.4</td>
<td>2.342</td>
<td>0.134</td>
<td>5</td>
</tr>
</tbody>
</table>

Significance levels: \( p<0.05^{**} \) \( p<0.01^{***} \)

Since all of the questions asked in the survey data contains a neutral category, either labelled “neither agree nor disagree” or simply represented as the median value, it could be interesting to see how large a percentage of the sample that does not agree (or strongly agree) with redistribution express the opposite point of view; that government should not reduce difference in income (Disagree or Strongly disagree).

![Graph](image)

**Figure 5.16** Government should not reduce difference in income. ESS.

The graph above tell us that the low scores on support for income redistribution by the state in Denmark is not caused by a large ‘neutral’ segment, but rather a that a large portion of the Danish respondents oppose income redistribution by the state. Furthermore, In 2002 and 2004, a larger portion of Danes were against income redistribution by the state rather than in favour of it; 44.41 % vs 43.41 % and 39.29 % vs 38.01 % respectively. We can also note that
the neutral segment is on average over time quite similar between the Nordic countries at roughly 20-22 % in Denmark, Norway and Sweden and somewhat lower at around 17 % in Finland. Finally, we see a decrease in all countries from 2010 to 2012, but since there is a corresponding increase from 2008 to 2010 in all countries but Sweden, it is unlikely that this can be linked to the Global Financial crisis.

From the data above on support for income redistribution by the state we might expect that we should find similar results when we investigate another measure of egalitarian attitudes in the Nordic countries; that Denmark should be an outlier here as well with a general less egalitarian attitude of its citizens. The graph below show the scores of each country on the statement that it is “Important that people are treated equally and have equal opportunities”

![Figure 5.17 People treated equally/have equal opportunities. ESS.](image)

While the graph shows that Denmark has the lowest score in this variable as well, there is less distance between Denmark and Norway than between Norway and Finland. Furthermore, no country scores less than 80 % except Denmark in 2002, and the positions of the countries relative to each other is roughly the same here as in the previous graphs that measured support for income redistribution, or economic equality: Finland have the highest scores on both (except the graph above in 2010 and 2012), followed by Sweden, Norway and Denmark at fourth. However, the percentage of respondents that is in favour of general equality as this
variable measure is significantly higher in all countries than the percentage in favour of income redistribution by the state. This could mean several things. One, there may be a clear conceptual difference in how economic and general equality is perceived by the Nordic citizens. That is to say there is an overwhelming support for the egalitarian ideal, but less so for active redistribution of income between groups. Or, it could mean that income inequality is perceived to already be sufficiently reduced, and further redistribution by the state thereafter receives less support than the egalitarian ideal. However, both income redistribution and the egalitarian ideal receive the support of a clear majority of respondents in all the Nordic countries (except income redistribution in Denmark). Finally, we can also note a rising trend in the support for the egalitarian ideal in all countries except Finland, and all countries score between 87 and 93% in 2012.

The last of the variables that make up the social dimension of the Nordic model is trust in the state, represented by merging trust in legal institutions and trust in the parliament. The graph below shows the scores for each country from 2002 to 2012.

![Graph showing trust in the state from 2002 to 2012 for Norway, Denmark, Sweden, and Finland.]

**Figure 5.18 Trust in the state. ESS.**

We immediately see that the scores here follow a different pattern than the previous variables, with much greater difference between the countries and that the trend over time is more ambiguous. Of particular note, we see that Sweden scores lower than the other countries on
average, with a bottom point of 52.2 % in 2004, then to rise sharply until 2010 when it again falls back to a score in 2012 that is slightly above what it displayed in 2008. Norway follows a similar trajectory with the identical score as Sweden in 2002, but its score continues to rise past 2012 to converge with Denmark as the country with the highest trust in the state in 2012. Finland and Denmark also follow roughly the same pattern, increasing the score from 2002 to 2006, and then decreasing until 2010, before rising again to a score in 2012 that is higher than that of 2002 in both countries.

Here it is important to remember that this variable is created by merging variables that measure trust in the country’s legal system and trust in the country’s parliament. The table below show the average score of those two variables for each country.

Table 8 mean score trust in legal system and trust in parliament, 2002-2012. ESS

<table>
<thead>
<tr>
<th>Country</th>
<th>Trust in legal system, mean</th>
<th>Trust in parliament, mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>80.9</td>
<td>63</td>
</tr>
<tr>
<td>Finland</td>
<td>77.7</td>
<td>60.3</td>
</tr>
<tr>
<td>Norway</td>
<td>72.7</td>
<td>56.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>63.2</td>
<td>56.9</td>
</tr>
</tbody>
</table>

We see here that there is a large difference between the degree to which the respondents trust the legal system of their country and their parliament. In Denmark and Finland, the difference is roughly 17 %, while the difference in Sweden is much lower at 6.3 %. Similar to the variables that measure generalised trust in the Nordic countries, Sweden is the outlier with a lower score both at trust in the state at the two variables that are combined to create the former variable. It is difficult to explain this variation between the countries within the limits of this study other than what has been suggested in the section on generalised trust. I shall therefore be content here to show the notable difference in scores both between countries and within the countries over time. We are left with the impression that the general trend for Denmark, Finland and Sweden is one of slightly increased trust in the state since 2002, with a significant downturn in the period of 2008-2010 in Denmark and Finland with Sweden following suit two years later. Trust in the state decreased slightly from 2002 to 2004 in Norway, but has increased every year since 2004, and the country has the highest level of trust
in the state in 2012 of all the Nordic countries at 73.44% with Denmark as a close second at 73.25%.

The difference in where the fall in trust in the state occurred in time could be understood in terms of the Global Financial crisis for three of the four countries when we note that Denmark and Finland fell from 2008 to 2010 while Norway did not, which corresponds to the severity of the crisis in each country: Denmark and Finland were hit hard both in terms of fall in GDP growth and rise in unemployment, while Norway escaped relatively unscathed. This perspective is strengthened when we look behind the graphs and find that both the increase and decrease in the scores for Denmark, Finland and Norway is explained almost entirely by change in the respondents trust in parliament. It could therefore be hypothesised that the trust in parliament is influenced by the perception of how well the government (here represented by the parliament) has handled the financial crisis. The subsequent increase in the scores of Denmark and Finland from 2010 to 2012 is also almost entirely due to an increased trust in parliament, but is more difficult to explain as the growth in both countries slowed after a strong rebound in 2010. The factors that explain the increased scores for Sweden from 2004 to 2010 are less clear as we should expect a fall similar to that of Denmark and Finland when the crisis hit Sweden in 2008-9, but instead follows a sharp slowdown of growth from 2010 to 2012. Here too the increase and decrease of the trust in state is largely explained by variation in trust in the parliament, with a solid increase from 60 to 69% from 2008 to 2012, and a subsequent decrease to 61% in 2012. It can perhaps be hypothesised then that the Swedes were initially pleased with how the government handled the financial crisis, but were less pleased when the growth rate plummeted from 2010 to 2012.

In short, the trust in the state has on average increased from 2002 to 2012 in all Nordic countries, with Norway seeing the largest and most stable increase. There is also indications that the global Financial crisis may have had an effect on the citizens trust in the state through their trust in parliament.

5.6 Partisan positions
Nygård found in his study that support for welfare expansion had remained relatively stable in the Nordic countries, only tempered somewhat in Sweden and Finland by the banking crisis in the early 1990’s, and that the parties on the Right were more in favour of market oriented solutions rather than welfare limitation. One exception to this trend was Finland in which there was a sharp rise in proposals for welfare state limitation during the oil crisis of the
1970’s and again in the aftermath of the Nordic Banking crisis. The graphs that are shown in the following sections display the development in each country up to the last election available for each country, and have been calculated with the same parties and variables in the previous study.

5.6.1 Welfare state expansion

The graph below show the change over time in partisan positions on welfare state expansion in the four countries from the middle 1980’s up to the time of writing.

![Graph showing partisan positions on welfare state expansion from 1987 to 2012](image)

**Figure 5.19 Partisan positions on welfare state expansion 1987-2012. MRG**

As we can see from the graph above, partisan position on welfare expansion has been relatively stable also in the period after Nygårds study, but with visible between-country variation. Of particular note, we find that since the 2002 election, political parties Sweden have become steadily more positive to welfare expansion while Norway has remained fairly stable. Both Finland and Denmark experience sharp drops around the mid-2000s. Overall though, party positions remain fairly stable, with a slight increase in emphasis on welfare state expansion in the election programs of the Nordic parties. Not unexpected, scores vary much more from data point to data point on this and the following graphs due to the shifting nature.
of election programs that may vary considerably from year to year without there necessarily being a dramatic shift in party positions overall.

If we now consider the change over time against the backdrop of two financial crises, the early 1990’s and 2008, there seems to be little if any correlation between economic crisis and change in support for welfare state expansion. We try to look a bit closer by applying the standard listwise correlation to see if there is a relationship between welfare state expansion and economic downturn, here represented by harmonised unemployment rates. I have chosen this rather than GDP growth as voters and thus parties are likely more sensitive to change in unemployment than GDP rates, as the former directly affects portions of the electorate while the latter have little direct relevance on most voters in the short run. The unemployment rate in the election years is used in the analysis, and the results are shown in the table below.

**Table 9** Corr HUR-Welfare. OECD, MRG.

<table>
<thead>
<tr>
<th>Country</th>
<th>Corr HUR/Welfare</th>
<th>Std. Dev. HUR</th>
<th>Std. Dev. Welfare</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>-0.172</td>
<td>1,536</td>
<td>4,454</td>
<td>10</td>
</tr>
<tr>
<td>Finland</td>
<td>0.376</td>
<td>3,268</td>
<td>5,881</td>
<td>6</td>
</tr>
<tr>
<td>Norway</td>
<td>-0.396</td>
<td>1,165</td>
<td>3,039</td>
<td>5</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.495</td>
<td>2,92</td>
<td>3,901</td>
<td>8</td>
</tr>
</tbody>
</table>

*Significance levels: p=<0.05** p=< 0.01***

As we see in the table, we find no statistical or substantial correlation between economic downturn represented by unemployment rates and partisan positions on welfare state expansion in any of the countries. However, there are a number of conceptual and technical problems that make this and later correlation analysis unreliable. For one, elections are not held every year (and not even at regular intervals in Denmark in the beginning to the middle of the period), thus begging the question of which unemployment year should be set for the election year. The unemployment rate of that year? An average since the last election? Or the average of the two preceding years if we assume that voters have short memories? Second, the uneven number of observations between the countries, where Norway has only half the observation points as Denmark, also make between country comparisons more problematic in this case than on the preceding variables. And third, it is far from certain that unemployment is the best way to measure economic downturn in this case, and the exact causal links between economic downturn and what parties write in their programs are rather unclear. In addition,
what is written in party programmes may not be the same as what is focused on in election campaigns, as issues have a habit of turning up and claiming much of the attention during election run ups. In such cases, the party program may be less relevant to actual party positions than one might expect. On the other hand it could be interjected that party programs are what guides the party outside elections, and therefore have more importance in the long run and thus the policy decisions that are made.

Returning to the graph, it is thus little evidence to conclude that the two economic crises of the past twenty-five years have had much effect on partisan positions on welfare state expansion. The trend of increased support for expansion in Sweden started before the financial crisis of 2008. As noted earlier, there are reasons to expect a change in either direction as a result of economic crisis, and in the short term it could be argued that Sweden and Denmark has seen an increase in support for welfare expansion after the crisis with a corresponding decline in Finland. However, looking further back this may be normal variation in the case of Denmark and Finland while Sweden stands out as a country with a stable increase in support. The partisan position in Norway have become slightly more positive to welfare expansion in Norway since the late 90’s, but the fact that data for the 2005 election and the recent 2013 election are not available, together with the problem of FRP mentioned earlier, makes it difficult to say anything definite about the development in Norway.

5.6.2 Market economy orientation

In the case of Market Orientation Economy, we can see in figure 5.20 below that the emphasis on private alternatives or complementary services has been proposed by Swedish parties to a greater extent than its neighbours throughout the 1990’s until the early 2000’s when the attraction to market oriented solutions seem to have waned to a level comparable to that of Norway.

Political parties in Denmark and Finland seem to have followed similar trajectories in their emphasis on market oriented solutions, which seems follows the path of increased emphasis in times of economic growth and decrease in times of economic hardship. In the context of the Financial crisis, the rebound and decrease in unemployment rates between 2010 and 2011 could be seen as a cause for the increased emphasis on market oriented solutions that converge in the 2011 elections in both countries. However, the growth in GDP that picked up in 2010 has slowed down again, and turned negative in Finland in 2012 and barely positive in
Denmark. It is therefore difficult also here to judge the possible effect of the financial crisis on partisan positions, and a correlation analysis may therefor shed some light on the matter.

Figure 5. 20 Market economy orientation 1987-2012. MRG

However, the correlation analysis here suffers from the same shortcomings as the previous one. Again, unemployment rates are chosen as a proxy for economic downturn, and the results are shown in table 10.

Table 10 Corr HUR-Market. OECD, MRG.

<table>
<thead>
<tr>
<th>Country</th>
<th>Corr HUR/Market</th>
<th>Std. Dev. HUR</th>
<th>Std. Dev. Market</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>-0,1</td>
<td>1,536</td>
<td>2,825</td>
<td>10</td>
</tr>
<tr>
<td>Finland</td>
<td>0,527</td>
<td>3,268</td>
<td>2,177</td>
<td>6</td>
</tr>
<tr>
<td>Norway</td>
<td>0,0859*</td>
<td>1,165</td>
<td>0,959</td>
<td>5</td>
</tr>
<tr>
<td>Sweden</td>
<td>-0,048</td>
<td>2,92</td>
<td>0,364</td>
<td>8</td>
</tr>
</tbody>
</table>

Significance levels: p=<0,1* p=<0,05** p=< 0,01***

We do not find any relationship between economic downturn represented by unemployment and emphasis on market solutions at acceptable levels of statistical significance in this sample. There is a relationship significant at 10 % in Norway, but considering that we lack
much data for Norway there is even less reason than usual to set the 10 % level as acceptable. We must therefore limit ourselves to observe the general trend on this variable, which is an overall decrease in emphasis on market solutions in all countries since the middle and late 1990’s until 2011 where it seems to receive more attention in the national elections in Denmark and Finland.

5.6.3 Welfare state limitation

Finally, we turn to partisan positions on welfare state imitation, or retrenchment as it is also called. The first thing can note is a considerable spike in proposals for welfare limitation in Finland around the 1995 election. Nygård explains this as a culmination of demands for welfare cuts due to the effects of the Nordic banking crisis of the early 1990’s (Nygard 2006).

![Figure 5.21 Welfare state limitation, 1987-2012. MRG](image)

Political parties in Norway and Sweden seems to keep a low profile on welfare state limitation, or reject the ideas outright. There is a slight increase in Norway during the 1993 and 1997 elections and in Sweden during the 2006 election, but both countries end up at roughly the same score as they started at the end of the 200’s. The missing data for the 2005 election in Norway leaves us uninformed of the situation then, but considering the trend throughout the period and the political climate it is rather unlikely that welfare limitation was emphasised by any of the parties in 2005. Danish parties have been more open to cuts in the
welfare state in 1994, 2005 and recently in 2011 where the acceptance for discussing policies for limiting the welfare state is at an all-time high in this period. Finland, as noted earlier, stands out as the country where the parties have been the most eager to emphasize welfare cuts, and that in times of economic hardship. This is illustrated by the spikes in the aftermath of the Nordic Banking crisis and at the onset of the Global financial crisis. We investigate this further in a correlation analysis presented below, once again using unemployment as proxy for economic hardship.

**Table 11 Corr HUR-Limit. OECD, MRG.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Corr HUR/Limit</th>
<th>Std. Dev. HUR</th>
<th>Std. Dev. Limit</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>0.393</td>
<td>1.536</td>
<td>0.737</td>
<td>10</td>
</tr>
<tr>
<td>Finland</td>
<td>0.795*</td>
<td>3.268</td>
<td>1.461</td>
<td>6</td>
</tr>
<tr>
<td>Norway</td>
<td>0.508</td>
<td>1.165</td>
<td>0.218</td>
<td>5</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.06</td>
<td>2.92</td>
<td>0.181</td>
<td>8</td>
</tr>
</tbody>
</table>

*Significance levels: p=<0,1* p=<0,05** p=< 0,01***

As expected, there are no statistically significant relationships between unemployment and welfare state limitation, although Finland comes very close to the accepted 5% level, but still remains too uncertain to be deemed statistically significant. We can however talk about a substantial correlation between unemployment and welfare state limitation in Finland, much in line with Nygård’s earlier findings. In short then, there has been very limited emphasis on welfare state limitations by the political parties in the Nordic countries during the period of interest, with the exception of Finland where this issue seems to gain some importance in times of economic crisis, though the shortage of data, conceptual problems with the correlation analysis and no statistically significant results make this conclusion less certain than what is immediately apparent.

**5.7 Summary**

This section will summarise the findings in the analysis, and is divided in two parts. First I will look at the robustness of the institutional equilibrium that is at the basis of the Nordic model. In others words, I will assess how strong the model stands measured by scores achieved on the variables analysed here, and the development over time that together represent the six traits of the Nordic Model. Second, I will test the statistical significance of the changes that have occurred after the Global Financial crisis through an ANOVA test by comparing the mean score of each variable before and after the financial crisis. This is done to
obtain more robust results and greater certainty about the conclusions. Through the analysis, we have found indications that suggest an effect of the financial crisis on several variables, but I believe that such observations alone are not enough, and that a means comparison is therefore necessary.

5.7.1 The robustness of the institutional equilibrium

The first and most important question in this thesis has been just how robust the institutional equilibrium that the Nordic Model rests upon really is. By looking at the development over time on the variables that make up our five traits, we can note the following findings: First, we see that the centralisation of the wage setting process has decreased in all of the Nordic countries except Finland, and stabilised after the late 1990’s. Finland has on average a higher level of centralisation in the wage setting process, but also much larger variation from year to year. The average level of wage centralisation is still relatively high in the Nordic countries compared to more “liberal” countries such as the United Kingdom, France and the USA. Second, as mentioned in the OECD study (2011a), wage compression measured by the s80/s20 rate and the gini coefficient has decreased in the Nordic countries since the 1980’s, that is income inequality has increased. The exception here is Norway in which income inequality increased until 2006, since when it has fallen to the lowest level among the OECD countries. Denmark on the other hand has seen a substantial increase in income inequality, with Finland and Sweden in between Denmark and Norway. However, while wage compression has decreased, income inequality in the Nordic countries is significantly lower than most of central and southern Europe and the Anglo-Saxon countries. 

To measure deviations from the Nordic model I have plotted the gini coefficient and wage setting scores for the Nordic countries as well as several other European countries in the graph below. As we can see from the graph, Norway and Sweden are close both in terms of wage compression represented by the gini coefficient and in the level of centralisation in the wage setting process. When we consider wage compression alone, the Nordic countries do form a cluster of low income equality together with Austria, the Netherland and Belgium. Denmark is the outlier here, closer to Germany and Cyprus than Norway and Sweden, while Finland is still close enough to Norway and Sweden to be comparable.

In terms of centralised wage setting, Denmark, Norway and Sweden form a close cluster together with Austria, Germany, Italy, Slovenia, Slovakia and the Netherlands, with Finland as the outlier who is only second to Belgium in the centralisation of the wage setting process.
However, we have seen in previous sections that the centralisation is liable to periodic change in Finland, which would for example place it at identical value as Sweden and Denmark in the previous year, 2010.

Figure 5.22 Gini Coefficient and Centralised Wage Setting in 2011. Eurostat, ICTWSS

For a closer look, we investigate the difference in the mean value of centralised wage setting (CWS) and wage compression between the Nordic countries and the Euro area average in the table below. The difference to the average of the 17 euro countries are displayed in parentheses. Greece is dropped from the Euro zone in CWS because of missing data.

Table 12 CWS, Gini and s80/s20 in 2011, Nordic countries and Eurozone. Eurostat, ICTWSS

<table>
<thead>
<tr>
<th>Country</th>
<th>CWS</th>
<th>Gini</th>
<th>s80/s20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>2.75 (-0.15)</td>
<td>27.8 (-2.7)</td>
<td>4.4 (-0.7)</td>
</tr>
<tr>
<td>Finland</td>
<td>4.75 (1.85)</td>
<td>25.8 (-4.7)</td>
<td>3.7 (-1.4)</td>
</tr>
<tr>
<td>Norway</td>
<td>3 (0.1)</td>
<td>22.9 (-7.6)</td>
<td>3.3 (-1.8)</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.75 (-0.15)</td>
<td>24.4 (-6.1)</td>
<td>3.6 (-1.6)</td>
</tr>
<tr>
<td>Euro zone</td>
<td>2.9</td>
<td>30.5</td>
<td>5.1</td>
</tr>
</tbody>
</table>
In table 12 we can see that the Nordic countries do not on average have a more centralised wage setting processes than the Euro zone average. In all cases but Finland the Nordic countries have on average a lower level of centralisation than the Euro zone average. At the same time we note that wages are more compressed in the Nordic countries than the Eurozone average, and that Denmark is an outlier in its closeness to the Eurozone average. It can therefore be argued that Denmark fails the Hoop test on wage compression and constitutes a significant deviation from the Nordic model when compared to its neighbours. The table also imply that either it is not the level of centralisation in the wage setting processes that matter so much for wage compression in the Nordic countries today, or that the measure for centralisation does not capture all of the difference between the Nordic countries and the other countries measured. It may also mean that there have been other factors at work in the Nordic countries that have led to wage compression in addition to a centralised wage setting process, as we can see that Spain and Portugal have both a higher level of centralisation and a considerably higher degree of income inequality that points to a low level of wage compression. Finally, it could also be that centralisation in the wage setting process was important for wage compression to become so ingrained in the Nordic countries that later decentralisation has not lead to much greater income equality. Following that logic, we could conclude that even with a decrease in the level of centralisation in the wage setting process, the process still ensure wage compression in all the Nordic countries except Denmark.

Looking at the secondary traits, we find that poverty has remained fairly stable in Finland and Sweden since 2004, fallen in Norway and increased considerably in Denmark. Unique for the case of Denmark is the statistically significant and substantial correlation between unemployment and risk of poverty rates in Denmark. This indicates that the unemployment schemes in Denmark are less effective than those of the other Nordic countries in mitigating economic exclusion for the unemployed. Further, we note that union density has fallen from the early 1990’s in all the Nordic countries, but stabilised and even increased slightly since 2007-8. We also find a statistically significant correlation between unemployment and union density, suggesting that more workers organise in times of economic crisis, in large part because of the Ghent system in Denmark, Finland and Sweden. We also see that employer organisation density has increased steadily in the period that we have data for. And while union density has decreased across the board, the unionisation rate of the Nordic countries is still very high in comparison to the OECD.
We have also investigated the social dimension through various measures of trust and support for economic and general equality. Here we find that the Nordic countries score very high on trust in both other citizens and in the state, with Sweden as something of an outlier with a lower score than the other Nordic countries. Trust in the state and fellow citizens have on average increased in all countries since 2002, but with some variation between countries. Trust in people and state have fallen somewhat in Sweden from 2010 to 2012, while trust in the state has steadily increased in Norway since 2002, going from the lowest to the highest score among the Nordic countries. Support for income distribution has on average decreased somewhat in all the Nordic countries, but still remain at very high levels with the exception of Denmark which never rises above 50% unlike the rest of the Nordic countries. In contrast, support for the egalitarian ideal has increased in all countries except Finland since 2002 to a very high level, with Denmark at the bottom where 87% agree that people should be treated equally and have equal opportunities, and Sweden at top with 93% in 2012.

Finally, we have looked at partisan positions on welfare state expansion, market orientation and welfare state limitation. Here we find that emphasis by political parties on welfare state expansion has generally increased in the Nordic countries since 1987, except in Finland where there has been a marginal decrease. The Swedish parties have on average emphasised private solutions and other market oriented policies to a greater degree than parties in its neighbouring countries, up until the early 2000’s where emphasise fell to a level comparable to Norway, in which the parties have been rather quiet about the issue. The Norwegian case is however more uncertain, as the pro-privatisation (and welfare expansion) progress party has not been included. In Denmark and Finland, parties have increasingly emphasised market solutions since the mid 2000’s. And lastly, among the Nordic countries, only political parties in Finland have loudly suggested welfare state limitation during the aftermath of the Nordic Banking crisis in the early 1990’s and apparently to a similar extent on the onset of the Global financial crisis. Norwegian and Swedish parties have kept a low profile on the issue or rejected it outright, while Danish parties seem to have warmed somewhat to the idea at regular intervals in 1994, 2005 and 2011.

5.7.2 The Global Financial crisis.

The second research question in this thesis has been whether or not the recent financial crisis has had an effect on the Nordic Model as specified here. By looking at the graphs, we are left with the impression that this has not been the case for any variable or indicator. However, while the graphs may be unanimous at a glance, a statistical analysis could give important
insights not immediately available by studying graphs alone. I have therefore compared the
means of each variable for each country before and after the crisis to determine if there is a
statistically significant variation between them. The cut-off point has been set to 2009 and the
starting year to 1995 since the countries had all mostly recovered from the banking crisis of
the early 1990’s by that point. Thus, that all years up until and including 2009 has received
the value 1, and the years from 2010 and onward the value 2. Not unexpectedly, the short time
that has passed since 2009 does not make this an optimal tests, and because of the lacking
data on elections in Norway, the partisan positions on welfare expansion, limitation and
market solutions have been omitted as there is no data available after 2009.

There are also other problems associated with this approach. One is that since all the variables
are tested country by country and are year’s rather than different subjects they violate the
ANOVA assumption of independent cases. That is to say, when running a test for each
country, we test variables within the same case, and may therefore not be independent of each
other. Because of this we are likely to get too liberal significance values, meaning that the
analysis may report a statistically significant difference when in reality the difference is not
statistically significant. Other methods of analysis have been considered, but the limited data
post-crisis unfortunately ensures that critical assumptions are also violated in the case of
repeated measures ANOVA and paired sample t-tests. In addition, at my level of proficiency
these methods do not handle panel data well, and are more suited for a study with many cases
and few variables, rather than one of few cases and many variables like this one. Finally, the
method used here test the difference for each variable for each country instead of each
variable with every country, thus making between country comparisons easier. In short, the
significance test conducted here should be treated as a preliminary test with limited data that
may yield too liberal significance results which should be interpreted accordingly. All
variables have their mean scores compared before and after 2009 in the other three countries.
The results of the mean comparison are displayed in the ANOVA tables below, one for each
country.

We first consider Denmark, which has been an outlier in terms of decreased wage
compression and low support for income redistribution by the state. We see in table 13 that
the measures of wage compression, the s80/s20 rate and the gini coefficient, as well as Rate of
Poverty and Welfare Limitation have mean values after the Global financial crisis that differs
from the mean values before the crisis and this difference is statistically significant.
<table>
<thead>
<tr>
<th>Denmark</th>
<th>N</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage Setting</td>
<td>17</td>
<td>0,502</td>
<td>1</td>
<td>0,502</td>
<td>0,126</td>
<td>0,728</td>
</tr>
<tr>
<td>S80/s20</td>
<td>13</td>
<td>1,631</td>
<td>1</td>
<td>1,631</td>
<td>7,365</td>
<td>0,02**</td>
</tr>
<tr>
<td>Gini</td>
<td>13</td>
<td>27,509</td>
<td>1</td>
<td>27,509</td>
<td>5,808</td>
<td>0,035**</td>
</tr>
<tr>
<td>RoP</td>
<td>9</td>
<td>7,094</td>
<td>1</td>
<td>7,094</td>
<td>34,929</td>
<td>0,001***</td>
</tr>
<tr>
<td>Union Density</td>
<td>16</td>
<td>17,496</td>
<td>1</td>
<td>17,496</td>
<td>1,851</td>
<td>0,195</td>
</tr>
<tr>
<td>Government should reduce income diff.</td>
<td>6</td>
<td>4,014</td>
<td>1</td>
<td>4,014</td>
<td>0,923</td>
<td>0,391</td>
</tr>
<tr>
<td>People can be trusted</td>
<td>6</td>
<td>6,12</td>
<td>1</td>
<td>6,12</td>
<td>1,496</td>
<td>0,288</td>
</tr>
<tr>
<td>Equal opportunity/should be treated equally</td>
<td>6</td>
<td>24,883</td>
<td>1</td>
<td>24,883</td>
<td>2,942</td>
<td>0,161</td>
</tr>
<tr>
<td>Trust in the State</td>
<td>6</td>
<td>1,76</td>
<td>1</td>
<td>1,76</td>
<td>0,262</td>
<td>0,636</td>
</tr>
<tr>
<td>Welfare Expansion</td>
<td>5</td>
<td>5,381</td>
<td>1</td>
<td>5,381</td>
<td>0,265</td>
<td>0,642</td>
</tr>
<tr>
<td>Market Solutions</td>
<td>5</td>
<td>2,306</td>
<td>1</td>
<td>2,306</td>
<td>0,204</td>
<td>0,682</td>
</tr>
<tr>
<td>Welfare limitation</td>
<td>5</td>
<td>3,3</td>
<td>1</td>
<td>3,3</td>
<td>18,049</td>
<td>0,024**</td>
</tr>
</tbody>
</table>

Significance levels: p=<0,05** p=< 0,01***

Caution should be taken when reaching this conclusion as there are few observations post crisis, in the case of welfare limitation only one, and since we have reason to suspect that the significance result is too liberal. In addition, correlation does not automatically translate causation, and we would be getting ahead of ourselves if we concluded unambiguously that the financial crisis is the sole reason for the differences observed here.

Second, we examine Finland, whose deviation from the Nordic ‘norm’ in the previous section lies in a more centralised wage setting process and a greater emphasis on welfare state limitation in periods of economic crisis. The ANOVA analysis here finds only the difference in means in the support for the egalitarian ideal to be statistically significant. From the graph we see that the score on this variable has decreased somewhat in Finland, and has been generally lower after the crisis than before.
### Table 14 Finland, between groups (combined), 1995-2012

<table>
<thead>
<tr>
<th>Finland</th>
<th>N</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage Setting</td>
<td>17</td>
<td>4,902</td>
<td>1</td>
<td>4,902</td>
<td>0,362</td>
<td>0,557</td>
</tr>
<tr>
<td>S80/s20</td>
<td>17</td>
<td>0,087</td>
<td>1</td>
<td>0,087</td>
<td>1,324</td>
<td>0,268</td>
</tr>
<tr>
<td>Gini</td>
<td>17</td>
<td>1,525</td>
<td>1</td>
<td>1,515</td>
<td>0,557</td>
<td>0,467</td>
</tr>
<tr>
<td>RoP</td>
<td>9</td>
<td>0,036</td>
<td>1</td>
<td>0,036</td>
<td>0,352</td>
<td>0,572</td>
</tr>
<tr>
<td>Union Density</td>
<td>17</td>
<td>40,998</td>
<td>1</td>
<td>40,998</td>
<td>2,778</td>
<td>0,116</td>
</tr>
<tr>
<td>Government should reduce income diff.</td>
<td>6</td>
<td>1,643</td>
<td>1</td>
<td>1,643</td>
<td>0,106</td>
<td>0,761</td>
</tr>
<tr>
<td>People can be trusted</td>
<td>6</td>
<td>3,956</td>
<td>1</td>
<td>3,956</td>
<td>1,893</td>
<td>0,241</td>
</tr>
<tr>
<td>Equal opportunity/should be treated equally</td>
<td>6</td>
<td>4,048</td>
<td>1</td>
<td>30,897</td>
<td>4,048</td>
<td>0,005**</td>
</tr>
<tr>
<td>Trust in the State</td>
<td>6</td>
<td>8,3</td>
<td>1</td>
<td>8,3</td>
<td>1,106</td>
<td>0,352</td>
</tr>
<tr>
<td>Welfare Expansion</td>
<td>5</td>
<td>25,348</td>
<td>1</td>
<td>25,348</td>
<td>2,061</td>
<td>0,247</td>
</tr>
<tr>
<td>Market Solutions</td>
<td>5</td>
<td>4886</td>
<td>1</td>
<td>4886</td>
<td>0,882</td>
<td>0,417</td>
</tr>
<tr>
<td>Welfare limitation</td>
<td>5</td>
<td>0,691</td>
<td>1</td>
<td>0,691</td>
<td>0,244</td>
<td>0,655</td>
</tr>
</tbody>
</table>

*Significance levels: p=<0,05** p=< 0,01***

It would appear then that the only variable on which the financial crisis may have had a significant effect on in Finland is its citizen’s adherence to the egalitarian ideal, which already was among the highest of the Nordic countries. Once again however, we cannot know for certain that this is solely because of the financial crisis, or that the result would be significant with more data, and not some other factors not analysed here.

Third, Norway has proven to be an outlier in terms of a relatively low union density and on average falling poverty rates and income inequality which translates to increased wage compression. As mentioned earlier, the partisan variables are not tested in the ANOVA analysis since there is no data after 2009. What we do find is that the mean values of income inequality measured by the s80/s20 rate and Risk of Poverty rates are before and after the crisis are different at a statistically significant level. That income difference is reduced in times of economic crisis is expected but that poverty rates have not increased implies one of two things. Either that the levels were unnecessarily high before the crisis, or those policies...
that aim to mitigate economic exclusion through poverty have continued to work during the crisis.

**Table 15** Norway, between groups (combined), 1995-2012

<table>
<thead>
<tr>
<th>Norway</th>
<th>N</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage Setting</td>
<td>17</td>
<td>0.502</td>
<td>1</td>
<td>0.502</td>
<td>0.317</td>
<td>0.582</td>
</tr>
<tr>
<td>S80/s20</td>
<td>16</td>
<td>1.631</td>
<td>1</td>
<td>1.631</td>
<td>7.365</td>
<td>0.02**</td>
</tr>
<tr>
<td>Gini</td>
<td>10</td>
<td>22.214</td>
<td>1</td>
<td>22.214</td>
<td>4.28</td>
<td>0.72</td>
</tr>
<tr>
<td>RoP</td>
<td>9</td>
<td>4.702</td>
<td>1</td>
<td>4.702</td>
<td>9.758</td>
<td>0.017**</td>
</tr>
<tr>
<td>Union Density</td>
<td>18</td>
<td>0.114</td>
<td>1</td>
<td>0.114</td>
<td>0.132</td>
<td>0.721</td>
</tr>
<tr>
<td>Government should reduce income diff.</td>
<td>6</td>
<td>94.36</td>
<td>1</td>
<td>94.36</td>
<td>5.349</td>
<td>0.82</td>
</tr>
<tr>
<td>People can be trusted</td>
<td>6</td>
<td>0.198</td>
<td>1</td>
<td>0.198</td>
<td>0.054</td>
<td>8.27</td>
</tr>
<tr>
<td>Equal opportunity/should be treated equally</td>
<td>6</td>
<td>13.104</td>
<td>1</td>
<td>13.104</td>
<td>6.803</td>
<td>0.06</td>
</tr>
<tr>
<td>Trust in the State</td>
<td>6</td>
<td>128.88</td>
<td>1</td>
<td>128.88</td>
<td>14.282</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Significance levels: p=<0.05** p=< 0.01***

The reason for the difference in wage compression may also be due to the spike in income inequality in 2006, without which the analysis may have yielded a different result. Still, the ANOVA analysis indicates that the financial crisis may have had an effect on these two variables, with the qualification that more data and a different method may not yield the same result.

Finally, we look at Sweden which deviates from its Nordic neighbours by generally having lower trust in ones fellow citizens and the state, as well as higher union and employer organisation density, and parties that emphasis both welfare expansion and market oriented solutions. Through the ANOVA analysis, we find that the mean values of union density and support for general egalitarianism are different before and after the financial crisis at a statistically different level. In the case of union density, the explanation could reasonably be said to be that union density has fallen substantially in the entire period, and that one could expect to see a similar result if the cut-of point was set for example in 2004.
<table>
<thead>
<tr>
<th>Sweden</th>
<th>N</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage Setting</td>
<td>17</td>
<td>0.502</td>
<td>1</td>
<td>0.008</td>
<td>0.126</td>
<td>0.728</td>
</tr>
<tr>
<td>S80/s20</td>
<td>12</td>
<td>0.067</td>
<td>1</td>
<td>0.067</td>
<td>1.626</td>
<td>0.231</td>
</tr>
<tr>
<td>Gini</td>
<td>12</td>
<td>1,634</td>
<td>1</td>
<td>1,634</td>
<td>1,495</td>
<td>0.250</td>
</tr>
<tr>
<td>RoP</td>
<td>8</td>
<td>0.042</td>
<td>1</td>
<td>0.042</td>
<td>0.034</td>
<td>0.860</td>
</tr>
<tr>
<td>Union Density</td>
<td>18</td>
<td>231.04</td>
<td>1</td>
<td>231.04</td>
<td>11,295</td>
<td>0.004***</td>
</tr>
<tr>
<td>Government should</td>
<td>6</td>
<td>1,135</td>
<td>1</td>
<td>1,135</td>
<td>0,190</td>
<td>0,685</td>
</tr>
<tr>
<td>reduce income diff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People can be trusted</td>
<td>6</td>
<td>2,970</td>
<td>1</td>
<td>2,970</td>
<td>0,251</td>
<td>0,643</td>
</tr>
<tr>
<td>Equal opportunity/</td>
<td>6</td>
<td>11,900</td>
<td>1</td>
<td>11,900</td>
<td>34,511</td>
<td>0,004***</td>
</tr>
<tr>
<td>should be treated equally</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in the State</td>
<td>6</td>
<td>86,564</td>
<td>1</td>
<td>86,564</td>
<td>5,129</td>
<td>0,086</td>
</tr>
<tr>
<td>Welfare Expansion</td>
<td>4</td>
<td>45,733</td>
<td>1</td>
<td>45,733</td>
<td>2,912</td>
<td>0,230</td>
</tr>
<tr>
<td>Market Solutions</td>
<td>4</td>
<td>24,311</td>
<td>1</td>
<td>24,311</td>
<td>1,077</td>
<td>0,408</td>
</tr>
<tr>
<td>Welfare limitation</td>
<td>4</td>
<td>0.015</td>
<td>1</td>
<td>0.015</td>
<td>0,208</td>
<td>0,693</td>
</tr>
</tbody>
</table>

Significance levels: p<0.05** p<0.01***

However, we have also seen a sudden stabilisation and small increase during the time of the financial crisis, so it may well be there the crisis has had an effect. Finally, Sweden has seen an increase in egalitarian preference since 2008, which is at the onset of the financial crisis. It may therefore be possible that the financial crisis has had a significant effect on this variable.

6. Conclusions

The starting point of this thesis has been the continuous debate on the robustness of the Nordic Model, here defined as one consisting of a political, economic and social dimension which are mutually reinforcing. The most important traits of this model is a system of centralised wage setting that ensures wage compression, a comprehensive welfare state that pools risks and provides care from cradle to grave, a high degree of trust in ones fellow citizens, the state and a strong preference of both economic and social equality. All these traits reinforce each other, but the wage compression that follows a centralised wage setting process is the fundament and lies at the core in this relationship. It is in this institutional equilibrium that the Nordic Model is made possible and thrives. The first aim has therefore
been to assess the robustness of this model today; ten years after Barth et al conducted their analysis which is the fundament of this thesis.

Second, the Global Financial Crisis is the greatest economic malaise that has affected the Nordic countries since the Great depression in the 1930’s. The crisis have, like other crises in the past, been said to bring an end to the Nordic Model, and has therefore been an important part of this thesis as the secondary research question: Has the Global Financial crisis disturbed the institutional equilibrium that the Nordic Model rests upon?

By investigating the variables that together make up the traits in the Nordic model over time, we have found that the institutional equilibrium is still robust and even seen changes that are positive in terms of strengthening the robustness of the Nordic model, such as increased trust and preference for egalitarian positions. However, we have also seen a falling degree of wage compression that may have followed in the wake of less centralised wage setting processes in Denmark, Norway and Sweden, as well as declining union density and support for income redistribution in all the Nordic countries. On the other hand, the Nordic countries still score higher on income equality (wage compression) than the Euro zone average, and coupled with the observation that increased partisan emphasis on welfare state expansion and low profile on welfare state limitation make a strong case for the conclusion that the Nordic Model remains robust in the foreseeable future. This study shows some significant variation between countries on certain variables however, and Denmark fails the Hoop test for wage compression. There is therefore less certainty about the robustness of the Nordic Model in Denmark, while the answer to which factors have lead Denmark on a path to higher income inequality is not known at this time. We also find that the relationship between a centralised wage setting process and wage compression may not be as straightforward as the model predicts, exemplified by Spain and Portugal which have a higher degree of centralisation than the Nordic countries, except Finland, yet a much higher degree of income inequality.

The effects of the Global Financial Crisis on the Nordic Model appear to be quite limited and only statistically significant on a few variables, and even then with much uncertainty given the data and method employed. It is therefore difficult to assess just how much the financial crisis alone can explain of the variation, and I will therefore conclude that the financial crisis has only had marginal consequences for the institutional equilibrium of the Nordic Model in the short run, if any at all. In other words, the institutional equilibrium that upholds the Nordic Model seems to have weathered the Global Financial Crisis well.
However, not much time has passed since the financial crisis, and especially the decrease in wage compression in Denmark should worry those who wish for a continuation of the outcomes that results from policies based on the Nordic Model in that country. In general I would argue that it is too early to conclude on the long term effects of the Global Financial crisis on the Nordic model, even if its effects are marginal or none-existent in the short run.

Finally, the analysis of the traits that make up the Nordic models have shown significant variation between the countries on several variables, with one country often being a clear outlier. The factors behind these differences are not clear, and may warrant more attention in the future.
Literature


OECD (2011a): *Divided We Stand.* OECD Publishing.


SSB (2013): Personer med lavinntekt etter gruppe og alder. Oslo: SSB.