

# Nordic retail trading as a labour market

A review and comparative study based on the Nordic model



Agneta Berge, July 2013



**Contents**

- Summary..... 6
- 1. Introduction..... 8
- 2. The service sector..... 10
  - Summary..... 11
- 3. Three societal models..... 12
  - 3.1 The three cornerstones of the Nordic model ..... 13
  - Summary..... 15
- 4. Method and demarcations ..... 16
  - 4.1 Expected observations ..... 17
- 5. Organisation of the service sector ..... 19
  - 5.1 Degree of union organisation in the Nordic countries and in the USA..... 19
    - Summary..... 22
  - 5.2 Employment in privately and publicly financed services ..... 22
    - Summary ..... 24
- 6. About Nordic wage structure statistics..... 25
  - 6.1 Industry sector division..... 25
  - 6.2 Occupational classification..... 25
  - 6.3 Wage components ..... 26
  - 6.4 Purchasing power parity adjusted currency..... 28
    - Summary ..... 29
- 7. Wages in Nordic and American retail trading ..... 30
  - 7.1 Average wage for salespersons in retail trading..... 30
    - Summary ..... 33
  - 7.2 Minimum wages for salespersons in retail trading ..... 33
    - Summary ..... 38
- 8. Is a lower minimum wage a way to a more effective labour market?..... 39
  - 8.1 What does the research say? ..... 39
  - 8.2 What do the figures say? ..... 42
    - Summary ..... 42
- 9. Two further perspectives on wage structure..... 43
  - 9.1 An equal opportunity perspective on Nordic retail trading pay..... 43

Summary .....	45
9.2 Retail trading wages in relation to an industrial wage .....	45
Summary .....	47
10. Unemployment insurance for salespersons in Nordic retail trading.....	48
10.1 Previous studies.....	49
10.2 Method .....	49
10.3 Unemployment insurance in the Nordic region .....	50
10.3.1 Association principles and qualification conditions.....	50
10.3.2 Compensation systems .....	52
10.3.3 Actual compensation levels and comparisons.....	54
Summary .....	56
11. Conclusion.....	58
References .....	60
Wage structure statistics .....	60
Written references.....	60
Review of wage structure statistics .....	60
Appendix A: Summary of industry sector classification in the Nordic region .....	62
Denmark .....	62
Finland .....	62
Iceland .....	62
Norway .....	62
Sweden.....	63
Appendix B: Summary of occupational classification in the Nordic region.....	64
Denmark .....	64
Finland .....	64
Iceland .....	65
Norway .....	65
Sweden.....	66
Appendix C: Summary of wage components in the Nordic region.....	67
Denmark .....	67
Finland .....	67
<i>Total wage</i> .....	67

<i>Wage for ordinary working hours</i> .....	68
<i>Compensation for additional work</i> .....	68
<i>Compensation for overtime work</i> .....	68
<i>Paid hours</i> .....	69
Iceland .....	69
Norway .....	69
Sweden.....	70

## Summary

This study represents the first stage of gathering wide ranging but at the same time detailed knowledge about Nordic retail trading as a labour market and studying this knowledge from the perspective of the Nordic model. Among other things, it reviews the Nordic countries' wage systems, the first part of a combined database for Nordic retail trading is built up and the basis established for the continued gathering of Nordic wage structure statistics.

In empirical terms, the study investigates the degree of union organisation, the distribution of employment within private and publicly financed services, average wages and minimum pay, to some extent wider wage structures in the respective countries and actual remuneration levels and certain basic principles for unemployment insurance in the Nordic countries. The Nordic countries are compared and also seen in relation to anticipated observations from the description of the Nordic model and the USA.

It is evident from the study that the labour markets in the respective Nordic countries have many similarities, but also that they are far from homogeneous. The latter applies to both the outcome of, for example, real wage development or union organisation in the private sector and institutions, such as in the distribution of the wage components in wage structure statistics or association principles in unemployment insurance. But the greatest differences can still be seen between the USA on one hand and the Nordic countries on the other, which indicates that it would be reasonable to place the USA in a different social model from the Nordic countries.

A couple of potential storm clouds have also shown up in the study, giving a number of consequent questions that it will be interesting to consider further in future studies.

- The degree of union organisation in the private sector is considerably lower in Norway compared with the other Nordic countries, but at a similar level in the public sector. How does this arise and what implications does it have?
- Wages in Iceland are nominally level with the USA, including in respect of minimum pay. What is the reason for this? And does this mean that workers in Iceland also have low incomes and difficulties in living properly on their wages?

- Wages in Denmark have seen a very weak real development, unlike other Nordic countries, which indicate positive trends. What does this mean for the workers? Have they received other benefits instead or is there something in the wage pattern in Denmark that differs from other Nordic countries?
- And unemployment insurance. The ceiling for Swedish unemployment insurance has not been raised since 2002. In Iceland, only three month's compensation for unemployment is income-related, the rest is uniform. An average salesperson in retail trading does not receive more than about 60 per cent of his or her previous income in the income-related part of compensation when unemployed in some Nordic countries. Many observations boil down to questions of the extent to which the so important loss of income principle is still active, or whether all the Nordic countries are on their way towards a basic security principle, and thus a change of system.

## 1. Introduction

About 80 per cent of the workforce of the Nordic countries is employed in the service sector, and it is also in the service sector that we find some of the labour market's most vulnerable groups of workers. Among those services that are personal and consumption-intensive, production is often labour-intensive, while competition most often has the effect of squeezing costs. This puts pressure on workforce-related costs. At the same time, the workforce is often relatively replaceable and there is a relatively high level of staff turnover. All-in-all this gives a workforce with a weak position in relation to the employers.

Retail trading is an example of such an industry sector. But there is a lack of collated information about Nordic retail trading. This makes it difficult for members of a Nordic union movement to learn from each other and set out paths for improvement. At the same time it also limits the general understanding of what kind of labour markets the Nordic societies create.

The social systems and their outcome vary a great deal between different countries globally, but the Nordic systems and their outcomes are relatively similar to each other. For this reason they are often referred to together, in somewhat simplified form, as the Nordic model. The Nordic model is often described in its ability, unlike other social models, to form societies that are both equal and effective, with good economic growth and high employment, as well as limited poverty and, from an international perspective, modest income differences.

But the Nordic model is most often studied on the basis of industry or at country level. Does the picture of the Nordic model still hold if we study a relatively more vulnerable workforce such as in retail trading in the Nordic region? And are the labour markets in the retail trading of the respective Nordic countries similar, or are there actually great differences that a combined Nordic union movement would benefit from knowing about? There is thus a reason to gather wide-ranging and at the same time detailed knowledge about Nordic retail trading as a labour market and to study this on the basis of the Nordic model. This study begins this comprehensive work and also creates conditions for continuing this knowledge building in future, as well as pointing out possible directions for future studies.



The first part of the report describes the service sector and social models in general, and the Nordic model in particular, in more detail. Why is the private service sector relevant to study as a labour market? What are the characteristics of the organisation of the Nordic labour market? What features can we expect to see in retail trading as a labour market given the description of the Nordic model?

The second part of the report reviews some perspectives of organisation of the service sector in the Nordic countries and the USA. What does the level of union organisation look like in general and in particular in retail trading? What is the distribution of employment between private and publicly financed services?

The third part of the report describes the systems for wage structure statistics in the Nordic countries and studies both average wages and minimum pay in the Nordic countries and the USA. What are the levels of and trends in wages? Do we see the expected observations in all the Nordic countries or are there important intra-Nordic differences?

The Nordic countries are known for their relatively high minimum wages in international terms. But many claim that high minimum wages are a problem for the labour market and that reducing minimum wages would be a way of increasing employment and reducing unemployment. The fourth part of the report seeks support for this claim in international research and in statistics. Should Nordic minimum wages be reduced?

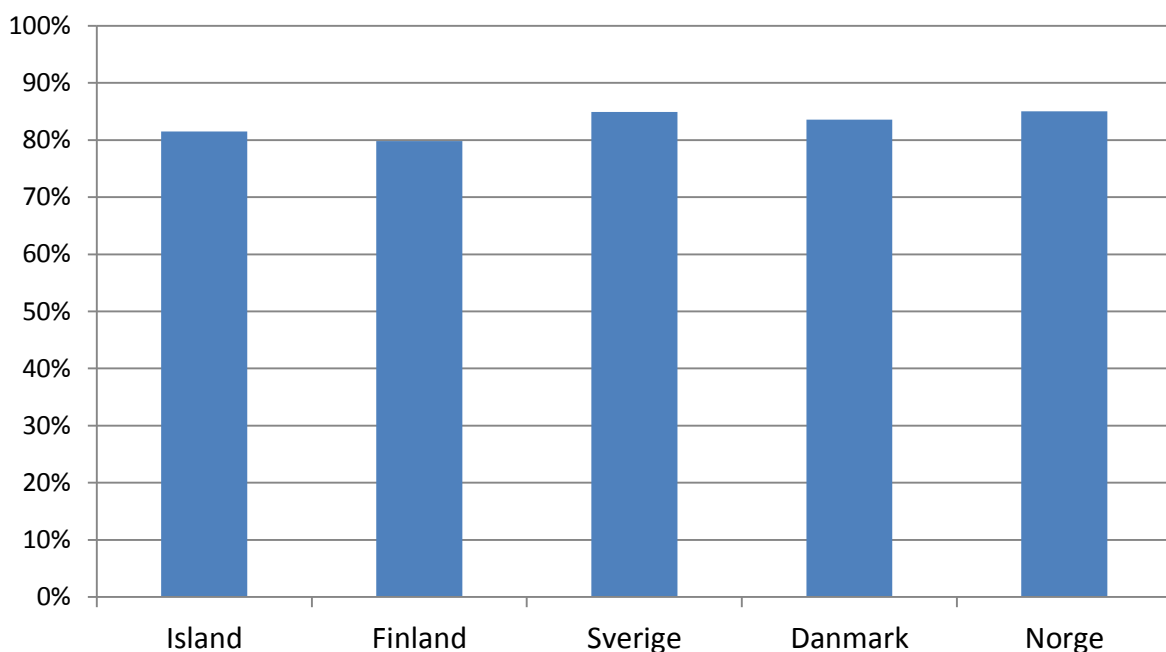
The fifth part of the report takes a further look at the wage issue and studies whether wages in retail trading are comparable and how they relate to other wages in the economy.

But of course many things other than wages are significant for our understanding of retail trading as a labour market. Such an example is unemployment insurance. The sixth part of the report therefore studies principles and remuneration levels in the Nordic unemployment insurances. How great a proportion of an average retail trading salesperson's wage is safeguarded in unemployment? Is unemployment insurance organised in comparable ways in the Nordic countries?

## 2. The service sector

Traditionally, industry has had a dominant role in society's total production in the Nordic countries, but with post-industrial societal development the significance of the service sector becomes ever greater and today around 80 per cent of the Nordic workforce is employed in the service sector.

Figure 1. Proportion of those in work who were employed in the service sector in the respective Nordic countries in 2012.



Source: SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, own calculations.

The service sector can be divided into, on one hand, the consumption-oriented services that are aimed at the end consumer or individual, and on the other hand the production-oriented services, which are involved in production and thus aimed at various organisations. The service sector can also be divided into, on one hand, the personal services, which must be directly performed by a person, and on the other side impersonal services, which can instead be performed to a great extent by a technical system.

Figure 2. A division of the service sector

<b>Personal services</b>	Retail trading, hotel and restaurant, care, cleaning services	Consultancy services, cleaning services, wholesaling
<b>Impersonal services</b>	Banking services, IT services, online trading	Banking services, IT services, online trading
	<b>Consumption-oriented services</b>	<b>Production-oriented services</b>

Within personal services in general, and personal consumption-oriented services in particular, we find workforce groups that are relatively more vulnerable and weak in relation to the employer, compared with many other workforce groups. These include care, restaurants, cleaning services in the home and retail trading.

The vulnerability is due to the production being relatively labour-intensive, which means that workforce-related costs, rather than software programmes or hardware for example, account for a relatively high proportion of production costs. At the same time, many of these industry sectors largely compete by holding down costs. This combination means that pressure is put on workforce-related costs. At the same time, many of these industry sectors have a relatively replaceable workforce, relatively standardised working tasks and a high staff turnover. Taken altogether, these conditions mean that the workforce does not have a particularly strong position in relation to the employer. In times of high unemployment in particular, this is a potential breeding ground for undercutting competition and the development of extremely low-wage markets, with poor jobs and poor working conditions. The risk of developing a large group of working poor is relatively high in these sectors.

Even though there is a need for a detailed review of large parts of the personal, consumption-oriented service sector, this study is limited to only covering retail trading.

## Summary

80 per cent of the Nordic workforce is employed in the service sector and among the personal, consumption-oriented services there are workforce groups that have a relatively weak position in relation to their employers. This study addresses such a group's circumstances in the labour market of the Nordic region, namely retail trading.

### 3. Three societal models

All countries have their special arrangement of institutions<sup>1</sup> and their special combination of measurable outcome, and among these combinations of institutions and outcomes there are certain patterns: some countries resemble each other more than others. On the basis of these patterns, countries are sometimes grouped in different societal models, for the purpose of capturing the pattern and minimising differences within the model, but maximising the differences between societal models.

However there is no established theory for societal models, which makes empirical analysis from a societal model perspective difficult. On the other hand societal models are described in similar ways in most of the literature, with many consistent features.

The description of a societal model is always a simplification, however, and has as many exceptions as it has countries.

A frequently recurring description of this pattern among western democracies, which derives from Gösta Esping-Andersen (1990), is to talk about the liberal model (which tends to include Anglo-Saxon countries), the conservative model (which tends to include continental and Mediterranean countries) or the social democratic model (which tends to include the Nordic countries). This description can be found for example in Christer Persson, Stefan Carlén and Daniel Suhonen (2010) and in Espen Løken (2009), with the difference that the conservative model is called the corporative model and the social democratic model is called the general or Nordic model.

The liberal model may be found for example in the United Kingdom and the USA. A basic principle of this welfare model is that public welfare programmes are needs tested and directed at those with the lowest incomes. Other economic groups are referred to the family or the market to cover their welfare needs. This means that there is no large tax withdrawal to finance social insurances and welfare services and that those that are financed are limited

---

<sup>1</sup> In accordance with Douglass North's (1991) definition institutions refers to formal or informal rules of collections of rules.

to only covering a very low level of need, so-called basic social security. Covering needs beyond this basic level is financed privately. This type of arrangement and financing of welfare means that no great redistribution of resources or adjustment of risks in society occurs.

Germany is normally used as a representative country for the corporative model, but other countries in central Europe are also included here. In the corporative model, the individual's position in the labour market is strongly linked to its access to social security and welfare, through various wage-earner groups (or corporations) having their own social programmes. However to a great extent it is families not individuals that are awarded social benefits in the corporative model. The financing of programmes occurs both privately and publicly and risk adjustment occurs only within the different groups. Those who are outside the corporations must turn to the family and the market to cover their welfare needs.

Finally we have the general model, which is probably better known as the Nordic or Swedish model, to which all five Nordic countries tend to belong, although not always and not always exclusively. Since this study focuses on the Nordic model, a more detailed description of this is given than for the liberal and corporative models.

### **3.1 The three cornerstones of the Nordic model**

The Nordic model can be described on the basis of three cornerstones, which distinguish this model from the other models. These three cornerstones are a unique relationship of a party to the labour market, a mandatory and general social insurance system that is based on the loss of income principle and basic welfare services that are financed from taxation and performed by public officials.

Thus the first cornerstone is about the labour market. The party system that regulates conditions in the labour market in the Nordic region is based on central parties for employees and employers coming to collective agreements and then themselves interpreting and applying these on the labour market. Collective agreements often regulate, for example, wages, working hours and other working conditions. A high rate of coverage by collective agreements thus gives predictability and regulation to the labour market and the conditions for stable and real wage increases. It is also common in collective agreements to regulate the

lowest price the workforce will sell its work for, often known as minimum wages. The homogeneity of wage patterns and this collective wage floor contribute to a more compressed wage structure and to putting upward pressure on the lowest costs for companies. This last point gives companies an incentive to do away with the least efficient working tasks and develop new techniques and new ways of organising production. In this way a well-functioning party model can contribute to a pressure for conversion in production and to production factors (work, capital etc.) being transferred from less profitable tasks to more profitable ones.

The collective agreement system in the party model also ensures that both parties' interests can influence the labour market, while collective agreements and legislation allow room, for example, for elected union representatives to find flexible solutions for given local conditions. A prerequisite for this working is that both parties are relatively equal, which for employees means a requirement for a high level of union organisation. The level of union organisation has also been relatively high in the Nordic countries for some time. However it is also important that the union organisation is not only strong at a central level but also at local level, so that employers have a long-term negotiating party at individual company level where the best local solutions can be arrived at. In this way a stable and predictable, but at the same time dynamic labour market with the ability to adapt is created.

The second cornerstone concerns the social insurance system. It is a fundamental principle that social insurance should include everyone and not be needs tested. Thus the whole population is included in the social insurance system, regardless of economic or social background. Another fundamental principle is that compensation is paid out in proportion to the recipient's income, also called the loss of income principle. This is where the legitimacy of the system lies, that high and middle income earners also have security and receive full income protection. The social insurance system in the Nordic countries is generally financed from employers' contributions. In this way, risks are distributed over wider groups compared with the way that private insurance works, while this type of social insurance also gives greater redistribution effects than private solutions.

The third cornerstone comprises welfare services such as schools and health care, which are financed to a great extent from taxation and provided by public bodies such as local and country authorities. Precisely as for social insurance, a fundamental principle of this system is that the entire population is to be covered by welfare services. Other key principles are that welfare services should be distributed on equal terms and according to need, not buying power.

Naturally these three cornerstones interact in a more or less complicated way. For example both the redistribution of resources and the spreading of risks via welfare services and social insurance are important for high workforce participation and for a workforce that is willing and able to make necessary reorganisations of the labour market. And what is possibly the most interesting thing about the Nordic model and its three cornerstones is the totality they create, with societies with relatively small income differences and a low level of poverty, high competitiveness and good economic development, high social confidence and relatively effective labour markets etc.

### **Summary**

The Nordic model differs from other societal models primarily in the wide-ranging party relations in the labour market, general social insurance that is based on the loss of income principle and general, publicly performed and tax financed welfare services.

#### **4. Method and demarcations**

By way of introduction, this study was very broadly based with the ambition to review all parts of the Nordic model from a retail trading perspective. But both the Nordic model and retail trading as a labour market are very large areas that require certain demarcation. Where these two areas meet, the overlap most explicitly in the part of the Nordic model that affects organisation of the labour market and party model, with issues such as collective agreements, wages, working conditions and union organisation. The study's focus is therefore on this part of the Nordic model, even if other aspects may be affected.

Furthermore, to begin to answer questions about retail trading in the Nordic region, an empirical basis is needed so as to permit comparisons between the Nordic countries, on one hand, and on the other hand between the Nordic countries and a country that can act as an external reference point, so as to obtain a relation to the variations that are observed within the Nordic region. The country that has been chosen for this study is the USA, which is the country often used to exemplify the Anglo-Saxon model, which is a societal model that is often described as being the opposite to the Nordic model. The choice of the USA is also made easier by the fact that there is good access to relevant wage statistics via the Bureau of Labor Statistics (BLS). However, unlike the Nordic countries, the USA is a very large country. This limits the degree of comparability.

It is the case however that there is a lack of satisfactory databases for a number of parameters for Nordic retail trading as a labour market. This is the case not least for wages, where it is not currently possible to study wages and wage trends for a specific occupational category within retail trading in the Nordic region. There is also a lack of good databases for such aspects as workforce costs in retail trading, disposable incomes, part-time employment for specific occupational groups and others.

What was needed so as to be able to begin building knowledge about Nordic retail trading as a labour market was thus to single-handedly collect statistics for creating relevant databases. Since wages are key to both the workforce and the trade union's activities and since wages are included in studies of workforce costs and disposable incomes, the focus has been on gathering relevant wage structure statistics from the central statistical bureaux of the



respective Nordic countries and minimum wages from the respective countries' collective agreements <sup>2</sup> for retail trading.

For the sake of the study's validity it is vital that these statistics are as comparable as possible, and herein lies the major challenge, since the individual Nordic countries' systems for wage structure statistics are not entirely in accord with the other Nordic countries' systems. For practical reasons, the wage structure statistics for Sweden were produced first. This then provided the framework for the formulation of wage statistics obtained from other Nordic countries. Ordering wage structure statistics has occurred from and in consultation with the respective countries' central statistical bureaux, so as to arrive at the best possible comparability. For the USA, the wage structure statistics that are needed<sup>3</sup> are available from BLS and no specific order needed to be made.

It is however relevant not only to study wage structure statistics but also for example total workforce costs and disposable incomes. It has unfortunately not been possible to do this within the framework of this study, but will be interesting for future studies. The study does however consider the level of union organisation, the distribution of employment in public and privately financed services (which fall within the part of the Nordic model that affects welfare services) and some aspects of unemployment insurance in the Nordic region, such as the degree of compensation for salespersons in retail trading and certain general principals (which fall within the part of the Nordic model that affects the social insurance system).

#### **4.1 Expected observations**

Given the parameters that are studied within the framework for this study, on the basis of the descriptions of the Nordic model it is possible to extract a number of expected observations in retail trading as a labour market that should be viewed in particular in comparisons with the USA. It should be stressed however that these parameters are based on

---

<sup>2</sup> In the USA, minimum wages are regulated by law rather than collective agreements. The minimum wage for the USA has thus been obtained not from a collective agreement but from the Bureau of Labor Statistics database.

<sup>3</sup> Without separation by gender however, for which reason the USA is not included in the part of the study that investigates gender differences within retail trading wages.

interpretations of descriptions of the Nordic model. In this sense therefore the input is deductive. But the study also has an inductive input and is open to the empirical generating completely different patterns from those expected and that it is relevant to present these, whatever they may be.

It is primarily parameters within the part of the Nordic model that affects the labour market that are studied here, but unemployment insurance is also studied and the welfare services section is also affected, if only superficially.

*Table 1. Expected observations in the study*

<b>Cornerstone in the Nordic model</b>	<b>Studied parameter</b>	<b>Expected observation (especially in relation to the USA)</b>
<b>Labour market</b>	Real wages	Good, stable development
	Minimum wages	High
	Wage structure	Compressed
	Degree of union organisation	High
<b>Social insurance</b>	Compensation from unemployment insurance	Functioning loss of income principle
	Real development of compensation in unemployment insurance	Good
<b>Welfare services</b>	Proportion of employees in publicly-financed services	Relatively high (since welfare services are publicly not privately financed)

## **5. Organisation of the service sector**

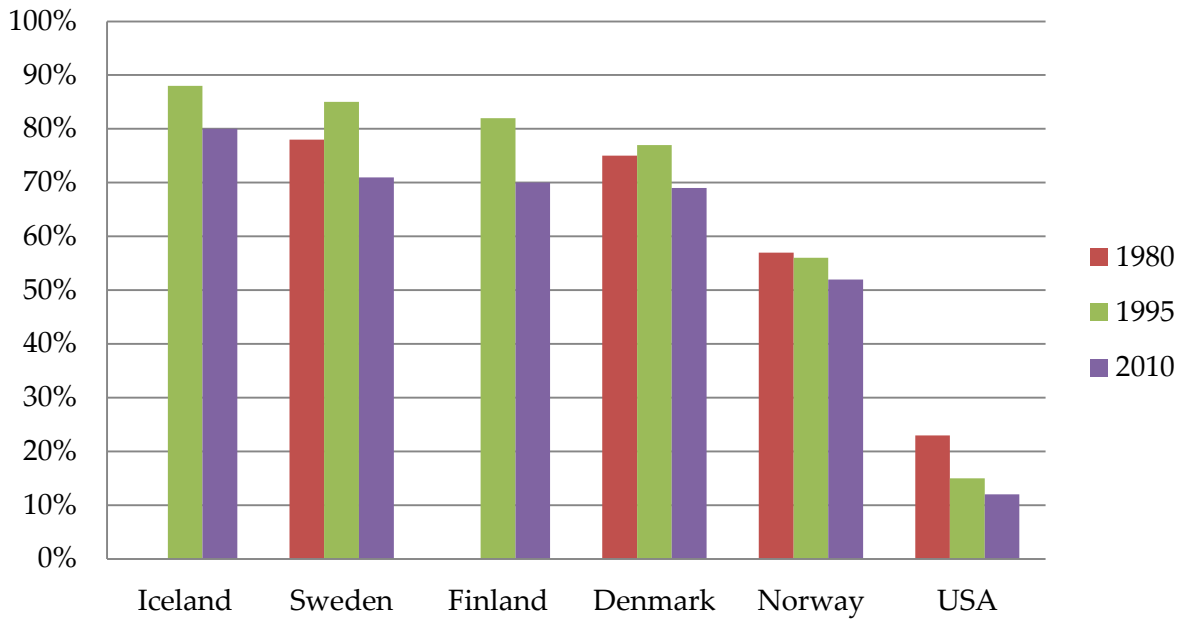
To begin with we create an image of how the service sector as a labour market is organised in the Nordic countries and in the USA, by studying the degree of union organisation. We also create an image of the service market by looking at the distribution of employees between privately and publicly financed services and how much of the employment in the service sector is in retail trading.

### **5.1 Degree of union organisation in the Nordic countries and in the USA**

Over time the Nordic countries have had a significantly higher degree of union organisation than the USA and they still have. However the level of union organisation has fallen in recent years, in both the Nordic region and the USA. In Norway and the USA, the degree of union organisation has fallen since 1980, in Sweden and Denmark since 1995 and in Finland and Iceland since 1995 or even earlier.

In the USA the degree of organisation has almost halved in 30 years, from 23 per cent in 1980 to 12 per cent in 2010. The degree of organisation in the USA is clearly different from that of the Nordic region, barely a quarter of the lowest degree of organisation in the Nordic region, which is Norway's. And among the Nordic countries, Norway differs in having a markedly lower degree of organisation than the other countries. While on average in Norway about every other employee was a union member in 2010, the average proportion of union members among employees was about 70 per cent in Denmark, Finland and Sweden and 80 per cent in Iceland.

Figure 3. Level of union membership in the Nordic countries and the USA in 1980, 1995 and 2010\*



\* Iceland: 1999 and 2008.

Source: OECD, Kjellberg (2013).

However the degree of union organisation is not evenly distributed between sectors; some sectors have a higher level than others. The figures in Figure 4 below are not entirely comparable since not all figures are for the same year and there is a downward trend in union membership. But these figures still give a good picture of how successful union organisation has been in different sectors, which gives an indication that there are different conditions in different parts of the labour market.

In all the Nordic countries and in the USA, the degree of union organisation is significantly higher in the Public sector than in the private sector. For Denmark, Finland and Sweden the degree of organisation is about 20 per cent greater in the public sector than in the private sector, at around 80 per cent in the public sector as against 60 per cent in the private sector. In Norway the difference is even greater, with twice the percentage of union members in the public sector as in the private sector: 81 per cent compared with 40 per cent. Thus the degree of organisation in the public sector is equally high within the Nordic region, and no lower in Norway than in the other Nordic countries, which on average it is, as we saw in Figure 3 above. Instead it appears to be the significantly lower level of union membership in the private sector that is pulling Norway's average figures down. That the degree of union

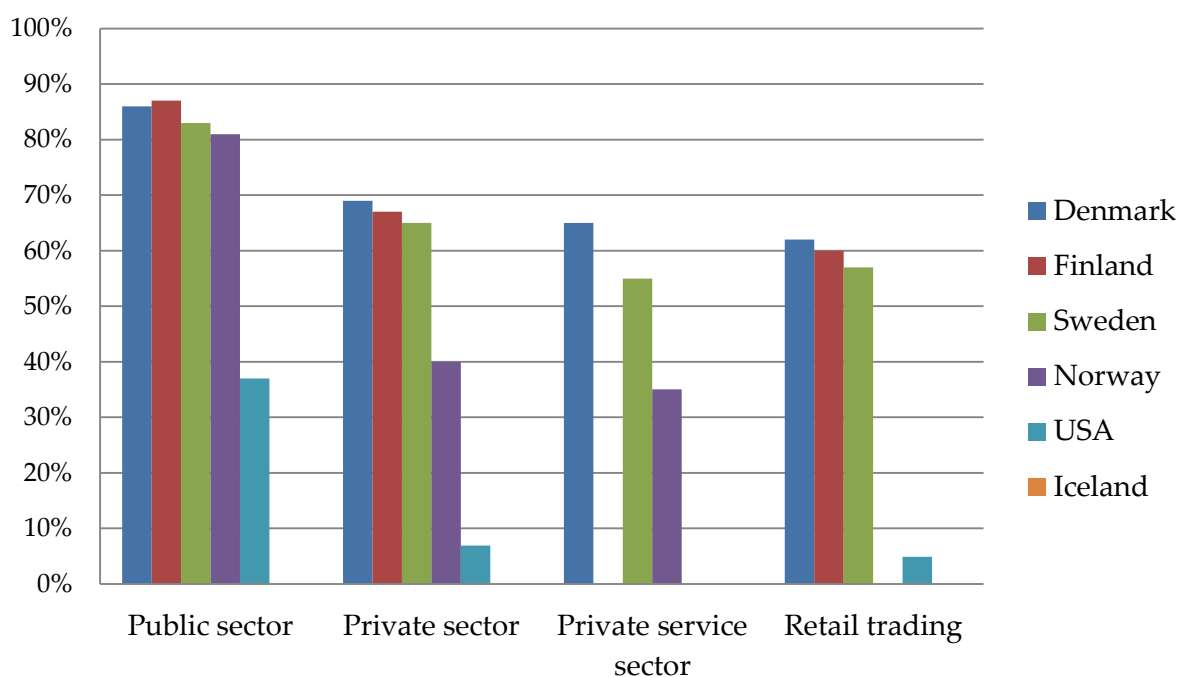
organisation in the Norwegian private sector is so much lower than in other Nordic countries is an important observation, the implications of which for the labour market etc. and the reasons for which are relevant to study. They do not however fall within the framework for this study.

In the USA, the difference in the degree of union organisation in the private and public sectors is dramatic: the 37 per cent level of organisation in the public sector is about five times that in the private sector, where it is 7 per cent.

On the basis of these figures, it is also clear that strategies for how the labour market should be regulated and organised are radically different in the Nordic countries and the USA, in line with what was expected based on the descriptions of the different societal models, where the party model has a much stronger position in the Nordic countries than in the USA.

The degree of union organisation in the private service sector and in retail trading appears to be somewhat lower than in the private sector in general, but in principle similarly high. Thus this means that approximately 6 out of 10 of those in retail trading should be union members. But this figure would probably be reduced somewhat if we had the opportunity to study only workers. It would also be interesting to study these figures divided into different age groups, where the young tend to have a significantly lower level of union membership than the older, while at the same time representing a large group within retail trading.

Figure 4. Degree of union organisation in different sectors in the Nordic countries and the USA



Note: Unfortunately no statistics have been found for Iceland. Denmark and Finland: all trading. Sweden and the USA: 2011; Denmark and Finland: 2008; Norway: 2004.

Source: BLS, Tilastokeskus, Medlingsinstituttet (2012), Nergaard & Stokke (2006), Ibsen et al (2011).

### Summary

The enormous difference in the degree of union organisation between the Nordic region and the USA indicates very different strategies for the organisation of the labour market, with the party model having a strong position in the Nordic countries. Two challenges that have emerged as central, however, are to reverse the trend of falling union membership and to raise the degree of union organisation in the private sector, which is consistently lower than in the public sector. This applies in particular to Norway.

### 5.2 Employment in privately and publicly financed services

In both the Nordic countries and the USA, the service sector, including the building sector, employs around 80 per cent of the workforce. But the distribution of employment within the service sector is different in the Nordic countries and in the USA.

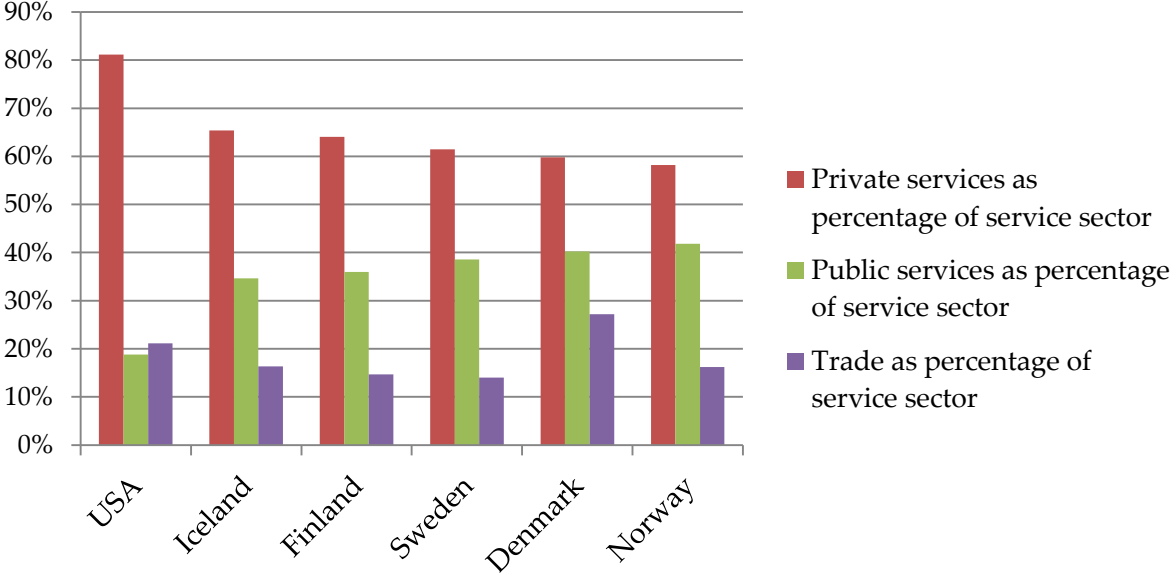
As show in Figure 5 below, about 80 per cent of employees in the USA's service sector are in privately financed services, and thus 20 per cent are in publicly financed services. In the Nordic countries the corresponding figures range from 65 per cent in privately financed services and 35 per cent in publicly financed services (in Iceland) to 58 per cent in privately financed services and 42 per cent in publicly financed services (in Norway). Thus the publicly financed services employ about twice as large a proportion of the service sector workforce in the Nordic countries as in the USA.

This shows two different strategies for how services are financed and how employment in the service sector is to be created. The observation is in line with expectations, where the Nordic model chooses to finance a greater proportion publicly rather than privately, compared with the Anglo-Saxon model.

Add to this that the level of union membership is consistently higher in the public sector than in the private sector in both the Nordic countries and the USA, as shown in the foregoing, and that the public sector often tends to be seen as setting the standard in the form of good conditions in the labour market and the picture emerges of a workforce that is in a much weaker position in relation to employers in the USA than in the Nordic region.

As regards employment in retail trading as a proportion of the service sector, we have only found figures for all trading, which also includes wholesaling and trade in motor vehicles. Trading's proportion of the service sector's total employment is without doubt greatest in Denmark, where it is as much as 27 per cent of the service sector workforce, compared with between 14 and 16 per cent in the other Nordic countries and 21 per cent in the USA. The reasons for this difference are however outside the scope of this study, but would be interesting to study further.

Figure 5. Proportion of employment in the service sector found in privately and publicly financed services, as well as in trading.



Source: BLS, SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, own calculations

**Summary**

In the Nordic region, a significantly greater proportion of service sector employees are in publicly rather than privately financed services, compared with the USA. Together with the finding that the degree of union organisation is higher in the public sector than the private sector in both the Nordic region and the USA, a picture emerges of an American workforce in a weaker position in relation to employers than the Nordic workforce.



## 6. About Nordic wage structure statistics

In order to obtain wage structure statistics from the respective Nordic countries that can be used for knowledge production, there should be comparability in a number of dimensions, such as industry sector, occupational classification, wage components, time measurement and currencies. The empirical elements presented below have been obtained from various documents, conversations and e-mails from the respective countries' statistical bureaux. Refer to the references for the complete list.

### 6.1 Industry sector division

Wage statistics are classified based on industry sectors. The division into industry sectors used in the respective Nordic countries correspond relatively well to each other, which means that comparability in the statistics obtained is quite high. Table 2 shows which standards for industry sector division have been used in the study for each Nordic country, as well as which industry sectors have been used for each standard so as to only capture retail trading, for the years the study refers to. See Appendix A for an overview of the industry sector division in the Nordic region.

*Table 2. Industry sector division and in brackets the codes for retail trading for each Nordic country*

<b>Country</b>	<b>National industry sector division standard (code for retail trading)</b>		
Denmark	DB 1993 (G 52.1-52.6)	DB 2003 (G 52.1-52.6)	DB 2007 (G47)
Finland	TOL 2002* (G 52.1-52.6)		
Iceland	ÍSAT 1995 (G 52.1-52.6)	ÍSAT 2008 (G 47)	
Norway	SN 1994 (G 52.1-52.6)	SN 2002 (G 52.1-52.6)	SN 2007 (G 47)
Sweden	SNI 1992 (G 52.1-52.6)	SNI 2002 (G 52.1-52.6)	SNI 2007 (G 47**)

\* Ordering wage structure statistics from TOL 2002 was sufficient to obtain corresponding industry sectors for other years that the study refers to.

\*\* In SNI 2007 G47 retail trading is included with fuel, which is not included in G 52.1-52.6 in SNI 1992 and SNI 2002 (where it is instead in G50). This is thus not fully comparable.

### 6.2 Occupational classification

Wage statistics are classified on the basis of occupation and occupational groups.

Occupational classification in the respective Nordic countries is based on ISCO classification,

which is an international standard for occupational classification produced by the OECD. Thanks to this it is possible to obtain occupational codes for every Nordic country that ensure that the wage structure statistics are relatively comparable. In an optimum scenario, statistics for both salespersons/cashiers and shop managers in retail trading could be produced. The exact codes for these occupational groups differ somewhat between countries. A summary may be found in Appendix B.

There was only one occupation for which it was possible to obtain wage structure statistics for all the Nordic countries, namely salespersons in retail trading. This is probably because salespersons represent the largest single occupational group in retail trading in the Nordic region. Table 3 shows what the respective Nordic country's standards for occupational classification are called as well as each standard's code for the occupational group salespersons.

*Table 3. Occupational classification standards for the respective Nordic countries*

<b>Country</b>	<b>National occupational classification standard (code for salespersons in brackets)</b>
Denmark	DISCO (522)
Finland	Ammattiluokitus (522)
Iceland	ÍSTARF (522)
Norway	STYRK (522)
Sweden	SSYK (522)

**6.3 Wage components**

All the Nordic countries break wage structure statistics down into different components and no two systems are exactly alike. It is also among wage components that the study has met the greatest challenges in terms of comparability. Denmark, Finland, Norway and Sweden all have a number of individual wage components that one can put together into various wage measurements. But unfortunately the wage components for the four countries do not agree with each other and the number of wage components in Denmark and Sweden is also considerably higher than in Finland and Norway. In Iceland, wages are not reported as individual wage components but as a number of calculated wage measurements.

The wage measurement that has been used in this study for each Nordic country to calculate the average monthly wage is the one that most resembles a time and performance wage including weekend pay, and which does not therefore include payment for inconvenient working hours, holiday pay, staff benefits etc. On the other hand, the analysis of compensation levels in unemployment insurance, later in the report, uses total pay, since this is what the compensation levels are calculated on in practice. Table 4 below shows which wage components have been used in the study for each Nordic country and Appendix C contains a description of the wage components for each country. Once again, it should be stressed that comparability in this point is limited, which affects how precisely one should interpret the figures when they are used.

*Table 4. Wage components for the respective Nordic countries used in the study*

<b>Country</b>	<b>Measurement</b>
Denmark	"Narrow earnings per hour worked"
Finland	"Time wage": [Wage for time worked] – [Remuneration for additional work] – [Benefits in kind]
Norway	"Agreed monthly wage"
Iceland	"Regular salaries per month"
Sweden	"TAH": [Time and performance wage] + [Weekend wage]

The wage terms can in turn be calculated on the basis of different time terms. The standard for international comparisons, and also for most national public statistics databases, is to use pay per hour performed. For Finland however it was not possible to obtain pay per hour performed. Instead in Finland time-measured pay for paid hours is used, which also includes paid absence and thus hours that the employee has not actually worked. Even though the Finnish wage component used in the study is wage for time works less benefits in kind and remuneration for additional work, this limits the comparability of the Finnish wages.

As regards time period, the wage structure statistics have initially been obtained for 2012, while the ambition was to obtain wage structure statistics for the years 2000-2011 for each

Nordic country. This would give the opportunity to see wage development over the first twelve years of the new millennium, which have been characterised by increased global interaction and affected by the crash of the IT bubble and the recent economic and financial crisis in Europe. However because of the limitations of the central statistical bureaux, for Norway data has only been obtained for 2003-2011, and this with a gender division only for the years 2008-2011, and for Iceland only data for 2008-2011 has been obtained. It has been possible to obtain the value of minimum wages for all countries for 2000-2012. It is possible to obtain values for 2012, in spite of the fact that the data was obtained during that year, because they are based on agreements made earlier in the year.

#### **6.4 Purchasing power parity adjusted currency**

To simplify the comparison and analysis of wages, all amounts have been reported in the same currency. This currency has also been power adjusted, which means that currency conversions have been corrected to allow for different price levels in different countries.<sup>4</sup> Such power parities are produced using a "shopping basket" to put together average consumption patterns - the same basket for all countries. Then the price of this basket is calculated for each country and the relationship between countries' total prices for the basket become the buying power parity. The main difficulty in purchasing power parity is that consumption patterns can differ between countries, which makes it a challenge to put together a shopping basket that reflects average consumption patterns in several countries. Table 5 shows the buying power corrected currencies that have been used in this study.

---

<sup>4</sup> In a comparison with conversion using non-purchasing power parity adjusted currencies "gains" (in the sense that wages become higher) are made by Iceland, the USA and to some extent also Finland when we correct for purchasing power parity, while Denmark and Norway "lose" (in the sense that wages become lower).

Table 5. Purchasing Power Parities corrections used, EU27=1

Year	EU27	Denmark	Finland	Iceland	Norway	Sweden	USA
2000	1.00000	10	1.14452	96.9916	10.5015	10.5090	1.1504
2001	1.00000	10	1.17860	103.612	10.6950	10.8925	1.16508
2002	1.00000	10	1.17451	106.933	10.6664	10.9480	1.17071
2003	1.00000	10	1.19626	111.851	10.7869	11.0512	1.18382
2004	1.00000	10	1.15789	111.895	10.6708	10.8101	1.18725
2005	1.00000	10	1.16729	118.348	10.6267	11.2023	1.19448
2006	1.00000	10	1.16670	131.639	10.6737	11.1559	1.22675
2007	1.00000	10	1.15833	139.282	10.8072	10.9417	1.23141
2008	1.00000	10	1.17371	150.190	11.1945	11.2216	1.27907
2009	1.00000	10	1.19965	166.038	11.8966	11.8427	1.32099
2010	1.00000	10	1.20124	176.653	11.7595	11.7715	1.29828
2011	1.00000	10	1.22127	181.878	11.8375	11.6299	1.30158

Source: Eurostat

### Summary

It is a great challenge to create comparability in Nordic wage structure statistics and involves a trade-off between precision and time spent. Within the framework for this study, it has only been possible to produce wage structure statistics of limited comparability - but this is also possibly the greatest value that this study delivers: the first input towards building a combined wage database for Nordic retail trading.

## **7. Wages in Nordic and American retail trading.**

In this section, we study the collected wage statistics for salespersons in retail trading. Both average and minimum wages are studied: their nominal levels and real development.

Minimum wage is also seen in relation to average wage, which gives a measurement called minimum wage bite, which illustrates how high in the wage distribution the minimum wage "bites".

### **7.1 Average wage for salespersons in retail trading**

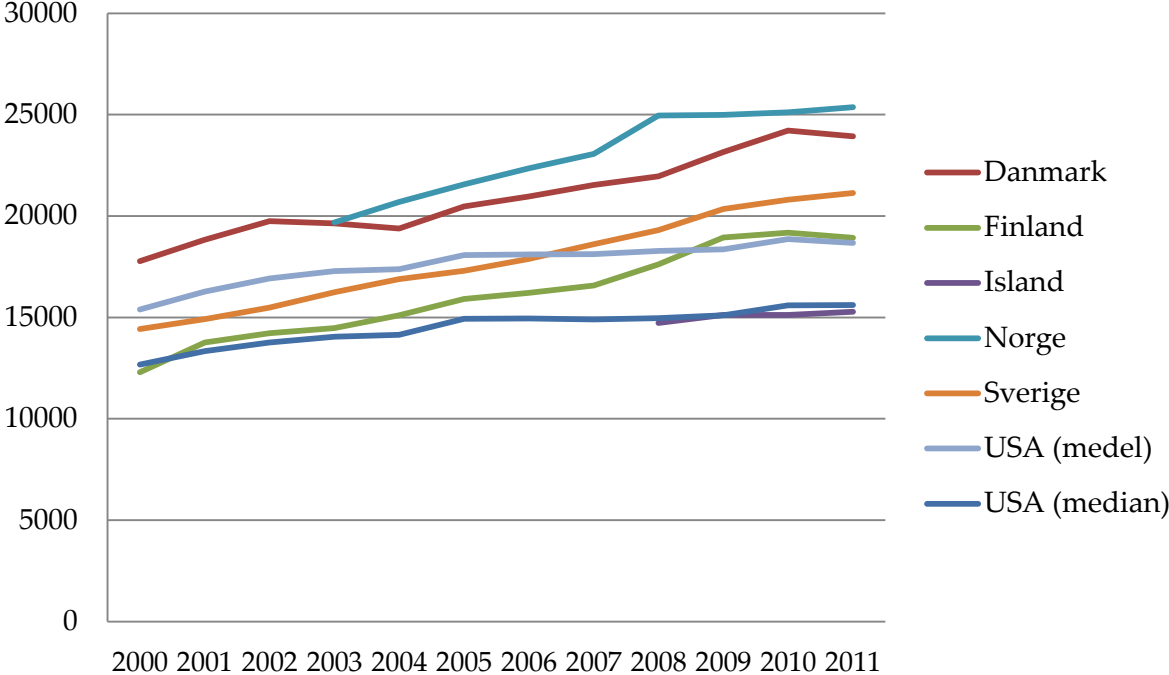
Figure 6 shows average monthly wage corresponding to a full-time salesperson in retail trading from 2000 to 2011. However for Norway the series begins in 2003 and for Iceland in 2008, because these are the only statistics that have been available from these countries' respective central statistical bureaux.

Perhaps not entirely unexpectedly, Norway has the highest average wage at SEK 25,361 a month in 2011. But Denmark's average wage of SEK 23,932 a month is not that much lower than Norway's. The lowest average wage was observed in Iceland, which at SEK 15,283 corresponds to only about 60 per cent of the average wage in Norway.

At the end of the period, Sweden's average wage of SEK 21,132 a month is the third highest and Finland's SEK 18,931 a month the fourth highest, but only marginally. Because the USA's average wage corresponds to SEK 18,673 a month in 2011 and is actually higher than both Sweden's and Finland's average wage until 2007 and 2009 respectively, which is not an expected observation, since the USA is hardly known for its high wages in retail trading. But while the USA's average wage is approximately SEK 3,000 higher than median wage in 2011, the corresponding difference in Sweden is around SEK 700. USA has a considerably greater wage range than the Nordic countries and primarily upwards in the wage distribution, which the average wage takes into account. To give a truer impression of wage levels, the USA's median wage has therefore also been included.

But even the USA's median wage is higher than Finland's average wage until 2001. It is also similar to Iceland's average wage for all years for which Iceland's wage is reported, which indicates that wage levels in Iceland are relatively low, especially when compared with other Nordic countries.

Figure 6. Average monthly wage for salespersons in retail trading working full time, both genders (buying power corrected SEK)



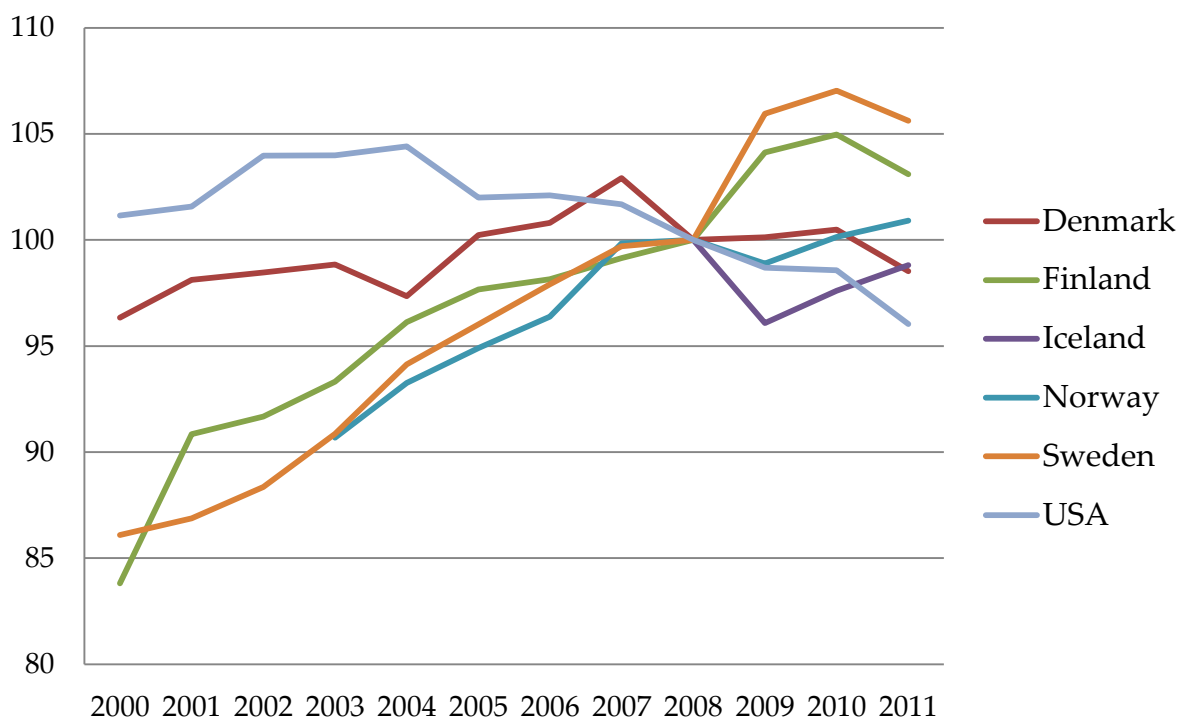
Source: BLS, Eurostat, SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, own calculations.

While nominal wages give a picture of how high or low wages are, they give a poorer picture of how the value of wages has developed over the course of time. Figure 7 below therefore shows indexed real development. Since the wage statistic for Iceland begin in 2008, this is the index year. However this create a diagram that is somewhat hard to interpret, since the wage series for the other countries begin several years earlier.

Figure 7 shows that Sweden's, Finland's and Norway's lines have a steeper gradient than Denmark's and the USA's. This indicates a stronger growth in real wages in the three first named countries, which did however see a fall in real wages from 2010 to 2011, while the value of the other countries' wages increased somewhat in real terms.

Iceland saw a relatively large fall in real wages from 2008 to 2009, which the increase from 2009 to 2011 did not quite make up.

Figure 7. Indexed real development of average wages for salespersons in retail trading, 2000-2011, 2008=100



Source: BLS, SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, Own calculations.

To arrive at a more easily interpreted diagram, we remove the observations for Iceland and set the index year to 2003, which is the earliest observation for Norway.

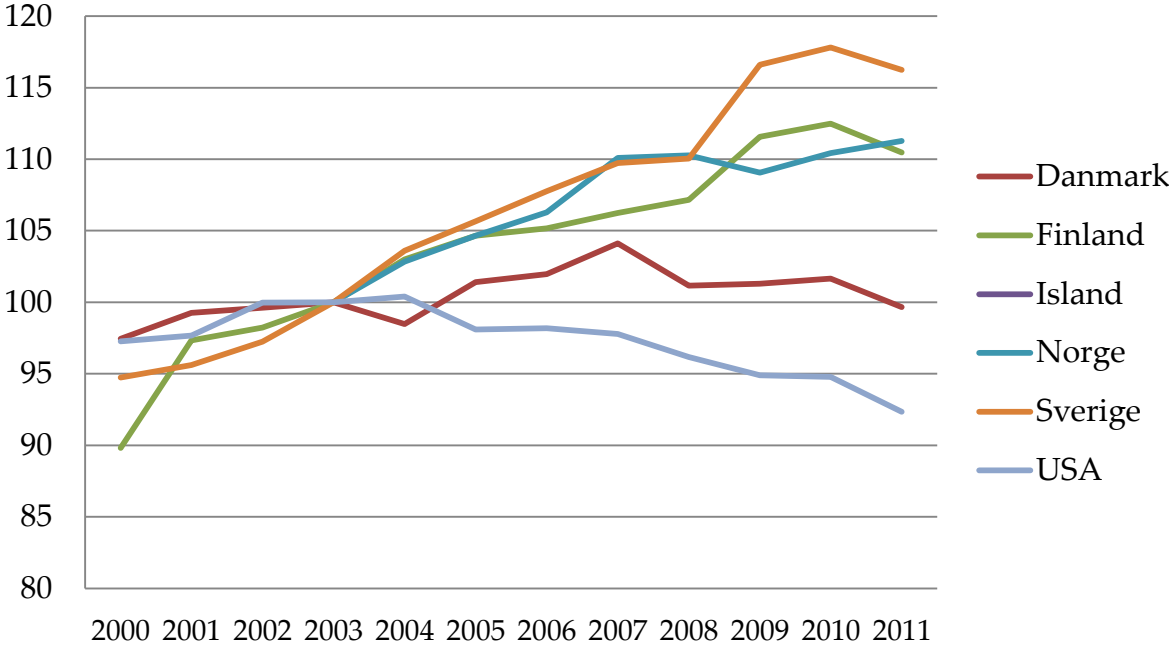
Just as in Figure 7, we can see in Figure 8 that Norway, Finland and Sweden have had the strongest increases in real wages of the countries in the study. The patterns for Finland and Sweden follow each other quite well, but Sweden's real increase has been somewhat stronger than Finland's. Denmark is distinguished from the other Nordic countries with a wage that has only marginally increased in real terms during the observed period 2000-2011. The real value of the Danish wage in 2011 is just below the value for 2003.

The USA is the only country in the study that has had a very clear fall in real wages during the period observed. That most Nordic countries have had a strong increase in real terms, while the USA saw a clear fall can of course be due to many things, but is an observation that is at least in line with expectations, in that in the Nordic countries there are strong labour market parties that take responsibility for wage patterns and sign collective agreements that



give a guaranteed wage increase, while the USA does not have this. In the light of this, it is worth underlining the fact that Denmark had a weak real increase, which would make an interesting subject for further study.

Figure 8. Indexed real development of average wages for salespersons in retail trading, 2000-2011, 2003=100



Source: BLS, SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, own calculations

**Summary**

All the Nordic countries except Denmark show good and relatively stable real development of average wages for salespersons in retail trading during the years 2000-2011. USA is the only country that shows a fall in real wages. In terms of the nominal level of average wages, Iceland is at a very low level, on a par with the USA's median wage, which is an unexpected observation.

**7.2 Minimum wages for salespersons in retail trading**

As well as average wages, it is also relevant to study minimum wages. Particularly in a sector such as retail trading, which is labour intensive and with a strong downward pressure on costs, the minimum wage fulfils an important function in setting the collective wage floor.

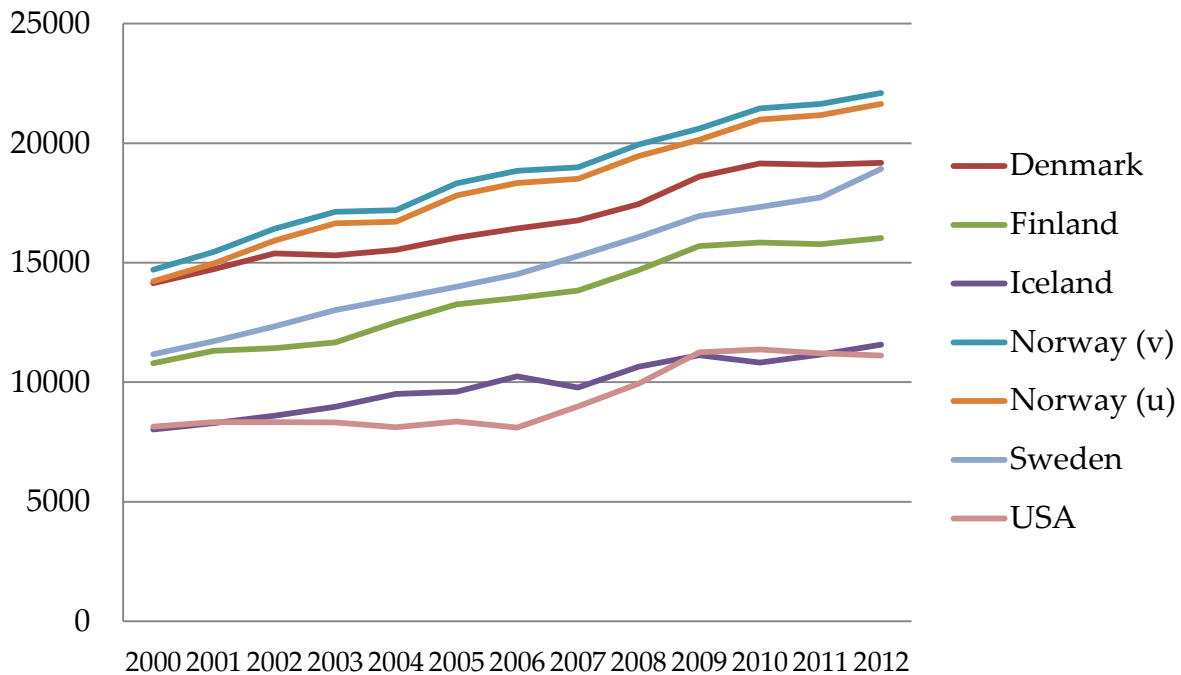
It is however not quite straightforward to study minimum wages in the Nordic countries, because within the framework for collective agreements differentiation is often made in

minimum wages on the basis of age and industry practice. The minimum wage for the Nordic countries that has been used consistently in this study is that for persons aged over 18 or 19 without experience or special training. Two minimum wages are used for Norway, one of which covers the 18-24 age group. "Norway u" is the minimum wage for young persons and "Norway v" is the minimum wage for adults. In the other Nordic countries the same minimum wage can be used to capture both the majority of young people and adults. The minimum wage for the USA is the statutory minimum wage that applies to all industries, ages and states (some states have legislated a somewhat higher minimum wage).

As shown in Figure 9, the highest minimum wage for salespersons in retail trading is found in Norway at SEK 22,100 a month for full-time employed adults in 2011 and with SEK 21,643 as the corresponding figure for young persons. At the start of the period, Denmark's minimum wage was on a par with Norway's, but since then has not developed as strongly as the Norwegian and in 2012 is at SEK 19,173 a month, which is at a similar level to Sweden's minimum wage. Sweden's minimum wage, in turn, was level with Finland's at the start of the period, but at the end of the period is almost SEK 3,000 higher than the Finnish, due especially to a strong increase from 2011 to 2012, from SEK 17,727 a month to SEK 18,925 a month.

Iceland's minimum wage is markedly lower than those in the other Nordic countries. In 2012 it was SEK 11,565 a month - about half of the Norwegian and only marginally higher than the USA's minimum wage of SEK 11,120 a month. That Iceland's minimum wage is in principle level with the USA's right through the period observed is unexpected and not in line with the expectations from the descriptions of the Nordic model.

Figure 9. Minimum wage in retail trading in the Nordic region and the USA 2000-2011 (buying power corrected SEK)



Source: BLS, Eurostat, Handelsfacket (De., Fi., Ic., No., Sw.), own calculations.

As regards the real development of the minimum wage in the Nordic countries and the USA, as shown in Figure 10 below, it is clear that the USA has a system for minimum wages that is different from that of the Nordic region. As Figure 10 shows, the real value of the USA's minimum wage fell steadily from 2000 to 2006, before a strong increase in real value up to 2009 and then another quite marked fall in real value until 2011. This is in contrast to the graphs for the Nordic countries' minimum wages, which, apart from Iceland, are relatively stable and which, apart from Denmark, have a clear positive trend over the period.

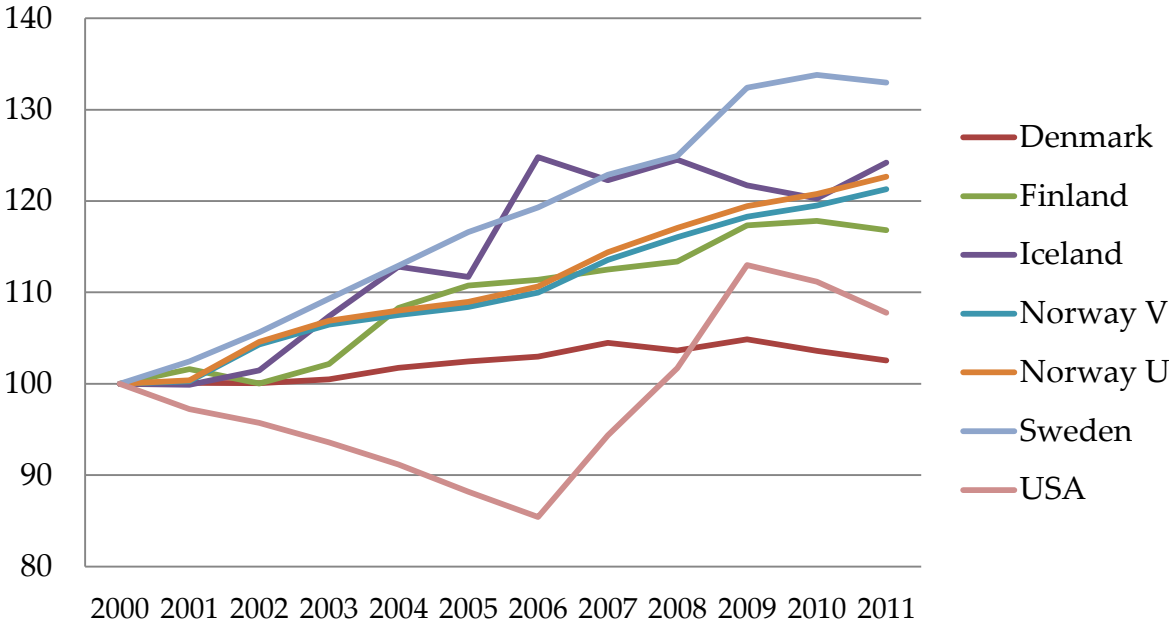
This observation is in line with what was expected in view of the fact that the Nordic countries regulate minimum wages under collective agreements, which gives a better guarantee that the minimum wage level will rise each year and not be overtaken by inflation. The USA regulates the minimum wage by law, which means dependence on political decisions for the minimum wage level to rise. What is shown in the real development is probably that the minimum wage in the USA stays in a nominally still position for a number of years, while the USA has inflation at the same time, and is then raised in one or two stages

before remaining still again for some years and in reality being overtaken. If we look back at Figure 9 above, these conditions can also be seen there.

As regards the real development of minimum wages, Iceland manages better than when we study the nominal levels. On average Sweden's and Iceland's minimum wages had an approximately equal real value development up until 2008 and the strongest of all the countries in the study, but while Sweden's minimum wage shows even stronger real development from 2008 to 2010, that of Iceland fell in real terms over the same period. Then from 2010 to 2011 Iceland's minimum wage rises in value again while that of Sweden falls.

It is interesting to study the real development of Iceland's minimum wage compared with that of its average wage. Both seem to lose real value for two years from 2008 and then move upwards again. Considering that Iceland's minimum wage up to 2008 seems to have had a good development on average this may be an indication that the period 2008-2011 is not representative for the entire period 2000-2011 for the real development of average wage either.

Figure 10. Indexed real development of minimum wage in retail trading in the Nordic region and the USA 2000-2011, 2000=100



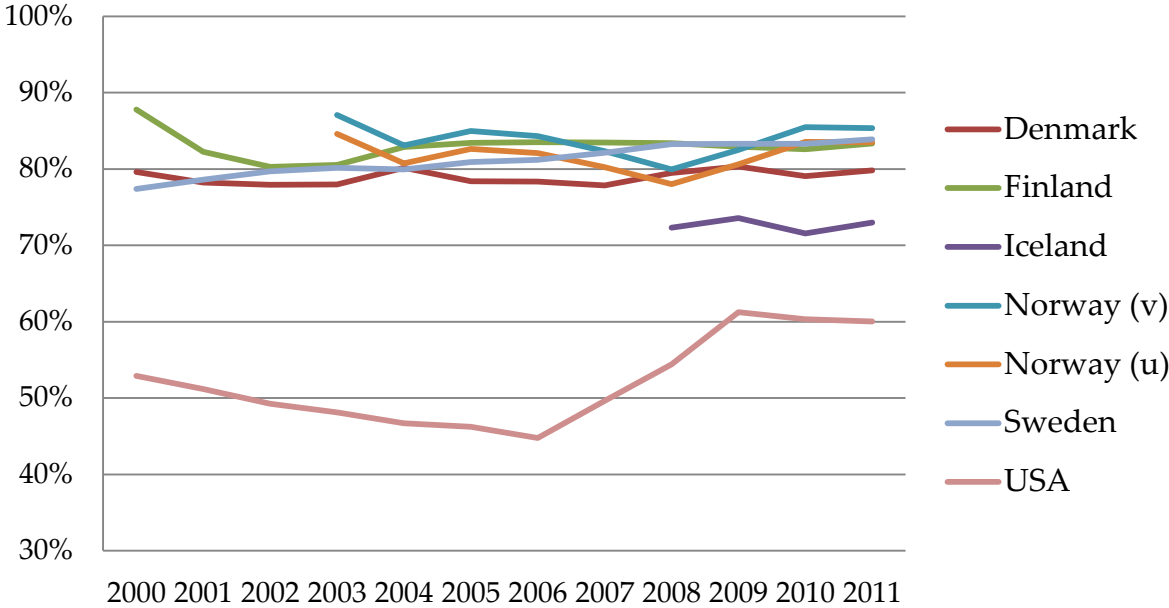
Source: BLS, SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, Handelsfacket (De., Fi., Ic., No., Sw.), own calculations.

In addition to studying nominal levels of the minimum wage and its development in real terms, the level of the minimum wage relative to average wage is often studied. This measurement is called the minimum wage bite and the higher the minimum wage is in relation to average wage, the higher the minimum wage bite is. The measurement is often used in research and other literature as a relative measurement of how high the minimum wage is. The minimum wage bite in Figure 11 is constructed with the minimum wages and average wages reported above for the Nordic countries and the USA.

Over the whole period studied, the minimum wage bite for Denmark, Finland, Norway and Sweden is between 77 and 88 per cent, which can be considered to be a relatively high minimum wage bite. Iceland is somewhat lower for the years that are reported, around 73 per cent, which even so is a relatively high level of minimum wage bite. Once again, the USA has the value that fluctuates most over the period, and during the years 2000-2011 the minimum wage bite varied between 45 and 61 per cent. Thus the USA's minimum wage bite is markedly lower than the Nordic. We have been able to see this in earlier diagrams: The USA has an average wage at a similar level to the Nordic average wages, but a minimum wage that is considerably lower than almost all the minimum wages in the Nordic region, Iceland being the exception. Taken all together, this gives a lower minimum wage bite.

That the minimum wage bite in the Nordic region is higher than in the USA is expected, since the Nordic model describes more equal countries and has a more compressed wage structure than the Anglo-Saxon model. It is therefore also interesting to see that Iceland's consistently lower nominal wages still give a minimum wage bite that in principle is level with the other minimum wage bites in the Nordic region.

Figure 11. Minimum wage relative to the average wage in retail trading in the Nordic region and the USA 2000-2011 (buying power corrected SEK)



Source: BLS, SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, Handelsfacket (De., Fi., Ic., No., Sw.), own calculations.

**Summary**

The Nordic countries have a relatively high minimum wage in retail trading, both nominally and in relation to average wage, or the so-called minimum wage bite. This is particularly clear in comparison with the USA, whose minimum wage is in reality overtaken during some periods, which could be explained by its being regulated by law rather than in collective agreements. Iceland differs from the other Nordic countries in the nominal level of the average wage, which is similar to the USA's which is unexpected. On the other hand, Denmark also has weak real development of wage levels.

But high minimum wages are often described as being negative for the effectiveness of the labour market. The argument is therefore often put forward that lowering minimum wages would lead to lower unemployment and a higher employment rate. Should minimum wages in the Nordic region be lowered?

## **8. Is a lower minimum wage a way to a more effective labour market?**

### **8.1 What does the research say?**

The quantity of international research into the effect of the minimum wage on employment is considerable. In spite of this however it is difficult to draw any conclusions as to whether the minimum wage should be lowered or not. Because in practice most of the research has been devoted to the effects that a *raised* minimum wage has on employment. The reason is that minimum wages are raised more often than they are lowered, which is why most natural experiments enable such studies. Thus research primarily provides input for the question of whether to raise or not to raise the minimum wage. It is unclear whether the effects on employment of raising the minimum wage are the mirror image of those of lowering it, and it is possible that employers react differently to increased and decreased costs.

However on the basis of the research, it is not even possible to draw any unambiguous conclusions about the effects of raising the minimum wage on employment (see for example Neumark & Wascher 2006 and Schmitt 2013). Some international research indicates that certain employees who are directly affected by the minimum wage lose their employment if the minimum wage is raised. This is for example the case in two thirds of the 102 studies that David Neumark and William Wascher (2006) review. But the research does not indicate what then happens to these individuals. Do they get a new job or do they become unemployed? What actually happens to total unemployment and the employment rate? These effects are more difficult to capture in studies and knowledge about more long-term cumulative effects is sparse. A common conclusion in these 102 studies is however that a low-productive workforce is replaced by a more highly productive one when the minimum wage is raised. This tends to indicate that the total effects on employment need not be as great as are measured in some studies.

But at the same time there is also international research that tends to indicate that not very much at all happens to employment when the minimum wage is raised. More precisely, this is what a third of the 102 studies reviewed by Neumark and Wascher (2006) believe, precisely as a number of studies that John Schmitt (2013) refers to.

Schmitt (2013) also shows that there is reason to believe that employers adapt to a higher minimum wage in other ways than through reducing the demand for work and that employees also have certain adaptation strategies. Examples of this appear to be adapting to a higher minimum wage by increasing efficiency in the company, that personnel stay with the company longer, compressing wage levels and raising prices to the customers.

According to Neumark and Wascher (2004), how the labour market is otherwise organised also plays a part. The effect on employment of raising the minimum wage in one country may be different from the effect in another country, depending on the system that is in place. In a society with active labour market policy, high job security and high work standard<sup>5</sup>, the negative effects of a higher minimum wage on the employment rate for young people (15–24) appear to be lessened. Neumark and Wascher (2004) place Sweden in this category of countries. And conversely, in a country with passive labour market policy, low job security and low work standard, it appears that the negative effects may increase. The authors place the USA in this category of countries. The other Nordic country besides Sweden that is included in the study is Denmark, which the authors place in a category of countries with active labour market policy and high job security, but low work standard. For this category of countries, the authors find no significant connection between minimum wages and the employment rate for young people. It therefore also appears that conclusions from studies in the USA about the effects on employment of the minimum wage cannot be directly translated to either Denmark or Sweden. If we may assume that the other Nordic countries resemble Denmark and Sweden more than they resemble the USA, in terms of labour market institutions etc., then the same conclusion should also apply to them.

In the same study, Neumark and Wascher show that in a society where the minimum wage is regulated by collective agreements rather than the law, and where young people have

---

<sup>5</sup> Based on an OECD index that considers how rigid the regulation is of working hours, employers' opportunities to use flexible forms of employment and employees union rights.



special minimum wages, the negative effects of a higher minimum wage on the employment rate for young people also appear to be lessened. This is the case in all Nordic countries.

With reference to the fact that the institutional context appears to play a role in the minimum wage's relationship to employment, it becomes especially relevant to seek knowledge in studies that are done in the Nordic region. It is also probably easier to generalise results in the Nordic countries, since they resemble each other a great deal, than with results from American research, for example. As with the research position for minimum wage and employment, relatively few studies on this topic have been performed in the Nordic region.

In Sweden, Per Skedinger has studied how a higher minimum wage affects employment for those who are directly affected by the minimum wage in the hotel and restaurant sector and in retail trading (Skedinger 2002; Skedinger 2011). In both studies, Skedinger shows that some individuals who are directly affected by the minimum wage can lose their employment when the minimum wage is raised, but Skedinger does not measure the effects for all young people in the labour market, for example, or for the labour market as a whole. Skedinger (2011) also shows that employment increases in the group in retail trading that consists of more highly productive workers when the minimum wage is raised. The total effect on employment is thus necessarily not as great as it might first appear to be and productivity in retail trading appears to increase when the minimum wage is increased.

In Denmark, the negative effects on employment of a higher minimum wage were measured in the 1970s (Albaek & Ströjer Madsen 1987, referred to in Skedinger 2008), while in Norway, very small effects on employment from a higher minimum wage were found (Askildsen, Lommerud, Nilsen & Salvanes 2000, referred to in Skedinger 2008).

Studies have also been made in Finland. Between 1993 and 1995, companies could pay below the minimum wage for young workers in Finland, and Petri Böckerman and Roope Uusitalo (2007) studied what effect this had on young people's employment and pay. In spite of very high youth unemployment, pay did not fall as much as might have been expected.

Böckerman and Uusitalo believe that one reason may be that employers did not wish to pay far below the minimum wage, afraid that an inequitable wage might have a negative effect

on work input. Böckerman and Uusitalo also state that no positive effects on employment could be measured.

Altogether, based on both international and Nordic research, it appears not to be so simple as to claim that lowering the minimum wage would increase the employment rate and reduce unemployment. Neither does it appear to be so simple as to claim that a raised minimum wage would have the opposite effect, either as a whole or for the young person group.

## **8.2 What do the figures say?**

In Berge (2013) four simple econometric analyses are made of the connection between the minimum wage bite for workers in the service and sales sectors and unemployment and the employment rate in 27 countries. The thesis for which the study seeks support is that a high minimum wage has a negative effect on unemployment and the employment rate and that lowering the minimum wage would therefore be a good measure.

The statistical instruments used in Berge (2013) do not permit causal conclusions. The four econometric analyses do not therefore show whether or how the minimum wage actually affects unemployment or the employment rate. On the other hand, the results can be in line with the thesis being investigated or not – and none of the econometric results is in line with the thesis investigated. It is not said that it is refuted, but instead Berge (2013) says that support for the thesis that a high minimum wage has a negative effect on unemployment and the employment rate is not found within the framework of the study.

### **Summary**

Many believe that raising the minimum wage leads to increased unemployment and a lower employment rate. Many therefore say that it would be good for Sweden to lower the minimum wage. But no support for this can be found in either international statistics or previous research.

## **9. Two further perspectives on wage structure**

This section takes a further look at retail trading wages so as to get a better picture of their structure and to study them from an equal opportunity perspective. It is also interesting to consider retail trading wages in relation to some other wages so as to get an impression of wider wage structures in the economy, for which reason this section also compares wages in retail trading with average industrial wages.

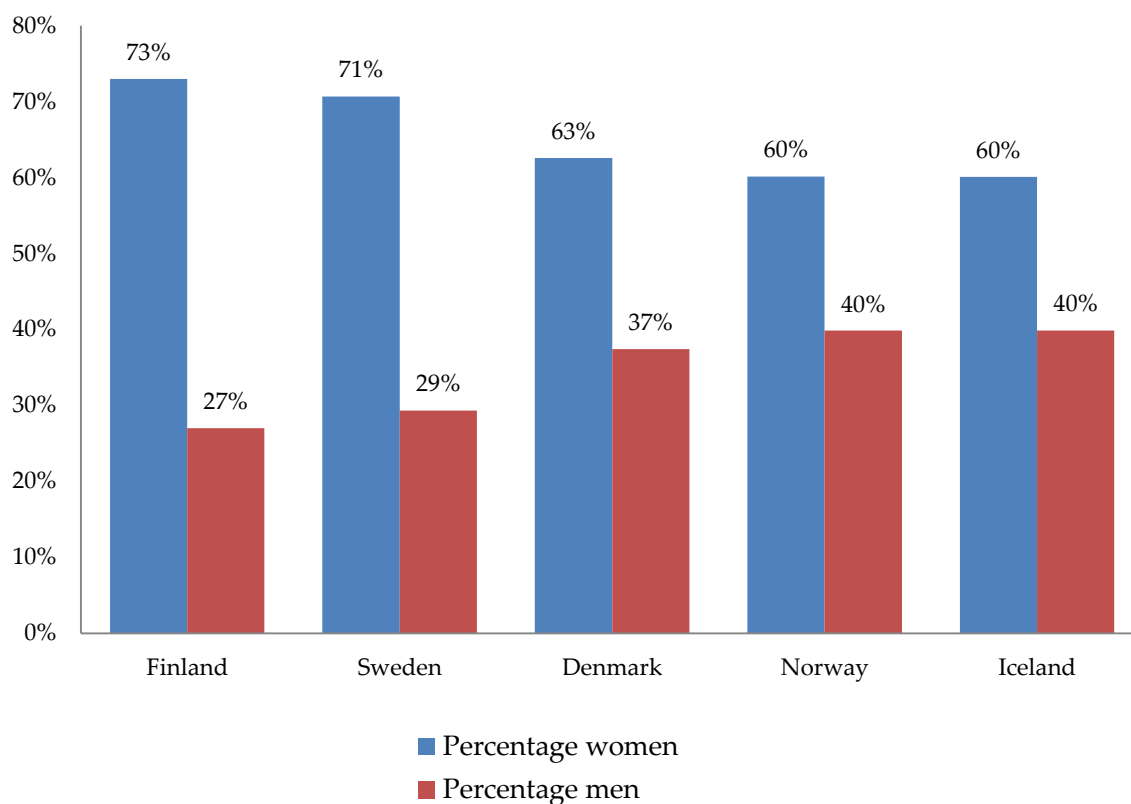
### **9.1 An equal opportunity perspective on Nordic<sup>6</sup> retail trading pay**

As shown in Figure 12, the sales force in retail trading is clearly female-dominated in all the Nordic countries, and primarily in Finland and Sweden with over 70 per cent women, although Denmark, Norway and Iceland all have about 60 per cent women in the retail trading sales force.

---

<sup>6</sup> As mentioned, there are unfortunately no wage structure statistics for salespersons in retail trading broken down by gender on the Bureau of Labor Statistics' website, for which reason the USA is not included in this part of the study.

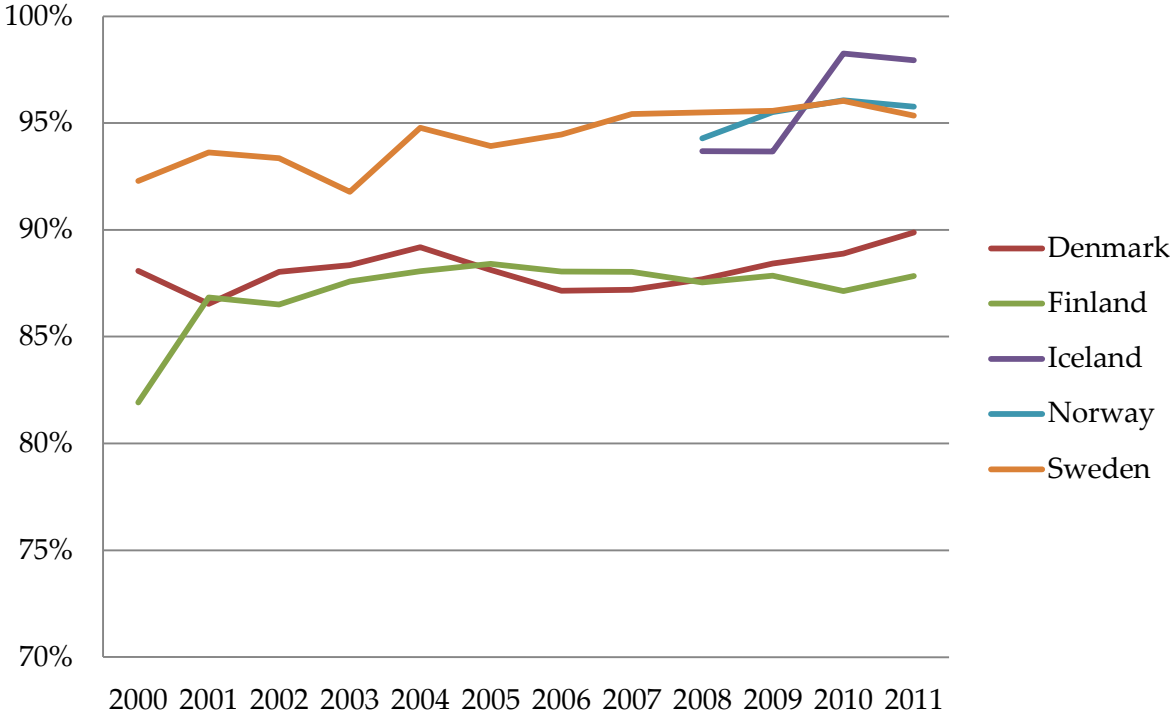
Figure 12. Gender distribution among salespersons in retail trading in the Nordic region 2011



Source: SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, own calculations.

As Figure 13 shows, however, wages for salespersons in retail trading in the Nordic region are not equal: on average men have higher wages than women. In Finland and Denmark, women's wages as a percentage of men's among salespersons in retail trading are clearly lower than in other Nordic countries, generally between 85 and 90 per cent, compared with between 92 and 98 per cent for Iceland, Norway and Sweden. If we may allow ourselves to interpret what trend applies to women's pay as a percentage of men's based on this diagram, there may be an indication that we are seeing more equal wages over time.

Figure 13. Women’s pay as a percentage of men’s among salespersons in retail trading in the Nordic region 2000-2011



Source: SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, own calculations.

**Summary**

Considerably more women than men are salespersons in retail trading, especially in Finland and Sweden. But on average men earn more than women, especially in Finland and Denmark.

**9.2 Retail trading wages in relation to an industrial wage**

The average wages and minimum wages for the retail trade in the Nordic region and the USA, as reported above, are seen here in relation to an average industrial wage in each country, calculated on total pay and all occupations in industry. Since we have been able to show previously that the average wage for the USA is pulled upwards by that country's more uneven wage distribution, the USA's median wage is also shown in relation to an industrial wage.

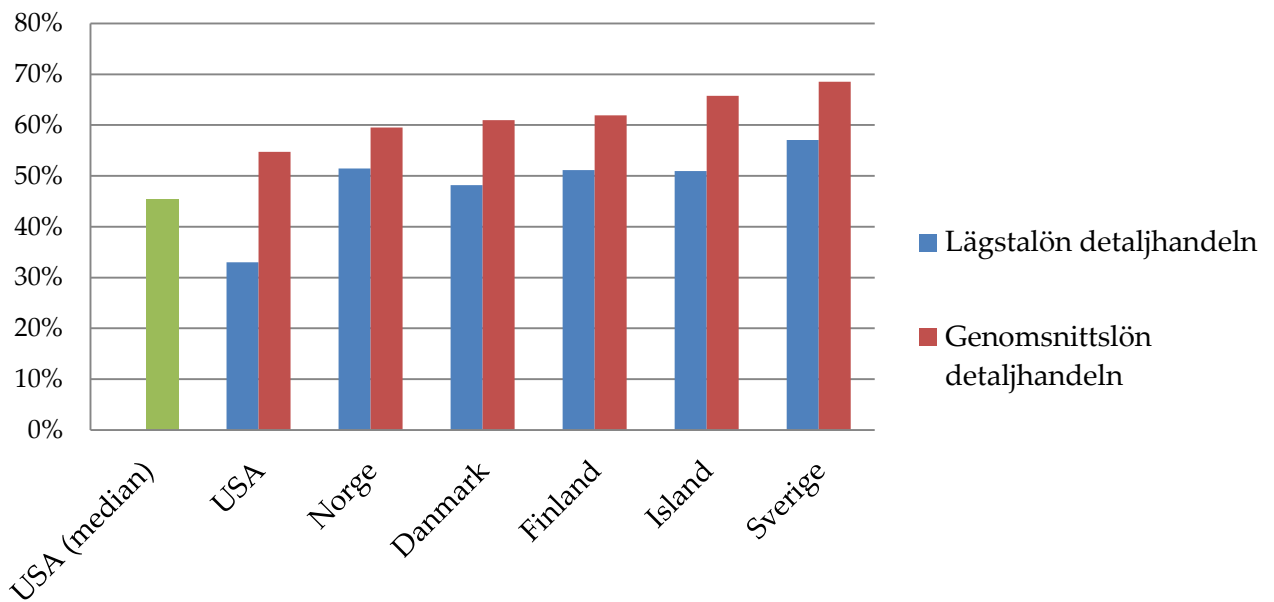
When the Nordic countries' retail trading wages are seen in relation to each country's average industrial wage, there is a difference of about 10 percentage points between the highest and the lowest proportion, as Figure 14 below shows. While an average wage in

Swedish retail trading corresponds to 69 per cent of an industrial wage, the corresponding figure for Norway is 60 per cent, which is the lowest of the Nordic countries. The same applies for minimum wages in retail trading, from Denmark's 48 per cent of an average industrial wage to Sweden's 57 per cent.

The USA's average wage in retail trading as a percentage of an industrial wage is not far below the lowest Nordic figure, at 55 per cent. On the other hand, the USA's median wage corresponds to only 45 per cent of the industrial wage, which is markedly lower than the levels for average wages in the Nordic region. This is even a lower percentage of the industrial wage than the lowest percentage given by a Nordic minimum wage.

Even though the USA's and Iceland's minimum wages are nominally level with each other, Iceland's minimum wage has a higher percentage of the wage it relates to, exactly as when it is seen in relation to the average wage in retail trading. Iceland's minimum wage corresponds to 51 per cent of an industrial wage, compared with the USA's 33 per cent. What is worth noting here is that the minimum wage in the USA is not generally differentiated into different sectors, as in the Nordic region. The minimum wage in the USA in this study also applies in industry – which thus gives a minimum wage bite in industry of 33 per cent, which must be considered to be a relatively low minimum wage bite and a good illustration that the USA has a relatively wide range of wages.

Figure 14. Minimum wage and average wage for salespersons in retail trading relative to average industrial wage in the Nordic region and the USA 2010



Source: Eurostat, BLS, SCB, SSB, Danmarks Statistik, Hagstofa, Tilastokeskus, Handelsfacket (Dae, Fi., Ic., No., Sw.), own calculations.

### Summary

The Nordic region has a more compressed wage structure than the USA and Sweden is the country that has the most compressed wage structure of the countries studied, since both minimum wage and average wage in retail trading are the greatest percentage of an industrial wage there. This is a relatively expected observation.

## **10. Unemployment insurance for salespersons in Nordic retail trading**

In the description of the Nordic model, general social insurance based on the loss of income principle represents one of the model's three cornerstones. Social insurance generally handles the risk of not managing to support oneself because of illness, occupational injury, age, family situation and unemployment. Unemployment insurance is thus a social insurance.

The loss of income principle is based on covering a relatively large part of the loss of income that affects people in certain life situations by offering social insurance both financially and as social security. This not only means that the insured person does not need to scale down living standards much, but also that, for example, matching on the labour market can be improved if individuals dare to change jobs or can afford not to take the first job that is offered but the first best job,

Exactly as with all other insurance, the idea of social insurance is to spread and socialise risks over smaller or larger groups, because this is smart from the view of both socio-economics and private finances. If social insurance is general, the risks are generally spread over larger groups and widely in society.

In the case of the risks of being ill, injured at work or unemployed, these are systematically unevenly distributed across society in a way that, for example, the risk of theft or fire is not. The proportion of fixed-term positions for example is higher in some industries than in others, which means that the risk of short periods of unemployment is also greater in these industries. The spreading of risks within social insurance therefore has a specific equalising and fairness function in society.

Since social insurance generally handles the risk of not managing to support oneself, it is clearly linked to working life and the labour market. It fulfils important functions both in creating a secure and at the same time dynamic labour market and in creating more equal conditions and outcomes for individuals in the labour market. A review of all types of social



insurance in the Nordic region would be desirable, but because of the limitations stated this study only considers unemployment insurance.

### **10.1 Previous studies**

Folksam (2010) has reviewed the social insurance systems of Sweden, Norway and Denmark. The report has in institutional basis and describes and compares the regulations for health insurance, occupational injury insurance, unemployment insurance, family economy systems, support for survivors and pensions. The perspective is descriptive rather than problemising or theoretical. But since the report addresses 11 occupational groups and sectors and does not include Finland and Iceland, it gives neither the depth nor the breadth that are needed for this study, even though it represents a good first step in reviewing the regulations for unemployment insurance in Sweden, Norway and Denmark.

Ferrarini, Nelson, Sjöberg & Palme's (2012) report of underlying information to the Swedish parliamentary social insurance investigation studies Swedish social insurance in relation to social insurance in more or less comparable countries. Historical trends and relevant differences between occupational accident insurance, health insurance and unemployment insurance in 18 OECD countries are reported, among which are found all the Nordic countries except Iceland, with an average industrial worker as the basis. Among the report's conclusions is that the maximum amount in Swedish social insurance has not increased in line with real wages, meaning that loss of income protection in Sweden has become weaker. Between 1985 and 2010, the value of the income ceiling has been overtaken most in health insurance, but it is in unemployment insurance that the ceiling is lowest down the income distribution and clearly below the median income.

### **10.2 Method**

Unemployment insurance's role in a society can be analysed by studying the system's expense levels. A major problem with this approach for this study however is that the different social insurance systems in the Nordic regions are not organised in a uniform manner, which means that the same function is handled in different insurance systems and cannot be separated out in the total calculations of the statistics registers. A person who should receive sickness allowance in one country might receive unemployment benefit in another. This lessens comparability between expense items. Moreover the different types of

insurance function in themselves as communicating vessels: if after a rule change one country sees a great increase in expenses for unemployment benefit, for example, it is possible that one might see a roughly corresponding reduction in sickness allowance, for example. For this reason too, it can be difficult to make a true analysis by studying the expense levels for the different types of insurance. Also, an analysis of total expenses is not optimum for clarifying the conditions for the individual insured persons.

This study therefore applies an institutional perspective, as for example Ferrarini et al (2012) and Folksam (2010) do. This enables reasoning about the consequences of unemployment insurance for the individual insured persons within retail trading. Institutions here refers, in accordance with Douglas North's (1991) definition, a set of rules, formal as well as informal. In practice this means making an analysis on the basis of the regulations of unemployment insurance. Informal institutions, such as norms and values, do not constitute an analysis perspective in this study.

The regulations for unemployment insurance are however both complex and comprehensive. This study does not therefore take into account all aspects of unemployment insurance, but considers association principles, qualification conditions and compensation systems, including level, any ceiling, taxation, indexing and duration of compensation. As regards compensation level and any ceiling, the average total wage for a salesperson in retail trading is used to calculate their actual level of compensation in the event of unemployment.

The regulations for unemployment insurance that are discussed below have been taken from the MISSOC database and apply to 2011. All figures are stated in buying power corrected SEK.

## **10.3 Unemployment insurance in the Nordic region**

### **10.3.1 Association principles and qualification conditions**

Unemployment insurance is mandatory in both Norway and Iceland but is entirely voluntary in Denmark. In both Finland and Sweden, unemployment insurance consists of two parts: voluntary unemployment insurance and a mandatory basic insurance for those employees not covered by voluntary unemployment insurance. For a person in Denmark who becomes unemployed but is not covered by voluntary unemployment insurance, there

is nothing to correspond to Finland and Sweden's basic insurance within the insurance framework. Instead he or she is referred to another type of basic insurance in the form of a social contribution that people other than the unemployed may be entitled to.

The qualification conditions, which give entitlement to unemployment benefit, are based in all the Nordic countries partly on a sort of basic condition, such as that the unemployed person must be unemployed, capable of working and actively seeking work, and partly on a combination of one or more of the following types of condition: work, membership and income conditions. None of the Nordic countries have any kind of need testing within the framework for unemployment insurance.

The three countries that have partly or entirely voluntary unemployment insurance – Denmark, Finland and Sweden – have similar qualification principles, with a combination of work and membership conditions. In Finland, the work condition for basic insurance is that the unemployed person must have worked for at least 34 weeks, at least 18 hours a week, during the last 28 months. In order to qualify for compensation under the voluntary unemployment insurance, in addition to the work condition there is also a membership condition, that the unemployed person must have been a member of the voluntary unemployment insurance during the same period. In Sweden there is also a work condition for basic insurance, where the unemployed person must have worked for at least six months, at least 80 hours per month, or at least 480 hours during six consecutive months, at least 50 hours per month, during the last twelve months. In order to obtain unemployment compensation from the voluntary unemployment insurance there is in addition a requirement to have been a member for at least 12 months. Finally in Denmark, membership of the voluntary unemployment insurance is required for at least a year and full time work for at least 52 weeks during the last three years (the requirement for working hours is reduced by at least 7.4 hours per week for part-time workers) for an individual to be entitled to unemployment compensation.

In the two countries with fully mandatory unemployment insurance – Iceland and Norway – there are no membership conditions. In Iceland there is only one work condition, that the unemployed person must have worked for 12 consecutive months to be entitled to the

maximum level of compensation and for 3 of the last 12 months for the minimum level of compensation. In Norway there is an income condition instead. To be entitled to unemployment compensation, an unemployed person in Norway must be calculated to have had an annual income of at least 1.5 base amounts - or SEK 116,740 - or alternatively an average of one base amount - or SEK 77,827 - per year over the last three years.

### **10.3.2 Compensation systems**

Only Denmark and Norway exclusively apply income-related unemployment compensation. In Finland, Sweden and especially in Iceland, in addition to income-related compensation there is also a unit compensation amount.

Danish unemployment compensation corresponds to 90 per cent of compensation-entitled income, up to SEK 896 per day. In total, unemployment compensation for up to two years is given in Denmark, during a three year period. In Norway the compensation amounts to 0.24 per cent of the compensation-entitled income per day, up to a maximum of six times the Norwegian base amount a year, which in 2011 corresponded to a total of SEK 445,904. If the insured person has an annual income exceeding two base amounts - or SEK 148,629 in 2011 - unemployment compensation is given for 104 weeks, and for those with a lower annual income 52 weeks.

In Finland the voluntary unemployment insurance is income related, while the mandatory version that exists for those who are not covered by voluntary insurance gives a unit amount of compensation. In total, compensation is given for 500 days. In the mandatory basic insurance, two different unit compensation amounts are used. In 2011 these were SEK 245 and SEK 287 per day. Unfortunately it cannot clearly be seen from the MISSOC database what qualifies an unemployed person for one amount or the other. The income-related compensation consists of a basic insurance amount plus 45 per cent, or 57.5 per cent, of the difference between this daily amount and the former daily wage. If the monthly wage exceeds 105 times the basic insurance amount, corresponding to SEK 25,737 in 2011, 20 per cent, or 35 per cent, of the wage over this amount is given. Thus in Finland there is no ceiling for the income-related compensation. Instead it is stepped down at higher income levels.

Just as in Finland, the voluntary unemployment compensation is income-related in Sweden, while the mandatory basic insurance consists of unit amounts. The basic insurance in Sweden amounts to SEK 320 per day and lasts for up to 300 days (450 if the insured person has children under 18). The income-related part of the insurance amounts to 80 per cent of the compensation-entitled income for the first 200 days, falling to 70 per cent for a further 100 days (or 250 days if the insured person has children under 18), although of a compensation-entitled income of a maximum of SEK 18,700 a month, or SEK 680 a day.

Iceland uses a unit amount for unemployment compensation for the first two weeks of unemployment corresponding to SEK 441 per day in 2011. Thereafter unemployment compensation is income-related for three months, corresponding to 70 per cent of the compensation-entitled income, but up to a maximum of SEK 15,515 per month. After these three months the compensation once again returns to the unit amount. In Iceland the total length of the compensation period is three years, for most of which time the compensation is in unit amounts.

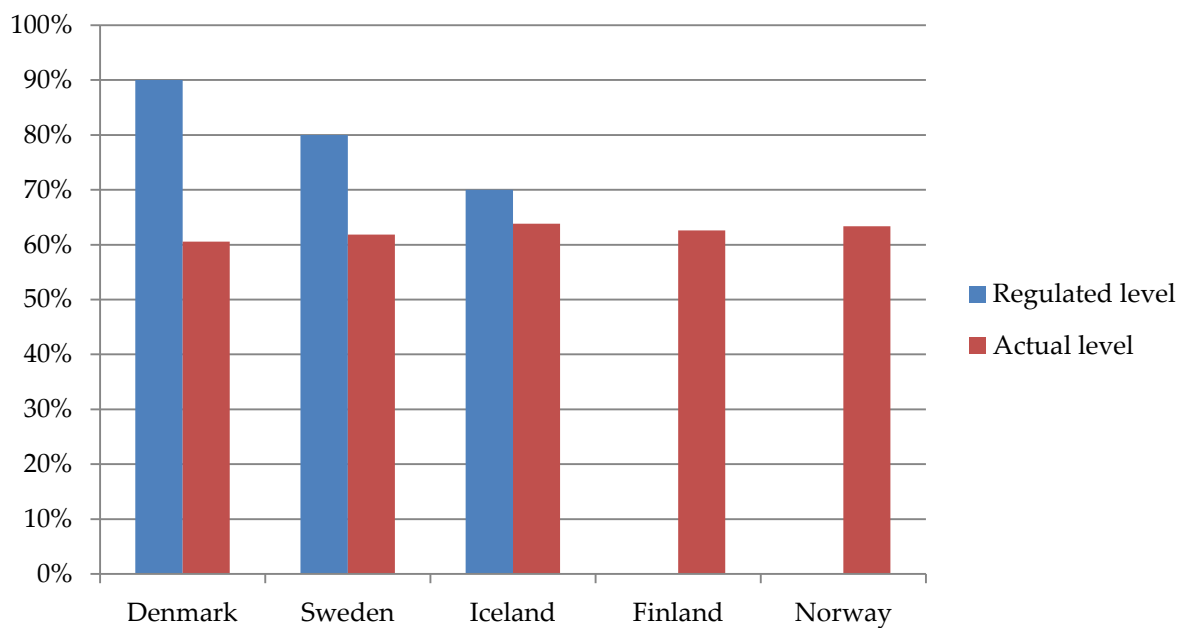
In all the Nordic countries, employment compensation is subject to tax exactly like normal income without any special relief. As regards indexing of the income ceiling for unemployment compensation, Sweden is the only Nordic country not to have any form of index linking or systematic adjustment. Instead in Sweden such adjustment depends on parliamentary decisions and the income ceiling in Sweden has not been adjusted since 2002. Since we have seen that the wage of an average salesperson in retail trade in Sweden has risen in real terms since 2002, it is easy to see that these workers receive an ever smaller percentage of their previous income in the event of unemployment.

In Denmark the ceiling for unemployment compensation is adjusted annually in accordance with a special rate (*statsreguleringsprocenten*) and in Finland the compensation is linked to the cost of living index. Adjustments in Norway and Iceland are not on the basis of any specific quota. Instead in Iceland a more general assessment is made of wages, prices and the economy as part of the budget process, while in Norway an assessment is made of general income level and on the basis of this the base amount is adjusted, which affects both the ceiling and the duration of unemployment compensation.

### 10.3.3 Actual compensation levels and comparisons

On the basis of this data and the average total wage of a salesperson in retail trading, Figure 15 below shows the average compensation level a salesperson working full-time in retail trading receives on employment, parallel with the regulated compensation level (where it is possible to do this in a simple manner).

Figure 15. Regulated and actual compensation level for an average salesperson in retail trading in unemployment insurance in the respective Nordic countries\*



Source: MISSOC, SCB, SSB, Hagstofa, Danmarks Statistik, Tilastokeskus, own calculations

\*For Finland and Norway it is not easy to illustrate the regulated compensation level in a diagram.

Even though the Nordic countries have very different compensation systems in their unemployment insurance, as shown above, the actual compensation for an unemployed salesperson in retail trading is rather similar in the Nordic countries. On average a salesperson receives 61 per cent of his or her previous income in Denmark, 62 per cent in Sweden, 63 per cent in Finland and Norway and 64 per cent in Iceland.

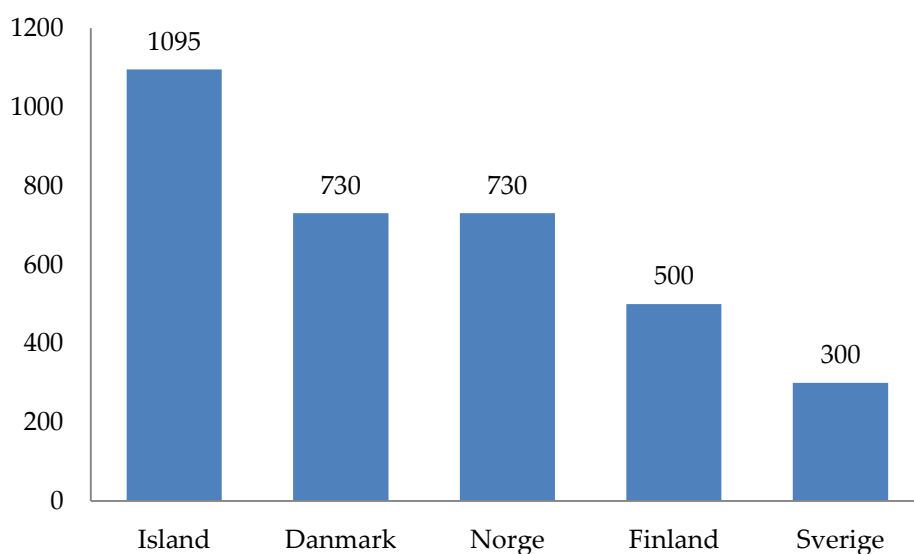
Thus it is clear that the actual compensation level lies quite far below the level that Denmark and Sweden have considered to be a reasonable level in accordance with the loss of income principle, at 90 and 80 per cent of previous income respectively. That a salesperson in retail

trading does not reach this level of his or her previous income is probably due to the ceiling in the compensation system being too low. In the case of Sweden we have established that the ceiling has not been raised since 2002. That the actual compensation levels are relatively low is also in line with the conclusions of Ferrarini et al (2012) and it is reasonable to ask, for the sake of the general access to social insurance and generality, the extent to which such an important loss of income principle can still be found in practice.

The fact that a large proportion of the employees in retail trading do not have a sufficiently large part of their income insured via unemployment insurance means that the need to supplement this general unemployment insurance is increasing. It is therefore common for unions to insure their members' incomes further, beyond the statutory levels. Unfortunately it falls outside this study's scope to investigate these systems, but this would be desirable in future studies.

Figure 16 below shows the duration of unemployment compensation in the respective Nordic countries. Here too there are clear differences in the systems, from Iceland's 1,095 days of compensation to Sweden's 300 days (or 450 days if the unemployed person has a child). When studying Iceland's figures in Figure 16 however, it should be remembered that only three months out of these 1,095 days involves compensation that is income-related; other compensation is based on unit amounts. Thus the validity of the loss of income principal in Iceland could also be generally questioned.

Figure 16. Duration of unemployment compensation in the respective Nordic countries (days)



Source: MISSOC

### Summary

Unemployment insurance in the Nordic region is organised according to different association principles, being entirely voluntary in Denmark, entirely mandatory in Iceland and Norway and partly voluntary, partly mandatory in Finland and Sweden. The principles for qualifying for unemployment insurance and the actual conditions also vary greatly, with different combinations of membership, work and income conditions. What the Nordic countries have in common however is that there is no need testing within the framework of unemployment insurance, which is expected given the description of the Nordic model.

As regards compensation for the unemployed, the systems vary greatly - but even so an average salesperson in retail trading receives about 60 per cent of his or her previous income on average in all the Nordic countries. It should however be considered to be a level that is relatively low and quite far from the level that it is considered that an unemployed person should have in both Sweden and Denmark.

Furthermore, Sweden is the only Nordic country with no systematic annual adjustment of the ceiling in unemployment insurance, but at the same time good real increases for salespersons in retail trading, which means that the actual compensation level for these



workers is steadily falling. Iceland has a very long compensation period, but only three month of this is income-related.

Many observations boil down to the question of whether the loss of income principle is still holding or whether all the Nordic countries are really on their way towards a basic social security principle. This could risk seriously threatening the legitimacy and function of unemployment insurance in the Nordic model, which would be a very unfortunate development.

## 11. Conclusion

So, does the picture of the Nordic model still hold if we study a relatively more vulnerable workforce in the Nordic region such as in retail trading? And are the labour markets in the retail trading of the respective Nordic countries completely similar, or are there actually differences that a combined Nordic union movement would benefit from knowing about?

Being able to answer the first question in a completely satisfactory way would require more studies than this, since it has only been possible to take some aspects of the Nordic model into consideration here. But as the first study to include all the Nordic countries and to focus on retail trading, this still gives an important first insight. And in relation to the Nordic model, Denmark's weak real income development, Norway's low union membership in the private sector, Iceland's low nominal minimum wage and all the Nordic countries' relatively low actual level of compensation for unemployment are all deviating observations that give reason to wonder about the Nordic model's position.

As regards the other questions, this report shows great similarities between the Nordic countries in the parts of the labour market studied, with relatively equal and compressed wage structures, a relatively high level of union organisation, relatively good real wage development in retail trading, very similar actual compensation levels for unemployed salespersons in retail trading and a relatively similar distribution of employment between publicly and privately financed services. But the study also shows important differences between the countries. Among others, a salesperson in retail trading in Denmark has not had as good a development in real wages as in other Nordic countries, a salesperson in retail trading in Norway is a member of a weaker union movement, in terms of degree of organisation, than in other Nordic countries, a salesperson in retail trading in Iceland has a wage on a par with colleagues in the USA, rather than the other Nordic countries and in every Nordic country the unemployed encounter regulations for unemployment insurance that are not quite like any other country's.

In conclusion, what appears to be clear from this study is that there remain many areas that can and perhaps also should be studied so as to properly understand Nordic retail trading as a labour market and to correctly evaluate the Nordic model's position. The collection and

quality assurance of such empirical data is a resource-consuming process, since it is the usability of the empirical data that is at stake. If further studies are to be made, they should thus build on a clear prioritising of motivation and resources.

## References

### Wage structure statistics

Wage structure statistics were ordered from:

Denmark: Danmarks Statistik

Finland: Tilastokeskus

Iceland: Hagstofa

Norway: Statistisk Sentralbyrå (SSB)

Sweden: Statistiska Centralbyrån (SCB)

Wage structure statistics were obtained from:

USA: Bureau of Labor Statistics (BLS)

### Written references

Berge, Agneta (2013), "Hög lägsta lön lönar sig", Handelsanställdas förbund

Esping-Andersen, Gösta (1990), "Three worlds of welfare capitalism"

Ferrarini, Tommy, Kenneth Nelson, Ola Sjöberg and Joakim Palme (2012), "Sveriges socialförsäkringar i ett jämförande perspektiv. En institutionell analys av sjuk-, arbetsskade- och arbetslöshetsförsäkringarna i 18 OECD-länder 1930-2010"

Folksam (2010), "Vår trygghet i Skandinavien. Gränsgångarnas sociala trygghet i Danmark, Norge och Sverige"

Löken, Espen (2009), "De nordiske modellene etter 2000 – bakgrunn og fellestrekk"

North, Douglass C. (1991), "Institutions," *The Journal of Economic Perspectives*, vol. 5, no. 1, pp. 97-112

Persson, Christer, Stefan Carlén and Daniel Suhonen (2010), "Bokslut Reinfeldt"

SO (Arbetslöshetskassornas Samorganisation) (2012), "Lägesbeskrivning av arbetslöshetsförsäkringen våren 2012".

### Review of wage structure statistics

Danmarks Statistik (2007), "Dansk Branchekode 2007", Available from: [www.dst.dk/DB07](http://www.dst.dk/DB07)

Danmarks Statistik (2009), "Fastlæggelse af lønebegreber"

Danmarks Statistik (2011), "DISCO-08. Danmarks Statistiks fagklassifikation", Available from: [www.dst.dk/DISCO-08](http://www.dst.dk/DISCO-08)

Hagstofa Íslands (1994), "Íslensk atvinnugreinaflokkun – ÍSAT 95. Skipting í bálka og deildir"

Hagstofa Íslands (2009), "ÍSTARF95. Íslensk starf flokkun með skýringum og dæmum"

Hagstofa Íslands, "Yfirlitstöflur"

SCB (1998), "SSYK 96. Standard för svensk yrkesklassificering 1996", MIS

SCB (2002), "SNI92, Rubriker, Aktivitetstexter och kommentarer, Sortering SNI92"

SCB (2003), "Nyckel SNI92-SNI2002"

SCB (2003), "SNI 2002. Standard för svensk näringsgrensindelning 2002", MIS

SCB (2007), "SNI2002, rubriker och texter, sortering SNI2002"

SCB (2012), "Löner för arbetare inom privat sektor 2011"

SCB (2012), "SNI2007, rubriker och texter, sortering SNI2007"

SSB (1998), "Standard for yrkesklassifisering"

SSB (2011), "Standard for yrkesklassifisering (STYRK-08)"

Tilastokeskus, "Ammattiluokitus 2001", Available from:

[http://www.stat.fi/meta/luokitukset/ammatti/001-2010/luokitusavain\\_01\\_10.html](http://www.stat.fi/meta/luokitukset/ammatti/001-2010/luokitusavain_01_10.html)

Tilastokeskus (2009), "Näringsgrensindelning TOL 2008", Helsinki

E-mail correspondence and conversations with the respective Nordic countries' central statistical bureaux have also been an important contribution.

## Appendix A: Summary of industry sector classification in the Nordic region

(statistics for the years 2000-2011)

### Denmark

Version	Relevant for following years	Industry sector: Retail trading
DB 1993		G 52.1-52.6
DB 2003		G 52.1-52.6
DB 2007	2008-	G 47

### Finland

Version	Relevant for following years	Industry sector: Retail trading
TOL 1995		
TOL 2002		G 52.1-52.6
TOL 2008		

Ordering wage structure statistics from TOL 2002 was sufficient to obtain corresponding industry sectors for other relevant years.

### Iceland

Version	Relevant for following years	Industry sector: Retail trading
ÍSAT 1995		G 52.1-52.6
ÍSAT 2008		G 47

### Norway

Version	Relevant for following years	Industry sector: Retail trading
SN 1994	1994-2001	G 52.1-52.6
SN 2002	2002-2008	G 52.1-52.6
SN 2007	2009-	G 47

## Sweden

<b>Version</b>	<b>Relevant for following years</b>	<b>Industry sector: Retail trading</b>
SNI 1992	-2002	G 52.1-52.6
SNI 2002	2003-2007	G 52.1-52.6
SNI 2007	2008-	G 47

Note: In G47 retail trading is included with fuel, which is not included in G 521-526 (in SNI 92 and SNI 02 retail trading is included with fuel in G50). This is thus not fully comparable.

## Appendix B: Summary of occupational classification in the Nordic region

(statistics for the years 2000-2011)

### Denmark

Version	Relevant for following years	Code
DISCO 1988 3-figure level <sup>7</sup>	-2009	122, 522 (salespeople in retail trading etc.)
DISCO 1988 4-figure level	-2009	1224 (Sales management in wholesale and retail, shop manager, warehouse manager), 5221 (Serving, cashier and demonstration work),
DISCO 2008 3-figure level	2010 -	122, 142 (Management of main activity in retail and wholesale trading), 522 (Sales work in shop), 523 (Cashier and related customer service)
DISCO 2008 4-figure level	2010 -	1221 (122100, Sales and marketing management), 142010 (Management of main activity in retail trading), 5222 (522200 Shop management work), 5223 (522300 Sales work in shop), 523000 (Cashier and related customer service)

### Finland

Version*	Code
Ammattiluokitus 2001 (SV) 3-figure level	122 (Operation and company managers), 131 (Managers of small companies), 421 (Staff in customer service work in monetary traffic), 522 (Salesperson, product demonstrator)
Ammattiluokitus 2001 (SV) 4-figure level	1224 (Operations managers in trading etc.), 1314 (Managers of mall companies in trading), 4211 (Ticket sellers), 5220 (Salesperson, product demonstrator), 52202 (Salespersons and cashiers), 52203 (Special salespersons)
Ammattiluokitus 2001 (FI) 3-figure level	122(Tuotanto- ja linjajohtajat), 131 (Pienyritysten johtajat), 421 (Rahaliikenteen asiakaspalvelutyöntekijät), 522 (Myyjät ja tuote-esittelijät)
Ammattiluokitus	1224 (Kaupan ym. johtajat), 1314 (Kaupan ym. alojen pienyritysten

<sup>7</sup> 3-figure level corresponds to occupational group, 4-figure level corresponds to occupation



2001 (FI) 4-figure level	johtajat), 4211 (Lipunmyyjät), 5220 (Myyjät ja tuote-esittelijät), 52202 (Myyjät ja myymäläkassanhoitajat), 52203(Erikoismyyjät)
-----------------------------	--

\*Ammattiluokitus 2001 works for all years according to a contact in Finland. 1997 and 2010 also available

## Iceland

Version	Code
ÍSTARF 1995 (SV)* 3-figure level	122 (Production and company managers), 131 (Managers of small companies), 421 (Cash handling, invoicing etc.), 522 (Handling and sales jobs)
ÍSTARF 1995 (SV) 4-figure level	1224 (Company managers in wholesale and retail trading), 1314 (Managers in wholesale and retail trading (fewer than 10 employees)), 4211 (Cashier and ticket seller), 5221 (Handling and sales jobs in food shops, bakeries, petrol stations, warehouses, confectioners, video and similar jobs), 5222 (Telephone sales)
ÍSTARF 1995 (IS) 3-figure level	122(Yfirmenn framleiðslu- og rekstrardeilda), 131 (Framkvæmdastjórar og forstöðumenn lítilla fyrirtækja og stofnana), 421 (Störf við peningaafgreiðslu, innheimtu o.þ.h.), 522 (Afgreiðslu- og sölustörf)
ÍSTARF 1995 (IS) 4-figure level	1224 (Yfirmenn framleiðslu- og rekstrardeilda í heildsölu og smásölu), 1314 (Framkvæmdastjórar í heildsölu- og smásölu (færri en 10 starfsmenn)), 4211 (Störf afgreiðslugjaldkera og miðasala), 5221 (Afgreiðslu- og sölustörf í dagvöruverslunum, bakaríum, bensínstöðvum, lagerum, sjoppum, myndbandaleigum og lík störf), 5222(Störf við húsgöngu- og símasölu)

\*translation via Google translate

## Norway

Version	Relevant for following years	Code
STYRK 1998 3-figure level	1998-2010	122 (Production directors), 131 (Managers of small companies), 421 (Ticket sellers, cashiers and similar service workers), 522 (Shop assistants, salespersons etc.)
STYRK 1998 4-figure level		1224 (Production director in goods trading, hotel and restaurant etc.), 1314 (Manager in goods trading etc.), 4211 (Ticket seller), 5221 (Shop assistant etc.)
STYRK 2008 3-figure	2011-	142 (Goods trading manager), 522 (Shop salesperson)

level		
STYRK 2008 4-figure level		1420 (Goods trading manager), 5221 (Proprietor of kiosk/small shop), 5222 (Shop department manager), 5223 (Shop assistant)

## Sweden

Version	Relevant for following years	Code
SSYK 1996 3-figure level	1997 (?) -	122 (operation and company managers), 131 (managers of smaller companies and units), 421 (cashiers etc.), 522 (retail trading salesperson etc.)
SSYK 1996 4-figure level	2004 -	1224 (shop manager large or medium sized company), 1314 (shop manager 5-9 employees), 4211 (cashiers etc.), 5221 (salespersons etc. food shops), 5222 (salespersons etc. specialist retail)

## Appendix C: Summary of wage components in the Nordic region

### Denmark

*Gross income* in addition to fixed wage also includes the following components:

*Staff benefits* that are included in A income

*Special holiday pay* amounts to 1-2% of the wage of a person entitled to holiday

*Holiday pay etc.* Holiday pay and any full day payments (public holiday payments) for hourly paid workers

*Absence payments* Payments in connection with own illness, child's illness, pregnancy, accidents and other absence for which payment is made by the employer to the employee. Thus only absence payments from the employer are included.

*Overtime payments* Given for work beyond normal working hours, including both overtime and added time for part-time workers For permanently employed the total payment for overtime work is included, while the associated hours for hourly paid workers include only overtime supplement and the number of hours overtime. I don't understand the difference between permanently employed and hourly paid.

*Other generic payments* Supplements in and out of working hours apart from overtime payments. Including night and evening supplements (disposal supplement, warning, dirt, outside work, protective, accommodation supplements etc.)

*Irregular payments* Include performance based payments (bonus etc.), compensation payments (not withheld holidays, compassionate leave etc.) and other irregular payments such as any subsequent adjustments and payments.

*Narrow earnings* includes neither generic supplements nor special holiday pay, which the standard calculated hourly pay includes.

### Finland

#### *Total wage*

The total wage describes the wage paid for ordinary working hours and other working hours such as overtime and additional working hours. See Total working hours

For the total is calculated for every wage period

- basic wage
- supplement paid on the basis of task, skills, seniority etc.
- supplement paid on the basis of workplace location and environmental supplement
- working hours supplement

- white collar workers' pay on the basis of results and performance, employees' pay on the basis of performance
- taxable value of benefits in kind
- pay for additional and overtime work
- partly also any on-call and call-out compensation
- other supplements that are paid irregularly
- (in the wage structure statistics also pay given for unworked working hours)

The total wage includes no pay items of a one-off nature such as holiday pay and result bonuses.

In the wage statistics, the term total wage also includes result bonuses.

### *Wage for ordinary working hours*

Wage for ordinary working hours is calculated for every wage period

- basic wage
- supplement paid on the basis of task, skills, seniority etc.
- supplement paid on the basis of workplace location and environmental supplement
- working hours supplement
- white collar workers' pay on the basis of results and performance, employees' pay on the basis of performance
- taxable value of benefits in kind
- (in the wage structure statistics also pay given for unworked working hours)

Wage for ordinary working hours includes no pay items of a one-off nature such as holiday pay and result bonuses. In the wage statistics, the term wage is also used for ordinary working hours together with result bonuses.

Wage for ordinary working hours is used in all wage statistics but its content can vary somewhat depending on the wage statistic. For example in the statistics for hourly pay, wage for ordinary working hours includes wage for ordinary working hours for hourly, piecework and fee-paying work as well as the basic elements for Sunday and overtime pay but not the supplements.

### *Compensation for additional work*

Stated here are evening and night supplements, Saturday supplements and shiftwork supplements for ordinary working hours.

### *Compensation for overtime work*

Overtime is work that the employee performs primarily in addition to the agreed working hours.

### *Paid hours*

Paid hours refers to the hours during the total working hours that the employee has received a wage for. Paid hours can be hours worked or hours not worked, i.e. absence hours (holiday, illness, general free days, other absence)

## **Iceland**

### *Regular salary*

Is the remuneration for regular working hours, that is ordinary working hours according to collective agreements, both daytime and shift-work hours.

### *Total regular salary*

Is the total remuneration per month including overtime and sick days.

### *Total salary*

Is the total remuneration per month including piecework, irregular bonuses and various other irregular payments.

### *Hours paid*

Are all working hours for full-time employees, whether being daytime, shift-work or overtime hours.

### *Number of employees*

Are the number of employees in the survey. Number of employed persons according to Labour Force Survey can be found in the next sheet. Note that the number of total employees for hourly and monthly paid employees can differ from the number of total employees for each group individually because each employee can have more than one job.

## **Norway**

The term wage in the wage statistics is limited to cover cash remuneration from the employer to the employee for work performed. Consequently the statistics do not cover benefits in kind, insurance or non-deductible expenses and similar.

### *Monthly wage*

Gross monthly wage. Includes agreed wage, irregular supplements and bonuses. Overtime remuneration is not included.

### *Agreed monthly wage*

Includes the fixed monthly wage that is paid at the time of calculation whether this is defined as hourly, monthly, 14-day or weekly wage, and is often referred to as tariff wage or fixed basic wage. Qualifications/competence supplements and other fixed personal supplements are included.

### *Irregular supplements*

These are supplements connected with position-related working tasks and are given as a calculated average per month for the period 1 January to the date of calculation. Includes among other things shift and rotation supplements, supplement for unsocial working hours, Sunday and public holiday supplements and other supplements that come irregularly.

### *Bonus*

This is a supplement to pay that is often connected to specified working tasks and where payment is made irregularly with reference to the period it is earned in or applies to. Includes, among other things, commission, profit sharing, production supplements, gratuities and bonuses and is given as a calculated average per month for the period from and including the 4th quarter of the previous year to the date of calculation.

### *Overtime remuneration*

Comprises the sum of cash remuneration for work performed beyond normal working hours and is a calculated average per month over the period 1 January to the date of calculation.

## **Sweden**

### *Time and performance wage (monthly wage for white collar workers, hourly wage for workers)*

Fixed wage, fixed supplement, piecework performance and variable pay. Variable pay includes performance and piecework pay, commission, bonuses etc.

### *Wage for time worked (monthly wage for white collar workers, hourly wage for workers)*

Time and performance wage plus inconvenient working hours/shift supplement and supplements for risk, dirt, heat etc.

### *Total wage (monthly wage for white collar workers, hourly wage for workers)*

Wage for time worked and benefits, on-call and call-out compensation, waiting time and travelling time compensation outside ordinary working hours. For workers includes public holiday pay, i.e. compensation for lost pay on public holidays.

*Average shift supplement* is also reported. This refers to the average shift supplement per month or hour, calculated to correspond to a full time service.

*Average benefits* is reported in the form of an average per month or hour, calculated to correspond to a full time service. Average benefits includes the value of benefits, on-call and

call-out compensation and compensation for waiting and travelling time outside ordinary working hours.

*Average public holiday pay (only workers)*







HANDEL OG KONTOR I NORGE



Landssamband  
íslenskra  
verzlunarmanna



Handelsanställdas förbund

UNIONEN